

Visitors' and Locals' Experiences of Westland, New Zealand

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Summary

The objective of this study was to develop an understanding of visitors' and locals' experiences of the Westland landscape and infrastructure. The interest in landscape experience reflects the central role that both passive and active involvement in landscape plays in the Westland tourism industry. The interest in infrastructure reflects the critical role that provision of basic services to support tourists, and the management of the tourists' impact on the environment, will have in the development of sustainable tourism.

The use of photographs and Q method to investigate visitor experience in this study has been developed and tested in two previous case studies within the overall tourism research programme (Fairweather et al., 1998; Fairweather et al., 2000; Fairweather and Swaffield, 2000; Fairweather and Swaffield, 2001) and in other studies elsewhere. The selection of photographs for the two Q sorts was based on frameworks for landscape with general infrastructure (such as utilities), and for tourist infrastructure (such as accommodation, toilets, carparking etc.).

A total of 111 people were selected in a diverse, non-random sample with roughly equal proportions of both men and women, including 42 overseas visitors, 26 domestic visitors and 43 locals. Each subject sorted two sets of 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 first identify three factors or types of landscape and general infrastructure experience and these four factors or types of tourism infrastructure experience. Subjects' attitudes, beliefs and expectations in making their selections were recorded in interviews and provide an additional basis for interpreting the different factors. The titles of each factor are shown below. (There is no link between the two sets of factors).

Factor	1	2	3	
Landscape (and general infrastructure)	Pure Nature	Living in Nature	Pastoral Nature	
Factor	1	2	3	4
Tourism infrastructure	Nature and Heritage	At One with Nature	Cultural Heritage	Quality and Care

For the landscape and general infrastructure Q sort, the 'Pure Nature' experience was common to a wide range of respondents but the subjects tended to be younger than those loading on the other factors. These subjects emphasised untouched nature, favouring apparently unmodified settings that showed qualities of its pristine status. They disliked general infrastructure that damaged nature, and they had a neutral response to farming. The 'Living in Nature' experience was common to local men who were older and fewer had tertiary qualifications. They appreciated both nature and local buildings, which were symbolic of home. They disliked general infrastructure but were more accepting of commercial activities associated with local employment. Farming was slightly liked. The 'Pastoral Nature' experience was common to all a wide range of respondents, and included a high proportion of women. They also appreciated nature, especially its visual qualities and the green colour, and liked the idea of living in Westland. They emphasised pastoral values

of farming, livestock and country life in which humans are a part of nature. They disliked general infrastructure and commerce.

For the tourism infrastructure Q sort, the 'Nature and Heritage' experience was common to mainly locals and some visitors. These subjects liked scenic nature, history, 'Living in Nature' and favoured natural features and basic amenities which encourage a visit for varied activities including heritage. They were not keen on the modern visitor centre (Haast) but accepted familiar built structures. They disliked old rubbish bins and toilets that they probably do not use, and which perhaps gave a poor impression to visitors. The 'At One With Nature' experience was common to mainly visitors. They liked nature and enjoyed active participation in settings with minimal man-made facilities and where signs and facilities helped to protect nature. Emphasis was given to visual aspects and design so they disliked the modern visitor centre and buildings that were commercial, and which they felt were 'out of place'. They accepted minor infrastructure elements such as well designed toilets and rubbish bins as part of the Westland experience. The 'Cultural Heritage' experience was common to mainly visitors. They liked cultural heritage manifest in older buildings, which allows connection to other people. They disliked tourist infrastructure that contrasted with natural surroundings, so they were not keen on the modern visitor centre. Toilets and rubbish bins were accepted provided they were discrete and well maintained. The 'Quality and Care' experience was common to mainly locals and domestic visitors. They liked the neat and tidy appearance of a variety of public amenities and attractions which also provided something interesting to see and do. They liked a variety of built structures including the modern visitor centre but disliked unkempt facilities such as old toilets.

Comparison of results in this study to earlier research in Kaikoura and Rotorua shows similarities in factors suggesting that among visitors and locals there are some fundamental and relatively constant experiences of tourist settings. Overall, the results indicate that there is a strong consensus in core environmental preferences among overseas and domestic visitors and local residents. In addition, the results extend our present understanding of experience of Westland and show how domestic and international visitors have both shared and distinctive views.

Design and facility management (for both the public and private sectors) is a critically important factor in planning for tourism development on the Coast. A recurring theme of locals and visitors has been the sensitivity of respondents to the appearance of infrastructure provision. For buildings in predominantly natural settings, there is clearly a desire that they be integrated visually with the broader environment, to minimise their impact. Similarly, for other infrastructure elements, respondents seek a minimisation of the visual impact of larger features, while they prefer the appearance of small features such as picnic areas, campgrounds etc. to be as 'natural' as possible, with simple but robust timber or stone details.

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 persons 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 persons and also with a significant level of tourist activity. The third case study, reported here, was located in the lower Westland of the South Island, that is, in the Westland District Council area. This District had a total population of 8,410 persons in 1996, and the main town is Hokitika, with a population of 3,771 persons in 1996. There is a significant level of tourist activity in Westland. The general strategy of the overall 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 Westland. Visitors were defined as any people visiting Westland who are normally resident elsewhere, and includes both domestic and overseas day and overnight visitors, the latter group usually referred to as tourists. Locals included both Maori and European New Zealanders/Pakeha resident in Westland. Westland was defined as the area encompassed by the Westland District Council, which includes the towns of Hokitika, Ross, Harihari, the glaciers and Haast. We sought to understand people's landscape experience of the Westland as fully as possible, in ways that reflect what people think, feel and say about their experience. Q method using photographs as stimuli was well suited to developing this understanding. While this report describes patterns of landscape experiences in depth, it does not attempt to describe or account for these patterns amongst the visitor or resident population as a whole. In this sense the research is qualitative in its focus, and exploratory and interpretative in its scope.

Research in the first two case studies focused on experiences of landscape in order to deepen our understanding of visitors' and locals' landscape perceptions and experience within tourist destinations elsewhere in New Zealand. This focus was continued in Westland but, in addition, there was a greater emphasis on infrastructure, both in general and specifically for tourism. Thus, an important secondary objective was to assess, in an in-depth way, thoughts and responses to infrastructure as it is manifest in the landscape. Effective management of infrastructure is critically important to the long-term success of tourism.

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 and the overall advantages and disadvantages of the approach are critically reviewed in Fairweather and Swaffield (2000). We have argued 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). Similarly, there is other research on tourist experiences which takes a positivist approach. For example, Kim and Lee (2000) surveyed Japanese tourists returning from a visit to the Great Barrier Reef. Factor

analysis of the results from the sample of 272 respondents showed that there were four main motivations for travel to Australia: 'exciting experience', 'cultural experience', 'self esteem and development' and 'family relationship'. For travel to the Great Barrier Reef specifically, the motivations were 'experiencing nature', 'experiencing excitement' and 'relaxation'. The experience of nature, rated the most highly, emphasised such elements as seeing coral in its natural environment, seeing marine life in detail, being close to nature and seeing the beauty of the reef. While gaining insight into tourist experiences, this approach still privileges the researcher's knowledge in the way in which the items for assessment are *provided* to the subject.

There is, however, increasing interest in landscape as a phenomenological experience, using a variety of methods, and also in interpretation of the socio-cultural dimensions of landscape. For example, Ryan (2000) has mapped out how tourist experiences can be examined using a phenomenographic approach and illustrates it by reference to research on attitudes of visitors to a national park in the Northern Territory, and research on attitudes towards crocodiles and wildlife as an attraction. Ryan suggests that NUDIST and CATPAC packages can be used to analyse the transcripts in ways that foster a close relation between the transcripts and the researcher. Other tourism research (Vitters et al., 2000) argues that positivist assessments of satisfaction are insensitive to the variety of differences in subjective experiences. They show that the use of the 'flow-simplex' reveals different patterns of responses in a study of six Norwegian attractions, thereby supporting their use of a cognitive theory of cognition and affect. Wearing and Wearing (1996) go further with an interactionist approach which rejects the objectified tourist and destination as image for the gaze. They conceive of the tourist operating creatively in an interactive space, taking home a lived experience. However, while there is interest in alternative approaches to the study of tourism and tourists and some use of qualitative methods (Riley and Love, 2000) there are few empirical studies that use photographs to evoke responses from visitors in ways that lead to a deeper understanding of experience.

We also note that, within New Zealand, there has been very little systematic research into landscape perception either of residents or visitors. New Zealand research to date, which typically adopts a positivist approach (Kearsley et al., 1998) has shown Hokitika to be a destination image which for international visitors represents uncrowded and peaceful qualities, while domestic visitors value uncrowded, friendly, hunting/fishing, peaceful, safety and tramping/camping qualities. Further, international visitors describe the unique images of Hokitika as scenery and beauty, and domestic visitors describe the unique images of Hokitika as weather and greenstone. 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) and Rotorua (Fairweather et al., 2000) 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 experiences represented by 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 and Rotorua identified some common types of visitor experience. In both studies there were factors relating to nature, appreciation of the picturesque landscape, and to family recreation.

The research reported here complements the international research on the phenomenology of tourist experience, and further develops a new direction in tourism research in New Zealand. It does this by 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 111 people who live in or who have visited Westland. Finally, Chapter 4 discusses the salient points of each factor and makes some general observations. It includes a comparison of the results with earlier research in Rotorua and Kaikoura, and develops 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 the Westland 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 developing the research design, particular attention was therefore paid to the inclusion of a full range of landscape settings, from 'natural' to 'modified', the latter including general infrastructure. In addition, attention was given to a full range of tourism infrastructure.

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). In the Westland study, the variables selected to represent the range of landscape settings were derived from three frameworks. The first was geographical, and aimed to provide a representative range of broad dimension landscape settings across the study area, including landscapes modified by farming or mining. The second focused on general infrastructure such as roads, buildings and utilities. The third included specifically tourist infrastructure such as accommodation, campsites, car parks and rest areas.

In selecting viewpoints that best represented these settings no attempt was made to 'randomise' or to 'standardise' viewpoints. Views of landforms and land uses 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 field of view of a passive eye, in this study the aim was to present to the subjects an image which represented one of a wide range of different landscape settings and experiences. Therefore we used a range of focal lengths from 50-70mm to best express the particular settings identified in the sampling frame. For cultural features and elements of infrastructure, views were selected which captured essential qualities of the setting. All photographs were taken on a fine day in summer. A small number of photographs were edited to remove clouds so that all photographs had a consistent blue sky.

Within each framework were 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. An additional consideration is that when presented with a mixture of natural and modified settings, people are most likely to prefer those that are natural so we used two sets of photographs. The first contained the natural and general infrastructure settings (henceforth referred to as the landscape Q sort), and the second

contained the tourist infrastructure settings (referred to as the infrastructure Q sort). This design allowed for people to express refined preferences for tourist infrastructure. There were 26 photographs in the first Q sort of landscape and general infrastructure settings, and 29 photographs in the second Q sort of tourist infrastructure settings. Table 1 shows the complete list for each Q sort, showing the working title for each photograph. The number for each photograph was randomly allocated.

Table 1
Classification of Photographs Used in the Two Q Sorts

Landscape and General Infrastructure		Tourist Infrastructure	
No.	A. Landscape settings	No.	
1	Lake edge	1	Rubbish bin - improved
3	Braided river	6	Rubbish bin - basic
9	Lowland forest	16	Rubbish bin - modern
13	Glacier	4	Toilet - improved
16	Coastal wetland	15	Toilet - modern
19	Valley forest	24	Toilet - basic
22	Lake and forest	7	Visitor information - basic
24	Coastline - rocky	19	Visitor centre - modern
26	Coastline - beach	25	Visitor centre - traditional
	B. Modified landscape	2	Car park - informal
2	Sphagnum moss - drying shed	10	Car park - viewpoint
5	Improved farming	13	Car park - informal
7	Pine forestry	29	Car park - bush
12	Regenerating pakihi	5	Walkway - basic
17	Mining (gold)	18	Detailed sign
21	Unimproved farming	23	Walkway - improved
	C. Basic infrastructure	11	Effluent disposal
4	Town centre -hotel	12	Campsite - cabins
6	Town centre - shops	22	Campervan park
8	Glacier hotel	26	Campsite - improved
10	Sewage ponds	27	Campsite - basic
11	Electricity substation	9	Tourist lodge
14	Bridge	14	Backpackers - modern
15	Rubbish dump	20	Motel - traditional
18	Petrol station	3	Picnic spot
20	State highway	8	Craft outlet
23	Dairy factory	17	Café
25	Water supply tanks	21	Pie cart
		28	Heritage building

Photographs are shown for landscape and general infrastructure in Figure 1, and for Tourists infrastructure in Figure 4, page 53, when factor loading results are discussed in detail.

2.3 Selection of People and Location of Interviews

The main strategy for sampling people was to secure a diverse, non-random sample of New Zealand and overseas participants, with roughly equal proportions of men and women. To ensure a variety of people were included, participation was sought from local residents, business people, tourist operators, and public sector staff in Westland, as well as from New Zealand visitors to Westland. Overseas participants included people mainly from Europe and North America. Asian visitors could not be accessed. These visitors travel in large groups by bus, keep to tight timeframes, and usually do not stay overnight in Westland. Asian visitors often leave from Queenstown and those who return to Christchurch often arrive late at night and leave early the next morning. An attempt was made to negotiate access with hotel managers in Christchurch who act as gatekeepers but this proved to be unhelpful. As a consequence, the results do not explicitly address ‘Asian’ experiences or those associated with organised tours, and further study of these types of tourist would be helpful.

The sample composition was checked at regular intervals during the interviewing process for deficiencies or gaps. This allowed particular categories of persons to be targeted in order to boost numbers in that particular category, for example, overseas visitors travelling by campervan and New Zealand visitors to Westland. Most New Zealand visitors had travelled to Westland from Canterbury, and some were accessed in Christchurch after their trip to Westland.

Information was recorded on participants’ mode of travel to Westland, type of accommodation, and length of stay. This information was deemed relevant because mode of travel, quality of accommodation, and length of stay, are likely to influence people’s landscape experiences. Travelling by bus according to fixed time schedules, for example, does not afford the flexibility associated with travelling by private/rental car or campervan. These latter forms of transport allow the visitor to explore destinations and public amenities not necessarily marketed or commodified for tourist experiences. It was also considered important that participants had been on the Westland for a short time in order that recent experiences inform their interpretations or understandings of the places shown in the photographs. Participants were asked whether they were specifically visiting Westland, or were generally travelling around New Zealand. In one case, a participant had recently arrived in Westland (five minutes before being interviewed), but had specifically travelled to Westland and therefore had firm expectations or ideas about the Westland landscape.

A total of 111 visitors and locals participated, and Table 2 (page 8) shows the composition of the sample. There were 43 locals, 26 domestic visitors and 42 international visitors. Overall, males comprised 56 per cent of those interviewed, although the distribution of males and females across the three types of participant ranged from 45 per cent for overseas male visitors, 54 per cent for domestic male visitors, and 67 per cent local males. For the overseas visitors there was a rough similarity between the sample used here and another tourist survey sample of 681 persons studied in another part of the current research programme.

Table 2
Characteristics of the Sample

Type	New Zealand				Overseas					Tourist Survey
	Male	Female	Sum	%	Country	Male	Female	Sum	%	
Local	29	14	43	62	Europe	7	8	15	36	34
Visitor	14	12	26	38	U.K.	5	6	11	26	22
					N/America	4	6	10	24	11
					Australia	2	1	3	7	18
					Other	1	2	3	7	15
Total	43	26	69	100		19	23	42	100	100

		%
Total Male	62	56
Total Female	49	44
Total	111	100

The majority of interviews took place in Hokitika, Westland during the months of February and March 2001. Participants were approached at a number of different locations, including cafes, along the beachfront, at the Visitors Information Centre, and at backpacker lodges. Interviews were relatively straightforward to obtain in the evenings: evening visits to places of accommodation proved fruitful as people had finished their plans for the day and were relaxing indoors. The beachfront also proved a popular venue for interviewing locals, especially on warm mornings and evenings. Other locals were interviewed at their place of work both in and around Hokitika, or at their place of residence. Locals in other parts of Westland were not interviewed. In order to obtain New Zealand visitors to Westland, some colleagues at Lincoln University were included, and a special visit was made to Hokitika during the Wild Foods Festival held in March. Some campervan visitors who had been to Westland were interviewed in Christchurch in order to ensure that this type of traveller was included. A motor park situated on the main route west out of Christchurch was a useful venue for locating these visitors.

A final point needs to be noted. Even a simple classification such as ‘overseas’ or ‘New Zealand’ can be difficult to apply. For example, one person had been away from Westland for a few years and yet had grown in Westland and considered himself to be a ‘Coaster’. In another case, a person had just arrived in Hokitika to start a new job and considered herself to be a local. A handful of other cases involved persons who had either been born in Westland and had not lived there for quite some time, or who were immigrants to New Zealand, yet regarded themselves as ‘New Zealand’ visitors.

2.4 Q Sorting Procedure

After requesting permission to conduct an interview, the interviewer explained that the focus of the research was on people’s experience of the Westland landscape as indicated by the

photographs. Each subject was asked not to evaluate the quality or composition of the photographs themselves, but to think about their experiences if they were at the places shown in each photograph. Each subject was asked first to sort the landscape and general infrastructure photographs into three piles: those which represented experiences of Westland 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 place or experience they liked the most, then the next two, then the next three, and so on. The focus then shifted to the dislike pile and the same procedure was repeated. The photographs in the neutral pile were used to complete the Q sort. Most subjects followed this general procedure.

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

Landscape + general infrastructure Q sort	1	2	3	4	6	4	3	2	1
Tourist infrastructure Q sort	1	2	3	5	9	5	3	2	1
Assigned score	-4	-3	-2	-1	0	+1	+2	+3	+4

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 recording sheet. Participants were often shown the normal distribution curve, as it appeared on the recording sheet, in order to aid their understanding of what was required. Some participants sought further instruction as to how to go about ranking the places represented in the photographs in terms of their experiences. Participants were reminded that it was their own criteria for judging the places that was important. For example, two artists and one philosopher drew a distinction between aesthetics and function with regards photographs in the tourism infrastructure Q sort, and, therefore, were unable to complete the Q sort as originally requested. They were then asked to complete the Q sort taking into account all criteria.

On completion of the first Q sort, each subject was asked to explain the six top and six bottom-ranked photographs chosen and these comments were recorded verbatim on the recording sheet. In some cases fewer comments were asked for as the subject had limited time to undertake the Q sort. After the comments, each subject was asked to indicate which settings, if any, in the photographs he or she thought were distinctive of Westland. These responses were recorded with a circle around the relevant photograph number 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 Westland 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 upon both 'real' and 'imagined' experience. This mix is quite congruent with the approach in this study as it focuses on subjects' constructed experiences of landscape. In this context, the beliefs, values and expectations that inform subjects' choices or interpretations are as much a part of the overall 'type' of

experience, as are remembered aspects of a visit to a particular site. Together these 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 on 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 Westland landscape. In earlier research using the same method for visitors to Kaikoura this issue of real versus imagined experience 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.

After completion of the first Q sort, participants were asked to repeat the process with the second set of photographs on tourism infrastructure. They were usually advised that the second set of photographs was quite different from the first. Again, comments were recorded for the six top and bottom-ranked photographs, and participants were asked if they considered any of the places in the photographs to be distinctive to Westland.

When the second Q sort was complete, subjects were asked to give their assessment of environmental management on the Westland. This was assessed using three questions (see Appendix 1). Subsequent to this, four photographs from earlier research in Rotorua were presented to the subjects and they were asked to select the one that showed the place they liked the most in terms of travel in other parts of New Zealand. These photographs were the highest ranked for each of the four factors or types of experiences identified in the Rotorua study and using them here allowed for some comparison to be made to the earlier research. At the close of the interview, some background descriptive data for each visitor were recorded (see Appendix 1).

The subjects responded very well to the request to sort photographs. Both Q sorts were done expeditiously, although some people commented that the second Q sort was harder. They found it more difficult to discriminate between the different photographs, and commented on the necessity of having these public amenities, irrespective of whether they liked them or would make use of them. The Q sorts took about 30 minutes to complete, and gave subjects an ideal opportunity to express their preferences for the different landscape and infrastructure experiences in Westland. This focus on experience worked well with only a few comments being made about the composition or colour of the photograph, for example. In contrast, participants frequently reported having enjoyed the research experience, due to the use of photographs as a research tool, rather than a series of questions.

The data obtained from the two Q sorts were subject to factor analyses. This computational procedure identifies groups of subjects who sorted the photographs in a similar order. Factor analysis is based on correlation coefficients which measure the similarity of Q sorts, and on a procedure called rotation which strengthens the characteristics of the individual factors. The factors are ultimately named, drawing on the factor analysis results and the recorded comments.

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 of Westland.

Chapter 3 Results

3.1 Introduction

Each subject completed two Q sorts and the presentation of results reflects this process. There are two major sections in this chapter, the first presents results for the landscape Q sort and the second presents results for the infrastructure Q sort. The sections are structured in a similar way: each shows the key results of the factor analysis, including the demographic profile of each factor and preliminary comparison across factors, and then describes the factors in detail. When factor results are presented we have characterised each factor as a distinctive type of experience and referred to the factor as a person, based as it is on the Q sorts of the subjects loading on to it. The chapter concludes with supplementary data on attitudes to environment management.

3.2 Landscape Q Sort

3.2.1 Factor Analysis Results

The 111 Q sorts completed in response to the instruction to sort the landscape and general infrastructure photographs in terms of respondents' landscape experience (real or imagined) were correlated and rotated using the varimax option of the PQ method computer programme (version 2.06) suitable for personal computers. Three factors were extracted and they accounted for 73 per cent of the variance of the rotated correlation matrix. For the 26 photographs in this Q sort the standard error of a factor loading is $1/\sqrt{n} = 0.196$, and, at the 0.01 probability level, a loading has to be at least $0.196 \times 2.58 = 0.51$. 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 77 subjects (69%) 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. This shows relatively equal numbers of subjects loading onto Factors 1 and 3, with 32 people and 31 people respectively, and Factor 2 accounting for 14 people. The labels for each factor derive from the qualitative analysis which follows.

**Table 3
Key Results from the Landscape Factor Analysis**

	Factor			Sum
	1 Pure Nature	2 Living in Nature	3 Pastoral Nature	
% Explained Variance	28	18	27	73
No. of Subjects	32	14	31	77

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

Table 4
Correlations Between the Landscape Factors

Factor	2	3
1	0.70	0.85
2		0.67

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 Factor 1 has a mix of different groups loading on it, Factor 2 has mainly local males loading on it, and Factor 3 has mainly females loading on it. Bolding is used to show subjects over 40 years old. Factors 2 and 3 have more older people loading onto them compared with Factor 1. Table 6 summarises the data in Table 5 and reports some other characteristics. Factor 1 has younger subjects many with tertiary qualifications; Factor 2 has older subjects with less tertiary education and has many males, and Factor 3 has many females.

Table 5
Demographic Profile for Each Landscape Factor, Showing Age

	Factor						Total
	1. Pure Nature		2. Living in Nature		3. Pastoral Nature		
	Male	Female	Male	Female	Male	Female	
Overseas:							
Australia		62			58/68		Austr.=3
Austria	24						
Denmark	52				46		Euro.=14
Germany	32	21/22				24	
Holland	31				50	23/24	
Israel		22			24	22	Other=3
Switzerland		26					
Sweden		24				24	
U.K.	39	42			25/54	31/57/63	U.K.=7
N/America		49/24				27/65	N/Am.=4
Subtotal	5	9	0	0	7	10	31
New Zealand:							
Local	19/20/21 /24/28/3 2/39/ 63	13/34	29/31/34 /37/ 42/4 7/48/50/ 50/51/69	37/38	47	23/24/35 /40/ 46/5 0/52	
Visitor	23/25/25 /59	23/24/36/ 60	59		18/40/ 54	26/32/ 42	
Subtotal	12	6	12	2	4	10	46
Gender Totals	17	15	12	2	11	20	77
Factor Totals	32		14		31		77

Table 6
Demographic Characteristics of the Landscape Factors

Factor	General Composition	% > 40 years	% Tertiary Education	% Female
Pure Nature	Mixed	22	56	47
Living in Nature	Locals	64	29	14
Pastoral Nature	Mixed	39	56	65

Before examining each factor separately, data are presented to show which photographs were scored in a similar way by all three factors. Table 7 shows the photographs listed from consensus to disagreement. The differences in the scores for the first nine are not statistically significant at the 0.01 level and the first four are consensus photographs. The table shows that there is agreement and liking for lake and forest (22), coastline - rocky (24) and glacier - Franz (13). There is agreement and dislike of rubbish dump (15), electricity substation (11), water supply tanks (2) and sphagnum moss drying shed (2). There is a very low or neutral score for bridge (14) and pine forestry (7). It is notable that even where significant disagreement is expressed between factors on particular photographs, the evaluations do not range from highly positive to highly negative. Rather, they typically range from *either* highly positive *or* negative, to neutral. The table also shows distinguishing photographs for each factor, those whose scores are statistically significant ($p < 0.01$), and the bolding shows for which factor the score is significantly different. These are located below the dividing line. In some cases, the table shows that the photograph received a distinct score for all three factors. That is, it evoked strong and different responses from all these factors.

