

Vantage Points: Scientific Photography in Jasper National Park.

by

Trudi Lynn Smith

B.F.A., Emily Carr Institute of Art and Design, 1999

B.A., Dalhousie University, 1995

A Thesis Submitted in Partial Fulfillment of the  
Requirements for Degree of

MASTER OF ARTS

Interdisciplinary

We accept this thesis as conforming  
To the required standard

© Trudi Lynn Smith, 2004  
University of Victoria

All rights reserved. This thesis may not be reproduced in whole or in part, by photocopy  
or other means without the permission of the author.

Co-Supervisors: Dr. Eric S. Higgs  
Dr. Andrea N. Walsh

### Abstract

Like the north, the Mounties and the transcontinental railway, national parks are the subject of some of the most persistent images, stories and legends in Canada. This thesis investigates one collection of these images, scientific photographs of Jasper National Park (JNP). While acknowledging that photographic images are understood and read as objective reflections of reality, this thesis shows that multiple narratives are produced from a single photographic record. It is through these multiple, complex narratives that we envision and understand JNP. Using an interdisciplinary approach to this research, I combined the literature and methods of anthropology (visual anthropology and the anthropology of space and place), environmental studies, museum studies, and photography. I use the creation and delivery of an exhibition as a method to investigate this photographic collection. My field site, Vantage Points: Scientific Photography in Jasper National Park, the Bridgland and Repeat Photography Projects, was exhibited at the Jasper Yellowhead Museum and Archives, between July and October 2003. This research shows visual documents to be important for investigating and understanding how landscape representation has become central to Canadian ideas about national parks, wilderness and nature.

Examiners:

## TABLE OF CONTENTS

Abstract.....	ii
Table of contents.....	iii
List of figures.....	iv
List of tables.....	vii
Acknowledgements .....	viii
Chapter 1: Introduction.....	1
Background.....	1
Canadian identity and national parks.....	6
Photography as a dominant source of knowledge and representation.....	9
Research Goals.....	11
Thesis Outline.....	12
Chapter 2: Literature Review and Methods.....	14
Environmental Studies.....	14
Visual Anthropology.....	15
Space and Place in Anthropology.....	16
Methods: The exhibition as field site.....	20
Chapter 3: Developing Vantage Points - Production and Circulation.....	24
Context and display.....	54
Storyline .....	61
Chapter 4: Capturing Jasper National Park - <i>Vantage Points</i> as a background experience of landscape.....	73
Imaging Jasper National Park .....	75
Narrating Jasper National Park.....	85
Fixing Jasper National Park.....	105
Chapter 5: Consuming Jasper National Park - The making of a foreground landscape through <i>Vantage Points</i> .....	106
Opening <i>Vantage Points</i> .....	108
Interviewing using Vantage Points.....	115
Bob Hallam.....	116
Jeanine Rhemtulla.....	119
Eric Higgs.....	121
Complicating the view of JNP through Vantage Points.....	124
Interrupted Viewing.....	125
Chapter 6: Conclusions - Locating a sense of place.....	129
Limitations of research.....	133
Future research.....	134
References Cited.....	137

## LIST OF FIGURES

Figure 1.1	Trainscape # 65 detail from the series <i>Parallel Tracks</i> .....	2
Figure 1.2	Untitled (Murakami Garden) From the series <i>Britannia Heritage Shipyard</i> .....	4
Figure 1.3	View of Jasper National Park from <i>Morro Peak</i> , station #308. Dominion Land Survey Photograph, M.P. Bridgland, 1915.....	6
Figure 1.4	View of Jasper National Park from <i>Morro Peak</i> , station #308. Rocky Mountain Repeat Photography Project Photograph. J. Rhemtulla and E. Higgs, 1998.....	7
Figure 2.1	Model of landscape experience after Eric Hirsch 1995.....	19
Figure 3.1	Invitation to opening.....	25
Figure 3.2	Introductory panel to exhibition.....	26
Figure 3.3	Introductory panel to exhibition.....	27
Figure 3.4	Phototopographic Survey in Jasper National Park – Survey Techniques.....	28
Figure 3.5	Station #11 – Mt. Clitheroe.....	29
Figure 3.6	Behind the lens: Setting.....	30
Figure 3.7	Phototopographic Survey in Jasper National Park – Mapping.....	31
Figure 3.8	Installation view of Map of the Central Part of Jasper, Alberta.....	32
Figure 3.9	Phototopographic Survey in Jasper National Park – Beyond the Map..	33
Figure 3.10	The Bridgland Repeat Photography Project – Repeat Photography in Jasper National Park.....	34
Figure 3.11	Behind the lens – Cairns.....	35
Figure 3.12	The Bridgland Repeat Photography Project – Landscape Change – Old Fort Point.....	36
Figure 3.13	Station #26 Old Fort Point.....	37
Figure 3.14	The Bridgland Repeat Photography Project – Technology.....	38
Figure 3.15	Behind the Lens – Lining it up.....	39
Figure 3.16	The Bridgland Repeat Photography Project – Glacier Fluctuations: Thunderbolt Peak.....	40
Figure 3.17	Station # 13 Thunderbolt Peak.....	41
Figure 3.18	The Bridgland Repeat Photography Project – Hydrology – Mount Cinquefoil.....	42
Figure 3.19	Station #47 Mount Cinquefoil.....	43
Figure 3.20	The Bridgland Repeat Photography Project – Landscape Change: Henry House Flats.....	44
Figure 3.21	Station #58 Henry House Flats.....	45
Figure 3.22	Behind the Lens – Images.....	46
Figure 3.23	The Bridgland Repeat Photography Project – Changing Activity in the Park – Brule Lake II.....	47
Figure 3.24	Station #91 Brule Lake II.....	48
Figure 3.25	The Bridgland Repeat Photography Project – Changing Activity in the Park – The Palisade.....	49
Figure 3.26	Station #57 The Palisade.....	50
Figure 3.27	Station #38 Morro Peak I.....	51