Table 7
Landscape Photographs, with Q Sort Scores, Sorted from Consensus to Disagreement

No.	Title	Factor		
		1	2	3
14	Bridge	0	0	0
15	Rubbish dump	-4	-4	-4
24	Coastline - rocky	3	2	2
13	Glacier (Franz)	1	2	2
22	Lake and forest	3	4	4
7	Pine forestry	0	-1	0
25	Water supply tanks	-2	-3	-2
11	Electricity substation	-2	-3	-3
2	Sphagnum moss - drying shed	-1	-1	-1
26	Coastline - beach	2	2	1
20	State highway	-1	-2	-1
1	Lake edge	2	1	1
9	Lowland forest	1	-1	0
16	Coastal wetland	1	0	0
19	Valley forest	2	0	2
3	Braided river	4	3	1
6	Town centre - shops	-1	0	-2
18	Petrol station	-2	0	-2
17	Mining (gold)	-3	-2	-1
8	Glacier hotel	-1	1	-1
5	Improved farming	0	1	3
12	Regenerating pakihi	1	-1	0
21	Unimproved farming	0	1	3
23	Dairy factory	-2	0	-3
4	Town centre - railway hotel	0	3	0
10	Sewage ponds	0	-3	1

Note: While Q sort scores (-4 to +4) are presented in this table, the basis of the distinction between factors for the distinguishing photographs is the Z score taken to two decimal places. Thus two similar Q sort scores may in fact be statistically different.

Figures 1 to 3 presented in the following sections show the arrays of photographs for each factor in the landscape Q sort. The arrays present the photographs in the same way as each Q sort was completed. The figure also identifies the distinguishing photographs by highlighting the background in colour. Red is used to show photographs that have a statistically higher position than the other two factors and green is used to show photographs that have a statistically lower position than the other two factors. Yellow shows photographs that have a position in between that of the other two factors but are still statistically different in position.

3.2.2 Factor 1: 'Pure Nature'

Factor 1, which we describe as 'Pure Nature', accounts for 28 per cent of the total variance among the rotated factors, and comprises 32 participants. Of these, fourteen were overseas visitors, ten were locals, and eight were domestic visitors. Overseas females and local males

were the largest sub-groups loading on Factor 1, but there were people from all other sub-groups who also loaded on Factor 1. The overseas females were from Israel, Germany, Australia, Sweden, Switzerland, Canada and the United States of America. Compared to the other factors, subjects loading on Factor 1 were younger with only 22 per cent older than 40 years. In addition, eight of the top 11 individuals contributing to Factor 1 had, or were in the process of receiving, a tertiary education and 56 per cent of all subjects loading on Factor 1 were in this category.

Figure 1 shows the array for Factor 1. The array in overview shows that all the photographs liked, that is, those that receive a score of one to four, are apparently natural with no signs of buildings or man-made structures. In the neutral column are farming, forestry and basic infrastructure that show some natural elements as well. The disliked photographs include infrastructure and mining. Compared to the other two factors, Factor 1 has the braided river (3), valley forest (19), lowland forest (9) and regenerating pakihi (12) in a higher position. This is in keeping with an emphasis on natural settings. Unimproved farming (21) is lower than in the other factors presumably because, while it is natural to some extent, it shows human influence (the building). Mining - gold (17) is also lower than in other factors presumably because it is seen as disrupting nature.

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

3	Braided river	(+4)
22	Lake and forest	(+3)
24	Coastline - rocky	(+3)
19	Valley Forest	(+2)
26	Coastline - beach	(+2)
1	Lake edge	(+2)

As indicated by the title descriptors, these six photographs show a combination of natural features and have water as a common element. There are no signs of human activity in any of them. Comments made by those people with a high loading on Factor 1 are presented on page 23¹.

¹ A loading of 0.71 or above was used to select the high loaders for Factor 1. A loading of 0.67 or above was used to extract quotations for Factor 2 (lower because fewer people loaded on it) and 0.73 for Factor 3. We expect that factors with higher loadings will have more consistent quotations.

Photograph 3 - Braided River (+4)

- Subject 17:
(VisOF22)² “This is nature. Pure nature”.
- Subject 18:
(LocF34) “Beautiful. Simple. Untouched. Water in it. Spectacular. Colour’s good. Not busy.”
- Subject 50:
(VisNZF23) “Didn’t see a lot of these rivers in the North Island. To see something like that is really beautiful. I have concern for Canterbury ones-farming. May not look as nice as at the moment. Braided rivers are so big, the expanse, the space. Don’t feel crowded. Makes you realise how insignificant you are. A feeling of freedom. Also a feeling of how you can’t take them for granted. They can be dangerous. “
- Subject 67:
(LocM39) “Looks pristine. Nice braided river. Clean water, mountains in background again. Doesn’t look to be many exotic plants on riverbed, any rubbish.”
- Subject 69:
(VisOF49) “I like the beach and the clear blue water. Looks refreshing. (What would you do in that place?) Either sit or lie down on beach – do nothing.”
- Subject 79:
(VisOM24) “Something I really don’t know at home. Wide river, natural way of river. Not regulated.”
- Subject 82:
(VisOM52) “I love water and mountains. We have spent hours in places like these. (Who is ‘we’?) We have small children, and the water is too rough here [in New Zealand]. (What would you do in places like these?) Walk around beach looking for shells, enjoying the sun.”
- Subject 94:
(VisOF26) “Its wide. Reminds me of Wanaka because of the mountains. Also its quiet. (What would you do there?) Walking. I did a skydive in a place like that.”

Photograph 22 - Lake and forest (+3)

- Subject 18:
(LocF34) “Dark and mysterious. Can smell the clean air”.
- Subject 43:
(VisOF63) “Natural area of New Zealand untouched”.

2 The notation for each subject identifies either local or visitor (and, if a visitor, if NZ or overseas), male or female and age.

- Subject 50:
(VisNZF23) “Quite beautiful. Lake and forest. Doesn’t look as much wetland, more developed forest around edges. Looks tranquil, a spot to go to get away from people, time out. Wouldn’t want to see jet boats ripping around. Bird life would be pretty amazing”.
- Subject 51:
(VisNZM23) “Looks pristine habitat. Got mature trees, mountains in background. Can see a bird on lake. (What does ‘pristine’ mean?) Looks fairly natural, pretty much untouched”.
- Subject 65:
(VisOM31) “This is nature opened up. Nobody in picture. Water, mountain. I would like to jump in the water”.
- Subject 69:
(VisOF49) “The view, and the air seems clear and clean. You could take some good deep breathes there”.
- Subject 79:
(VisOM24) “Reminds me of kayaking at Abel Tasman and Milford Sound. Doesn’t look like the lake, could be shore coast”.
- Subject 94:
(VisOF26) “The sea is so quiet? - the lake. Like when the mountain and water together. I like the forest as well”.

Photograph 24 - Coastline - rocky (+3)

- Subject 18:
(LocF34) “Don’t like photo, but if it’s where I think it is, I really like it. Water plus rocks”.
- Subject 51:
(VisNZM23) “Shows sea, rugged coastline. Again undisturbed. Just the natural geology of this area. Something to do with the contrast between rock, water and forest – the diversity”.
- Subject 65:
(VisOM31) “Its about the coastline. It is rough, formed by nature. (What would you do there?) Not possible to go down there, so view. Would like to lie on beach”.
- Subject 94:
(VisOF26) “To be honest, to me too cold to go swimming. Would be nice to swim there when hot. To walk around, just to be”.

Photograph 19 - Valley forest (+2)

- Subject 18: “Outside, and water and green”.
(LocF34)
- Subject 50: “Looks untouched by humans. I can’t see any manmade objects, any pylons, any buildings, obvious tracks. Looks like unsliced native bush. I think about places like this when I want to relax. Looks peaceful and not chaotic. Aesthetic value is really high. The fact that we know they are there is enough. In memory, mind even if not there. Green is relaxing to look at”.
- Subject 51: “Shows nice forest – emergent trees – podocarps probably. Nice clean river. (What is nice?) Its in a natural state, soft, pleasant to eye, not hard to look at. Smooth and rounded natural features. Diverse, lot of trees, lots of things for eye to look at”.
- Subject 79: “I enjoy the nature. This image expresses it. The river, the green, the colours. Comfortable. (What would you do there?) Maybe I pass it when I’m walking. Have a break there”.

Photograph 26 - Coastline – beach (+2)

- Subject 17: “Like to see the ocean distorted – still natural, no interference”.
(VisOF22)
- Subject 18: “Love the beach. Try and walk on the beach regularly”.
(LocF34)
- Subject 50: “Boulders and black beeches”.
(VisNZF23)
- Subject 67: “I like the sea. That’s an active place”.
(LocM39)
- Subject 69: “Looks a little colder (compared to photograph 22). I like being by the water, the ocean. There’s still something refreshing about it”.
- Subject 79: “We’ve not seen at home. The waves. I could sit there for hours and look at the waves. Huge bay, long distance bay”.
- Subject 82: “Quite different”.
(VisOM52)
- Subject 94: “I’ve seen it on the road. Lots of sea”.
(VisOF26)

Photograph 1 - Lake edge (+2)

Subject 18: “Colour of water. Bush looks wild, uninhabited, natural.”
(LocF34)

Subject 50: “Looks reasonably untouched. Lake edge, wetland area as well which I like because of my lake experience. They are beginning of food chain, starts impacting on the larger things. Real relaxing feel, reasonably still water on a calm day. I get images of kayaking – some activity that blends with the environment”.

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

15	Rubbish dump	(-4)
11	Electricity substation	(-3)
17	Mining (gold)	(-3)
23	Dairy factory	(-2)
18	Petrol station	(-2)
25	Water supply tanks	(-2)

Four of these photographs are of infrastructure, and two relate to commercial activities.

Photograph 15 - Rubbish dump (-4)

Subject 17: “Absolutely screaming. In middle of forest see garbage”.
(VisOF22)

Subject 18: “Disgusting – bush and sky and help”!
(LocF34)

Subject 50: “Fact that there is recyclable rubbish chucked in there. Looks like next to really nice area of native bush. It is an eyesore - suggests to me we must be lacking in space. Consumerist thing - amount of rubbish, what we do with it - packaging”.

Subject 69: “All the rubbish. (What could be done to improve places like this?) Having a rubbish bin nearby. I don’t know where this is – on the road edge? Educating people, fines, educating children at schools”.

Subject 94: “How can they do that? Awful, just put that stuff over there”.
(VisOF26)

Photograph 11 - Electricity substation (-3)

- Subject 18:
(LocF34) “Really dislike. Unhealthy – hate to live near. Electro magnetic waves. Man made, but ugly. Has no bush around”.
- Subject 51:
(VisNZM23) “Shows area completely modified to fit in this power-station. Visually, it is an eyesore, but I guess its necessary with the way we live. Just dumped a few poles and a roll of wire in front there. Doesn’t look like they pay attention to keeping it as well as they can. (What could be done to improve places like these?) Can’t really solve the problem, they need to be there. Everyone relies on electricity. Could offset visual problem by planting some decent trees around it, or putting it in a hollow or something, or underground and cover with trees. But that’s too hard, people take the easy options”.
- Subject 65:
(VisOM31) “Industry. Views of mountains. (What could be done to improve places like this?) It will be impossible. Can’t manipulate with painting”.
- Subject 67:
(LocM39) “I don’t like the idea of energy flowing everywhere”.
- Subject 82:
(VisOM52) “Its an ugly construction. They should pull it right away”.
- Subject 94:
(VisOF26) “Its damaged nature. Can see mountains behind, but whole stuff in front – a paradox”.

Photograph 17 - Mining – gold (-3)

- Subject 17:
(VisOF22) “This too – disturbing. Landscape is so brutal”.
- Subject 18:
(LocF34) “Not particularly attractive – don’t mind mining – need to fix up what they ruin and it can be done okay”.
- Subject 50:
(VisNZF23) “Looks like raping the land. I hate stuff like it. Obviously there were trees on there that are completely gone. Looks unstable. Shows worst interaction of humans and nature – segregation. It’s intrusive. Question how they are going to rehabilitate it”.
- Subject 51:
(VisNZM23) “Obviously completely disrupted natural forest structure. Basically natural system and created a huge eyesore. But to give them credit, looks like they are covering what they are doing, or it could be native forest taking over again. Also involves questions about run off – what could be flowing down into natural river. Certainly ripped into it a bit”.

Subject 65:
(VisOM31) “Ruins the landscape. I would look to the other side”.

Subject 79:
(VisOM24) “Doesn’t represent image from New Zealand. Need all these things, industry. (What is the image from New Zealand?) Nature, land, no people. Coast – the sea”.

Photograph 23 - Dairy factory (-2)

Subject 23:
(LocM39) “That annoys me the most because I live by it”.

Subject 50:
(VisNZF23) “With the dairy farming again. It’s not very pretty. Haven’t tried to plant trees. Doesn’t blend with the whole environment at all. (What could you do to improve this place?) Hard with something big like that. More trees, revegetate island more. Tiny shrubs. Maybe they should be more concentrated in the cities”.

Subject 65:
(VisOM31) “I’ve been there. It’s just industry, like everywhere on the world”.

Subject 69:
(VisOF49) “It’s a factory. I don’t like the appearance of it. I don’t care for buildings like that. I know they are necessary”.

Subject 94:
(VisOF26) “Same. Destroying nature”.

Photograph 18 - Petrol station (-2)

Subject 67:
(LocM39) “Not good for meditating. Has personal meaning. My house used to be there. I grew up there. I played in the tree that was next to the palm tree. I wouldn’t meditate there because that’s the highway”.

Subject 69:
(VisOF49) “Kind of a neutral one too. I guess I’d like to see more trees around it”.

Photograph 25 - Water supply tanks

Subject 69:
(VisOF49) “Not sure what it is. Just like nature better. They’ll actually not that obvious. They’re fairly obscure”.

Summary for Factor 1: 'Pure Nature'

The main themes from the comments listed above about Factor 1 are presented below, followed by a synthesis of the themes and other data. This synthesis, whilst based on comments generated in individual Q sorts, necessarily goes beyond these individual comments. This is because the comments were extracted only from the highest loading subjects. The overall factor array is based on the Q sorts of all subjects loading onto the factor and is therefore important in its own right. Thus, synthesis includes factor interpretation rather than individual subject interpretation, and makes reference back to the figure presented earlier and uses other information about the factor. This approach applies to the presentation of all factors for both Q sorts.

Positive:

Character (qualities of the settings)

- Nature, 'Pure Nature', natural area, natural state, natural geology, natural way, formed by nature.
- Nature opened up, dark and mysterious, unsliced native bush, mountain and water together, wild, uninhabited, rough, cold, rugged.
- Spectacular, amazing, beautiful, high aesthetic value, green, colours good, soft, smooth, pleasant to eye.
- Contrast, diversity, diverse, active, different.
- Untouched, undisturbed, no interference, no man made objects, not regulated, simple, pristine, clean, clear, refreshing.
- Not chaotic, not busy, not crowded, quiet, still, peaceful, nobody in picture, tranquil, comfortable.
- Big, expanse, space, wide, huge, long distance.

Elements (physical and tangible qualities of the settings)

- Water, clear blue water, clean water, still water, river, clean river, braided rivers, riverbed.
- Lake, lake edge, huge bay.
- Sea, ocean, waves, shore coast, coastline, rocks, boulders, beach, shells.
- Forest, mature trees, developed forest, emergent trees, lots of trees, bush, black beeches, podocarps.
- Lake and forest, mountains and water together, water and rocks, rocks-water-forest, water and green, river-green-colours.
- Mountains, clean air.
- Habitat, wetland, birds, bird life.

Evoking (feelings, sensations, memories associated with the qualities of the settings)

- 'Pure Nature', expresses nature, clean air, good deep breathes.
- Danger, dark and mysterious, can't take for granted, feel your insignificance, just to be, relax, green is relaxing, real relaxing feel.
- A feeling of freedom, away from people, time out, relaxation, relaxing feel.
- Concern for Canterbury rivers, my lake experience, beginning of food chain.

Activities (what subjects would do in those settings)

- Sitting, sitting for hours and looking, lying down, doing nothing, enjoying the sun, viewing, having a break.
- Walking around, walking on beach, jumping in water, swimming, kayaking, skydive in a place like that, lots of things for eye to look for, activity that blends with the environment.

Negative:

Character and elements (qualities of the settings)

- Absolutely screaming, disgusting, disturbing, not pretty, not attractive, eyesore, awful.
- A paradox, in middle of forest see garbage, bush and sky and help!, just put stuff over there, mountains in background - whole stuff in front, next to nice bush, just dumped.
- Man made, industrial, ugly, ugly construction, factory, no bush around.
- Damaged nature, completely modified, disrupted, destroying, unstable, ripped into, intrusive, brutal.
- Exotic plants, rubbish, jet boats, manmade objects, pylons, buildings, tracks.

Evaluation (of the qualities of the settings)

- Ruins the landscape, raping the land, destroying nature, segregation, disrupted natural forest structure, doesn't blend with whole environment, trees in there that are completely gone, worst interaction of humans and nature.
- Need all these things, I know they are necessary, necessary with the way we live, like everywhere in world, can't really solve problem, visual problem, can't manipulate with painting, people take the easy options, are covering what they are doing.
- Doesn't represent New Zealand, don't care for buildings like that, not keeping it as well as they can, haven't tried to plant trees, question how they are going to rehabilitate it, question of run off.
- Unhealthy, hate to live near, energy flowing everywhere, electro-magnetic radiation.
- Recyclable rubbish chucked in there, suggests lacking in space, consumerist thing – amount of rubbish.

Management (implications of the settings)

- Education, fines, packaging, electricity reliance.
- Plant some decent trees, put in hollow or underground, cover with trees, more trees, re-vegetate more, put right away, fix up what they ruin.
- Should be concentrated in cities.

The positive themes show that Factor 1 is responding to nature. The main character of the settings is of nature as open, mysterious, wild and rugged. It is spectacular and amazing, aesthetically appealing, and rich in contrasts. An important characteristic is that nature is untouched and pristine and as a result is peaceful and quiet, not busy or crowded. Nature is also characterised as manifesting as a large-scale phenomenon. The important elements in the liked settings include water, lakes, or sea and coastal elements such as rocks, boulders and beaches. Also important are forest, trees or bush. These characteristics are overlain with an awareness of colour and contrast. The elements also provide habitat. Thus Factor 1 is sensitive to a wide range of elements in the natural environment. Individual elements or particular combinations of elements are experienced as defining a distinctive feel or mood in each setting. The settings evoke nature, which can be dark and mysterious or show one's insignificance. They also evoke a feeling of freedom or relaxation. A variety of activities are associated with these liked settings including the more passive activities of sitting, lying down or doing nothing, or the more active activities of walking, kayaking or skydiving.

The negative themes show that the main character of infrastructure is that it is disturbing and unattractive. Strong words are used to express distaste for infrastructure in otherwise 'natural' settings. It is ugly, man-made and industrial. Infrastructure is seen as damaging, disrupting and intruding into nature. In evaluating these negative settings, Factor 1 emphasises how infrastructure ruins the landscape and nature and therefore is an offence to nature. While some infrastructure is acknowledged as necessary, Factor 1 sees it as unhealthy and is concerned that little attempt has been made to improve the damage caused, especially in relation to mining – gold (17). Suggestions are made for hiding or remedying the offensive view, such as more plantings and/or re-vegetation. Factor 1 also displays an awareness of environmental concerns: comments show knowledge of waste management issues with respect to rubbish dump (15), and environmental pollution issues with respect to electricity substation (11) and dairy factory (23).

The themes fit well with other information already presented on Factor 1. The overall array shows that the top six photographs are all apparently natural. Other photographs of natural settings that were less popular overall, lowland forest (9), regenerating pakihi (12) and valley forest (19), were rated significantly higher by Factor 1 compared with Factors 2 and 3. Farming is also not part of the preferred landscape: improved farming (5) and unimproved farming (21) receive neutral scores, and are rated lower than for other factors. Overall, the emphasis on 'Pure Nature' is consistent with the finding that Factor 1 subjects are younger than those for Factor 2 and Factor 3, and many have tertiary qualifications³. Factor 1 perhaps has a more idealistic view of nature because of these attributes. The title selected to describe Factor 1 is Pure Nature.

3 In any quantitative study of the distribution of the factors in the population we would expect that Factor 1 would be younger on average compared to Factors 2 and 3.

3.2.3 Factor 2: ‘Living in Nature’

Factor 2 accounts for 18 per cent of the total variance among the rotated factors and comprises 14 subjects. Eleven of these subjects were local males. The remaining people included one male New Zealand visitor, living in Christchurch but formerly from the United Kingdom, and two local females. The ages of the locals ranged from 29 years old to 69 years old, and there were 64 per cent with an age greater than 40 years. Only 29 per cent of all subjects loading onto Factor 2 had, or were receiving, a tertiary education.

Figure 2 shows the array for Factor 2. The array in overview shows both natural and built settings in the liked piles, a mix of built structures and natural settings in the neutral piles, and mainly infrastructure settings in the disliked piles. Compared to the other two factors, Factor 2 has two photographs, town centre (4) and glacier hotel (8), significantly higher and liked. Both of these include bars, and constitute important places for socialisation by local males. Three photographs showing infrastructure in the neutral column may be settings that are familiar to residents of Hokitika or the Westland. All three are rated more highly than for the other Factors. The two photographs highest in the neutral column, dairy factory (23) and town centre – shops (6), are perhaps more distinctive of Hokitika compared to the lowest one, petrol station (18). Factor 2 also has five photographs rated in a lower position compared to all other Factors, and three of these five, valley forest (19), lowland forest (9) and regenerating pakihi (12), are “natural” settings. This suggests that Factor 2 privileges local or urban amenities ahead of certain natural settings, although still valuing scenery that is typical to the Westland and which attracts visitors to the place.

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

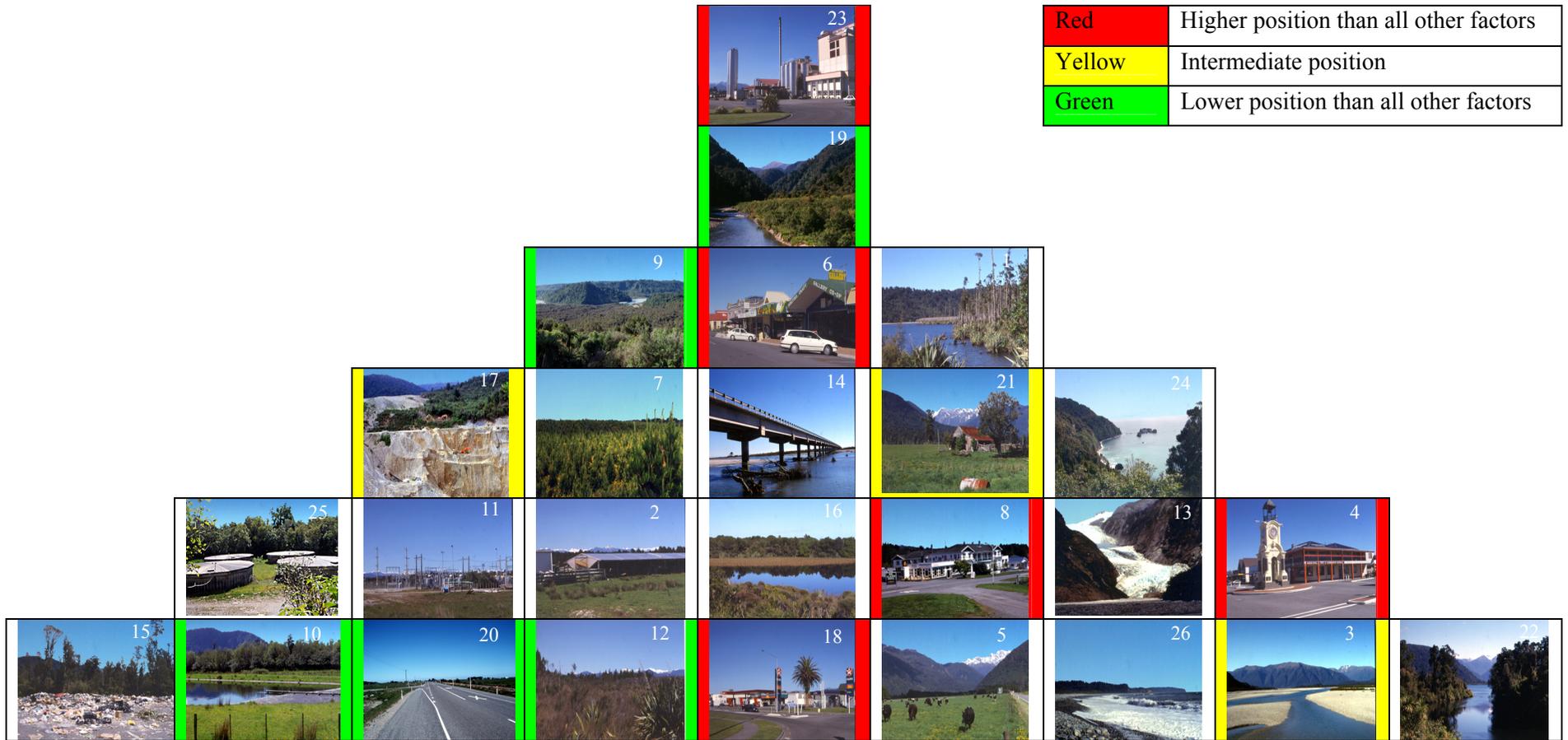
22	Lake and forest	(+4)
4	Town centre - railway hotel	(+3)
3	Braided river	(+3)
24	Coastline - rocky	(+2)
13	Glacier	(+2)
26	Coastline - beach	(+2)

All of these photographs, except one, are of natural settings and have water as a common element. The remaining photograph (ranked second highest) shows the Hokitika town clock and nearby hotel. Comments made by subjects loading highly on the factor are listed below.

Figure 2
Array of Photographs for Landscape Factor 2 - 'Living in Nature'

Key

Red	Higher position than all other factors
Yellow	Intermediate position
Green	Lower position than all other factors



Photograph 22 - Lake and forest (+4)

- Subject 23:
(LocF37) "River and bush and mountains. Like mountains at back, especially in winter".
- Subject 26:
(LocM31) "Coast, sea, everything that represents the Westland. Sea, trees, ruggedness, coastline".
- Subject 28:
(LocF38) "Lovely view and natural".
- Subject 34:
(LocM34) "Bush and mountains and river/lake all in one. You know one spot you get the lot".
- Subject 37:
(LocM42) "Scenery of it. Really nice, clear. Peaceful".
- Subject 72:
(LocM47) "Similar - typical. Mountains as added dimension. Implies river to coast. Typical. No roads".

Photograph 4 - Town centre – railway hotel (+3)

- Subject 23:
(LocF37) "That is Hokitika - symbol. Where I'm from - identify. Tourists take photos."
- Subject 26:
(LocM31) "Love the Hokitika town clock. Its home to me. Not so keen on hotel, but it is historic".
- Subject 28:
(LocF38) "It's home and it's the welcome home. Clean".
- Subject 34
(LocM34) "Identity of the Hokitika Hotel - go to it and others. Nice old pub - done up well, both are old".
- Subject 37:
(LocM42) "Symbol of town".
- Subject 91:
(VisNZM59) "Sentimental reasons with respect to sport. Symbol of Hokitika - wonderful clock tower and cars have to go around it".

Photograph 3 - Braided river (+3)

- Subject 28:
(LocF38) "Beautiful isn't it? Clean water".

- Subject 34:
(LocM34) “River heading to mountains - how close we are to them. Don’t really go. Looking at going to Australia but realised got good bush here. Now have a boat. Go to Kanieri”.
- Subject 37:
(LocM42) “Nice picture of clean river. Can imagine yourself there fishing. Not done all that much. Do in retirement”.
- Subject 91:
(VisNZM59) “Open scenery – wilderness of it all. Contrast in mountains - flatness compared to others parts of world”.

Photograph 24 - Coastline rocky (+2)

- Subject 23:
(LocF37) “Like bay etc. Struck me the scenery. Coastal.”
- Subject 26:
(LocM31) “Coast, sea, everything that represents the Westland. Sea, trees, ruggedness, coastline”.⁴
- Subject 72:
(LocM47) “Magic - essence of south Westland coast. Land pops out of sea and near to mountains. Majesty”.
- Subject 91:
(VisNZM59) “Grand, geology, typical between Greymouth and Westport. Mountains to sea relevant to history - had to fight these conditions”.

Photograph 13 - Glacier (+2)

- Subject 23:
(LocF37) “Symbols - like snow. Not been recently”.
- Subject 26:
(LocM31) “Which glacier is it? My favourite, scenic, even locals enjoy it.”
- Subject 34:
(LocM34) “Never been to see them. Like it because it’s natural. Mother nature made”.
- Subject 37:
(LocM42) “Clear. Clean. Peaceful. Natural.”

4 This subject has used the same comments to describe photographs 22 and 24.

Subject 72: “Typical jewel in the crown. Although photograph number 1 (lake
(LocM47) edge) is well liked by tourists”.

Subject 91: “Hate mountains and going up them. I get dizzy”.⁵
(VisNZM59)

Photograph 26 - Coastline – beach (+2)

Subject 28: “Like the beach, its clean and natural. I go there.”
(LocF38)

Subject 34: “Sea and natural beach. Nothing else is manmade, untouched”.
(LocM34)

Subject 91: “Westland beaches, and able to walk an hour either way on autopilot and
(VisNZM59) the scenery is accessible”.

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

15	Rubbish dump	(-4)
10	Sewage ponds	(-3)
25	Water supply tanks	(-3)
20	State highway	(-2)
11	Electricity substation	(-2)
17	Mining - gold	(-2)

Five of the above photographs show basic infrastructure in Westland. The odd one out is mining - gold (17), showing industrial activity.

Photograph 15 - Rubbish dump (-4)

Subject 23: “Just lying around”.
(LocF37)

Subject 37: “Just been let go. Not properly managed”.
(LocM42)

Subject 34: “Just doesn’t look right. Next to bush. They don’t go together. Without
(LocM34) dump it would be good”.

⁵ This subject actually rated Glacier (13) lower than the factor array overall giving it a neutral score, rather than a liked score. Other comments with this characteristic are identified by an asterisk.

- Subject 26: “Rubbish, no one wants to see the tip”.
(LocM31)
- Subject 91: “Rubbish and rubble, trees indicate that it could recover quickly”.
(VisNZM59)
- Subject 72: “Unbelievably poor, there is no excuse for it”.
(LocM47)
- Subject 28: “Just a dump, not look after. It is ruining the environment, it could
(LocF38) couldn’t it lead to rats and pests. We need recycling bins”.

Photograph 10 - Sewage ponds (-3)

- Subject 23: “Its an old sewage pond”.
(LocF37)
- Subject 37: “Could have been hidden better. Better than raw sewage out to sea”.
(LocM42)
- Subject 34: “Just a bloody sewage pond. It does nothing. Nice background”.
(LocM34)
- Subject 91: “Pipeline into lagoon suggests it could be sewage. Just plonked into a
(VisNZM59) peaceful lagoon. No disguise, no bushes, hard to know what it is.”
- Subject 72: “Been there for 20 years but no planting.”
(LocM47)
- Subject 28: “Sewage, have to have it but quite tidy.”
(LocF38)

Photograph 25 - Water supply tanks (-3)

- Subject 23: “Just water tanks, no meaning”.
(LocF37)
- Subject 34: “Doesn’t do anything for me, it’s a non-event”.
(LocM34)
- Subject 26: “What are they? It is visual, like photograph 11, they don’t look right”.
(LocM31)
- Subject 91: “Dropping in these artificial structures with that background. Perhaps
(VisNZM59) spread out, perhaps spread it out”.

Subject 72: “No attempt to do anything to improve what is essentially ugly”.
(LocM47)

Subject 28: “What are they? They have a purpose”.
(LocF38)

Photograph 20 - State highway (-2)

Subject 23: “Boring bit of road”.
(LocF37)

Subject 34: “Could be anywhere”.
(LocM34)

Subject 91: “Dumped homogeneous seal, plus bold lines across vegetation. No
(VisNZM59) effort to fit it in. A shingle road with gorse fence-lines would be better”.

Subject 72: “Same as photograph 15. Its nothing”.
(LocM47)

Subject 28: “Highway, I don’t like roads, its looks busy. I’ve been in an accident
(LocF38) recently”.

Photograph 11 - Electricity substation (-2)

Subject 23: “Its an eyesore”.
(LocF37)

Subject 34: “It’s a bit pointless really”.
(LocM34)

Subject 26: “They don’t look right”.
(LocM31)

Subject 72: “No attempt to do anything. Its just a blot”.
(LocM47)

Photograph 17 - Mining – gold (-2)

Subject 37: “Looks awful, it does give employment and can be put back okay”.
(LocM42)

Subject 26: “Just damn ugly, and its not just the surface. Its right next to a pretty
(LocM31) town”

Subject 91: “Work of dredges in years gone by and no effort to disguise it. It is
(VisNZM59) attacking the scenery”

Subject 28: “This is towards neutral. It’s another form of destruction but creates
(LocF38) jobs. Its looks dangerous. They leave it like that, some do, some leave
it good and turn it into farmland.”

Summary for Factor 2: ‘Living in Nature’

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

Positive:

Character (qualities of the settings)

- Mountains at back, mountains in background, river-bush-mountains, bush-mountains-
river/lake all in one, mountains as added dimension, river heading to mountains, contrast
in mountains, land pops out of sea and near to mountains, mountains to sea, mountains
and flatness.
- Coast to sea, coast and sea, trees and rugged coastline, river to the sea, coastal.
- Natural, mother-made, wilderness, rugged, good bush.
- Scenic, beautiful, a jewel in crown, magic, majestic, grand, wonderful.
- Nothing man made, no roads, untouched, open, peaceful, lovely, nice.
- Clean, clean river, clean water, clear, clean and natural.
- Typical, symbolic, historic, accessible.

Elements (physical and tangible qualities of the settings)

- River, bush, mountains, trees.
- Beach, coast, coastal scenery, coastline, sea, bay.
- Glacier, snow, geology.
- Clock tower, Hokitika town clock, Hokitika, nice old pub, historic hotel.
- Tourists, hotel, cars.

Evoking (feelings, sensations, memories associated with the qualities of the settings)

- Everything that represents Westland, essence of south Westland coast, typical between
Greymouth and Westport, Westland beaches, how close we are to mountains, implies
river to coast.
- Symbol of Hokitika, symbol of town, sentiment, it’s the welcome home, it’s home to me,
where I’m from.
- Sport, fishing, winter, retirement, history, comparison with other parts of world.
- You know one spot you get the lot, my favourite, even locals enjoy it, I go there.

- Tourists take photos, well liked by tourists.
- Don't really go, not done all that much, do in retirement, not been recently, never been to see them.

Activities (what subjects would do in those settings)

- Fishing, boating, walking, viewing, go to pub.

Negative:

Character (qualities of the settings)

- Ugly, damn ugly, old sewage pond, bloody sewage pond, eyesore, a blot, awful, dangerous.
- Rubbish, rubbish and rubble, let go, just lying around, dropped in, unbelievably poor, just a dump.
- Next to bush, just plonked into peaceful lagoon, bold lines across vegetation, next to pretty town, attacking the scenery.
- Doesn't look right, don't go together, hard to know what it is, visual problem.
- Artificial structures, bit of road, dumped homogeneous seal, form of destruction, work of dredges, looks busy.
- A non-event, no meaning, pointless, does nothing, is nothing, boring, neutral, doesn't do anything for me.

Evaluation (of the qualities of the settings)

- Ruining the environment, attacking the scenery, leads to rats and pests, no effort to fit in, no effort to disguise, no disguise, no bushes, no planting, could have been hidden better, no attempt to do anything to improve.
- Not looked after, not properly managed, no excuse for it.
- Could be anywhere, have to have, have a purpose, no one wants to see.
- Can be put back okay, some leave it good, trees indicate it could recover quickly, better than raw sewage out to sea.

Management (implications of the settings)

- Need recycling bins, perhaps spread it out, shingle roads with gorse fence line would be better, turn it into farmland.
- Does give employment, creates jobs.

The positive themes show that Factor 2 is also responding to nature. There is appreciation for mountains, bush, river and sea. The coast is also attractive. Nature is mentioned along with absence of human intervention, and nature is seen as clean. Nature has qualities of being beautiful, majestic and grand. The settings have a typical or symbolic character. Like Factor 1, Factor 2 is sensitive to a wide range of elements in the natural environment especially the mixture of different, contrasting elements. The settings that combine mountains with water

in various forms, such as lake and forest (22) and coastline – rocky (24) illustrate this point. In addition, there is reference to built elements such as the clock tower and the hotel. While nature is important to Factor 2, the character of this response is different compared with Factor 1. The references to nature are not so frequent or detailed and there is no reference to colour. The settings evoke Westland, its towns and its natural features. Also evoked are a number of activities for locals and for tourists. Nature is surely liked, but the settings evoke appreciation of Westland, and, to a lesser extent, the assets or resources that attract visitors and tourists to the place that is considered home. Activities in the liked settings include fishing, boating and walking, in addition to going to the local hotel.

The negative themes show that basic infrastructure is mostly seen as an offence or is taken for granted as part of the familiar landscape. Factor 2 uses strong words to express distaste of infrastructure, especially the rubbish dump (15). It is next to bush and does not look right. Factor 2 therefore evaluates certain infrastructure as ruining the environment, and, in terms of management, sees it as improperly maintained and/or sitting uncomfortably within its natural surrounds. There is concern, for example, that little or insufficient attempt is made to hide these through planting. Few suggestions are made for management of infrastructure and there is acknowledgement that infrastructure provides jobs.

While the expressed character of infrastructure is similar to Factor 1, Factor 2 is, however, more likely to interpret some infrastructure as unproblematic or boring. For Factor 2, a tension is experienced with respect to infrastructure and commercial activity that provides employment or has some other identifiable or definite purpose. This tension relates to Westland embodying ‘home’ for the people living there. Some infrastructure is accepted as necessary where it is an integral part of people’s routine interactions with each other and their environment. Thus, unlike other factors, Factor 2 has more ambivalent reactions to settings featuring both natural and built elements.

These themes fit well with other information already presented on Factor 2. The overall array shows that the photographs liked include natural settings and built structures. Compared to all other factors, Factor 2 likes the town centre (4) with its hotel. The Fox Glacier Hotel (8) is also liked, albeit not as strongly. Familiar infrastructure is in the middle column, compared with the disliked columns of the other factors, because these local males are working and living with these. The Hokitika sewage pond in photograph 10 is readily recognised by locals on Factor 2 for not being something green and ‘good’. (Overseas visitors were less likely to detect what the place actually was.) Conversely, photograph 20, of a newly constructed road, is disliked by Factor 2 because its flatness and width is taken to be uncharacteristic of roads in Westland. Local knowledge may also explain why three ‘natural’ settings were rated lower by Factor 2 than for all other factors. Regenerating pakihi (12) and lowland forest (9) may be seen as lower country and associated with wet and difficult terrain. These settings could also be interpreted as unproductive wasteland from a farming point of view. Valley forest (19) may be disliked for similar reasons, and seen as not representing the Westland landscape.⁶

Factor 2 comprises subjects who were older than Factor 1 and had more subjects who lived in Westland. Their comments showed that in some cases they do not always actually participate in activities perhaps because they were too busy or perhaps because they could always pursue activities at a later time. While the majority of subjects loading on Factor 2 were locals it

6 Reference was made to comments on photographs not placed in the top six positions in the Q sort.

was still true that some Factor 1 subjects were also locals. An important point is that while many local males identified with the ‘Living in Nature’ experience, this was not the only experience of local males.

In sum, for Factor 2, the liked settings symbolise the people and landscape of Hokitika and the Westland, and evoke feelings of belonging to the place. The experience is of an appreciation of nature, juxtaposed with urban buildings and facilities, because both are important components of the place where people live. It is in this respect that “At Home in Nature” is an apt descriptor for this factor.

3.2.4 Factor 3: ‘Pastoral Nature’

Factor 3 accounts for 27 per cent of the total variance among the rotated factors and comprises 31 subjects. Of these, 17 were overseas visitors, compared with eight locals and six New Zealand visitors. Overseas males were slightly outnumbered by overseas females and there were also many more New Zealand females than New Zealand males. Approximately 40 per cent of the subjects loading on Factor 3 were more than 40 years old. Overall then, the subjects loading on to Factor 3 were similar to Factor 1 in that there was a mix of groups loading on it but they were older and comprised more females.

Figure 3 (page 39) shows the array for Factor 3. The array for Factor 3 in overview shows both natural and farming photographs in the liked piles. The neutral column has mainly natural photographs but includes the bridge (14) and town centre – railway hotel (4) as did Factor 1. Photographs disliked include infrastructure and industry. Unlike Factor 2, for example, dairy factory (23) and petrol station (18) are rated in the bottom six. Compared with the other two factors, Factor 3 has unimproved farming (21) and improved farming (5) in a higher position. Both are strongly liked. The three natural settings of braided river (3), coastline – beach (21) and lake edge (11) were not as strongly liked as for all other factors. These settings have fewer green elements in them compared with the natural settings that were strongly liked. The sewage pond (10) is also liked, suggesting Factor 3 has a more favourable attitude to infrastructure with a strong element of nature. Mining – gold (17) is also not as strongly disliked compared with the other two factors.

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

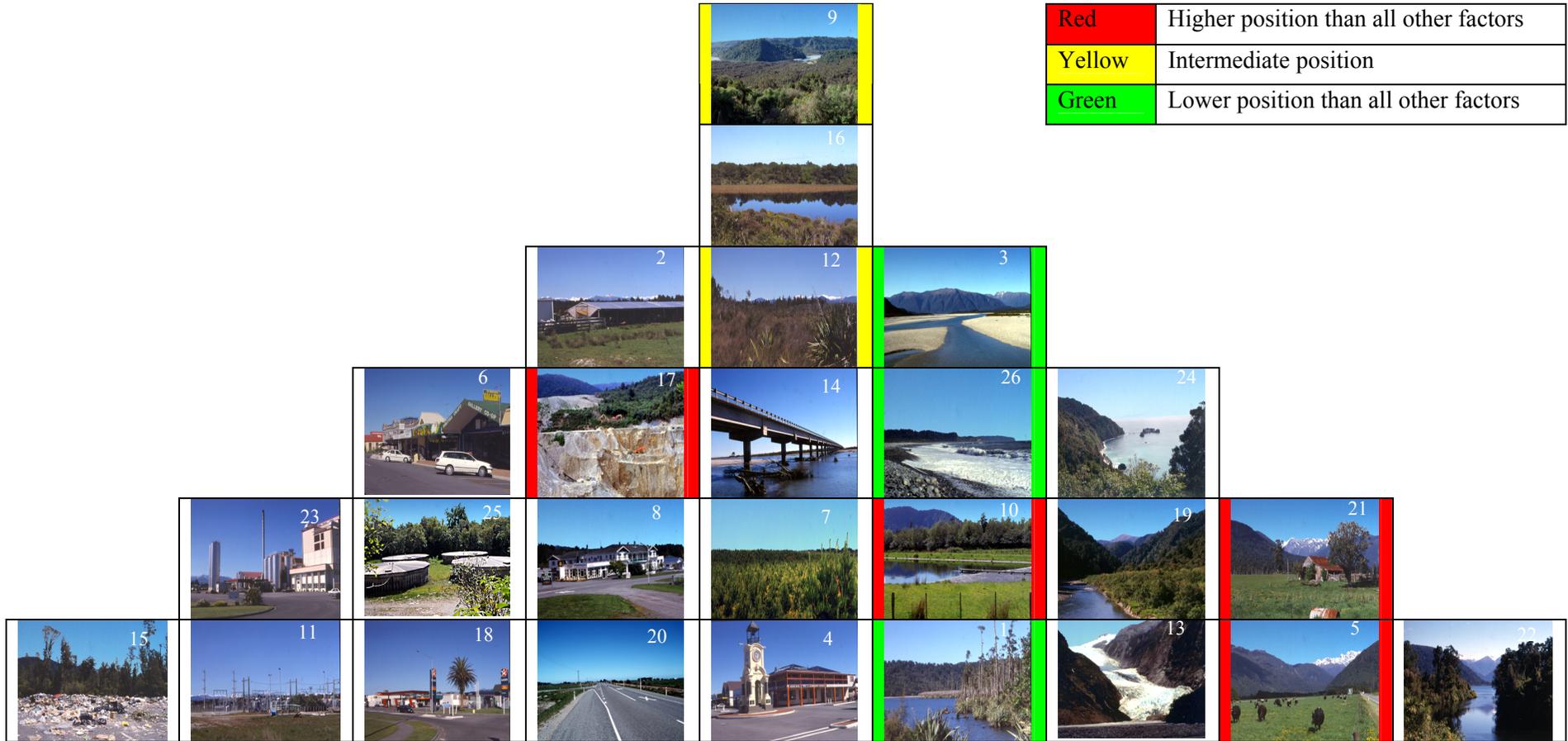
22	Lake and forest	(+4)
21	Unimproved farming	(+3)
5	Improved farming	(+3)
24	Coastline – rocky	(+2)
19	Valley forest	(+2)
13	Glacier	(+2)

Four of the six photographs are of natural settings, and most feature water, mountain and bush elements. The two remaining photographs (ranked second and third) depict places with a pastoral setting which combines natural and ‘unnatural’ elements, such as the old building in the unimproved farming setting, and the dairy cows in the improved farming setting. The mountain backdrop is important. Comments made by subjects loading highly on the factor are listed below.

Figure 3
Array of Photographs for Landscape Factor 3 – ‘Pastoral Nature’

Key

Red	Higher position than all other factors
Yellow	Intermediate position
Green	Lower position than all other factors



Photograph 22 - Lake and forest (+4)

- Subject 4:
(VisOM50) “Fantastic. Beautiful nature. Romantic, silence, peaceful”.
- Subject 6:
(VisOF22) “Looks so natural – no one has touched it - stayed the same as it was. I feel like I connect with that”.
- Subject 20:
(LocM47) “Nature, bush and snow in background. I’m a Hunter”.
- Subject 38:
(LocF24) “Greenery and mountains and water - all nice things”.
- Subject 75:
(VisOF27) “Looks peaceful. Mountains and water - what I like. Peaceful. No one to impress. Be yourself”.
- Subject 95:
(VisOM24) “Totally natural, mountains, rivers, trees. Looks like a nice place to be”.
- Subject 97:
(VisOM25) “Very similar to Milford Sounds. Just the peacefulness of it. Calm. Kind of towards the end of the day there. All the hustle and bustle’s going down”.

Photograph 21 - Unimproved farming (+3)

- Subject 4:
(VisOM50) “Very good. Grabs my fantasy to see a house like that. I would like to live there. Peaceful, secluded with mountains in back. Good place to live.”
- Subject 6:
(VisOF22) “This is something I could never see - the snow, the mountains and the farm. It’s a new composition for me”.
- Subject 20:
(LocM47) “Bit of old history - old yards. Beautiful place. As a young fella to be brought up there. Like mountains”.
- Subject 38:
(LocF24) “Mixture of nature and old fences. Shed - unique”.
- Subject 75:
(VisOF27) “Mountains, reminds me of home. Lots of old stuff on farms in Alberta. Beautiful. Anything with mountains I like. (What do you like about mountains?) Majestic, big and we are so little. Grand piece of nature, and I love nature”.

Subject 86:
(VisNZF42) "I like this because of mountains up there. And the house. I don't like this piece of rubbish in the front. Memories of my childhood".

Subject 95:
(VisOM24) "Mountains. House is a bit run down, but seems to be a nice house with a good view".

Photograph 5 - Improved farming (+3)

Subject 4:
(VisOM50) "Same as photograph 21. Lots of space. Beautiful area, natural. Dutch cows".

Subject 6:
(VisOF22) "Pretty much same, but in different way. Can see the nature of it. New things - the animals".

Subject 20:
(LocM47) "Green grass and mountains. Reminds me of dairy farm - last one - so much like it. Good hunting".

Subject 38:
(LocF24) "Has snow and cows in paddock and yellow - even the weeds they look nice. Yellow is my favourite colour".

Subject 86:
(VisNZF42) "Reminisces of places I used to go as a child. (What reminds you of your childhood here?) The grazings - the cows, and the snow mountains up there. The coziness of the mountains".

Subject 95:
(VisOM24) "I have a thing for snowy mountains. Looks like a peaceful place. (What is peaceful about it?) Cows and meadow. Cows are a vicious animal, but still make for picturesque pictures".

Subject 97:
(VisOM25) "The background. I'm a farmer so I appreciate the agriculture. How green it is. The cattle grazing on grass. In foreground, summer time grass, snow in background as well".

Photograph 24 - Coastline - rocky (+2)

Subject 4:
(VisOM50) "Not very specific, but okay. Nice little bay".

Subject 6:
(VisOF22) "Water - can see the ocean. Something that no one can touch. Can see the end".

Subject 20:
(LocM47) "Good elevation, not so good at sea level".

Subject 38:
(LocF24) "Clearness of water coming off hills looks good".