Figure 3.28	Visualizing a Future.....	52
Figure 3.29	Acknowledgements.....	52
Figure 3.30	The Jasper Yellowhead Museum and Archives' façade (left) and the doorway leading to the Showcase Gallery (right).....	54
Figure 3.31	Figure 2.31. The Showcase Gallery plan (top) and with my notes and layout (bottom).....	56
Figure 3.32	The Showcase Gallery "museum blue" walls – before installation (left) and during lighting set-up (right).....	57
Figure 3.33	Sample of the two panel styles from the exhibition <i>Vantage Points, Behind the Lens</i> (left) and the primary storyline style (right).....	59
Figure 3.34	The three-dimensional artifacts, albums containing black and white prints from the 1915 survey (far right), Bridgland's jacket, pistol and a copy of the Canadian Alpine Club journal (middle) and the Linhoff Technika 4 x 5" that the repeat project used.....	60
Figure 3.35	The story begins with the story of the Dominion Land Survey and M.P. Bridgland's visit to Jasper to make maps of the region.....	64
Figure 3.36	Installation view of 1915 albums and the story of Bridgland's early and active membership in the Alpine Club of Canada.....	65
Figure 3.37	Installation view of the introduction to the Bridgland Repeat Photography Project (BRPP).....	66
Figure 3.38	Installation view of the Linhoff Technika 4x5" camera used for repeat photography and corresponding text panel.....	68
Figure 3.39	Installation view of the computer station.....	69
Figure 3.40	Installation view of Mt. Cinquefoil station panoramas and image/text panels in the foreground. The end of the show is on the far left - hand side.....	70
Figure 3.41	Installation view of Thunderbolt Peak (left), Henry House Flats (middle), and The Palisade (right).....	70
Figure 3.42	Installation view of the final show panels. Morro Peak (left), the final text panel (middle) and acknowledgements (right). The door to the exhibition and a plinth with the comment book are behind the panel on the right. Visitors leave the exhibition on the right side of these text panels.....	72
Figure 4.1	View showing part of the phototopographical mapping technique, from M.P. Bridgland's 1924 book, <i>Photographic Surveying</i> .....	76
Figure 4.2	Samples of phototopographical views using Cartesian perspective from M.P. Bridgland's 1924 book, <i>Photographic Surveying</i> .....	79
Figure 4.3	Tree growth interrupting panoramic view of land. From Station # 57 Power House Cliff.....	83
Figure 4.4	1915 view from Mt. Cinquefoil. Survey photograph created by Dominion Land Surveyor M.P. Bridgland.....	86
Figure 4.5	1915 view from Mt. Cinquefoil. Survey photograph created by Dominion Land Surveyor M.P. Bridgland (top) (from RMRPP website) and the transformation of the image with mapping information (bottom)(from <i>Photographic Surveying</i> 1924).....	88
Figure 4.6	Detail from six-part map "Map of the Central part of Jasper, Alberta"	

	by Dominion Land Surveyor M.P. Bridgland.....	89
Figure 4.7	Site of Ewan Moberly homestead in JNP. RMRPP researcher Jenaya Webb discusses the memorial grave marker of Suzanne Cardinal Moberly (left) and a detail from one of the original buildings on the site (right).....	91
Figure 4.8	Two views of the Tonquin Valley. 1915 view by M.P. Bridgland (left) and 1990s view by J. Rhemtulla and E. Higgs (right) images from RMRPP website.....	93
Figure 4.9	Two views of the Tonquin Valley. 1915 view by M.P. Bridgland (left) and 1990s view by J. Rhemtulla and E. Higgs (right) images taken from RMRPP website (with my text).....	94
Figure 4.10	Two views of Cavell Meadows. 1915 view by M.P. Bridgland (left) and 1990s view by J. Rhemtulla and E. Higgs (right) taken from RMRPP website.....	98
Figure 4.11	Two uses of the photographs from Old Fort Point. Jeanine Rhemtulla's article (left) and in Eric Higgs's book (right).....	100
Figure 4.12	The Bridgland Repeat Photography Project website launch invite (left) and Jasper National Park's interpretive signage (right).....	101
Figure 4.13	<i>Vantage Points</i> invitation.....	102
Figure 5.1	Photographs from the opening of <i>Vantage Points</i> at the Jasper Yellowhead Museum and Archives, July 2003.....	109
Figure 5.2	Bob Hallam (right) tells a story using photographs from Morro Peak at the <i>Vantage Points</i> opening.....	111
Figure 5.3	The Bridgland family pose for a photo at the opening of <i>Vantage Points</i> .....	113
Figure 5.4	Marmie Hess's entry from the <i>Vantage Points</i> Comment Book.....	114
Figure 5.5	Bob Hallam in the Showcase Gallery during interview in July 2003...	116
Figure 5.6	Jeanine Rhemtulla, RMRPP member in Waterton Lakes National Park, August 2003.....	119
Figure 5.7	Eric Higgs in the Showcase Gallery during interview, August 2003...	121
Figure 5.8	M.P. Bridgland 1915. Cinquefoil station. Digital scan of glass plate reproduction taken from the RMRPP website.....	126
Figure 5.9	Images from the RMRPP website. Some links are broken (left), the wrong sets are set in a comparative structure (middle) and negative damage (right) each bring the viewer to the awareness of the act of looking and the contrived nature of the photographic representations..	126

**LIST OF TABLES**

Table 4.1 *Vantage Points* stations/photographs that were chosen and attached narratives.....96

## Acknowledgements

I received funding for this project from the Dean's Interdisciplinary Fellowship at the University of Victoria (2003), the Social Science and Humanities Research Council grant awarded to Eric Higgs, and from a Museums Alberta grant. I gratefully acknowledge their support.

I am greatly indebted to all of the people associated with the Rocky Mountain Repeat Photography Project who took the time to share their thoughts about Jasper National Park with me. I hope that I have represented their knowledge well. A particular thanks goes to Jenaya Webb, Jeanine Rhemtulla, Gaby Zezulka-Mailloux and Ian MacLaren whose insights, assistance and guidance made the creation of the exhibition possible. Thank you to Bob Hallam, who generously shared his extensive knowledge of the history of JNP.

Thanks to Rob Watt, whose enthusiasm towards repeat photography and knowledge of historic collections is inspiring, and whose influence on my own understanding of these Canadian historic collections has been enormous. Thanks to both Brian Thurgood and Jill Delaney at the Library Archives Canada.

This project would not have been possible without the foresight of Glenn Charron of the Jasper Yellowhead Museum and Archives. Glenn and his staff provided both a venue and invaluable support in the creation of the exhibition.

I have been fortunate to have an academically diverse and supportive committee. At the helm of the Rocky Mountain Repeat Photography Project, co-supervisor Eric Higgs provided encouragement and introduced me to the exciting world of repeat photography. Co-supervisor Andrea Walsh provided me with the inspiration to create a truly interdisciplinary study focusing on the visual. Committee member Dan Smith asked good questions which greatly improved this thesis.

I would also like to thank both the Anthropology Department and especially the School of Environmental Studies for giving me a home as an interdisciplinary student. A very warm thank you goes to the graduate students and support staff in both departments, and especially to those who spent time in the Tabasco Valley with me, particularly Ann Garibaldi, Wendy Cocksedge and Lynette Hiebert.

Thanks to my mom and dad. Without their unstinting support this thesis never would have been completed.

This thesis is dedicated to Grady, who, though not always in the Tabasco Valley, supported my travels and encouraged me to spend time there.

## Chapter 1: Introduction

### Background

I first became aware of tensions between different ways of knowing a landscape during my third year of art school. During a semester exchange to southern England I often made the regular one-and-a-half hour journey between the town of Winchester in southern England and London. The train was my mode of transport, my tour guide.