Subject 75: “Beautiful view - maybe kayak around. Secluded. Untouched”.
(VisOF27)

Subject 86: “Reminds me of Mediterranean coast. Again the memories”.
(VisNZF42)

Photograph 19 - Valley forest (+2)

Subject 4: “Beautiful, green, also silence. Good place to sit on a lost afternoon
(VisOM50) reading a book”.

Subject 6: “The green. You can see all that you want. Everyone will see the same
(VisOF22) thing. Peaceful and quiet”.

Subject 20: “Same as photograph 9. Reminds me of Westland. Know what’s up
(LocM47) there. Grown up. Can see myself camping. Gold in creek, and hunting”.

Subject 75: “Reminds me of home - by river, mountains and green hills”.
(VisOF27)

Subject 86: “I like this kind of scenery”.
(VisNZF42)

Photograph 13 - Glacier (+2)

Subject 6: “Mountains - I just love them. Mountains in Israel not so powerful,
(VisOF22) strong. Never seen view like this.”

Subject 75: “Perhaps. Haven’t been yet. Seen at home”.
(VisOF27)

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

15	Rubbish dump (-4)	(+2)
11	Electricity substation	(-3)
23	Dairy factory	(-3)
18	Petrol station	(-2)
25	Water supply tanks	(-2)
6	Town centre - shops	(-2)

These six photographs all show man-made structures. Four of the photographs are of basic urban infrastructure. The other two photographs depict signs of commercial activity – dairy manufacturing and retail shopping respectively.

Photograph 15 - Rubbish dump (-4)

- Subject 4:
(VisOM50) "It's a stupid left over from what people do. If you have a society that's what you get. It stinks. It's there. You can recycle now - it doesn't have to be like that. Leaving it there, that's stupid".
- Subject 6:
(VisOF22) "Contrast of rubbish, trees, green and the natural".
- Subject 20:
(LocM47) "Took rubbish away".
- Subject 38:
(LocF24) "Rubbish - messy. Ruins what could have been nice setting".
- Subject 75:
(VisOF27) "Its rubbish. Not interested in. Don't want to see. Just like starving children in other countries. And beautiful trees".
- Subject 86:
(VisNZF42) "You need these places, but you don't like to be close to them".

Photograph 11 - Electricity substation (-3)

- Subject 4:
(VisOM50) "It's a necessary thing, but doesn't tickle my fantasy. Sometimes it can have something special - at night with flames. Its functional."
- Subject 6:
(VisOF22) "Nothing you would want to travel to see. Something you can see everywhere, everyday. Nothing actually".
- Subject 20:
(LocM47) "Pipe jungle, see anywhere - eyesore".
- Subject 38:
(LocF24) "Just jungle of wires. Not natural".
- Subject 75:
(VisOF27) "Think of oil - gas. Unsightly. Mountains in background. Horrible pipes, wires, cables".
- Subject 86:
(VisNZF42) "Just the environmental concerns of it. Poison, dangerous stuff. Scares me mainly".
- Subject 95:
(VisOM24) "Just a power plant. Seems like there was good views before".
- Subject 97:
(VisOM25) "Its ugliness. I appreciate it doing a good job. That's what I expect to see from side of highway. Picturesque backgrounds like that and you're destroying a lovely view".

Photograph 23 - Dairy factory (-3)

- Subject 4:
(VisOM50) “Same as photograph 11. It’s a necessary thing, but doesn’t tickle my fantasy. There’s no problem - not a matter of like or dislike. Its there”.
- Subject 6:
(VisOF22) “Like all together, the contrast. I know they tried. It looks clean and tried to build high”.
- Subject 75:
(VisOF27) “Very unsightly - not art in building or structure - artistically void”.
- Subject 95:
(VisOM24) “Man-made, non-natural building. Not even a pretty building at that”.

Photograph 18 - Petrol station (-2)

- Subject 4:
(VisOM50) “Gas station. They are all over the world. Its commercial”.
- Subject 6:
(VisOF22) “Petrol station. Dirty, full of rubbish, yuk. The smell and the atmosphere”.
- Subject 20:
(LocM47) “Just nothing - no interest”.
- Subject 38:
(LocF24) “Just modern buildings, prefer old”.
- Subject 75:
(VisOF27) “Funny, don’t really hate, just don’t like. Only beauty is fern”.
- Subject 95:
(VisOM24) “Nothing to like. Its just a gas-station”.

Photograph 25 - Water supply tanks (-2)

- Subject 4:
(VisOM50) “Its necessary. Not done specifically to real good shapes and forms. Adjust them to the environment, make them green”.
- Subject 6:
(VisOF22) “Looks like stuck in middle of nowhere. Opposite to photograph five where cows and environment blend in. (How could these be made to blend in more?) If they were smaller and not so high, another colour. If each one could look different”.
- Subject 20:
(LocM47) “Means nothing to me”.

- Subject 75: “Guessed it was oil. Dislike. Ugly. Not good design”.
(VisOF27)
- Subject 86: “I associate this kind of place with some animals, snakes, rats. (Why is
(VisNZF42) this?) Water towers, collect water in these, attracts animals I’m scared
of”.
- Subject 95: “Just water tanks. Man-made things stuck in the middle of nature”.
(VisOM24)
- Subject 97: “Just the structure and the steel work against the background. Looks
(VisOM25) like an orchard”.

Photograph 6 - Town centre – shops

- Subject 6: “Monotone, all the same. No matter what they try to do”.
(VisOF22)
- Subject 38: “Just commercial buildings”.
(LocF24)
- Subject 75: “Same. Commercialism”.
(VisOF27)

Summary for Factor 3: ‘Pastoral Nature’

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

Positive:

Character (qualities of the settings)

- Beautiful, fantastic, majestic, powerful, strong, big, grand.
- Natural, green, clearness.
- Silence, peaceful, peacefulness, quiet, calm, secluded, lots of space.
- Untouched, no one has touched it, something no one can touch, stayed the same, bit of old history, bit run down, unique.
- Romantic, cosy.
- Something I could never see, a new composition for me, new things, never seen view like this.
- Can see the end, good elevation, you can see all that you want, everyone will see the same thing, looks good, looks so natural, can see the nature of it.

Elements (physical and tangible qualities of the settings)

- Bush, greenery, trees, green grass, green hills, hills, summer time grass, meadow, paddock.
- Ocean, little bay, water, rivers, creek, snowy mountains, snow.
- Rubbish, weeds, gold.
- Farm, old yards, old fences, shed, old stuff, house, nice house.
- Dutch cows, cows, cattle, animals, grazings.

Evoking (feelings, sensations, memories associated with the qualities of the settings)

- Reminiscent of places I used to go as a child, reminds me of home, memories of my childhood, as a young fella, again the memories, know what's up there, history.
- I feel like I connect with that, grabs my fantasy, what I like, yellow is my favourite colour, all nice things, nice place to be, no one to impress, be yourself.
- Similar to Milford Sound, reminds me of dairy farm, reminds me of Mediterranean coast, reminds me of Westland.
- The end of the day, hustle and bustle going down, a lost afternoon, we are so little.

Activities (what subjects would do in those settings)

- Hunting, kayaking, camping.
- Live there, be yourself, sitting, reading.
- Farming, agriculture.

Negative:

Character (qualities of the settings)

- Stupid left over, rubbish, poisonous, dangerous, scares me, destroying.
- Stinks, messy, dirty, yuk, eyesore, unsightly, ugly, artistically void.
- Man made, non-natural, commercial, contrast, not fitting in, stuck in middle of nowhere, stuck in middle of nature, structure and steel work against the background, pipe jungle, jungle of wires, horrible pipes-wires-cables, no art in building-structure, not a pretty building.
- Functional, a necessary thing, its necessary, need but don't like to be close, commercialism, monotone, all the same.
- Its there, don't want to see, not interested, doesn't tickle my fantasy, nothing actually, just a power plant, no problem, just nothing, no interest, just modern buildings-prefer old, just commercial buildings, means nothing, nothing to like.
- Looks clean, doing good job, sometimes can have something special.

Evaluation (of the qualities of the settings)

- If you have a society that's what you get, like starving children in other countries, something you see everywhere-everyday, see anywhere, all over the world.
- Doesn't have to be like that, I know they've tried, tried to build high, not good design, not done specifically to real good shapes and forms.
- Destroying a lovely view, ruins a nice setting, seems like there were good views before, the environmental concerns of it.

Management (implications of the settings)

- Can recycle, adjust them to the environment, make them green, make to blend in, make smaller and not so high, change colour.
- Expect to see them from side of highway.

The positive themes show that Factor 3 is also responding to nature. The main character of the photographs is nature which is beautiful and powerful, and which has the qualities of silence and peacefulness. It is untouched or unchanged, and is appealing as a bit of history which is considered romantic. Visual interest is an important characteristic of Factor 3: the settings are seen as new, and they are appreciated because they allow one to see what they contain which is often the natural qualities. The important elements in the photographs include bush and green grass, and water in various forms along with snow and mountains, creating a picturesque setting. In addition, Factor 3 includes man-made elements or structures and animals. A common adjective used to describe the elements is 'green'. The liked photographs evoke memories of childhood and home, a sense of connection, both personally and to other places in the world, and of being oneself. The settings also evoke a sense of winding down. The activities include active and passive pursuits but also farming. It is likely that Factor 3 would like to be in Westland or even to live there. The experience is of nature as a place for humans to live and to be part of, although acknowledged as being perhaps a romantic fantasy. These characteristics, elements and responses are typical of a pastoral expression, one that emphasises farming, livestock and a romantic view of country life.

The negative themes show that infrastructure is considered dangerous and a dirty eyesore. The man-made qualities show it to be an intrusion in the environment resulting in unattractive buildings. There is some acknowledgement that infrastructure is necessary and some appreciation of it being designed well. The settings are evaluated in terms of inevitability or more critically that the poor design destroys 'natural' views and nice settings. There are some suggestions for managing infrastructure better by doing something to make it less conspicuous.

The reference to green noted above is important in understanding Factor 1. Patterns in the overall array show that the factor likes having significant green components in the photographs. Those with most green were more strongly liked. Three 'natural' photographs showing less green were liked less than the other factors, and two infrastructure photographs featuring strong green components were ranked higher. In particular, this is true for sewage ponds (10), which is slightly liked. It may also explain why mining – gold (17) was given a higher position than for other factors. Most of the subjects loading onto Factor 3 are women and they perhaps have an approach to the environment that is highly responsive to colour.

Ultimately, settings are liked by Factor 3 where they exhibit a picturesque character, and enable identification with a place and a feeling of connection with the past. Factor 3 wants to be connected to the past through interweaving past, present and future personal and family experiences in 'natural' settings. It is also surmised from the above themes that Factor 3 has a higher tolerance of infrastructure compared to Factors 1 and 2. While the necessity of infrastructure is acknowledged by all three factors, the comments for Factor 3 (rather than the factor array per se) imply some degree of acceptance of activities and processes associated with modernity. Factor 3 has an awareness of social issues and problems linked with commerce, but these are downplayed as part and parcel of public life, as products of the way we live. This links to Factor 3's appreciation for farming, and of natural settings where it is believed that the pressures of work and urban-based activities characteristic of modern life can be escaped from and forgotten. Hence the best title for Factor 3 is 'Pastoral Nature'.

3.3 Tourist Infrastructure Q Sort

A second complete Q sort was also requested of participants. The focus of this second Q sort was tourist infrastructure which was a new addition to the programme for this case study.

3.3.1 Factor Analysis Results

The 111 Q sorts completed in response to the instruction to sort tourist infrastructure photographs in terms of respondents' experience were similarly correlated and rotated using the varimax option of the PQ method computer programme (version 2.06) suitable for personal computers. Four factors were extracted⁷ and they accounted for 60 per cent of the variance of the rotated correlation matrix. For the 29 photographs in this Q sort, the standard error of a factor loading is $1/\sqrt{n} = 0.186$, and, at the 0.01 probability level, a loading has to be at least $0.186 \times 2.58 = 0.48$. 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 68 subjects (61 per cent) whose Q sorts were used to define the factors, the others either not having a significant loading or having multiple loadings. Table 8 shows the key results of the factor analysis. It shows that Factor 1 is the main factor, with a relatively equal distribution of subjects loading onto the other factors. These results support a broad range of viewpoints held amongst subjects. There were from 11 to 14 distinguishing photographs for each factor, that is, photographs which each received a different score at a statistically significant level.

7 Initial inspection of the unrotated factor matrix showed that applying our usual rule of selecting factors with at least two subjects with a significant loading would give six factors with Factors 5 and 6 having only four and three subjects respectively loading on them. In order to simplify the analysis and increase the numbers loading onto factors, a four factor solution was used. Inspection of the factor arrays showed that the first four factors were similar for each solution.

Table 8
Key Results from the Infrastructure Factor Analysis

No.	Factor				Sum
	1 Nature and Heritage	2 At One with Nature	3 Cultural Heritage	4 Quality and Care	
% Explained Variance	18	13	14	15	60
No. of Subjects	24	15	14	15	68

Table 9 shows the correlations between factors, and indicates that Factor 1, Factor 3 and Factor 4 have some similarities because they have higher correlation coefficients than the others. In particular, Factor 1 is similar to Factor 4, while the correlation between Factor 3 and Factor 4 is slightly lower.

Table 9
Correlation Between Infrastructure Factors

Factor	2	3	4
1	0.48	0.62	0.69
2		0.42	0.39
3			0.55

Table 10 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 4 comprise mainly New Zealand people, while Factors 2 and 3 have a mix of people loading on them but few local. Therefore we expect Factors 2 and 3 will express a traveller's viewpoint, more so than Factors 1 and 4. The bolding shows that those over 40 years are spread evenly across all factors. Table 11 summarises the data in Table 10 and shows some additional characteristics. The main points are that Factor 1 subjects are older and few have tertiary qualifications and Factor 2 has a high proportion of subjects with tertiary qualifications. There are no obvious gender differences.

Table 10
Demographic Profile for Each Infrastructure Factor, Showing Age

	Factor								Total
	1. Nature and Heritage		2. At One with Nature		3. Cultural Heritage		4. Quality and Care		
	Male	Female	Male	Female	Male	Female	Male	Female	
Overseas:									
Australia	58			62					Austr.=2
Austria			24						
Denmark			52						
Germany		21	62			24			Euro.=10
Holland		24						23	
Israel	24	22							Other=2
N/America		57		24	69	49	48		N/Am.= 5
Sweden				24		24			
Switzerland				26					
U.K.			31/43		25/54	26			U. K.=5
Subtotal	2	4	5	4	3	4	1	1	24
New Zealand:									
Local	29/39/42 46/47/50 /63	24/37/38 40/46/50 /52	26/28		40/40/51		21/22/25 /34/47	17/23/30	
Visitor	24/34	36/42	23/25	23/51	18/59	24/60	25/40/59	26/60*	
Subtotal	9	9	4	2	5	2	8	5	44
Gender Totals	11	13	9	6	8	6	9	6	68
Factor Totals	24		15		14		15		68

* This is an estimate of this subject's age.

Table 11
Demographic Characteristics of the Infrastructure Factors

Factor	General Composition	% > 40 years	% Tertiary Education	% Female
1. Nature and Heritage	Mainly Locals Some Visitors	50	25	54
2. At One With Nature	Mainly Visitors	38	87	40
3. Cultural Heritage	Mainly Visitors	43	64	43
4. Quality and Care	Locals Domestic Visitors	27	40	40

Table 12 shows the infrastructure photographs listed from consensus to disagreement. There were no consensus photographs⁸, that is, photographs whose scores were not significantly different in all four factors. However, the table shows that the first four photographs have a difference in score of only one. Thus there is general agreement and modest liking of craft outlet (8), and general agreement and very low or neutral scores for visitor information –

⁸ Tourist infrastructure photographs first appear as Figure 4, page 53.

basic (7), car park – informal (2) and walkway – improved (23). Distinguishing photographs are shown by bolding.

Table 12
Infrastructure Photographs, with Q Sort Scores, Sorted from Consensus to Disagreement

No.	Title	Factor			
		1	2	3	4
8	Craft outlet	2	1	2	2
7	Visitor information – basic	0	0	0	0
2	Car park – informal	-1	-1	0	-1
23	Walkway – improved	0	1	1	0
14	Modern backpackers	0	-3	-1	0
13	Car park – formal	0	-1	0	0
15	Toilet – modern	-1	1	1	0
29	Car park – bus	0	0	-1	1
22	Campervan park	0	-1	-2	-1
6	Rubbish bin – basic	-2	-3	-3	-3
18	Detailed sign	2	2	2	0
20	Traditional motel	-1	-4	-2	-2
16	Rubbish bin – modern	-2	0	0	0
11	Effluent disposal	-3	0	-3	-2
9	Tourist lodge	4	2	2	4
24	Toilet – basic	-3	0	-1	-3
3	Picnic spot	3	4	1	3
12	Campsite – cabins	0	-2	-2	-2
10	Car park – viewpoint	0	0	0	3
28	Heritage building	2	0	4	2
25	Visitor centre – traditional	1	0	3	1
5	Walkway – basic	1	3	1	0
1	Rubbish bin – improved	-2	0	-1	0
27	Campsite – basic	3	3	0	1
26	Campsite – improved	1	2	0	-1
21	Pie cart	-1	-1	-4	-1
4	Toilet – improved	-2	1	0	-4
17	Café	1	-2	3	1
19	Visitor centre – modern	0	-3	0	2

Note: while Q sort scores (-4 to +4) are presented in this table, the basis of the distinction between factors for the distinguishing photographs is the Z score taken to two decimal places. Thus two similar Q sort scores may in fact be different.

Figures 4 to 7 presented in the following sections show the arrays of photographs for the infrastructure factors. The height of the neutral column precludes it from being presented as in the actual Q sort: in the figures (viz, Figures 4, 5, 6 and 7) the first three photographs in the neutral column are arranged horizontally with the left hand setting being in the top position.

3.3.2 Factor 1: ‘Nature and Heritage’

Factor 1 accounts for 18 per cent of the total variance among the rotated factors and comprises 24 subjects: 14 locals, six overseas visitors, and four domestic visitors. A high proportion of female locals loaded onto this factor, compared to the other three factors. Subjects ranged from 21 years of age to 63 years old, and 25 per cent had, or were receiving, a tertiary education.

Figure 4 shows the array for Factor 1. Looking at the array in overview shows that a variety of photographs are liked, ranging from a basic lakeside campground to historic buildings. All the most preferred examples of infrastructure are well care for and managed. However, toilets and rubbish bins of whatever description are not liked. Compared with all other factors, Factor 1 rates campsite – basic (27) as liked, although the score is not as high as for Factor 2. Two photographs, campsite – cabins (12) and campervan park (22), are scored as neutral, but these scores are higher than for all other factors. Similarly, while the traditional motel (20) is slightly disliked, it is in a higher position compared to other factors. Two toilets are disliked, one of these, toilet – improved (4), is rated higher than for Factors 2 and 3, but lower than Factor 4. Toilet – modern (15) fares slightly better, but is still scored lower than for all other factors. All three photographs of rubbish bins are consistently disliked ahead of the other factors. These characteristics of the array suggest that people loading on Factor 1 like camping or picnicking, as well as older buildings. They are less averse to older style accommodation and to campervans.

The six top-ranked photographs for Factor 1 and their respective scores were:

9	Tourist lodge	(+4)
3	Picnic spot	(+3)
27	Campsite - basic	(+3)
28	Heritage building	(+2)
8	Craft outlet	(+2)
18	Detailed sign	(+2)

Three of these photographs show buildings: two are old buildings that have been restored and one is a relatively modern building. Two of the other photographs depict basic public amenities - a picnic spot and camping site respectively - which are positioned in natural settings. Comments made by those people with a high loading on Factor 1 are presented below.⁹

⁹ A loading of 0.68 or above was used to select the high loaders for Factor 1, 0.64 for Factor 2, 0.63 for Factor 3 and 0.61 for Factor 4.

Figure 4
Array of Photographs for Infrastructure Factor 1 – ‘Nature and Heritage’



Photograph 9 - Tourist lodge (+4)

- Subject 5:
(VisOF57) "Looks like a very scenic restful spot. Good for kayaking, walking".
- Subject 15:
(LocM50) "Man-made structure but not obtrusive. Subtly done. Don't go, but know the area".
- Subject 20:
(LocM47) "Setting excellent right by lake and bush".
- Subject 23:
(LocF37) "River and setting. Know it - Nice, but not to stay. Upper class".
- Subject 32:
(VisOF21) "Walking, but house".
- Subject 45:
(LocF52) "Water and bush again - like to go there. Don't know it".
- Subject 111:
(VisNZF36) "All the bush around it - the native bush, cabbage trees. Looks like flax and rimu. Wouldn't say it really fits well into the setting, but a place to go and spend the weekend. Remote, nice being on water. (Why doesn't it fit well into the setting?) Probably the red roof makes it stand out".

Photograph 3 - Picnic spot (+3)

- Subject 5:
(VisOF57) "Pretty picnic spot. I like it where they put a table in a pretty spot where you want to sit".
- Subject 20:
(LocM47) "Not great looking, but lake and table".
- Subject 23:
(LocF37) "Reminds of my childhood at Kaniere".
- Subject 32:
(VisOF21) "Have a nice picnic, maybe sleep, and have breakfast".
- Subject 45:
(LocF52) "Water and bush".
- Subject 52:
(LocF46) "Can go for walks all around there. Beach, flaxes and trees. Even the smell of walking there is different. The mozzies would get us".
- Subject 111:
(VisNZF36) "Looks like a nice place to pull off road and have lunch. It's clean. The native bush".

Photograph 27 - Campsite - basic (+3)

- Subject 15:
(LocM50) “Tidy. Mostly nature - people can do own thing”.
- Subject 20:
(LocM47) “Flaxes planted. If you take them away it would look okay”.
- Subject 23:
(LocF37) “Nice to stop for a breath”.
- Subject 32:
(VisOF21) “Combines nature and living in nature”.
- Subject 45:
(LocF52) “Mountains and paddocks”.
- Subject 46:
(LocM46) “Camping ground near bush and lakes. Would stay in my tent there”.
- Subject 52:
(LocF46) “There’s a lake there that’s where I’d stay - looks like my caravan. This would be beautiful and peaceful”.
- Subject 111:
(VisNZF36) “Captures the lushness of the Westland - the water, bush-clad hills. Like all the native plantings. The cabbage trees and flax. Looks like a campsite with not a lot of other people which is nice”.

Photograph 28 - Heritage building (+2)

- Subject 5:
(VisOF27) “Heritage buildings are really beautiful. Fun to see how well kept the older buildings are”.
- Subject 15:
(LocM50) “Good example of old building tidied up”.
- Subject 23:
(LocF37) “Know it - history – craft. Go in there a bit. Locals use it. Wedding photos taken there”.
- Subject 32:
(VisOF21) “When told it was art and craft and historic building it was taken in to this column straight away”.
- Subject 45:
(LocF52) “I like old building. Really pretty. Been there”.
- Subject 46:
(LocM46) “Lot of unique buildings here. Efforts lately to restore and this is one of them”.

Subject 111:
(VisNZF36) “Like this one better as a building (compared to photograph 8). Just the simplicity of it. Very quaint, turn of the century, well kept. It could use a bit more in terms of plantings”.

Photograph 8 - Craft outlet (+2)

Subject 20:
(LocM47) “Look of old hut. Hunk of tin around tree. Old barrel”.

Subject 23:
(LocF37) “Rustic charm and wagon wheel. Good to stop for cuppa.”

Subject 52:
(LocF46) “That’s old too. With a little paint could be tidied up. That’s the Coast really”.

Subject 111:
(VisNZF36) “The setting of this is quite nice (compared to photograph 28). Cabbage tree here is nice. Done a nice job with the signs”.

Photograph 18 - Detailed sign (+2)

Subject 5:
(VisOF57) “I like that - really encouraging to a tourist who is lost. I like to look at a map and see what is available. That is very helpful”.

Subject 15:
(LocM50) “Mixture of man-made and nature. Good purpose - educational”.

Subject 32:
(VisOF21) “Reminds me of walking, love to do”.

Subject 46:
(LocM46) “Just ties into photograph 5. Lots of unique walks on coast - good for tourists. Occasionally go on them. Both tourism and personal. Don’t like seeing buses go past. Helps their appreciation level. Good for visitors”.

Subject 111:
(VisNZF36) “Tried to work with the natural aspect. (How have they done this?) It’s the colour, and the flax in the background. An attractive sign compared to photograph 5 (basic walkway). Fairly recently done and updated. I can imagine sign-posted”.

The six bottom-ranked photographs for Factor 1 and their respective scores were:

6	Rubbish bin - basic	(-4)
24	Toilet - basic	(-3)
11	Effluent disposal	(-3)
1	Rubbish bin - improved	(-2)
4	Toilet - improved	(-2)
16	Rubbish bin - modern	(-2)

All the bottom-ranked photographs are associated with waste disposal - either toilets or bins. The photograph of the basic rubbish bin shows a red 44 gallon drum (dented) that is being reused as a rubbish bin. Photographs 1 and 16, by comparison, show rubbish bins that were specifically designed for this purpose. The improved rubbish bin is green, covered, and secured to the ground; the modern rubbish bin is painted blue, uncovered, and mounted off the ground. All three of these photographs reveal something of the natural surroundings of the rubbish bins. The basic toilet is of green painted concrete and gray stone construction, and is positioned against trees with a shingled area in front. The improved toilet is a single toilet, also green, with its door open, and is located amidst greenery and mounted on concrete.

Photograph 6 - Rubbish bin – basic (-4)

- Subject 5:
(VisOF57) “Its unfortunate they have to have rubbish bins right on a scenic beach”.
- Subject 15:
(LocM50) “Example of something that should not happen - may as well have a pile of rubbish. Ruins a good scene”.
- Subject 20:
(LocM47) “Old rubbish bin - just rubbish. Photograph one is better”.
- Subject 23:
(LocF37) “Dented up old rubbish bin. Behind shelter by beach”.
- Subject 45:
(LocF52) “Looks ugly. Have to have. Just plonked there in middle of nothing”.
- Subject 46:
(LocM46) “Just a bloody rubbish bin - not even a tidy one. Have to do better than that for Coast, don’t we”?
- Subject 52:
(LocF46) “If it was tidier”.
- Subject 111:
(VisNZF36) “Looks unkempt. I guess with all of the rubbish bins, I’d like to see recycling bins as well. Nobody cares plus trash on the side that nobody is taking care of”.

Photograph 24 - Toilet - basic (-3)

- Subject 5:
(VisOF57) “(How does this toilet compare to the other toilets in photographs one and four?) Something planted in front of it. The rock is better too”.
- Subject 15:
(LocM50) “Not bad, but looks basic”.
- Subject 20:
(LocM47) “Painted rough - reasonably - could be better. Poor paint, gravel is tidier”.
- Subject 23:
(LocF37) “Could be tidied up”.
- Subject 32:
(VisOF21) “Quite bad - doesn’t look clean. Dirty, unused and smelly”.
- Subject 46:
(LocM46) “Same as photograph 15, even though well presented. Necessary evils”.
- Subject 52:
(LocF46) “Its original, its old”.
- Subject 111:
(VisNZF36) “Seems really tacky. (What exactly is tacky?) The green painted plywood doesn’t seem to fit with the landscape. Looks like they’ve tried to camouflage it, but could be better done”.

Photograph 11 - Effluent disposal (-3)

- Subject 5:
(VisOF57) “Important places too. Not attractive to look at. It could have some shrubbery around it. Not right in open like that. As long as it’s easily available for people who need it”.
- Subject 15:
(LocM50) “Water supply? Needs to be disguised with shrubs, bushes to hide it”.
- Subject 20:
(LocM47) “Not sure what it is. Nothing”.
- Subject 45:
(LocF52) “Photo of nothing really”.
- Subject 52:
(LocF46) “I would want a tidier one. That’s a bit scruffy for me”.
- Subject 111:
(VisNZF36) “It’s a place to empty waste for the campervan. I know that has to occur, but you wonder where its goes and how its being stored”.

Photograph 1 - Rubbish bin - improved (-2)

- Subject 5:
(VisOF57) "A little better. But could be more out of the way".
- Subject 15:
(LocM50) "Why stick it out in front of a good scene"?
- Subject 20:
(LocM47) "Obviously having trouble, it's bolted down".
- Subject 23:
(LocF37) "Are emptied".
- Subject 32:
(VisOF21) "(Speaking of photographs 16, six and one). Have to have but might be better, nice if look funny. These are boring. More integrated in nature".
- Subject 45:
(LocF52) "Sticks out".
- Subject 52:
(LocF46) "Looks good. It's tidy. Right beside beach. I like the scenery behind there".
- Subject 111:
(VisNZF36) "They (photographs 16 and 1) seem better taken care of. Someone has taken the trash out of them recently".

Photograph 4 - Toilet - improved (-2)

- Subject 5:
(VisOF57) "All necessary evils. Could put it down into the trees, instead of in the open".
- Subject 15:
(LocM50) "What is it? Toilet - can be completely disgusting".
- Subject 20:
(LocM47) "Why would use it. Last thing you want to see. Okay as loo, but sticking out".
- Subject 23:
(LocF37) "Sitting on planks".
- Subject 45:
(LocF52) "Same as photograph six, no appeal. Bush is okay".

Photograph 16 - Rubbish bin - modern (-2)

- Subject 5:
(VisOF57) “Pretty well done. Easier to look at”.
- Subject 15:
(LocM50) “Sticks out. Why not green”?
- Subject 23:
(LocF37) “Are emptied”.
- Subject 32:
(VisOF21) “Have to have but, might be better, nice if look funny. These are boring. More integrated in nature”.
- Subject 45:
(LocF52) “Not too bad, but bins in funny places. Should be hidden a bit”.
- Subject 46:
(LocM46) “Same - just collection. Should be in neutral. Its tidy and well presented”.
- Subject 111:
(VisNZF36) “(Speaking of photographs 16 and 1). They seem better taken care of. Someone has taken the trash out of them recently. Like that one (number 16) the best in terms of design”.

Summary for Factor 1: ‘Nature and Heritage’

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

Positive:

Character (qualities of the settings)

- Scenic, beautiful, excellent setting, lushness.
- Peaceful, restful, remote.
- Mostly nature, mixture of man-made and nature, man-made structure not obtrusive, subtly done, natural aspect.
- Encouraging, helpful, good for visitors.
- Clean, tidy, well kept.
- History, pretty, quaint, rustic charm, old, unique.
- Living in nature, simplicity, educational.

Elements (physical and tangible qualities of the settings)

- Lake and bush, river, beach, water and bush, native bush, nice on water, water, bush clad hills.

- Native plantings, cabbage trees, flaxes and trees, flax and rimu.
- Mountains and paddocks, camping ground, lake.
- Campsite with not a lot of other people.
- Heritage buildings, old building, old hut, old barrel, art and craft.
- Attractive sign, table.

Evoking (feelings, sensations, memories associated with the qualities of the settings)

- Lushness of Westland, that's the Coast really.
- Nice to stop for a breath, nice to stay a while, stay by lake, nice to pull off road and have lunch, stop for cuppa, campsite with not a lot of other people.
- Reminds of my childhood, history.
- Reminds me of walking, smell of walking there, living in nature, people can do own thing.

Activities (what subjects would do in those settings)

- Kayaking, walking.
- Sit, sleep, do own thing, stop for a breath.
- Picnic, have breakfast, have lunch, stop for cuppa.
- Go and spend weekend, camping, stay in my tent.

Negative:

Character (qualities of the settings)

- May as well have a pile of rubbish, dented up old rubbish bin, old rubbish bin - just rubbish, ugly, not even a tidy one, unkempt, trash on side.
- Looks basic, painted rough, dirty, unused and smelly, its original - its old, really tacky, not attractive, bit scruffy, can be completely disgusting.
- Unfortunate, have to have, necessary evils, I know they have to occur, boring.
- Looks good, tidy, easier to look at, well presented.

Evaluation (of the qualities of the settings)

- Rubbish bins right on a scenic beach, ruins good scene, doesn't fit with the landscape, not right in open like that, sticks out, right beside beach, why stick it out in front of a good scene?
- Just plonked there in the middle of nothing, nobody cares.

Management (implications of the settings)

- Have to do better than that for Westland, could be tidied up, looks like they've tried to camouflage it but could be better done, needs to be disguised, should be hidden, more out of the way.

- Recycling bins as well, something planted in front of it, could have some shrubbery around it, easily available for people who need it, more integrated with nature, why not green?
- Better taken care of, are emptied, bolted down, sitting on planks, gravel is tidier, pretty well done.

The positive themes show that Factor 1 is responding to nature in settings being used as public amenities. The photographs most liked show visitor provisions in a scenic setting, which is interpreted as beautiful and peaceful. There is appreciation of the way the lodge in photograph 9, for example, blends in with nature, and the photographs of amenities are seen as encouraging, helpful, clean and tidy. There is also an appreciation of history and heritage. The combined character of these elements evoke Westland as a place where one can stop for a while for a rest, lunch, camp or cup of tea. The settings also evoke experiences of walking or living on the West Coast. The activities are varied ranging from the active to the passive.

The negative themes show dislike of old rubbish bins and toilets, and a wide variety of epithets are used to characterise them. These public amenities are acknowledged as necessary. In some cases there were positive comments made about some the bins because Factor 1, as a local, is acknowledging that some aspects of tourist infrastructure were satisfactory. The main negative effect of the tourist infrastructure is that it contrasts with ‘good’ scenery. It follows that Factor 1 sees scope for better managing tourist infrastructure through disguise and/or better design.

Factor 1 comprises mainly locals and most of the female locals, and compared to all other factors, has the lowest proportion of subjects with a tertiary education. The factor array shows a combination of natural features with basic public amenities which creates the possibility of doing one’s own thing in nature. Factor 1 appreciates and expects an appropriate blend of amenities and nature. The liked photographs invite Factor 1 to stop and visit the place, without having the distraction of too many other people or an overabundance of facilities preventing the pursuit of whatever activities they happen to choose. Heritage buildings are an important component of this. They are part of Factor 1 experience and are seen as old, rustic and pretty. This implies they have withstood the test of time, and have become a part of the natural landscape. Heritage buildings enable Factor 1 to connect with the place – through an amalgamation of the built and natural landscape, and through time and familiarity. They are less enthusiastic about the modern visitors centre (19), however. This may be because they associate older buildings with the character of Westland; preserving and marketing these buildings, rather than demolishing them, are seen as favourable for attracting tourists to Westland and foster the reputation of the Coast in ways sympathetic to local heritage. Locals are more accepting of campsite – cabins (12), campervan park (22) and traditional motel (20) because these are places they are familiar with even if they do not use them. Being mostly locals, they tend not to use public amenities like toilets, rubbish bins and effluent disposals, disliking them and avoiding them where possible. The essential themes of Factor 1 support the use of the ‘Nature and Heritage’ title.

3.3.3 Factor 2: ‘At One With Nature’

Factor 2 accounts for 13 per cent of the total variance among the rotated factors and comprises 15 subjects. Nine of these subjects were overseas visitors and six were New Zealanders, mostly domestic visitors to Westland. The overseas visitors represented a range

of countries, and were aged from 24 years old to 62 years old. There were 87 per cent who had, or were in the process of receiving, a tertiary education.

Figure 5 shows the array for Factor 2. The top six photographs show settings that are relatively untouched by humans and provide basic facilities for campers and visitors. There are few buildings in all the liked piles, the only larger one being the craft outlet (8). The top six disliked photographs show mainly buildings. Rated higher than all other factors and liked are campsite – basic (27), walkway – basic (5) and campsite – improved (26). Rated lower than all others and disliked are traditional motel (20), visitor centre – modern (19), modern backpackers (14), and café (17). Rated as neutral but higher than all others is effluent disposal (11). These characteristics suggest that Factor 1 is a traveller keen on camping who avoids formal accommodation. Also rated lower than all others are the two visitor centres: visitor centre – modern (19) is disliked and visitor centre – traditional (25) is neutral. Factor 2 is less concerned about rubbish bins: rubbish bin – basic (6) was given a higher score than for all other factors, although still disliked, and the other two toilets were scored in the neutral column. This array suggests that Factor 2 is a camper who likes the outdoors and dislikes urban features. They are likely to use public toilets because they do not stay in formal accommodation and those amenities that do have modern characteristics as in photograph 4 and 15 are slightly liked. While all factors like the tourist lodge (9), Factor 2 (along with Factor 3) is less appreciative, in this case because Factor 2 is keen on camping and resents human-built intrusions into the natural environment.

The six top-ranked photographs for Factor 2 and their respective scores were:

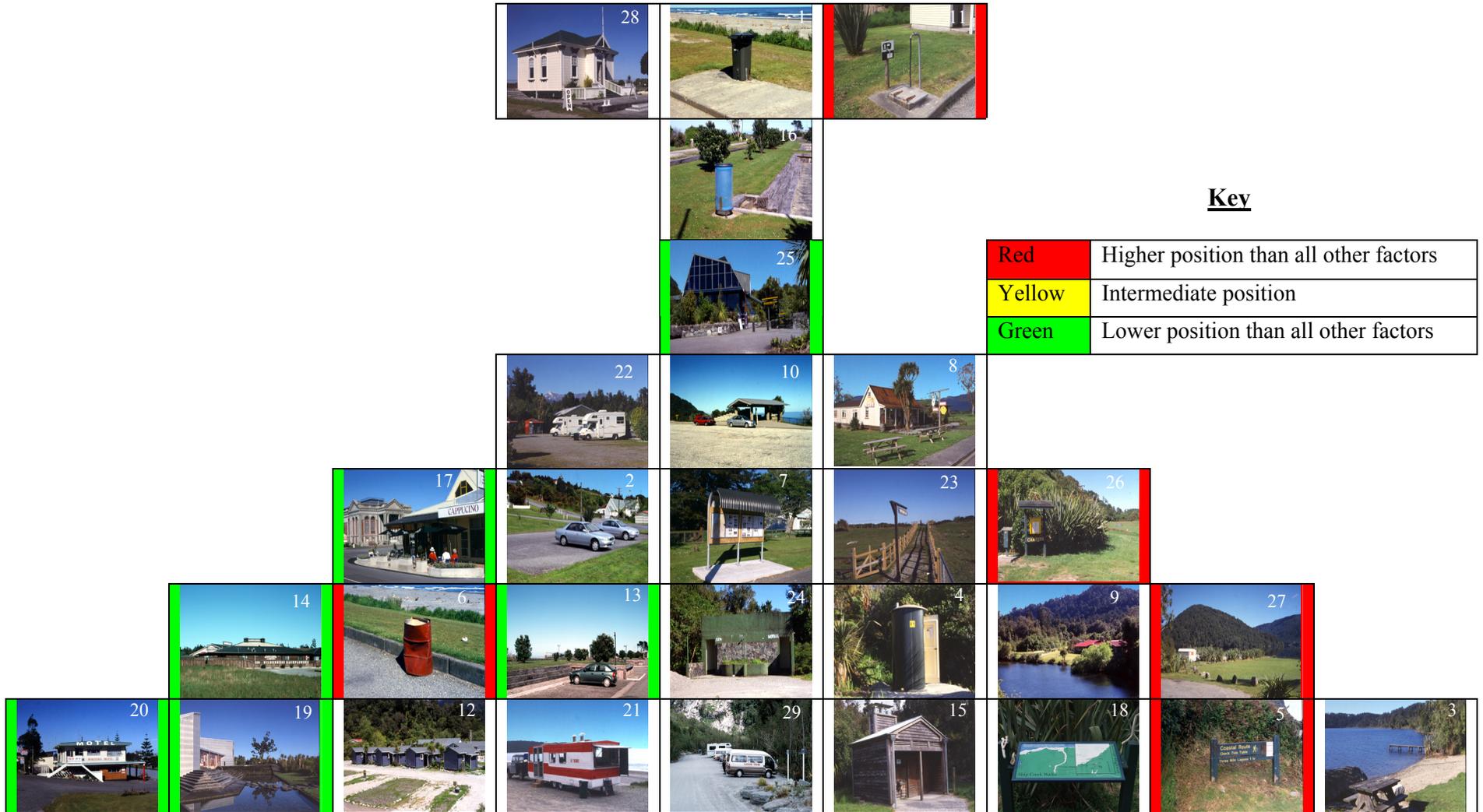
3	Picnic spot	(+4)
27	Campsite - basic	(+3)
5	Walkway - basic	(+3)
26	Campsite - improved	(+2)
9	Tourist lodge	(+2)
18	Detailed sign	(+2)

The top ranked photograph shows a wooden picnic table next to a beach in the foreground, and a small jetty in the background. The basic campsite depicts a vacant area of grass bordered by flax bushes, a lake and a road, and with a caravan parked to one side. Photographs 26, 5 and 18 are of walkway signs: the first is a “campers” sign between the hillside and a flat green area; the second reveals some vegetation around a more basic sign; whereas the third is a close up view of a newer and more detailed sign. The last of the six photographs is of a relatively modern building positioned next to the waterfront amongst native bush.

Figure 5
Array of Photographs for Infrastructure Factor 2 – ‘At One With Nature’

Key

Red	Higher position than all other factors
Yellow	Intermediate position
Green	Lower position than all other factors



Photograph 3 - Picnic spot (+4)

- Subject 11:
(VisOM43) “Comfortable spot to have lunch. Typical of places we have stopped at”.
- Subject 16:
(LocM28) “Lake sets it off. Looks natural. Unmodified. Has jetty and background, but nice place for half to one day for water based activities”.
- Subject 50:
(VisNZF23) “Doesn’t look like they have attempted to separate people from nature. Doesn’t look over populated. I like it because its got water. It is quite relaxing. Looks very simply done - haven’t wiped out a complete area to put tables in”.
- Subject 51:
(VisNZM23) “Nice wee area to go to and have a picnic. Table is natural looking. Set in nice location down by lake. (Would you go there?) Oh yeah probably would. Don’t know what’s behind it - maybe others. Looks pretty quiet, but makes you wonder with jetty if they launch boats there”.
- Subject 76:
(VisOM31) “Open expanse next to water. The wharf is a good facility, and can be above water to fish - native bush”.
- Subject 78:
(VisNZF51) “It’s a lake. Nice place to stop for lunch. Little table, jetty and bush all round. It’s inviting”.
- Subject 82:
(VisOM52) “Small places to sit down everywhere on the small beaches. Nice place to sit and have a view”.
- Subject 101:
(VisOF24) “More just what I’m used to seeing”.

Photograph 27 - Campsite - basic (+3)

- Subject 16:
(LocM28) “Peaceful. Front country, but looks into back country. Invites.”
- Subject 50:
(VisNZF23) “Similar to photograph 26 - how there is a flax right next to the lake. Blending in with the environment quite well. Not separating people from environment. Could go there and feel part of it. Haven’t got flash mod cons, can go there with what you’ve got. A nice, tranquil setting”.
- Subject 76:
(VisOM31) “Image of facilities to camp there - open, nice view”.

- Subject 78: "Camping ground. Looks isolated".
(VisNZF51)
- Subject 82: "Do not need always to make big. Photograph 7 (visitor information -
(VisOM52) basic) is not very nice. Do not need to have fences - more what is not in
the picture I like".
- Subject 101: "Looks like you can minimally camp - not altering that much.
(VisOF24) Simplistic versus photograph 12 (campsite - cabins)".

Photograph 5 - Walkway - basic (+3)

- Subject 16: "Where it's taking you".
(LocM28)
- Subject 51: "It's showing walking track. Fits in with environment. Not too
(VisNZM23) conspicuous it's green. Signifies something that has not too much
impact on environment. Hate to think what it looks like from back this
way - probably a big cleared area".
- Subject 76: "Same as photograph 18. Information on walking is useful, adds to
(VisOM31) experience of area. Added advantage to know where going, plus
guidelines for time".
- Subject 78: "Like idea of going on a walk - one hour. Looks interesting, says how
(VisNZF51) long".
- Subject 101: "I think this is really a good thing. As opposed to people just going in
(VisOF24) and destroying, building their own tracks. Designed walking areas are
good. Preserves areas that are not supposed to be touched".

Photograph 26 - Campsite - improved (+2)

- Subject11: "What it indicates around corner. Looks like good spot. DOC run, well
(VisOM43) managed".
- Subject 50: "Doesn't look a mainstream camping ground. Has benefits of being
(VisNZF23) away from people. Lots of grass to pitch tents. That is appealing to me.
Looks simple. Not sure of that powerline sticking out of the trees".
- Subject 51: "While cleared a lot of vegetation, looks fairly well done. Not too
(VisNZM23) obtrusive. Haven't built huge buildings and infrastructures. Probably a
little box to put your money in. Not a blotch on the landscape".

Subject 78: “Nice camping ground. No one there. (What exactly is nice about it?)
(VisNZF51) Looks like a DOC one, so therefore not a real commercial one”.

Subject 82: “Way in many places these markings are made. Fit well into the
(VisOM52) surroundings. Can also see them”.

Photograph 9 - Tourist lodge (+2)

Subject11: “Good setting. Nice place to be. (Would you go there?) Probably.
(VisOM43) Seems typical of New Zealand - nice lifestyle if it’s a house. If hotel,
over our budget”.

Subject 16: “Clean look. Water looks inviting to swim in. Little modification.
(LocM28) Tastefully done”.

Subject 50: “Again building doesn’t blend with environment with its bright red roof.
(VisNZF23) Looks like they have cleared to the lake in parts so they can have their
towns. Trying to fit in, but it is a big building. I would go for smaller
structures, rather than one big infrastructure to blend in more. I hope
they do something good with their waste, and it doesn’t go into the
water*”.

Subject 51: “Looks like tried to set it quite well with environment. Colours aren’t
(VisNZM23) good, but building is low. Surrounded by trees, water in foreground.
Hasn’t had too much impact on environment. Done quite tastefully
apart from the red”.

Subject 76: “Close to water - water is peaceful, fresh, sound of water. Open expanse
(VisOM31) grass for view of start of track”.

Subject 78: “Nice scene. River or lake. Maybe a house or a lodge type place, all
(VisNZF51) among the bush”.

Subject 101: “Altered the environment for the money industry*”.
(VisOF24)

Photograph 18 - Detailed sign (+2)

Subject 16: “Same as photograph five. Where it is taking you. A lovely spot.”
(LocM28)

Subject 50: “Fits into environment well. I’ve been there – its cool there. Its
(VisNZF23) informative, gives people an idea of what there is to see. I like it
because its not too huge, doesn’t stand out too much. Good colours and
stuff”.

Subject 51: “Fairly unobtrusive. Subtlety placed in natural vegetation. Colours good, fits in well – green and blues. Explaining some routes to walks. Directing people onto walkways, keeping them from destroying other bits and pieces”.

Subject 76: “Information of walks useful. Adds to experience of area”.

Subject 82: “Not very beautiful, but efficient”.

The six bottom-ranked photographs for Factor 2 and their respective scores were:

20	Traditional motel	(-4)
19	Visitor centre - modern	(-3)
14	Modern backpackers	(-3)
12	Campsite - cabins	(-2)
6	Rubbish bin - basic	(-2)
17	Cafe	(-2)

The bottom-most rated photograph shows an older style, split-level building on an uneven site, with a veranda-cum-balcony and a low-pitched roof. The word “motel” is clearly written in white on the roof, and the building is surrounded by concrete and has little landscaping. The basic rubbish bin is a red 44-gallon drum being reused as a rubbish bin. It is the odd one out because the remaining four photographs are also of buildings. Like photograph 20, the modern backpackers building has a low-pitched roof and is clearly marked as backpackers. It is located next door to a supermarket, in the background, and a vacant section and fence, in the foreground. The visitor centre is a contemporary building of innovative design, surrounded by landscaping using water features. The café is also a modern building with street-side tables, but has an older building used as a museum next to it. Finally, the basic cabins are of uniform shape, design and colour, and face an open space reserved for campervan and/or car parking.

Photograph 20 - Traditional motel (-4)

Subject 11: “Been here three weeks - budget accommodation or camping - this type in middle range - see too much”.

Subject 16: “All the advertising. Motel okay, but all the other stuff not appealing”.

Subject 50: “Looks dated, doesn’t fit in. Could make it fit in more, more wooden. Personally think it’s ugly. I would not stay there. No trees, just bare grass. Doesn’t look cosy. Doesn’t have those nice intrinsic qualities when you are going to Westland for a place to stay. Could be anywhere”.

- Subject 51:
(VisNZM23) “Worse than photograph 14. Again very contrasting with the surrounds – the orangey-white. Very squarish in shape. Large area covered in asphalt. Signs sticking out all over the place. Good for business because can see them easily, but not good for the environment. No real effort to soften it. I suppose a few trees, but not many”.
- Subject 76:
(VisOM31) “Building is quite tacky”.
- Subject 78:
(VisNZF51) “I’ve got nothing against them”.
- Subject 82:
(VisOM52) “It is too much a tourist thing. Not very nice architecture - painted. Don’t need. (What don’t you like about the architecture?). No lines in it. Can see the stairs. All the markings there - too commercial. Over advertising I think”.

Photograph 19 - Visitor centre - modern (-3)

- Subject 11:
(VisOM43) “Don’t know building, but style not really what interested in - modernist - making a statement, but dated and slightly/very unusual”.
- Subject 50:
(VisNZF23) “I always thought that was ugly. I don’t know why they built a building like that. I don’t like the concrete, the red window frames. The water is quite nice, but it looks so artificial. I thought because DOC, they would have made it more aesthetic. (How could they do this?) A wooden structure, or even like corrugated iron in green that would match more. Supposed to be a wild part of coast, so building stands out. Wants nature and people merged. Trying to be modern”.
- Subject 51:
(VisNZM23) “It’s just ugly. Doesn’t fit in with what I perceive Westland to be. It is the DOC centre too. (What exactly do you dislike about it?) The colour, the shape, contrasts heavily with the environment. Should be pulled down and rebuilt. First thing, paint it more neutral - brown or green or something. Get out harsh, straight lines. It is not curved or natural in shape. Plant some rushes around there - the lake”.
- Subject 76:
(VisOM31) “Design out of character. Impression of stark, harsh”.
- Subject 82:
(VisOM52) “Its also too commercial in another way - too fantastic. An architect has been there”.
- Subject 101:
(VisOF24) “Looks like a place set up, altered landscape again for tourism. Looks a little fancy-dancy. Unnecessary”.