As I sat in my seat, I watched the passing landscape through a glass window. The glass was often very dirty, reflecting other passengers, lights, and interior architecture of the train. In addition to the window, my view of the landscape was mediated by movement; the train's rhythm made visible through the window edges colliding with trees, hillsides and farmers' fields. The window and time broke up the land and ruptured my view. Yet I felt that I had begun to know this place – the space between Winchester and London – from the train. I began to recognize small farms, estates and rainy towns during my early spring residency.

This act of looking led me to reflect on what I was experiencing. I began to think about how we move through landscapes, how we view them and from where. I became suspicious of this familiar English landscape experience. How did I really know it? What did I really know about it? What was the difference between knowing it as mediated by the train window and knowing it by being out there in it? What effect did these different ways of knowing landscape have on attitudes toward that landscape?

I tried to envision the space I was experiencing as a location I could go to, but this space didn't exist. There I was, with a window and time mediating my relationship –

creating a particular relationship to the land, and that was the landscape I knew and recognized.

These questions played on my mind during my stay in England and I began to take photographs to try to convey these ideas. This resulted in my BFA project *Parallel Tracks/Trainscapes* wherein I photographed many hundreds, if not thousands of landscape panoramas from the train window, focusing on the window rather than the landscape beyond it (Figure 1.1). As a photographer, I was interested in the body, in human presence – but this interest had shifted to how we see – being in a body in culture and looking out.



Figure 1.1  
Trainscape #65  
detail from the series *Parallel Tracks*.

Once back in Canada, I began a series of projects that investigated the subject of space and place. In particular, I focused on the Britannia Heritage Shipyard in Steveston, B.C. Since the 1800s, the Britannia Heritage Shipyard existed as an important site of activity, home to a community of canneries, boatyards and residences. Yet, because of events in the middle of the 20<sup>th</sup> century, the place later to become the Britannia Heritage Shipyard was transformed in an unusual way. One event, the severe act of Japanese internment in World War II, is perhaps the most startling change in the history of the occupancy of the Britannia Heritage Shipyard space. As the shipyard was emptied of its occupants in the 1940s, an unnatural lifeline for household items, houses and gardens was created. Objects that would have played out a normal life – becoming worn out, out-modeled or discarded - fell suddenly into disuse. Most often the smaller items were stored at friends' houses, or were left stored at the shipyard in the abandoned buildings. With the breakdown of the community at the shipyard, the objects and the locality of the Britannia Heritage Shipyard became frozen - preserved in time.

In the late 1980s there was an interest in restoring the shipyard and buildings, and in 1990 the Britannia Heritage Shipyard was designated a national historic site. One of the first restoration projects, the Murakami House and Gardens – was restored to look as it did in the 1940s. This restoration proceeded with the involvement of the Murakami family, including re-planting the garden (Figure 1.2). The house became a portrait of the site in the early 20<sup>th</sup> century and a museum to house artifacts preserved from the time the Murakamis and others were forcibly removed from the area.

My introduction to the Britannia Heritage Shipyard brought me back to the questions I had raised through the *Parallel Tracks/Trainscapes* series. In thinking about

how I knew the shipyard - how I understood the landscape - I began to consider social, political and historical events as shaping and influencing how we understand a space. I fixated on photographing the site returning again and again at different times of the day. I began to investigate the place at night, when it was empty of people and lit only by a few old building lights and the moon. And from here I could capture a sense of place – half ruin, half restoration – one that could stimulate a sense of recognition, or perhaps nostalgia.



Figure 1.2  
*Untitled (Murakami Garden)*  
From the series *Britannia Heritage Shipyard*.

At the same time, my continuing fascination with rail travel was a focal point for exploration of landscape in Canada. Historically, rail travel, photography and art intertwined to create particular views of western landscapes that are distinctly Canadian. I discovered that these views converge in national parks<sup>1</sup>.

Like the space the train from Winchester to London produced, the landscape of national parks was also suspicious. Having grown up in close proximity to the most famous national park in Canada, Banff National Park, I felt I knew this landscape well. But I had some questions about it. How did I know it? What did I really know about it? What mediated my experience to formulate a particular view of this landscape? What effect did others' experiences have on attitudes toward this landscape? How did social, political and historical events shape an understanding of the space? To investigate these questions about this much-celebrated place in Western Canada I used visual images. This mechanism created a pathway that led me to my present position as an artist in the boots of a social scientist.

I began to understand that photographic moments, whether taking pictures from a train window in Southern England, or alone in a moon-illuminated Britannia Heritage Shipyard, have shaped my understanding of space and place. Landscape, as I have come to understand it, is neither all imagination, the way we might be, nor concrete reality, the way we are. The photographs I produce as an artist are intended to explore the tension between these two ideas, to ask questions about what a place is or means by producing a

---

<sup>1</sup>In the early 1900s, rail companies hired a number of artists to depict the mountain parks, and these works helped make them popular tourist destinations. For instance, as part of a publicity move to promote Jasper Park Lodge and rail travel, in 1927 CNR (Canadian National Railways) paid Group of Seven painter A.Y. Jackson to travel west and depict Jasper National Park. Later this work was featured in a book about Jasper promoting rail travel, the CNR hotel and the majestic landscape of the park (MacLaren 1999: 29).

new view of landscape. I approach my social science research of landscape in national parks from the same position.

### Canadian identity and national parks

Jasper Park is historic ground. More stirring scenes in the upbuilding of Canada have been staged in it than in any other part of the Rockies. Men, women and children, representing a score of nationalities have threaded its trails, and their ghosts still linger in the shadows, their influence still radiate in the colour of the mountain, valley and stream (Bridgland 1917:13).



Figure 1.3  
View of Jasper National Park from *Morro Peak*, station #308. Dominion Land Survey Photograph, M.P. Bridgland, 1915.

This large (over 4000 square mile)<sup>2</sup> national park straddles two provinces, British Columbia and Alberta, just a few hundred miles north of the U.S.-Canada border and immediately adjacent to its slightly more glamorous cousin, Banff National Park. The issues here are familiar to anyone working in protected areas in the mountainous west of North America and mountainous regions around the world: a rapid increase in the number of people visiting the region, escalating resource-extraction activities surrounding the park, and decades of management that have left, for example, extraordinary forest fuel loads just waiting for the right spark (Higgs 2003:10).

---

<sup>2</sup> 4000 square miles = 10,000 km<sup>2</sup>



Figure 1.4  
View of Jasper National Park from *Morro Peak*, station #308. Rocky Mountain Repeat Photography Project Photograph. J. Rhemtulla and E. Higgs, 1998.