Photograph 14 - Modern backpackers (-3)

Subject 16:
(LocM28) “Overdone Wilderness Backpackers, but nothing wilderness about it”.

Subject 51:
(VisNZM23) “Looks like sitting out in middle of nowhere. A wee bit better than photograph 19 but still doesn’t fit into natural environment. Take down those supermarket signs. Obviously cleared quite an area to put it in there. Just trying to work out what that tree is in the background - it’s very tall. (What else don’t you like about this building, compared to the other one?) Colour is not quite as bad, but shape is fairly structured - squared at bottom, triangular at top with stark backpackers sign sticking up”.

Subject 76:
(VisOM31) “Ranch in USA! Looks like, even style of letters”.

Photograph 12 - Campsite - cabins (-2)

Subject 11:
(VisOM43) “We have Butlin’s camps in UK - typical of the 1980s - no longer popular. (Regimental use?) Yes, but not out of choice. So small. Everywhere in New Zealand very clean, but some places need more money, for example chalet parks. Clean with lots of buildings (two years old) - these look quite new”.

Subject 50:
(VisNZF23) “I like how they have tried, have got the trees. Doesn’t have a good feel about it. Maybe it’s the colour of the cabins. Could look more like their environment. (Could you elaborate on why the place doesn’t have a good feel about it?) Maybe the fact that they are all cramped together. Wouldn’t have any space - that would be a put off. I like to get away and not be breathing down someone’s neck”.

Subject 51:
(VisNZM23) “Just, I guess, how they have cleared the land and popped in some ugly cabins - identical and uniform, ordered. Messy area that I presume they use for campervans in the foreground - weeds, unkempt. Better if covered completely in grass and put a couple of trees in”.

Subject 101:
(VisOF24) “Over abundance of places/accommodation all set up for tourism”.

Photograph 6 - Rubbish bin - basic (-2)

Subject 16: “Looks like an afterthought. Rubbish not in it.”
(LocM28)

Subject 51: “44-gallon drum. Obviously been as a little car-park down by beach. A highly modified area. Rubbish tin is stark with its surroundings. Doesn’t even fit in with grass, hasn’t even been used - there is rubbish behind it. I guess its good close to beach to be used. It is full, they haven’t emptied it for a while”.

Subject 78: “Quite rustic. Bit too out in the open. Too obvious. Could be more disguised.”
(VisNZF51)

Photograph 17 - Cafe (-2)

Subject 11: “Don’t drink coffee. Building in background interesting. Coffee bar overstated”.

Subject 76: “No appeal. Building is ugly! Café doesn’t represent New Zealand for me”.

Subject 78: “Designer coffees in Westland doesn’t seem to fit somehow. I like the untouched thing”.

Subject 82: “So many different items in it. Can read Cappuccino. A lot of buildings are over filled with advertising. I probably wouldn’t go there”.

Summary for Factor 2: ‘At One With Nature’

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

Positive:

Character (qualities of the settings)

- Natural, unmodified, little modification, simply done, tastefully done, simplistic, looks simple, table is natural looking, preserves areas that are not supposed to be touched.
- Not altering that much, not too much impact on environment, not too conspicuous, doesn’t stand out too much, not too obtrusive, unobtrusive, blends in with environment, fits well into surroundings, not a blotch on the landscape.
- Not separating people from nature, haven’t built huge buildings and infrastructures, not a real commercial one, colours aren’t good - but building is low, good colours, green, greens and blues.

- Comfortable, not over populated, good spot, inviting, away from people, no one there, looks isolated, space, open expanse, fresh, peaceful, tranquil, relaxing, pretty quiet.
- Information, know where going, guidelines for time, informative, well managed, clean, interesting.

Elements (physical and tangible qualities of the settings)

- Lake sets it off, down by lake, water, river, open expanse next to water, open view.
- Wharf, jetty, tables, facilities, small beaches, camping ground, walking track, walkways.
- Native bush, flax, natural vegetation.
- Big building, structures, infrastructure, surrounded by trees, house or a lodge type place all among the bush.

Evoking (feelings, sensations, memories associated with the qualities of the settings)

- Go and have a picnic, stop for lunch
- Interesting, where it's taking you.
- Quite relaxing, inviting, quiet, feel part of it, experience of area, nice lifestyle, sound of water.

Activities (what subjects would do in those settings)

- Picnic, lunch, sit and have a view.
- Going on a walk, designed walking tracks, swimming, water-based activities, fishing, camping - minimally, go with what you've got, pitch tents.

Negative:

Character (qualities of the settings)

- Not appealing, quite tacky, looks dated, ugly, doesn't look cosy, doesn't have those nice intrinsic qualities, unkempt, messy.
- Doesn't fit in, contrasting with the surroundings, contrasts heavily with the environment, colour and shape contrasts with environment, stark, harsh, looks quite new, design out of character, too obvious.
- Trying to be modern, modernist, artificial, unusual, too fantastic, overdone, an architect has been there, unnecessary, not curved or natural in shape, fairly structured, squarish, painted.
- Identical, uniform, ordered, no longer popular, small, cramped, no space.
- Cleared quite an area, in middle of nowhere, large area covered in asphalt, no trees – just bare grass, a highly modified area.
- Rubbish not in it, haven't emptied, hasn't ever been used, an afterthought.

Evaluation (of the qualities of the settings)

- Not good for environment, not a good feel, overfilled with advertising, not very nice architecture, making a statement, no real effort to soften it.
- See too much, over-abundance of accommodation places, could be anywhere, I would not stay there.
- Too much a tourist thing, too commercial, doesn't fit in with what I perceive Westland to be, altered landscape for tourism, coffee bar overstated, Café doesn't represent New Zealand, designer coffee on Westland doesn't fit.

Management (implications of the settings)

- Put a couple of trees in, plant some rushes around lake, paint it more neutral – brown or green, a wooden structure or even corrugated iron in green would match more, better if covered completely in grass.
- Could look more like their environment, could be more disguised, wants nature and people merged, get out harsh, straight lines, take down those supermarket signs.
- Should be pulled down and rebuilt.

The positive themes show that Factor 2, like Factor 1, is also responding to nature in a perceived unmodified or untouched state. Unlike Factor 1, however, Factor 2 values unique or individual experiences with 'nature' and the feeling of being 'at one' with nature. To this end, settings are liked that are minimalist in terms of man-made facilities, but which provide visitors with sufficient information to be environmentally aware. Signs are experienced as informative and useful, and are regarded as assets as long as they are designed in harmony with the natural surroundings, do not alter the environment, and are visually unobtrusive. These public amenities ensure that visitors stay on walking tracks and do not damage the surrounding environment, adding to Factor 2's enjoyment of nature without being detrimental to it. Less well-developed conveniences and public amenities in these settings are also seen to dissuade others who are searching for more co modified and passive experiences of settings. The important elements in the liked settings for Factor 2 include trees, lakes, water, tracks, views and openness. The settings are experienced as inviting and interesting and relaxing. It is likely that Factor 2 represents outdoor enthusiasts, with environmentalist attitudes, who are active in activities such as tramping and camping.

Factor 2 dislike buildings and infrastructure that are perceived to be out of character with their environment. This is judged primarily on visual aspects, including the physical placement of the building relative to elements in the surrounding environment, and to shape, form, and use of colour. Design is critically important for Factor 2 because poor design detracts from visiting a place, and is also disadvantageous to the environment. The settings most disliked were of buildings featuring obvious advertising, and a contemporary building, all identified as being uncharacteristic of the local place. Tourism and commercial processes were seen to override local idiosyncrasies by leading to architecture that has uniform qualities, which could appear anywhere, and is in overabundance of supply. These processes also entail altering the landscape or natural environment and changing the identity of local places. It follows that Factor 2 sees scope for better managing tourist infrastructure through sympathetic design and the use of natural materials but also that this development be strategic and within limits.

Factor 2 comprises mainly visitors and of all infrastructure factors has the highest proportion of subjects with a tertiary education. The title for Factor 2 could include such descriptors as environmentalist or even conservationist. It could also include references to building design to fit nature or to be sensitive to nature. An important feature of Factor 2 is careful enjoyment of nature so we have chosen to use ‘At One With Nature’ to reflect both the way subjects experience nature and their views about building design.

3.3.4 Factor 3: ‘Cultural Heritage’

Factor 3 accounts for 14 per cent of the total variance among the rotated factors and comprises 14 subjects. These subjects were distributed across each of the categories of persons interviewed, although as with Factor 2, there were no local females. Seven overseas visitors in total loaded onto this factor, and five were from Europe, including the United Kingdom, and two were from North America. There were 64 per cent who had or were receiving a tertiary education.

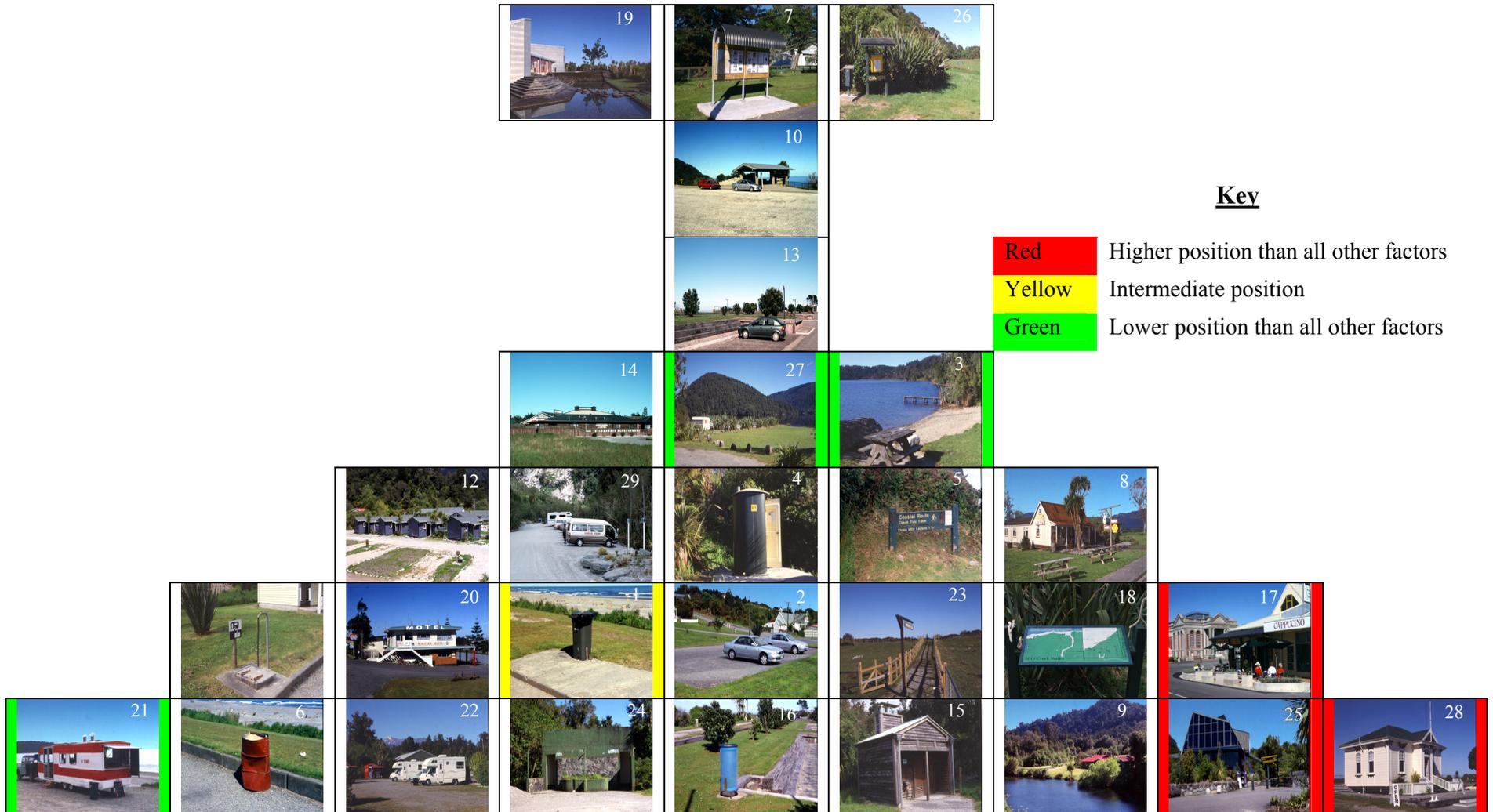
Figure 6 shows the array for Factor 3. It is immediately apparent that there is a strong appreciation of buildings. Heritage building (28), café (17) and visitor centre – traditional (25) are strongly liked and rated higher than for all other factors. The craft outlet (8) is also highly rated, along with the tourist lodge (9). By comparison, less liked than all other factors are picnic spot (3) and campsite – basic (27). Presumably these settings signify activities that are not important to Factor 3. However, there is still some interest in walking and an appreciation of maps and signs because walkway – basic (5), walkway – improved (23), and detailed sign (18) are all ranked among the top ten photographs. The disliked photographs include a range of settings, notably the pie cart (21), which is least liked and more so than for all other factors. These characteristics suggest that Factor 3 seek out buildings, especially older buildings, as an essential component of the experience of places. Being less keen on camping compared with Factor 1, urban settings are rated higher than predominantly natural settings.

The six top-ranked photographs for Factor 3 and their respective scores were:

28	Heritage building	(+4)
17	Café	(+3)
25	Visitor centre - traditional	(+3)
8	Craft outlet	(+2)
18	Detailed sign	(+2)
9	Tourist lodge	(+2)

Five of these six photographs show buildings: two are of old buildings that have been restored and converted to retail premises, two are modern buildings – the tourist lodge and visitor centre, and one features both an older building (a museum) and a new building (the Café) in close proximity. The exception is a close up view of a recently constructed sign, detailing a particular walk that is available in Westland.

Figure 6
Array of Photographs for Infrastructure Factor 3 – ‘Cultural Heritage’



Photograph 28 - Heritage building (+4)

- Subject 13:
(LocM40) “Associate with cultural heritage of Hokitika - such as important part. Building still there and maintained”.
- Subject 47:
(LocM51) “Influenced by knowledge and involvement in. Historic location – was moved away and back. I look for this sort of thing when I travel. Plus it’s a working building - artists working there. Historic colours – early photo – samples of boards, fence etc. Plantings are ‘historic’“.
- Subject 69:
(VisOF49) “Looks like a visitor’s centre or a gallery. A building that is indigenous to the area. It has character from that area and gives you an idea of what the place is like to me”.
- Subject 81:
(VisOM69) “I like the old custom house here. Just the setting, right on river in Hokitika. Can’t remember if shop or museum. We didn’t go in there. Building attracted me - I enjoyed looking at that”.
- Subject 91:
(VisNZM59) “Old post office - preserving old buildings. Live again”.
- Subject 93:
(VisOM54) “Heritage. Speaks for itself really that these things should remain. It is irrespective that as a building it doesn’t really stand out. I thought it was either a library or a police station”.

Photograph 17 - Cafe (+3)

- Subject 13:
(LocM40) “Apart from good food - link to old, new - important building”.
- Subject 47:
(LocM51) “Café is recent. Involved in plants and in building. (Carnegie) - Trend to outside dining is great, sceptical originally but people now do it. Like Carnegie building. About to build cupola on top. Like design and faithfully restored”.
- Subject 69:
(VisOF49) “Looks like a nice place to have a cup of tea. (What about the old building?) Nice having that there because older buildings add more character to a place”.
- Subject 81:
(VisOM69) “Don’t think much of the cafe, but I sure love the old building”.
- Subject 91:
(VisNZM59) “Outdoors - relax, enjoy wonderful building beside”.
- Subject 93:
(VisOM54) “Café looks all right. (What is all right about it?) Just a very nice street side café, next to what looks like an even more historic building”.

Subject 97:
(VisOM25) "I like eating out - cafes, bars. Good food".

Photograph 25 - Visitor centre - traditional (+3)

Subject 47:
(LocM51) "No great thrill, but significant building - not sure if compatible with environment. Perhaps dated. Architectural dream of past era".

Subject 81:
(VisOM69) "Did a beautiful job. People in there were first class".

Subject 93:
(VisOM54) "I haven't seen the inside, but slightly better than the last one (photograph 8). A bit of style to it - character. (Why does the building have style or character?) Looks like glass, lots of light. Just the angles as well".

Subject 97:
(VisOM25) "Find that very helpful and very informative. Not really worried about the style of the building".

Photograph 8 - Craft outlet (+2)

Subject 13:
(LocM40) "Comes back to vernacular of coast, like photograph 28. Example of linking cultural association with tourism".

Subject 47:
(LocM51) "Similar to photograph 28. Old standard design and eat out back, rustic".

Subject 69:
(VisOF49) "Looks like a local person owns it and I like to support local people. (What do you think about the actual building?) Looks more unique than just a shop in the mall. Down to the signs, the buildings, where it is".

Subject 81:
(VisOM69) "We always get a kick out of the old buildings. (What is it about this old building that you like?) Just how this one looks. We like to see some of the older things preserved".

Subject 91:
(VisNZM59) "Inviting. Keeping ancient building going. Tables inviting to have lunch".

Subject 93:
(VisOM54) "Looks very homely - not surprised it is a crafts. Crafts, bric-a-brac, antiques of a very rural setting".

Photograph 18 - Detailed sign (+2)

Subject 13:
(LocM40) "Quality interpretation, that is, it's a professional job, when go there as visitor".

- Subject 47: “Do go walking, but local response is don’t need signage. Not as good
(LocM51) as could be, quality of signage”.
- Subject 91: “Helpful. Making efforts to provide information and to explain
(VisNZM59) environment to visitors. Colours get in”.
- Subject 93: “We need more detailed signs in the world.”
(VisOM54)

Photograph 9 - Tourist lodge (+2)

- Subject 47: “Moeraki Lodge. They should paint roof green. Well done - in
(LocM51) wilderness. (Would you go there?) No, too much money, but been there three times with Council”.
- Subject 81: “I love the tranquillity and peacefulness”.
(VisOM69)
- Subject 91: “Good fit - lawn to lake, no fence. Dark colours blend in. Living with
(VisNZM59) environment”.
- Subject 93: “Are we talking about the building or the setting? The setting is better
(VisOM54) than the building, so we’ll leave that one out. Not a bad building to go in the setting”.

The six bottom-ranked photographs for Factor 3 and their respective scores were:

21	Pie cart	(-4)
6	Rubbish bin - basic	(-3)
11	Effluent disposal	(-3)
22	Campervan park	(-2)
20	Traditional motel	(-2)
12	Campsite - cabins	(-2)

The bottom-most ranked photograph of a pie cart shows a large caravan/trailer painted in red and white and parked on concrete near the beachfront. The next two photographs are of a 44-gallon drum, painted red, and converted into a rubbish bin; and an effluent disposal facility for campervans located at the edge of a concrete curb with little landscaping. The accommodation facilities are both budget-style. The motel is an older split-level building, surrounded by concrete and very little landscaping; and the cabins are uniform in appearance and sited close to each other in a row. The campervan park shows two parked campervans and a car against a backdrop of trees and mountains, with a vacant area of land in front.

Photograph 21 - Pie cart (-4)

- Subject 13: “Totally inappropriate use of location, that is of beach”.
(LocM40)

- Subject 47:
(LocM51) “Interesting - another one at Jackson Bay - doing well. Quality product and service, but blot on landscape”.
- Subject 69:
(VisOF49) “This is just a place where people set up. It looks kind of exposed”.
- Subject 81:
(VisOM69) “Gawdy and out of place. Not compatible with the area”.
- Subject 91:
(VisNZM59) “Just commercialism in old van - old trailer - and bad colours in front of magnificent view. Just ugly. Find in impoverished suburbs in any city, that’s where it should stay”.
- Subject 97:
(VisOM25) “Greasy fat. Unhealthy eating”.

Photograph 6 - Rubbish bin - basic (-3)

- Subject 13:
(LocM40) “Rough and ready - doesn’t reflect well on whoever’s responsible and image of area”.
- Subject 47:
(LocM51) “Looks scruffy. Poorly maintained”.
- Subject 69:
(VisOF49) “Rubbish bin looks like rubbish”.
- Subject 91:
(VisNZM59) “Nostalgia for drum, but it is battered. Could blow over, open top - loose waste and rained on. Impractical”.
- Subject 93:
(VisOM54) “Should be removed and a new one put in its place. Looks like an old oil barrel, and its next to the beach as well”.
- Subject 97:
(VisOM25) “Looks awful, the oil drum”.

Photograph 11 - Effluent disposal (-3)

- Subject 47:
(LocM51) "Utility, functional, but - not really dislike".
- Subject 91:
(VisNZM59) "Utilitarian, but could be disguised better. In public view, not enclosed or hidden".
- Subject 93:
(VisOM54) "I think that should be out of the public eye a bit more. For campervans to stop there - could be tucked away behind a screen".

Photograph 22 - Campervan park (-2)

- Subject 47:
(LocM51) "Don't like, but got to have".
- Subject 69:
(VisOF49) "A camper place. They're all just right beside each other. Too close".
- Subject 97:
(VisOM25) "Basically the same (as photograph 29). Just campervans really. Makes it really touristy. I'm not one for camping".

Photograph 20 - Traditional motel (-2)

- Subject 13:
(LocM40) "Just a garish motel".
- Subject 81:
(VisOM69) "We don't care for motels much. A motel has to be visible so you get visitors in, but on other hand it doesn't look inviting at all".

Photograph 12 - Campsite - cabins (-2)

- Subject 47:
(LocM51) "Area of gravel and uniformity of huts, too close together in a row. One cabbage tree per hut. Almost offensive to eye".
- Subject 81:
(VisOM69) "I know they're necessary. Doesn't look like they've done a good job".
- Subject 93:
(VisOM54) "That is hideous. Ridiculous. No thought went into those - dear me. I think there's enough land in New Zealand to have a bit of privacy".

Summary for Factor 3: ‘Cultural Heritage’

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

Positive:

Character (qualities of the settings)

- Heritage, ‘Cultural Heritage’, cultural association, historic location, historic colours, important building, significant, indigenous, unique, architectural dream of past era.
- Maintained, faithfully restored, preserving old buildings, working building, working example, old standard design, live again, linking old to new.
- Rustic, character, homely, wonderful, rural.
- Beautiful, first class, bit of style, quality, professional, well done.
- Helpful, informative, quality interpretation, detailed, good fit.

Elements (physical and tangible qualities of the settings)

- Building, older buildings, older things, crafts, antiques.
- Cafes, tables, bars, food.
- Artists, local people, people, visitor.
- Plants, plantings, river, lawn.
- Signs, signage.

Evoking (feelings, sensations, memories associated with the qualities of the settings)

- History, cultural heritage, character from that area, vernacular of the Coast what the place is like, local people.
- Tourism, past era, a visitors’ centre or gallery, a library or a police station, old post office, antiques of a very rural setting.
- Building attracted me, enjoyment from looking, link to old and new.
- Outdoors, relaxation, tranquillity, peacefulness, cup of tea, good food.

Activities (what subjects would do in those settings)

- Looking, relaxing, supporting local people.
- Eating out, having a cup of tea, lunch, outside dining.

Negative:

Character (qualities of the settings)

- Garish, gaudy, out of place, inappropriate, blot on landscape, kind of exposed, next to beach, in public view, bad colours in front of magnificent view.
- Where people set up, old, ugly, rough and ready, scruffy, offensive to eye, doesn’t look inviting.
- Battered, poorly maintained, looks like rubbish, blown over, impractical, open.
- Awful, hideous, ridiculous, too close, uniformity.

- Functional, utilitarian, utility, got to have, necessary.

Evaluation (of the qualities of the settings)

- Doesn't reflect well on whoever's in charge, not a good job, no thought went into those, doesn't look inviting, find in impoverished suburbs.
- Inappropriate use of location, not compatible with the area, commercialisation, makes it really touristy.
- There's enough land in New Zealand to have some privacy, unhealthy eating.

Management (implications of the settings)

- Should be removed, new one put in its place.
- Should be out of public eye, disguised better, tucked away behind a screen.

The positive themes show that Factor 3 is responding to 'Cultural Heritage', and particularly its expression in buildings. The main character of the settings is 'Cultural Heritage' brought to life in preserved older buildings. They have a rustic, homely style. The important elements include buildings and the other urban infrastructure such as tables, plants and signs. A notable inclusion in the list of elements is people. The character and elements of the settings evoke history and 'Cultural Heritage' based on old buildings and the positive experiences associated with these elements. The main activities include looking and eating. Good design is commented upon and appreciated.

The negative themes show dislike for tourist infrastructure that is out of place or old, scruffy or uninviting. There is acknowledgement that such infrastructure is necessary. Poorly managed infrastructure is taken to reflect poorly on those responsible for the area, as well as on the image of the area itself. Thus, the quality of public amenities is again linked to the attributes of (local) people living in or near the settings. Infrastructure is also seen as inappropriate or incompatible with the area. Factor 3 sees scope for managing tourist infrastructure by better disguising it.

Factor 3 comprises mainly visitors who like older buildings because of what they represent, rather than as structural forms in their own right. They provide links with the past and their restoration revives earlier actions and events, invoking knowledge of people who have gone before. This enables Factor 3 to feel connected with aspects of history that are projected into the present (and future) through the built environment. It follows that Factor 3 strongly supports the reuse of older buildings in ways that are respectful of their origins. Being in the presence of older buildings is greatly appreciated, and being able to passively view old buildings in preserved or working condition is the main source of enjoyment in the liked settings. Factor 3 particularly likes the 'Cultural Heritage' exemplified by heritage building (28). Comments about the café (17) also mention the historic building in the background. This illustrates the importance that Factor 3 attaches to the intermingling of the past and present: the placement of old and new buildings alongside each other embodies this, and enables Factor 3 to view both buildings simultaneously.

Contemporary buildings, such as café (17) and visitor centre – traditional (25), are also liked where they can be associated with memorable people service, and pleasurable events. This further supports the fact that settings with buildings are liked for the people dimension, rather than, as with Factor 2, from a purely design or environmental point of view. The modern visitor centre (19), however, receives a neutral score in the Factor 3 array, perhaps due to its newness of design and apparent break with previous building design traditions. The top two

people who loaded on Factor 3, nevertheless, rated the modern visitor centre relatively high. One associated helpful people with the Centre, which was similar to comments concerning the traditional visitor centre, and the other associated a cultural dimension to the water feature, namely Japanese fish gardens. These comments generally support the main features of Factor 3, even though the ranking of the particular photograph - 19 - does not reflect the overall factor array.

In sum, the liked settings tell Factor 3 what the place is like on the basis of history embodied in buildings that have existed through time. The buildings call to mind the lifestyles, work habits, and social relations of earlier peoples, which are then linked with present people and activities. This knowledge leads to enjoyment and peace, themes that are continued with respect to an appreciation of a variety of urban settings. Factor 3 values quality and professionalism in the provision of public amenities, such as tourist lodge (9) and detailed sign (18). Dining out is preferred to fast food, and helpful information is always appreciated. Being a visitor, Factor 3 uses and appreciates public amenities (toilets and rubbish bins) that are discrete and well maintained, and dislikes the campervan effluent disposal (11) and the pie cart (21). Both picnic spot (3) and campsite – basic (27) are rated lower than other factors, suggesting that what Factor 3 finds neutral about these settings is the minimalist provision of public amenities in predominantly natural settings. The title of ‘Cultural Heritage’ best captures the essential features of Factor 3.

3.3.5 Factor 4: ‘Quality and Care’

Factor 4 accounts for 15 per cent of the total variance among the rotated factors and comprises 15 subjects. Most were locals and domestic visitors. Only one overseas male and one overseas female visitor loaded onto the factor, and the highest loaders were all locals. All but one of these highest loaders were aged 25 years or under. There were 40 per cent who had or were receiving a tertiary education.

Figure 7 shows the array for Factor 4. Among the top six are tourist lodge (9) and picnic spot (3), which are also liked by two other factors, and buildings and a viewing platform. Not liked are public amenities and some older buildings. Car park – viewpoint (10), visitor centre – modern (19) and car park – bus (29) are liked, and score higher than for all other factors. The detailed sign (18) and walkway – basic (5) are in the neutral column and are rated lower than all other factors suggesting that Factor 4 is least inclined to walk or camp. Least liked and less than all other factors is toilet – improved (4). These characteristics of the array suggest that Factor 4 is sensitive to the standard of public amenities being made available to visitors and tourists alike, and is keen on safeguarding or improving the reputation of the place in which they either live or visit frequently.

The six top-ranked photographs for Factor 4 and their respective scores were:

9	Tourist lodge	(+4)
3	Picnic spot	(+3)
10	Car park - viewpoint	(+3)
19	Visitor centre - modern	(+2)
28	Heritage building	(+2)
8	Craft outlet	(+2)

Four of these photographs contain buildings: the tourist lodge on the waterfront amidst native bush; two older buildings restored and converted into retail premises; and the visitor centre of contemporary design and landscaping. The remaining two photographs are of a picnic table and jetty at the waterfront, and an expansive car parking area and covered information kiosk with elevated views over the sea.

Figure 7
Array of Photographs for Infrastructure Factor 4 – ‘Quality and Care’



Key

Red	Higher position than all other factors
Yellow	Intermediate position
Green	Lower position than all other factors

Photograph 9 - Tourist lodge (+4)

- Subject 2:
(LocF23) "Very relaxing scene. A nice place to stay. From a distance looks like it has nice gardens, good distance to lake, and well-groomed".
- Subject 36:
(LocM25) "Upmarket in middle of nowhere - things to do, go diving. Nearby to Munroe Beach".
- Subject 56:
(LocF17) "Really, really nice setting, next to the water's edge. (Would you go there?) I would go there and stay there".
- Subject 61:
(LocM22) "Looks like nice little - not sure if motel/hotel. New, location looks good as well. Overlooking lake".
- Subject 72:
(LocM47) "Got imagination and flair. Building set in nicely - not intrusive. (Go to it?) yes".

Photograph 3 - Picnic spot (+3)

- Subject 2:
(LocF23) "Just a nice picnic spot really. Just basic".
- Subject 36:
(LocM25) "Fishing there - nice lake".
- Subject 56:
(LocF17) "The lake is really a relaxing place. (What would you do there?) Went for a swim there".
- Subject 72:
(LocM47) "Lovely lake scene. Hills, water, place to sit - contemplative. Uncluttered by human activity. Nice lonely photograph. (Would you go there?) Yes, not for long though - problem of sand flies. Captures an essential, uncluttered quality".
- Subject 107:
(VisNZM25) "Jetty. A place where you could pull up a boat. Looks very, you are travelling around a quay and you pull up in a little beach".

Photograph 10 - Car park - viewpoint (+3)

- Subject 36:
(LocM25) "Go and look out over sea. Where can go diving".
- Subject 61:
(LocM22) "Looks like rest area. I like the location of it. Good view, beach. Like building itself - well maintained. (Would you go there?) Definitely a place I'd use".

Subject 72:
(LocM47) “Shows imagination. The Coast near to Australia has great expanse, space for people - isolation”.

Subject 107:
(VisNZM25) “If the cars weren’t there, it would be heaps better. Like a viewing platform. Nice and open and I like the house. You have the ocean over there that is massive, yet sense this is massive (looking other way over car park) and then have little house in the middle where you can go and stand out”.

Photograph 19 - Visitor centre - modern (+2)

Subject 2:
(LocF23) “Same as photograph 17. Shows we are not just ‘bush hicks’. Flash visitor centre. (We are) not ‘block’ people – do with a little style”.

Subject 36:
(LocM25) “Well set up - good for tourists. Moving sea. Just been there two weeks ago - one and half weeks ago. An early development in Westland”.

Subject 61:
(LocM22) “Where is that? Looks different. I’ve never seen it before. Looks wet. I like the architecture. (Why do you like the architecture?) If it’s a fountain, I think that’s pretty cool. I think its interesting”.

Subject 107:
(VisNZM25) “Seems bigger, but angular. Contemporary. Nice footpath. Therapeutic - like Japanese gardens. Water and pathway. Big corporation with garden in front - reminds me of that”.

Photograph 28 - Heritage building (+2)

Subject 61:
(LocM22) “Style of it reminds you of Westland”.

Subject 107:
(VisNZM25) “(I don’t like) the colour and the panelling here. The way of the timber*”.

Photograph 8 - Craft outlet (+2)

Subject 56:
(LocF17) “Its an older looking building. New Zealand, especially Westland, has a name for being behind in the world. That building shows it with its rustic roof - natural”.

Subject 61:
(LocM22) “Old, it’s the style too. Bit of character - the Westland character. Pioneer kind of look”.

Subject 107: "I don't like the style of house. Sort of like, doesn't have any character (VisNZM25) like the very old. Hang on, no I think it is the style of house. The settings good. (What do you like about the setting?) Its like, settler's shanty. Not culture, like if put something like Cathedral in Square. The colour, the white, the cream - white trash*".

The six bottom-ranked photographs for Factor 4 and their scores were:

4	Toilet - improved	(-4)
24	Toilet - basic	(-3)
6	Rubbish bin - basic	(-3)
12	Campsite - cabins	(-2)
20	Traditional motels	(-2)
11	Effluent disposal	(-2)

Photographs 4 and 24 respectively show a single unisex toilet with its door open, and an older style toilet block backing onto bush with a shingled area in front. The rubbish bin is the red 44-gallon drum being reused as a rubbish bin; and the effluent disposal is a facility for campervans. The remaining two photographs are of accommodation buildings: the older style split level motel, and the row of identical cabins.

Photograph 4 - Toilet - improved (-4)

Subject 2: "If this is meant to be permanent, I think it is impermanent. If it is for (LocF23) workers it is fine. If permanent, it is not flash. One toilet, a long-drop at that. Hot and smelly pretty quick".

Subject 36: "Could have been tucked away in bush with a path going up to it". (LocM25)

Subject 56: "I think this is on a lake side. I think its time they got flush toilets for (LocF17) the tourists. A lot of people are using them now".

Subject 61: "It's a portaloos. (What do you dislike about portaloos?) They are used (LocM22) so much, and normally they don't flush. Just a hole, sort of thing".

Subject 72: "Oh! Absolutely total lack of imagination. Nothing nice. Terrible. (LocM47) Someone said Westland needed a toilet so we got a toilet"!

Photograph 24 - Toilet - basic (-3)

- Subject 2:
(LocF23) “Well they could at least have done the writing neater. If the outside is not clean, you hate to think what the inside is like. Looks like spray painted”.
- Subject 36:
(LocM25) “Not really well presented”.
- Subject 56:
(LocF17) “Looks absolutely disgusting. If I was a tourist, I wouldn’t go there. Men and women have been spray painted on. Looks shabby.”
- Subject 61:
(LocM22) “Looks real dodgy, scummy, disease material. (What is it about it?) Just the maintenance of it – looks grubby.”

Photograph 6 - Rubbish bin - basic (-3)

- Subject 2:
(LocF23) “Really sort of obvious that things like that are going to be abused”.
- Subject 36:
(LocM25) “Doesn’t look good. Not good example”.
- Subject 56:
(LocF17) “Crushed old drum, compared to the respectable ones. Council ones look a lot tidier. Doesn’t look appealing. Looks like its been run over or something”.
- Subject 61:
(LocM22) “Looks like junk itself. Doesn’t make the Coast look very good”.
- Subject 107:
(VisNZM25) “That being damaged was basically it, and red stands out so much”.

Photograph 12 - Campsite – cabins (-2)

- Subject 2:
(LocF23) “Well the buildings are all right. I don’t know what that there is (pointing to dirt and grass area in foreground of photograph). It needs to be tidied up. Nice neat gardens. Even if they just bulldoze it complete and leave that white dirt it would be neater”.
- Subject 36:
(LocM25) “Budget and doesn’t look good.”

- Subject 61: “Small cabins. I’d choose to go elsewhere before I’d go there. (Why?)
(LocM22) The area, not the area around it, just looking at carpark or whatever is in the front. It doesn’t look nice. If not maintaining outside, what does it look like on inside”?
- Subject 72: “Worries me – far too many people. That’s Soweto that is”.
(LocM47)
- Subject 107: “Very regimented. Little bungalows remind me of a military camp – not
(VisNZM25) a very inviting place. I suppose okay to have a sleep, but you’d bet out of there as quickly as you can. Reminds me of bachelor quarters down at the barracks”.

Photograph 20 - Traditional motels (-2)

- Subject 2: “Tacky. Very out of date as well. (What is tacky about it?) The style of
(LocF23) building and the word ‘motel’ and the signs – all scattered as well”.
- Subject 36: “Not really flash”.
(LocM25)

Photograph 11 - Effluent disposal (-2)

- Subject 107: “Its something I wouldn’t noticed really. I’ve never seen thing before,
(VisNZM25) but I wondered where people from campervans put their stuff”.

Summary for Factor 4: ‘Quality and Care’

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

Positive:

Character (qualities of the settings)

- Nice place, nice setting, nice lake, nice gardens, well groomed, well maintained, well set up.
- Upmarket, new, imagination and flair, shows imagination, different, flash, contemporary, interesting, pretty cool.
- In middle of nowhere, set in nicely, not intrusive, lovely, uncluttered, lonely, open, massive, therapeutic, relaxing.
- Look out over sea, good view, viewing platform, stand out, rest area.
- Natural, old, character, style, rustic, pioneer kind of look, settler’s shanty.

Elements (physical and tangible qualities of the settings)

- Water's edge, lake, water, sea, hills.
- Gardens, fountain, footpath, platform, rest area.
- Jetty, little beach, quay, boat.
- Little house, building, architecture.
- Cars, sand flies.

Evoking (feelings, sensations, memories associated with the qualities of the settings)

- Things to do, travelling, imagination, contemplation.
- Great expanse, space for people.
- Development, we are not just 'bush hicks', bit of style, big corporation, Westland character, New Zealand.

Activities (what subjects would do in those settings)

- Diving, fishing, swimming, contemplating, boating, viewing.

Negative:

Character (qualities of the settings)

- Hot and smelly, disease material, doesn't flush, nothing nice, absolutely disgusting, grubby, real dodgy.
- Not permanent, not flash, long drop, just a hole, portaloo.
- Terrible, no imagination, spray painted, tacky, out of date, shabby, junk itself.
- Not well presented, scummy, red stands out, doesn't look good, doesn't look appealing, damaged, crushed, run over.
- Too many people, overcrowded, regimented, small, budget, military camp.

Evaluation (of the qualities of the settings)

- A lot of people are using them now, used so much.
- Total lack of imagination, doesn't make Westland look very good, not good example, out of date.
- If the outside is not clean, hate to think what the inside is like, if not maintaining outside, what does it look like on inside?
- Not inviting, if I were a tourist, I wouldn't go there, I'd choose to go elsewhere.
- Council ones look a lot tidier.

Management (implications of the settings)

- Could have been tucked away, put path up to it.
- It's time they got flush toilets for tourists.

- Needs to be tidied up, could have done the writing neater.

The positive themes show that Factor 4 is responding to the adequacy of public amenities and attractions available for visitors and tourists to Westland. The main character of the liked settings is their 'nice' appearance, good views, or the provision of something interesting, their unobtrusive nature and the availability of something to see. There is appreciation of the natural and the old. A wide variety of elements are mentioned including water, urban infrastructure, tourist infrastructure and perhaps significant for tourists: cars and sandflies. The character and elements of the settings evoke things to do in an open environment which is typical of Westland.

The negative themes show dislike for basic toilets, and, by implication, a strong preference for flush toilets. Basic toilets were regarded as poorly maintained, and semi-permanent toilets were considered unhygienic and dated. The temporary nature of the portable toilets signalled a lack of planning and half-hearted development. Other infrastructure was characterised as poorly presented and unappealing. The infrastructure was evaluated as not keeping pace with the times and with a lack of imagination. The appearance of toilets was taken to indicate their internal quality and putting people off using them. Factor 4 sees scope for better management by upgrading toilets to better cope with the volume of people using them.

Factor 4 comprises locals and domestic visitors who are young. Factor 4 has a sense of place – of belonging to or identifying with Westland, and wants to improve on its reputation. This involves creating an image for Westland in a way that retains remnants of the past. Comments on heritage building (28) and craft outlet (8) show that Factor 4 is aware of a Westland identity based on older buildings. The construction of new infrastructure is, however, valued because development reworks or capitalises on existing assets. Factor 4 is the only one that likes photograph 19, visitor centre – modern. It follows that elements in the liked settings include a mix of natural features and a wide range of built structures. For Factor 4, it is the combination of these features that evokes positive qualities about Westland. These qualities include evidence of care and attention, and feelings of pride, conveyed by well-maintained public amenities, such as car park – viewpoint (10), and by buildings using contemporary design techniques, namely, visitor centre – modern (19).

Factor 4 has some similarities with Factor 1 in that the two most liked photographs are the same and they dislike public amenities. The comments show, however, that divergent criteria are being used to evaluate the respective settings. Factor 4 is more attuned to issues of maintenance and high standards, whereas Factor 1 privileges natural elements interpreted as scenic nature. The locals and domestic visitors loading onto Factor 4 are perhaps less likely to be campers or walkers. Living in Westland for some locals at least, may mean that qualities of the natural environment, such as the bush setting, are taken granted and they do not actually pursue such activities.

Outside or exterior appearances are important to Factor 4, influencing people's perceptions of the inside or interior, as well as shaping visitor's first impressions of Westland. In Factor 4, it is very important that these responses and impressions are managed well, and that both heritage, nature and a variety of infrastructure are presented positively. To do this attention must be given to the quality of design management, so the appropriate title for Factor 4 is 'Quality and Care'.

3.4 Supplementary Data on Environmental Attitudes

In addition to the two Q sorts reported above, subjects were also asked to rate three statements about environmental management on a ten-point scale. These statements were part of the interview recording sheet (see Appendix 1) and were read aloud to the subjects and/or shown to them so they could read them themselves. It was stressed that subjects were to respond to the statements in terms of the importance to them personally of environmental management. They were also advised to consider the environment in a generic sense, that is, including solid waste, effluent, water, energy use and carbon emissions, for example. This exercise took place upon completion of the two Q sorts, and before background information about the subjects was obtained. The average scores for each statement were tallied using only scores of subjects' who loaded onto factors for each Q sort in order to compare these results across the different factors.

For the subjects loading significantly onto the landscape and infrastructure factors, actual 'environmental management in Westland' (6.6) was rated lower than assessment of the 'importance to them of the Westland managing its environment in a sustainable way' (9.4). Sustainability was also rated slightly higher than 'documentation of environmental standards' (8.5). It became clear while interviewing that many subjects did not understand the question or issue of documenting environmental standards. Where elaboration was necessary to aid their understanding of the statement, the distinction between theory and practice was often used to distinguish between the documentation of standards and actual environmental management. The concept of sustainability was generally well understood by locals and New Zealand visitors. However, many overseas visitors grappled with the concept so we refined its meaning and expressed it in more basic language as managing the environment in such a way that enables the environment to renew itself and to be preserved for the future.

The respective ratings for each statement were very similar for subjects loading on factors in each Q sorts. However, we can tentatively examine variations across factors and across the different groups to see if there were any differences in the average scores for the three statements. This approach is suggestive only of possible differences in the ratings for we have no way of assessing if the differences in scores are significant. For the landscape Q sort, the 'Pastoral Nature' factor rated actual environment management and the issue of environmental standards slightly higher than the overall average at 6.9 and 8.9 respectively. This corroborates the romantic aspect of this type of landscape experience. When the average scores for each statement were analysed according to the locals, overseas visitors and domestic visitors loading onto the landscape factors, some apparent differences did emerge. Both locals and New Zealand visitors rated actual environment management in Westland slightly lower than the overall average at 6.0 and 5.6 respectively. This suggests that locals and domestic visitors may be more critical of what is taking place in their own country, relative to overseas visitors who may be more accepting of what they experience. Overseas visitors rated both actual environmental management and the sustainability statement slightly higher than the total average at 6.8 and 9.6 respectively. New Zealand visitors, in contrast, rated the sustainability statement lower than the total average at 8.5, and lower than the score they gave to documentation of environmental standards. The slightly higher score given to the sustainability statement may suggest that domestic visitors to Westland are more sensitive to a discrepancy between theory and practice when it comes to environmental management and sustainability.

Factor 2 of the infrastructure Q sort, 'At One With Nature', rated both the sustainability statement and the issue of environmental standards higher than the overall average (9.4 and 8.5) at 9.9 and 9.3 respectively. This factor also rated actual environmental management in Westland lower than all other factors (6.6) at 6.1. This supports our interpretation of the environmentalist orientation of this type of landscape experience, in which untouched nature is regarded as an asset to be preserved and also enjoyed for its own sake. Signage of sensitive design was important for this factor. Clearly, Factor 2, 'At One With Nature', has high standards for the environment and is more critical than the other factors of actual environmental management. In contrast, Factor 3, 'Cultural Heritage', rated actual environmental management in Westland higher than the total average at 7.1, and the issue of environmental standards slightly lower than the total average at 8.2. From this, it can be suggested that the distinction between actual practice and the documentation of environmental standards may be less important to the "Heritage and Buildings" experience, which responds to people and the built environment, rather than 'natural' elements of settings. Factor 4, 'Quality and Care', rated the issue of environmental standards lower than the overall average (8.5) at 7.4. This type of experience emphasises the 'nice' appearance of a range of public amenities and appreciates a blend of natural features and built structures evoking qualities of Westland. However, for the locals loading on this factor, perhaps the need for environmental standards to be documented may be less pertinent to this end. This is because environmental standards are more likely to be informally negotiated and to emerge from tacit understandings and shared local knowledge.

3.5 Conclusion

The results identify four factors or preferred types of experience. 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 loading on them. Variations in the scores for environmental attitudes corresponded with the factor interpretations.

Chapter 4 Discussion and Conclusion

4.1 Summary of Findings

The research reported here aimed to determine locals' and visitors' responses to the Westland landscape. It achieved this by identifying their preferences for different types of landscape experience and tourist infrastructure, and by providing an understanding and interpretation of that experience. Clearly different and distinctive categories of response have been identified and interpreted, each of which represents a different characteristic experience of Westland.

There were three landscape and four infrastructure factors or preferred ways of experiencing Westland as shown below. There is no link implied between the two sets of factors in this table (interrelationships are considered later).

Factor	1	2	3	
Landscape	Pure Nature	Living in Nature	Pastoral Nature	
Factor	1	2	3	4
Infrastructure	Nature and Heritage	At One with Nature	Cultural Heritage	Quality and Care

For the landscape Q sort, the 'Pure Nature' experience was common to a wide range of respondents but the subjects tended to be younger than those loading on the other factors. These subjects emphasised untouched nature, favouring apparently unmodified settings that showed qualities of its pristine status. They disliked general infrastructure that damaged or imposed on nature, and they had a neutral response to farming. The 'Living in Nature' experience was common to local men who were older and fewer had tertiary qualifications. They appreciated both nature and local buildings, which were symbolic of home. They disliked general infrastructure but were more accepting of commercial activities associated with local employment. Farming was slightly liked. The 'Pastoral Nature' experience was common to all respondents, and included a high proportion of women. They also appreciated nature, especially its visual qualities and the green colour, and liked the idea of living in Westland. They emphasised pastoral values of farming, livestock and country life in which humans are a part of nature. They disliked general infrastructure and commerce.

For the infrastructure Q sort, the 'Nature and Heritage' experience was common to mainly locals and some visitors. These subjects liked scenic nature, history, living in nature and favoured natural features and basic amenities that encourage a visit for varied activities including heritage. They were not keen on the modern visitor centre but accepted familiar built structures. They disliked old rubbish bins and toilets that they probably do not use, and perhaps gave a poor impression to visitors. The 'At One With Nature' experience was common to mainly visitors. They liked nature and enjoyed active participation in settings with minimal man-made facilities and where signs and facilities helped to protect nature. Emphasis was given to visual aspects and design so they disliked the modern visitor centre and buildings that were commercial, and which they felt were 'out of place'. They accepted well designed minor infrastructure elements, such as toilets and rubbish bins, as part of the Westland experience. The 'Heritage and Buildings' experience was common to mainly visitors. They liked 'Cultural Heritage' manifest in older buildings, which allows connection

to other people. They disliked tourist infrastructure that contrasted with natural surroundings, so they were not keen on the modern visitor centre. Toilets and rubbish bins were accepted provided they were discrete and well maintained. The 'Quality and Care' experience was common to mainly locals and New Zealand visitors. They liked the neat and tidy appearance of a variety of public amenities and attractions that also provided something interesting to see and do. They liked a variety of built structures including the modern visitor centre, but disliked unkempt facilities such as old toilets.

4.2 Discussion of Results

4.2.1 Landscape

All landscape factors share an appreciation of nature. For both visitors and locals there is a process of selection that has already occurred and which has brought them to Westland. Visitors to Westland have made a decision to go a destination whose promoted image is often one of 'untouched nature'. Locals are living there in part because they can pursue a lifestyle and recreational activities in a relatively natural environment. Appreciation of nature, at a broad level, is thus something that locals and visitors have in common. This appreciation is exemplified in two photographs: coastline – rocky (24) and lake and forest (22). These settings are liked by all three factors to the extent that they are in the top three columns. They show the essential features of the natural Westland: the mountains-bush-water combination and the coastal-bush combination, each in a rugged and apparently natural way. All three factors also have a shared dislike of infrastructure, especially the rubbish dump which is a stark juxtaposition of unsorted solid waste set against a bush background.