In *National Dreams: Myth, Memory and Canadian History*, historian Daniel Francis describes a set of “core myths” that Canadians hold about themselves, “this is the story of Canada we say, the story which contains our ideals, which gives our experience continuity and purpose. This is who we are” (Francis 1997:10). To Francis, these core myths emerge from Canadian history through images, stories and legends and include the North, the transcontinental railway, and the Mounties. They are the most persistent images and stories in Canadian history and “express the fundamental beliefs that Canadians hold about themselves” (Francis 1997:10). According to Francis, “a nation is a group of people who share the same illusions about themselves. All nations are imagined communities” (Francis 1997:10). Canadians imagine a national identity through “core myths;” stories about Canada and Canadians.

I add the space and place of Canadian national parks to the “core myths” that Canadians imagine a national identity through. National parks are “understood as a part of a grand Canadian symbol of identity. Citizens flock to national parks and feel Canadian in them” (MacLaren 1999:9). Jasper National Park (JNP), located in western Canada is the largest (10,000 km<sup>2</sup>) and most northern national park in the Canadian Rockies. Formed as Jasper Forest Reserve in 1907 by the Dominion Government, it officially became Jasper National Park in 1930. In 1984, together with four national parks and three provincial parks, JNP was designated by the United Nations Educational Scientific and Cultural Organization (UNESCO) a World Heritage Site. The importance of these rocky mountain parks was characterized in the World Heritage List through an inventory including that the parks contain evidence of the Earth’s evolutionary history, ongoing geological processes, exceptional natural beauty, and are habitats of rare and endangered species (UNESCO: 2004[1983]).

Yet national parks, according to historian Pierre Burton, are in desperate trouble (Searle 2000:13). Geographer Rick Searle writes, “Canada’s national parks are dying” (2000:27). This observation comes from a growing concern about the impact of humans in national park spaces. In JNP, one of the primary issues facing park management today is a gap between mandates to protect the ecology of the park and the day-to-day reality of the park as a place of use and recreation. At stake in many cases is the long-term ecological sustainability of these parks (Higgs 2003:9). Problems of sustainability are compounded by a tension between a perception of JNP as pristine wilderness and the reality of the park as a highly impacted landscape. Indeed, the “ecological deterioration of national parks is going largely unnoticed by most Canadians. To many eyes,

everything appears fine” (Searle 2000:27). This is a particularly problematic perception of parks as “their integrity depends on what goes on around them, and how they are perceived by adjacent populations” (Marsh 1998:xvi).

JNP, like most national parks in North America, is considered an “icon of wilderness” (Higgs 2003:10), meaning that it is frequently imagined and represented as empty, pristine nature and “the last remaining place where civilization that all too human disease, has not fully infected the earth” (Cronon 1996: 69). Yet recent scholarship considering wilderness as a concept, places it as a reflection of North American values rather than a natural, empty space. As Ian MacLaren writes,

Debatable as some find it, the idea of wilderness is a paradox. Replete with tensions, it foists a culturally determined set of assumptions on space perceived in an absolute way to lie beyond culture (MacLaren 1999:7).

In this sense North American culture informs the space of JNP. The tensions between the physical space and a cultural idea of that space can be located and investigated through photographic images of the park. Following MacLaren, “we recognize and value wilderness, at least in the context of national parks, through the images we deploy to invent it; the human defines the non-human” (MacLaren 1999:9). If this is true, then photographs, (read: human made objects) can be studied to recognize wilderness (read: culturally constructed space) and the result will reveal the culture that invents it.

### **Photography as a dominant source of knowledge and representation**

Visual anthropologist Sarah Pink situates photography as a “dominant source of knowledge and representation” (Pink 2001:34). This is certainly the case in terms of how we have come to understand Canadian National Parks. Scientific photographic views are a dominant source of knowledge and representation about space and place. This is

evidenced in the use of photographic images made through surveys in the Canadian Rockies in 1915 (Figure 1.3), and in the subsequent re-use of these images coupled with new views created from the process of repeat photography 85 years later (Figures 1.3 and 1.4). The Bridgland Repeat Photography Project (BRPP) is perhaps the largest and most comprehensive repeat photography project in the world. As part of a study of landscape change in Jasper National Park in the Canadian Rockies since 1996, project leaders and participants have been taking photographs (creating upwards of 700 repeat images) to be used in comparison with images that were made by the Dominion Land Survey in 1915. The digitization of the photographs became a powerful tool for researchers and an award winning, and high-powered website (<http://bridgland.sunsite.ualberta.ca>) containing 1400 photographs, field notes, maps, field note images and publications. The digital space of the photographs is a popular tool to research the images. In 2002, the Bridgland Repeat Photography Project expanded to encompass the entire Canadian Rocky Mountain range, renamed the Rocky Mountain Repeat Photography Project (RMRPP)<sup>3</sup>. This expansion included a partnership with the Library Archives Canada to accession the entire Dominion Land Survey collection upwards of 20,000 4 x 6.5" glass plates (until that time it was stored but not accessioned). I have been a part of this project since 2002, as a researcher and project photographer as well as curator, designer and writer for the exhibition *Vantage Points*.

---

<sup>3</sup> At the time of the exhibition, the project was the Bridgland Repeat Photography Project, (BRPP), so it is referred to as such in exhibition materials. In this thesis, I have used the new project name, the Rocky Mountain Repeat Photography Project and corresponding acronym, RMRPP, to talk about the project.

## Research goals

The subject of this thesis is an exploration of the significance of photographic representations as they shape understanding of space and place in Canadian national parks. Building on the ideas of Daniel Francis, I argue for the inclusion of national parks a “core myth” in Canada, as they are the subject of many of the central narratives and images of Canada and Canadian history (1997:10). I study these core myths through scientific photographs of Jasper National Park, and, to suggest ways of thinking about space and place, ask: How is the landscape of JNP socially constructed through photographs? What can a study of scientific image making contribute to our understanding of the space and place of JNP? These questions are focused through the RMRPP photographic views of the park that generate a particular experience of knowing and understanding JNP. While acknowledging that photographic images are understood and read as objective reflections of reality, this thesis shows that multiple narratives are produced from a single photographic record and it is through these multiple, complex narratives that we envision and understand JNP.

To investigate the process by which people come to know the space and place of JNP, I created a field site to investigate scientific photographs in the form of a photographic exhibition. The result, *Vantage Points: Scientific Photography in Jasper National Park, the Bridgland and Repeat Photography Projects* was exhibited at the Jasper Yellowhead Museum and Archives in Jasper, AB, between July and October 2003. The exhibition blurred what Joan M. Schwartz and James R. Ryan have articulated in the recent volume, *Picturing Place, Photography and the Geographical Imagination*, as boundaries between “photography-as-art/photography-as-science/photography-as-

technology” (Schwartz and Ryan 2003:18). The decategorizing of the images in *Vantage Points* resulted in both an expanded narrative and the entry of new narratives. This thesis explores these narratives in order to understand more fully the multiple experiences and understanding of the place of JNP.

### **Thesis outline**

Chapter 2 begins with an outline of the literature that shaped my research. Primarily drawing upon the literature of environmental studies and anthropology I follow with a discussion of the methods I employ to investigate the exhibition. Chapter 3 is a description of the exhibition *Vantage Points* that I curated, wrote, and designed. The first part of Chapter 3 contains reproductions of each text and image panel from the exhibition. Next I outline the design, content and setting for *Vantage Points*. This description sets the scene for the rest of the thesis. In Chapter 4 I look at how and why the creation of *Vantage Points* produces an experience of the landscape of JNP beyond the everyday, what I am characterizing as Eric Hirsch’s *background potentiality* experience of landscape. I discuss and unpack the construction of photographs and their associated narratives that create a particular experience of the landscape of JNP. This primary set of themes reveals how national parks landscapes are represented by scientific pursuits and are subsequently understood by a Canadian public. In Chapter 5 I look at how and why *Vantage Points* is consumed as an inside account, what I am characterizing as Eric Hirsch’s *foreground actuality* experience of landscape. Through a narrative describing the exhibition opening, the comment book and interviews, I argue that *Vantage Points* creates “room for maneuver” (Chambers 1991:xi), it creates a space for new accounts about the space and place of JNP where change can occur. At the same time it

---

characterizes the park as complicated, and at times, a contradictory space. In Chapter 6, I give a summary of my research and give shape to my conclusions. This chapter begins as a discussion about the emergence of a sense of place – landscape - through the relationship between background and foreground experiences and how this relationship is cultural process. I draw my research to a close with reference to the idea that the way we see a place affects our actions towards it, and new ways of knowing can help alter how we see place. This research shows visual documents to be important for investigating and understanding how landscape representation has become central to Canadian ideas about national parks, wilderness and nature.

## Chapter 2: Literature Review and Methods

Sometimes – perhaps quite frequently – our initial understandings or readings of visual images are pre-scripted, written in advance, and it is useful to attempt to stand back from them, interrogate them, to acquire broader perspective (Banks 2001:7).

The primary focus of my thesis is the description and analysis of an exhibition that I produced, which reveals how the landscape of JNP is socially constructed through photographs. I approach this research as an interdisciplinary scholar and as such have formulated an investigation of photographs of JNP using the literature and methods from the disciplines of environmental studies and anthropology.

### **Environmental Studies**

My thesis is linked to environmental studies through a mutual concern with landscape. Environmental studies draws on a numerous fields to investigate connections between humans and the environment. Ethnoecology, restoration, and sustainable communities are some of the central pillars of the discipline and scholars use the literature and methods from a variety of disciplines including ecology, biology, anthropology, geography, philosophy and history. It is through this diverse array of disciplines and their associated methodologies that scholars can approach current environmental issues in novel and unconventional ways. This is the locus of the discipline and it is on this foundation that I build my investigation of the photographs of JNP.

From an environmental studies point of view what is most significant about my study of JNP is the use of novel methods – the creation of an exhibition – to explore human relationships with the landscape of JNP. Within the exhibition, the discipline of

environmental studies underlies my research, as the primary intellectual territory that informed the production and presentation of the exhibition. To tell the story of the Bridgland and repeat photography projects, I draw from the disciplines of ecology, restoration, history, Canadian Studies and geography, and synthesize these within a story that reflects a concern with environmental issues in JNP

In this thesis, I take the exhibition and describe and discuss it using literature and methods from cultural anthropology, and within this from the sub-disciplines of visual anthropology and the anthropology of space and place.

### **Visual Anthropology**

The meanings of such photographs of local landscapes or global panoramas are neither obvious nor fixed. Studies of the use of photography in the construction of symbolic landscapes of national identity, cultural difference and imperial order show further how the meanings of photographs, though bound up with myriad forms of power are also continually negotiated (Schwartz and Ryan 2003:5).

One aspect of recent scholarship in visual anthropology focuses on the parallel histories of photography and anthropology. Through examination of these photographic records and subjecting them to historical analysis, anthropologists are looking at the relationship between the ethnographic subject, the “Other”, and the European colonial power that created the account (Edwards 1992:5). As a result of this analysis, these photographic records reveal more than the “Other” culture they depict. These photographic records reflect the culture that produced them, primarily a 19<sup>th</sup> and early 20<sup>th</sup> century European culture obsessed with classification, measurement, and data collection (Edwards 1992:6).

My study is connected to attempts to deconstruct photographic practice as anthropological subject and, as such, I treat this collection of scientific photographs as

similar ethnographic data. Ethnographic photography, according to visual anthropologist Joanna Cohan Scherer,

may be defined as the use of photographs for the recording and understanding of culture(s), both those of the subjects and of the photographer. What makes a photograph ethnographic is not necessarily the intention of its production but how it is used to inform viewers ethnographically (Scherer1995:201).

The collection of scientific photographs of JNP can be cast as ethnographic, not only because of the intentions of the surveyors who originally took the photographs; but through contemporary analysis of this record we can also generate an understanding of the culture that produced the photographs. I consider that the phototopographical survey and resulting repeat survey mirror the culture that produced them, that being: Historically an emerging Canadian culture, and in the present a Canadian culture that has had much of its identity wrapped up in the space and place of national parks.

### **Space and Place in Anthropology**

Until recently in the discipline of anthropology, space and place were largely treated as a stage on which culture was positioned<sup>1</sup>. In the past decade, however, investigations into the influence of spatial dimensions on a culture have become essential elements of socio-cultural theory (Low and Lawrence-Zuniga 2003:1). In the introduction to a recent volume about the anthropology of space and place, editors Setha M. Low and Denise Lawrence-Zuniga (2003) separate this broad field into four themes. These themes are “embodied spaces,” (that describe accounts about the body in space); “inscribed spaces,” (how humans relate to the environment they occupy); “contested spaces,” (social

---

<sup>1</sup> The terms *space* and *place* are used together in anthropology to encompass a whole range of spatial issues and denote a focus on how cultures enact their relationship to the world.

conflict in spaces); and “transnational spaces,” (the global economic transformation of space). In this research, it is the idea of “inscribed spaces” that fit the investigation into the meanings photographs of the space and place of Jasper National Park. As Low and Lawrence-Zuniga define it, inscribed spaces can be understood as “how humans write in an enduring way their presence on their surroundings” (Low and Lawrence-Zuniga 2003:14). Inscribed spaces emphasize the relationships that people form with the space they occupy and as such, are not bounded in locations as much as in memories, exchanges and practices. The creation of experience in space and place is considered a social process.