Beneath the similarities across landscape factors, there are some important distinctions. The factor arrays for Factors 1 (Pure Nature) and 3 (Pastoral Nature) show that almost all of the preferred photographs are largely natural settings with no reference to urban or modern structures, although the 'Pastoral Nature' type (Factor 3) includes the two farming settings. These two types value what they think are natural elements, judged mainly in aesthetic and visual terms. In contrast, the 'Living in Nature' type (Factor 2) has a more considered and probably better informed view of what is natural and what is not, given that people loading onto this factor were mainly locals living and working in Westland; hence modified environments such as young pine forest and regenerating pakihi receive lower rankings than in the other factors. The three factors also diverge with regard to the disliked settings. While mining - gold (17) was disliked by Factors 1 and 2, and dairy factory (23) and petrol station (18) were disliked by Factors 1 and 3, Factors 2 and 3 had no disliked settings in common other than rubbish dump (15), electricity substation (11) and water-supply tanks (25). These latter three settings were rated in the bottom three columns by all three factors. Significantly, however, each factor had some settings that were more disliked than the other factors. Factor 1 rated mining – gold rated lower than the other factors; Factor 2 rated sewage pond (10) and state highway (20) low, and Factor 2 rated and town centre – shops (6) low. Thus, key differences in the disliked settings illustrate that the three factors have distinctive views of the types of infrastructure that are less acceptable within natural landscapes.

These responses are consistent with the overall focus of the factors. Factor 1 (Pure Nature) has a marked dislike for the overt destruction of an apparently natural setting caused by gold mining. Factor 2 (Living in Nature) being local, recognised the sewage ponds and ranked them consequently lower than other factors who perhaps responded more to the presence of

water in a bush setting. Factor 3 (Pastoral Nature) ranked the urban setting significantly lower than the other factors, expressing their preference for non-urban landscape.

These characteristics of the Westland experience suggest that an accommodation of interests between locals and visitors has been possible because the low population density has allowed Westland commercial activities to proceed in ways that are for the most part compatible with tourism. Thus the environment is not strongly affected by commerce and visitors can get to see their preferred views of untouched nature, and in the case of 'Pastoral Nature', they can get to appreciate farming as part of nature. However, the strongly negative perceptions of infrastructure elements suggest that there are significant tensions between tourism and the current state of public services needed to support it. In particular, the strongly negative responses to many of the photographs of general infrastructure raises a serious warning about the future development of tourism in Westland and the need for improved environmental management (see below). The open waste dump stands out, but strong reactions were also expressed about gold mining (clearly visible from the historic township of Ross), the electricity substation, water supply tanks and, despite their outwardly tidy appearance, the dairy factory and service station. These service facilities (or major employer, in the case of the dairy factory), although essential to support tourism and/or the local economy, do not sit well with people's expectations of the Coast (particularly overseas visitors). Improvements to many existing facilities, and careful location and design of future facilities, are clearly warranted.

So far we have given attention to developing an account of how experience of Westland varies and used the factor interpretations to achieve this. It is useful to supplement these interpretations by linking them to some demographic characteristics of the factors. This can provide some insight into the interpretations. However, it should not be taken to suggest that they explain in full why the interpretations are held. For the landscape Q sort, both males and females visitors loaded equally onto Factors 1 and 3. However, females were unlikely to load onto Factor 2 – 'Living in Nature'. Factor 2 comprised mainly local males who valued settings that were symbolic of their home, such as the local hotel. Other settings that were rated relatively highly (in contrast to the other factors) included the dairy factory (23) and petrol station (18). These express important resources to the locals, but to visitors they have no such significance, and contrast with their expectations.

Significant numbers of local males, relative to local females, also loaded onto the 'Pure Nature' type - Factor 1. Photographs rated highly by Factor 1 compared with the other factors included braided river (3) and valley forest (19). These are both settings that afford particular leisure opportunities. Local females in contrast highly loaded onto Factor 3 – the 'Pastoral Nature' type. Interestingly, all groups loaded onto Factor 3 except local males (with one exception). Factor 3 rated the farming settings, unimproved farming (21) and improved farming (5), high compared with the two other factors. Perhaps local males take farming for granted and do not attach strong values to it, compared with the women for whom farming evokes images of home and country life.

In sum, the distribution of visitors and locals across the landscape Q sort factors supports the findings of different experiences of the Westland landscape. For overseas visitors, responses to the landscape were often based on expectations of 'pure nature' that were significantly different from their home countries. For locals, the landscape settings were usually evaluated in terms of degrees of familiarity and intimacy. What is interesting about the landscape Q sort, however, is the mix of local males with overseas females on Factor 1, and the

combination of overseas visitors generally with local females on Factor 3. This suggests that compared with tourist infrastructure, when it comes to natural settings there is likely to be some considerable degree of consensus among locals and visitors about what settings are liked or disliked.

4.2.2 Infrastructure

The infrastructure factors show a more diverse range of responses. While appreciation of largely natural settings is important to most of the factors it is not universal, especially for Factor 3, 'Cultural Heritage', who privileges the built environment ahead of infrastructure elements within natural settings. Factors 1, 2 and 4 like infrastructure settings that appear 'natural' or at least have a significant 'open' quality, and they all like photograph 3 which shows a picnic site next to a lake. Beyond this similarity there were divergent responses to the infrastructure settings.

There were significant differences in emphasis in the preferred and least preferred types of infrastructure, and divergent views on some particular settings. Factor 1 ('Nature and Heritage') comprised mainly locals, both male and female, typically older and less well educated, along with some female visitors. They placed importance upon infrastructure being well maintained, neat and tidy, and tended to be relatively conservative in their preferences, placing highest value upon outwardly modest facilities that were well integrated into nature, or upgraded historic buildings. They had particularly negative views of rubbish bins and older, or bush, toilets. Factor 4 ('Quality and Care') also comprised a preponderance of locals, who were generally younger and held positive views upon the future of tourism in Westland, like Factor 1. They also expressed preference for well-managed and cared-for facilities, with similarly negative views upon old, neglected or otherwise basic facilities. However, they ranked examples of more modern facilities higher than Factor 1.

Factors 2 and 2 were predominantly visitors, both overseas and New Zealand, male and female. The overall level of education was much higher than Factors 1 and 4, with 87 per cent of Factor 2 ('At One With Nature') holding a tertiary qualification. These two 'visitor' factors had quite contrasting views on infrastructure. Factor 2 preferred tourist provisions that were focused upon camping, walking and picnicking in natural settings, and only one of the top six photographs included a building (a wilderness lodge). At the negative end, these visitors expressed dislike for buildings (old and new), urban settings, and evidence of vehicles. They clearly prefer facilities that allow access to and enjoyment of natural settings with minimal infrastructure.

In contrast, Factor 3 ('Cultural Heritage') emphasised the heritage buildings and interpretation facilities. Comments indicated that their interest was in the Westland culture, and the character of the people there, and the infrastructure facilities which expressed this 'Cultural Heritage' orientation were strongly preferred.

The main contrasts in evaluation of infrastructure were therefore in the extent to which different factors were interested in 'Cultural Heritage', and were willing and able to accept tourist facilities located in buildings and urban type settings as integral to the Westland experience. There was largely consistent rejection of poorly designed or neglected features such as toilets and rubbish bins, modified only by an even greater antipathy in one factor (2) towards modern buildings.

4.2.3 Interrelationships

There is evidence in both the landscape and infrastructure Q sort that gender, age and education are significant factors in the way tourism in Westland is experienced and valued. In the landscape Q sort, Factor 2 ('Living in Nature') was an almost exclusively male perspective, while in the infrastructure Q sort, no local females loaded on Factors 2 ('At One With Nature') or 3 ('Cultural Heritage'). Respondents loading on landscape Factor 1 ('Pure Nature') and infrastructure Factor 4 ('Quality and Care') were predominantly younger. Respondents loading on infrastructure Factor 2 ('At One With Nature') were predominantly those with tertiary education. While these relationships do not in themselves provide explanations for particular factors, they alert us to the possibility that demographic factors can be important in the way visitors and locals respond to the experience and effects of tourism.

There are also some interesting patterns in the way landscape factors are associated with infrastructure factors. Table 13 (page 99) shows how subjects who loaded on the landscape Q sort also loaded on the infrastructure Q sort, and there are two notable points. First, nearly one half of those subjects loading onto Landscape Factor 1, 'Pure Nature', and who loaded on any infrastructure factor, also loaded onto Infrastructure Factor 2, 'At One With Nature'. We would expect that the 'Pure Nature' experience would have some correspondence with the 'At One With Nature' experience because both emphasise a preference for natural settings with minimal evidence of built structures. Second, over one half of the subjects loading onto landscape Factor 3, 'Pastoral Nature', and who loaded on any infrastructure factor, also loaded onto infrastructure Factor 1, 'Nature and Heritage'. Perhaps the pastoral viewpoint with its acceptance of farming as part of nature also accepts the heritage buildings as part of the natural environment. Both 'natural' and 'cultural' elements also exhibit the picturesque qualities characteristic of this factor.

Table 13
Numbers of Subjects Loading on Landscape and Infrastructure Factors

Landscape Factors	Infrastructure Factors			
	Nature and Heritage	At One with Nature	Heritage and Buildings	Quality and Care
Pure Nature	5	9	3	4
Living in Nature	5	1	1	1
Pastoral Nature	10	1	5	4

Finally, the results from this survey can be compared with those from the earlier Q sort studies in Rotorua and Kaikoura. The Rotorua study included locals while the focus in Kaikoura was entirely upon visitors, rather than locals, but included New Zealand visitors who were bach owners in the area. The two earlier studies did not examine infrastructure and the landscape photographs in the Westland study did not include tourist attractions. While the two earlier studies had a different focus it is still possible to make some comparisons. There are some similarities in some of the factors found across all three studies. They are summarised in Table 14.

Table 14
Comparison of Factors across Three Studies

Location	Matching Factors					
Kaikoura	Ecotourist	Maritime Recreation	Family Coastal Holiday	Picturesque	Coastal community	
Rotorua	Sublime Nature		NZ Family	Picturesque		Iconic Tourist
West Coast - landscape	Pure Nature	Living in Nature		Pastoral Nature		
Westland - infrastructure	At One with Nature		Quality and Care		Cultural Heritage	Nature and Heritage

The Ecotourist experience in Kaikoura, the ‘Sublime Nature’ experience in Rotorua and the ‘Pure Nature’ and ‘At One With Nature’ experiences in Westland are all characterised by a desire for active contact with, and experience of, distinctive natural qualities in the destination. In Kaikoura, this focused upon marine mammals, the coastal environment and the mountain backdrop. In Rotorua, it was geothermal areas, lakes and waterfalls, and apparently ‘natural’ forests. For Westland it was the bush, mountains and water experienced through camping or walking.

‘Maritime Recreation’ in Kaikoura and the ‘Living in Nature’ in Westland was a predominantly male experience of the outdoor environment in which they either live or visit frequently and engage in both social and recreational activities. There was no equivalent for Rotorua, largely because few locals were included in the sample. There is some similarity between ‘Family Coastal Holiday’ in Kaikoura, ‘New Zealand Family’ in Rotorua and ‘Quality and Care’ in Westland in that they are all experiences seeking activities or settings that are suitable for a range of ages. The ‘Picturesque’ themes in both Kaikoura and Rotorua correspond with the ‘Pastoral Nature’ theme in Westland, all expressing appreciation of picturesque qualities, and a balance or narrowing of humans and nature. There is a similarity between the ‘Coastal Community’ factor for Kaikoura and the ‘Cultural Heritage’ factor for Westland. People loading on these factors included cultural elements in their liked settings. Finally, there is some similarity between the ‘Iconic Tourist’ factor in the Rotorua study, and the ‘Nature and Heritage’ infrastructure factor in Westland, because although the latter did not feature attractions or activities associated with Maori as in Rotorua, it did feature classic or iconic elements such as bush, lake and colonial buildings associated with the Coast in the promotional literature.

The occurrence of similar factors across three separate studies suggests that among visitors and locals there are some fundamental and relatively constant experiences of tourist settings. This in turn supports the idea that experiences are structured by combinations of personal and broader cultural factors. In New Zealand, the idea of direct and restorative experience of pristine nature has clearly been central to tourism marketing for 150 years, and taps into a major cultural trait of modern western society. Its expression in all three tourism settings is confirmation of the potency of the ideal. Similarly, the linked picturesque and pastoral ideals of landscape are both embedded in Western culture, and widely used in tourist and product promotion, and also emerge in all three studies. A third common feature, which illustrates

the importance of domestic tourism, is the repeated emergence of a 'family holiday' type experience. The distinctly male recreational experiences of both Kaikoura and Westland express an important New Zealand sub-culture, while the 'Community/Cultural Heritage' theme is a growing dimension of New Zealand tourism.

The recurrence of these themes suggests we might confidently develop resource management strategies that recognise the range of differing needs expressed.

4.3 Implications for Theory and Policy

In the introduction we argued that tourist experience to date has been studied mainly using positivist approaches and that there were few examples of research on tourist reactions to landscapes using a phenomenological approach. In terms of the study area, research to date (Kearsley et al., 1998) has shown Hokitika to have a destination image which international visitors value for uncrowded and peaceful qualities, while domestic visitors value uncrowded, friendly, hunting/fishing, peaceful, safety and tramping/camping qualities. Further, international visitors describe the unique images of Hokitika as scenery and beauty, and domestic visitors describe the unique images of Hokitika as weather and greenstone. Our results add considerably to this characterisation of the destination and show how international and domestic visitors have both shared and distinctive views. Our results also illustrate the application of a qualitative method to the study of tourist experiences of a particular place in New Zealand. Our approach is compatible with that advocated by Ryan (2000) in which he argues for the study of tourist experiences using a phenomenographical approach which maps the qualitatively different ways that people experience, conceptualise, perceive and understand various aspects of their world. Q method using photographs has allowed for the development of such an understanding. Factor interpretation has delineated how people have interpreted and responded to the landscape in distinctive ways. Each interpretation gave insight into particular sets of responses.

While the results show distinctive experiences in response to the settings used, underlying the overall results there is a dualism in terms of man's relationship to nature. One view is of humans separated from nature and the other is of humans as part of nature. The 'Pure Nature', 'At One With Nature' and 'Nature and Heritage' types see nature as distinct from humans, while the Living in Nature, 'Pastoral Nature', 'Cultural Heritage' and 'Quality and Care' types see nature and humans together. For the first group, the only acceptable built structures are either heritage buildings, or infrastructure that is well screened and integrated into the landscape.

The results have implications for tourism policy and management input. First, in terms of landscapes generally, there is widespread appreciation of apparently natural landscapes in which there is little sign of man-made intervention. Environmental management was rated as very important by most subjects. For the ten-point scale used, subjects gave a score of 9.4 out of ten for the importance of environment management but gave a lower score of 6.6 for actual management. Thus visitors and locals have high expectations about environmental management. Any change away from this perceived natural character will have an adverse effect for many people, including locals and visitors. Further, the general emphasis on nature means that careful siting and design of built structures is critical.

Second, in terms of infrastructure, most, but not all, types like less developed sites and seemingly natural settings. Man-made structures are liked when they are in keeping with the heritage of Westland and only one type liked the contemporary café; even here in part because the setting also included an historic building. Ironically these same people use such facilities and while they may argue that they are similar to such facilities elsewhere they nevertheless would object if they were not available. Perhaps the solution here is to provide the modern services in structures that are in keeping with local heritage. Negative reactions to infrastructure showed that, in many cases, older or poorly maintained facilities were seen as indicative of poor management that, in turn, created a poor impression of Westland. Care and attention must be given to the provision of basic infrastructure, especially toilets. Few people like them and many object to their overt presence. Perhaps toilets should be designed and built in ways that make them as inconspicuous as possible, with signage to identify their location. The infrastructure results also draw attention to the importance of buildings and urban features to some visitors. Thus while importance must be given to natural settings this must not be done to the exclusion of attention to the built environment.

In terms of management implications there was much commonality in responses to the disliked settings: all factors wanted improved design or at least some screening. Rubbish bin - basic (6) (an old oil drum) was the only photograph rated in the bottom three piles for all factors, perhaps because it lacked design and was highly visible by virtue of colour. Effluent disposal (11), traditional motel (20), and campsite - cabins (12) were all rated in the bottom three piles by three of the four factors. Factors 2, 3 and 4 had in common a dislike for accommodation places on the basis of poor design. While good design carries with it additional costs it seems that both visitors and locals are highly sensitive to the appearance of such basic amenities. Capital invested in improvements would seem to be important if tourist satisfaction is judged to be important for the long term sustainability of tourism.

The patterns of agreement across factors in both Q sorts provide the basis for making specific recommendations for those responsible for provision of public amenities, tourism development and development generally. We recommend that:

1. Any future development occurs in such a way that the features of water (sea or lake), bush and mountains, which are the core attractions for both visitors and locals, are maintained in a relatively undisturbed state.
2. Buildings in natural settings are designed to integrate with the setting and minimise their visual effect on the perceived naturalness of the area.
3. Refuse management be redesigned so that open rubbish dumps are redundant and can be rehabilitated.
4. Essential infrastructure sites (water, sewage and electricity) be designed or landscaped to minimise impact upon natural settings or views.
5. There is continued provision of well designed picnic amenities, that is, useful but modest facilities that provide opportunity to view and gain access to natural settings.

6. There is a need for the Westland District Council and Department of Conservation to consider using a uniform sign or symbol that directs people to unobtrusive rubbish bins. The basic design of bins should reflect the natural qualities of the Westland (pounamu coloured) or Westland architecture.
7. There is provision of toilets in ways that remove them from view but include clear sign posting. Toilets should be upgraded and designed in ways that reflect Westland architecture.
8. Visitor centres are designed to respond to Westland architectural heritage.
9. Heritage buildings continue to be restored and maintained to reflect the past.

Reviewing the above recommendations shows that design is a critically important factor in planning for tourist development in Westland. A recurring theme in this study of both locals' and visitors' preferred experiences has been the sensitivity of respondents to the appearance of infrastructure provision. For buildings in predominantly natural settings, there is clearly a desire that they be integrated visually with the broader environment, to minimise their impact. Similarly, for other infrastructure elements, respondents seek a minimisation of the visual impact of larger features, while they prefer the appearance of small features such as picnic areas, campgrounds etc. to be as 'natural' as possible, with simple but robust timber or stone details.

There was some difference of opinion over the acceptability of more contemporary regional design styles for buildings and other facilities, but consensus against 'international' corporate design. Restored historic buildings were much preferred to more modern styles.

There is a danger in responding to such findings too literally, for example, by promoting and prescribing a nostalgic historical style, as this can lead to a clichéd 'theme park' approach, which denies local communities the opportunity to evolve and innovate. Nonetheless, these findings certainly highlight the need for careful and well informed design of new facilities, and progressive upgrading of existing facilities, if Westland is to meet both visitors' and locals' expectations of its role as a major tourist destination.

4.4 Conclusion

We have identified seven distinctly different types of preferred landscape experience for Westland, amongst visitors and locals. They focus on two different sets of preferred landscape and infrastructure settings, with different responses expressed as character, elements, evocations and activities associated with the settings. There were some settings that were positively evaluated by all subjects, and others that were consistently given negative evaluations. The themes give more detail and richness to the destination image for Westland identified in previous work. We have argued that using Q method and photographs has extended our understanding of both visitors' and locals' experiences of Westland. Our approach has also described and analysed the qualitatively different ways that people experience, conceptualise, perceive and understand various aspects of their world, that is it has provided a phenomenologically rich interpretation of experience. The results also provide the basis for recommendations for policy.

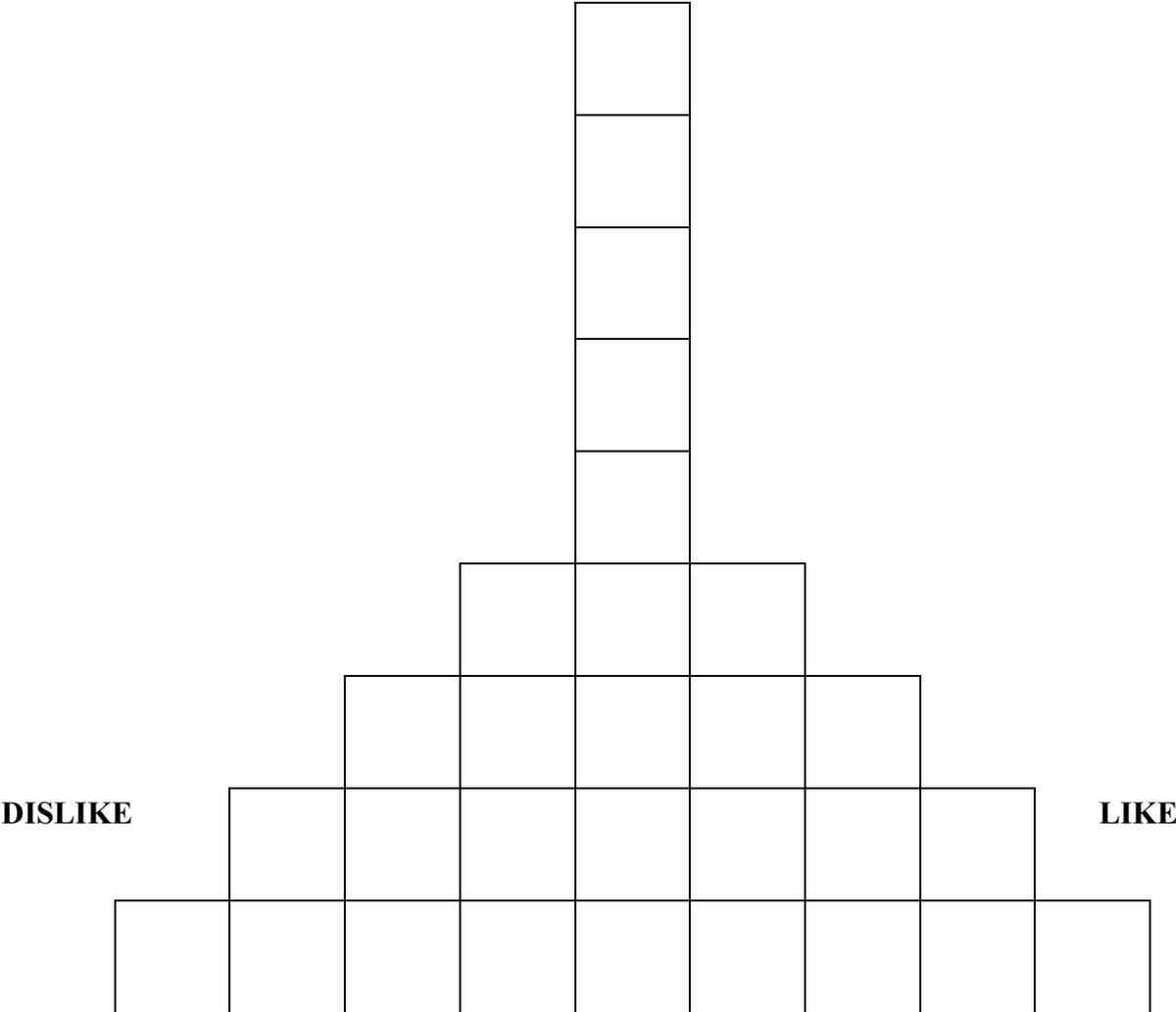
Some limitations of the results must be noted. The sampling approach does not attempt to provide a statistically representative sample hence no predications can be made from these results to the whole population. However we are confident that the main themes represent important types of tourist experience.

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YOUR EXPERIENCE OF THE WEST COAST

Tourist infrastructure: most like to least like



NB: Which places are distinctive of the West Coast.

Environmental Management

(solid waste, effluent, water, energy use, carbon emissions)

Using a ten point scale (10 is high), how important to you is it that the Westland manages its environment in a sustainable way?

Using a ten point scale (10 is high), how would you rate actual environmental management on the West Coast?

Using a ten point scale (10 is high), how important to you is it that environmental standards are documented (that is, people can use independent standards to back up their claims)?

Preferred Photograph

Please select your most liked of the four photographs.

Background Data

Visitors:

Which country are you from? _____ City _____

Mode of travel _____ Town _____

Direction _____ Rural Place _____

Are you travelling through New Zealand?

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

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

Or just visiting the West Coast?

What is the total number of days you have spent on the West Coast? _____ And will spend?

Type of accommodation _____

Gender: _____ Age: _____ Occupation: _____

What is your highest educational qualification (broad categories)? _____

Locals

How long have you lived on the West Coast? _____

Gender: _____ Age: _____ Occupation: _____

What is your highest educational qualification (broad categories)? _____