Under different names, this same characterization of “inscribed spaces” as social process is found in the disciplines of art theory, social sciences and humanities. In the preface to his book *The Visual Elements of Landscape*, John Jakle asserts that landscape is a multifaceted thing (Jakle 1987:ix). Though his discussion of aesthetics (the visual aspect of space and place) Jakle emphasizes landscape as a “visual world spread before the eyes” (Jakle 1987:16), and he argues for the inclusion of lived experience in comprehending how we see landscape. To Jakle, lived experiences are nests, they are the centers of human intent (Jakle 1987:x).

In the discipline of art theory W.J.T. Mitchell calls for landscape to be changed from a noun to a verb, to encompass the “process by which social and subjective identities are formed” (Mitchell 1994:1). He too understands space and place are inscribed with experiences. These experiences produce landscape and to understand it better he calls for broader investigation of landscape, “not just what landscape ‘is’ or ‘means’ but what it does, how it works as cultural practice” (Mitchell 1994:1).

Another way landscape as “inscribed spaces” can be understood is through what anthropologist/archaeologist Tim Ingold calls a dwelling perspective. He rejects the dualistic conception of landscape as either naturalistic, a neutral, external backdrop to human activities, or culturalistic, “that every landscape is a particular cognitive or symbolic ordering of space” (Ingold 1993:152). Dwelling perspective instead focuses on how landscapes are constituted as a blending between naturalistic and culturalistic experience. The blending between these two experiences is temporal and, as such, the landscape is “perpetually under construction”, a “work in progress” (Ingold 1993:162).

A specific way to investigate how landscape is cultural practice, or in Ingold’s conception, how landscape is constituted as a relationship between a neutral backdrop and cognitive experience is to look at the framework developed by anthropologist Eric Hirsch. In the introduction to *The Anthropology of Landscape, Perspectives of Place and Space*, he characterizes landscape as a social process, a relationship between what is out there and what we experience. This process of landscape can be understood as a relationship between “an ordinary, workaday life and an ideal, imagined existence” (Hirsch 1995:1). Hirsch splits these two experiences into background experience, called potentiality, which is an ideal or imagined setting, and foreground experience, called actuality, which is everyday, real, ordinary life.

To characterize this relationship, I have created a model to illustrate Hirsch’s argument (Figure 2.1). First, the design separates the two “poles of the notion of landscape” (Hirsch 1995:4), and I have arranged these on the two sides of the model. Background is grouped with concepts of space, outside and representation, as the “context and form of experience beyond the everyday” (Hirsch 1995:4). Foreground is

grouped with concepts of place, inside and image, representing the “context and form of everyday, unreflexive forms of experience” (Hirsch 1995:4). In this model, landscape is represented as a central thread moving closer to background or foreground experience. Hirsch cautions that the two poles are not unconnected, rather they are “moments or transitions possible within a single relationship” (Hirsch 1995:4). It is this relationship, continually renegotiated between these two poles of experience (the movement of the thread) in any culture that is landscape.



Figure 2.1 Model of Landscape experience, Hirsch (1995).

Most simply, this model represents a dialectical relationship between the formalized notion of a space and place “out there” and a local “insider” account. I will use this model to characterize landscape relationships in JNP throughout my thesis.

In my study of photographic accounts of JNP, the model characterizes a tension between the photograph as representation – as scientific, objective fact, reflecting reality – and the engagement the viewer or creator has with the image. The *Model of Landscape Experience* places on view and allows for my investigation of a tension between foreground actuality and background potentiality as it is created in photographic representation.

**Methods: The exhibition as field site**

The method that I use to investigate photographs of JNP is derived from the sub-discipline of visual anthropology. David MacDougall writes, “anthropology has had no lack of interest in the visual, the problem has been what to do with it” (MacDougall 1997:276). My solution to MacDougall’s problem is to take this visual record – The RMRPP- and turn it upon itself - to investigate the scientific record through the process of production, circulation and consumption of an exhibition. As Morphy and Banks write in their introduction to *Rethinking Visual Anthropology*, the discipline has a dual focus, “on the one hand visual anthropology concerns the use of visual material in anthropological research and on the other it is the study of visual systems and visible culture – it both produces visual texts and consumes them” (Morphy and Banks 1997:1). An investigation of the production, circulation and consumption of the exhibition engages with both foci.

The exhibition became my field site, my method to look at these scientific accounts of landscapes and national parks. The process through which the exhibition was formulated is as important as the outcome. I approached the conversation around the images through the use of what I have determined to be a type of photo-elicitation.

In anthropology and other social sciences, photo-elicitation has been used as a method to focus discussion and examine how the viewers create narratives with and around photographs. As Marcus Banks explains, “(i)t involves using photographs to invoke comments, memory and discussion in the course of a semi-structured interview” (Banks 2001:87). However, recent critiques of photo-elicitation have explored the problematic assumption that “the facts are in the pictures” (Pink 2001:68). Instead, some researchers have sought to understand how the project participants “use the content of the images as vessels in which to invest meaning and through which to produce and represent their knowledge, self-identities, experiences and emotions” (Pink 2001:68).

I used the photographic record of JNP to invoke comments, memory and discussion in three primary ways. First, the creation of the exhibition was an act of elicitation where I accessed stories and information from the RMRPP members about the landscape of JNP. Second, I elicited responses to the exhibition during both the opening of *Vantage Points* and through a comment book located in the gallery space. Third, I conducted interviews in the gallery space with both RMRPP members and others. These three sets of conversations acted as a broad source of information centering on the landscape of JNP accessed through the *Vantage Points* exhibition.

In the production of the exhibition, all discussion around the creation of the storyline and the image selection were based on the idea that “a photograph may become

a reference point through which an informant can represent aspects of his or her reality to an ethnographer and vice versa” (Pink 2001:69). To formulate the storyline of the exhibition, I conducted formal and informal interviews with project participants and reviewed both historical and contemporary literature on the Dominion Land Survey and RMRPP. The use of elicitation became the process by which I created the exhibition. This was an ongoing conversation, not one that began and ended with a tape recorder. Though the exhibition is my interpretation of the story, it was created in consultation with project members, as the subjects of the story played a role in the making of the text. It is also a collaborative approach, “as they (the photographic outcomes) combine the intentions of both ethnographer/photographer and informant and should represent the outcome of their negotiations” (Pink 2001:58). It is my position that people do not act “simply as passive reactors to and enactors of some ‘system’, but as active agents and subjects in their own history” (Ortner in Sanday 1988:49).

Using photo elicitation as a method enables a discussion of how photographs are “part of the practices and processes” (Schwartz and Ryan 2003:18) by which a Canadian public knows the space and place of JNP. But even more than this, as Schwartz and Ryan argue, photography is one of the many forums of technology through which the physical world has and continues to be negotiated (Schwartz and Ryan 2003:13). The exhibition *Vantage Points* is both a part of this negotiation – through the storyline about how the landscape has been understood through photographs and how this changes, and the exhibition also negotiates this world – through the fact that I created a new representation of the landscape of JNP by creating the exhibition. The exhibition is therefore an active practice through which the public gains knowledge of the space and place of JNP. To

describe this more fully I present the creation and delivery of the exhibition in the following chapter.

### **Chapter 3: Developing *Vantage Points* - production and circulation**

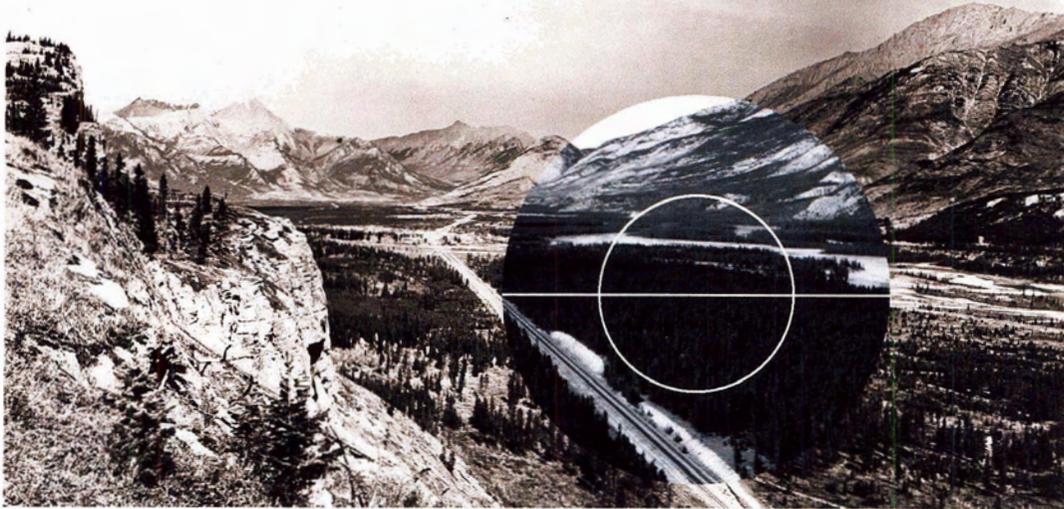
This chapter investigates the production and circulation of the exhibition, *Vantage Points: Scientific Photography in Jasper National Park, the Bridgland and Repeat Survey Projects*. Through description of the exhibition in this chapter, I lay out both the context and content of the exhibition and reveal the dominant story produced by the photographs and RMRPP project discourse.

The first part of this chapter comprises reproductions from the exhibition. I begin this section with a reproduction of the front and back of the invitation I designed for the opening of the exhibition (Figure 3.1). Next, I have included each of the images and text panels from the exhibition (Figure 3.2 to Figure 3.29) in the order they were intended to be viewed in the gallery space. The introductory text panels, Figure 3.2 and 3.3, mark the start of the exhibition. In addition to reproductions of the text panels, I have included reproductions of the photographs (e.g. Figure 3.5) and an installation view of six map sheets (Figure 3.8).

Following the image and text panel figures in this chapter, I describe the context for the production and circulation of the exhibition. I explain how the exhibition was formulated and who was involved with the production of the exhibition. I next portray how I developed the storyline for the exhibition, the perspective from which the RMRPP story was told, how I gathered the information, and the overriding narrative that was produced. Finally, I walk the reader through the exhibition and describe in detail the story I told through *Vantage Points*.

# VANTAGE POINTS

SCIENTIFIC PHOTOGRAPHY IN JASPER NATIONAL PARK  
THE BRIDGLAND & REPEAT PHOTOGRAPHY PROJECTS



## VANTAGE POINTS

SCIENTIFIC PHOTOGRAPHY IN JASPER NATIONAL PARK  
THE BRIDGLAND & REPEAT PHOTOGRAPHY PROJECTS

5 JULY 2003 - 26 OCTOBER 2003

Opening Reception 5 July 2003 7 - 9 pm

Showcase Gallery

JASPER-YELLOWHEAD MUSEUM AND ARCHIVES

400 PYRAMID LAKE ROAD JASPER, ALBERTA

780 852 3013

Exhibition curated by Trudi Smith, University of Victoria

Invitation to opening (front, top, and back, bottom)

Top image was also on the backlit display at entrance of gallery

Figure 3.1



M.P. Bridgland 1915  
Station #26 - Old Fort Point - #216-218

If you look closely you can see the effects of large-scale fire, glacial recession, and resource extraction. You can see where homesteads and fields once stood, and where and how railways, roads, and the Jasper townsite have developed.

Each of these elements has a story and at the centre of the story is a photograph.

Scientific photographs contribute to our way of seeing Jasper National Park. Whether they are used as source material for maps, scenic images of the park, or as evidence of landscape change, the Bridgland and Repeat Photography Projects together represent an extensive collection of images that have been used for these varying purposes over the past 85 years. The photographs have come to mean different things to different viewing audiences. They reflect not just the landscape but also changing interests and ideas about the park.

In the summer of 1915, surveyor Morrison Parsons Bridgland (1878 - 1948), a veteran of 13 years as a mountain surveyor, arrived in the recently formed Jasper National Park with the possibilities of a new technology - photo topographical survey. In the late 1800's this technique was developed by the Dominion Lands Survey to capture and map the complicated topography of the Rocky Mountains. Bridgland's task was to use this technology to make an exhaustive photographic record of the area and create topographical maps for the Canadian Government, and for the developing tourism industry.

At the time of their creation, the 735 photographs Bridgland and his survey teams produced from this large-scale undertaking acted as "permanent records from which to study at one's ease the country or feature portrayed, when far away from it" (Wheeler, 1920). Whether this information was to measure "...the height of surrounding peaks and fall of glaciers," or to record "their action and effect, the drop of waterfall, the depth of precipices" (Wheeler, 1920), the photographs were a source from which the surveyors were able to extract detailed information about the land.

By 1917 Bridgland had completed the six-part topographical map of the region: "Map of the Central Part of Jasper, Alberta." In addition to the map he produced, Bridgland submitted a report on the potential for natural resource extraction, scenic attractions, and the presence of game in the Athabasca Valley. Bridgland used several of the photographs in guidebooks, field notes, and technical publications, and as illustrations for articles in the Alpine Club of Canada's annual volume of the "Canadian Alpine Journal". Most of the images were then indexed and filed by the Department of the Interior in Ottawa, relegating them into the recesses of Canadian history.

Figure 3.2

By the summer of 1996, Jasper National Park had become a very different place than it was during Bridgland's stay 81 years earlier. Over the years it became a popular tourist destination, embodying the idea of a place for wilderness experience. Bridgland's maps and images helped give this idea form in the minds of Canadians.

In that summer of 1996, a group of researchers from the University of Alberta began investigating the idea of restoring the montane ecosystem of a portion of the Upper Athabasca Valley to the state it was in when it became a protected area in 1907. The team was gathering historical data to "map and understand the relationship between human activity and ecological processes" (Higgs, 2003).

The researchers found the Bridgland photographs while looking through files in the park office and began using them for their own exploration. Noticing that a visible change in the land had occurred over the years, the team decided to conduct a repeat photographic project. This work involved photographing the park from the same 92 stations from which Bridgland took his 735 photographs. With the birth of the Bridgland Repeat Photography Project, Bridgland's photographs became a point of departure, a baseline from which to measure landscape change.

The researchers used new technology to scan and create a high-powered website [bridgland.sunsite.ualberta.ca] showing the remarkable change between the features depicted in the images. Filed and stored in this new digital space, the images become a powerful testament to the changing nature of Jasper National Park.

This exhibition is about photography, landscape, and the vantage points derived from this relationship. As Bridgland set up his camera he made choices about placement - the angle of his lens, the crop of the image. Through these decisions, Bridgland established a vantage point which generated an original relationship between features in the photographs. The Bridgland Repeat Photography Project took great care to duplicate Bridgland's vantage points exactly.

Although the vantage points are the same in each of these photographs, what we see in them changes over time. The meanings we derive from the images shifts and slides against the physical stability of the vantage point. Where Bridgland recorded a glacier, the Bridgland Repeat Photography project evidences glacial recession. Where Bridgland recorded a forest, the Repeat Photography Project evidences the effects of fire suppression practices. And where Bridgland recorded a forest preserve with little human activity, the Repeat Photography Project evidences a complex cultural landscape. As this shifting reality of the images shows clearly, the photographs are not simply objective facts; they are complicated products from a culture that has transformed over the past eight decades as radically as the landscape of Jasper National Park itself.



J. Rhemtulla & E. Higgs, 1998/99  
Station #26 - Old Fort Point - #216-218

Higgs, E. 2003. *Nature By Design*. MIT Press. Cambridge.

Wheeler, A. 1920. *The Application of The Photography To The Mapping of The Canadian Rocky Mountains*. *Canadian Alpine Journal* XI.

Figure 3.3

## PHOTOTOPOGRAPHIC SURVEY IN JASPER NATIONAL PARK SURVEY TECHNIQUES

In the late spring of 1915 Dominion Lands Surveyor M.P. Bridgland arrived in the town of Jasper to begin work on the first comprehensive topographic maps of the surrounding area, the Upper Athabasca Valley. With Bridgland leading one crew and his assistant another, the men set up ninety-two survey stations on mountain peaks, cliff edges, and prominent points on the valley floor. At each station, Bridgland and his assistant composed a panorama by taking a set of photographs circling the entire horizon.



As "Photographic Surveying", his 1924 book, shows, Bridgland understood how to go about choosing a camera location for survey work:

*...when in the field it is important to select those points which give the best views of the surrounding country. This does not mean that the highest peaks are always the best. In photographs taken from a very high peak, the surrounding country often appears dwarfed, and the details do not show up as well as in ones taken from a more moderate elevation...It is customary to take enough views from each peak to cover the complete circuit of horizon. It seldom happens, however, that all the views can be taken from a single point. Usually one or more camera stations are required on different parts of the peak...*

Survey techniques from Bridgland's 1922 "Scenic Views" album.

Album located at National Archives of Canada

Bridgland, M.P. 1924. Photographic Surveying. F.A. Ackland, Printer to the King's Most Excellent Majesty, Ottawa.

Figure 3.4



M.P. Bridgland 1915  
Station # 11 - Mt. Clitheroe  
Photograph # 089  
Map sheet 5  
Looking west towards Amethyst Lake

Actual size of image panel: 28" x 40"

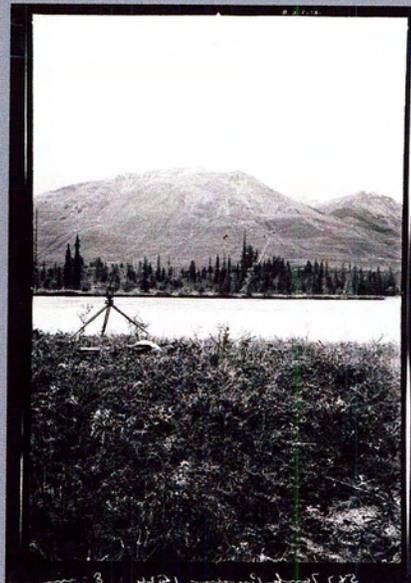
Figure 3.5

## BEHIND THE LENS

### SETTING

The repeat photography research team writes in "Mapper of Mountains", their forthcoming book about M.P. Bridgland, that

*Continuous rain prevented [Bridgland and his crew] from making any exploratory hikes during their first days in the park that was to be their home for the next four months. In the confines of their tents, they prepared and packed their equipment for a full summer of field work. Bridgland's priorities were the perfect calibration of his camera's levels, and verification of the focal length of the lens through a series of practical experiments in which he took pictures of targets placed on a level horizon and then applied a set of theoretical equations to the images produced. These tests ensured that he had accurate data at summer's end when he returned to his Calgary office for the cartographic stage of the survey. M.P., as his associates called him, also overhauled his survey instruments, checking his tripod, transit, and camera; meanwhile, his packers and cook would have been busy ensuring that the packs carrying clothing, bedding, and personal sundries, as well as the wooden boxes expertly crammed full with provisions and cooking equipment, were neatly organized and ready for the survey's twelve pack horses.*



Test image from Bridgland's 1915 field season.  
Image courtesy National Archives of Canada

### NAMING MOUNT CLITHEROE:

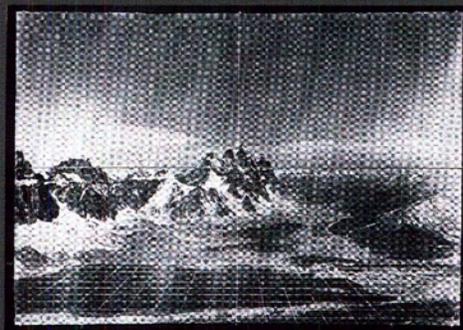
One of Bridgland's responsibilities was suggesting names for mountains that had yet to be named by the Canadian government. One of his that the Department of the Interior adopted was Clitheroe, meaning "rock by the water" in Lancashire, one of the hillier districts of England. His choice was prompted by the magnificent view of Amethyst Lakes that the mountain affords from its summit.

Bridgland Repeat Photography Project. Mapper of Mountains: M.P. Bridgland in the Canadian Rockies, 1902-1930, forthcoming.

Figure 3.6

## PHOTOTOPOGRAPHIC SURVEY IN JASPER NATIONAL PARK MAPPING

Returning at the end of a long summer to his office in Calgary, Bridgland then translated the photographs into a map of the park area.



Survey techniques. Top image is from Bridgland's 1915 survey. Bottom image is from "Photographic Surveying", Bridgland's 1924 book.

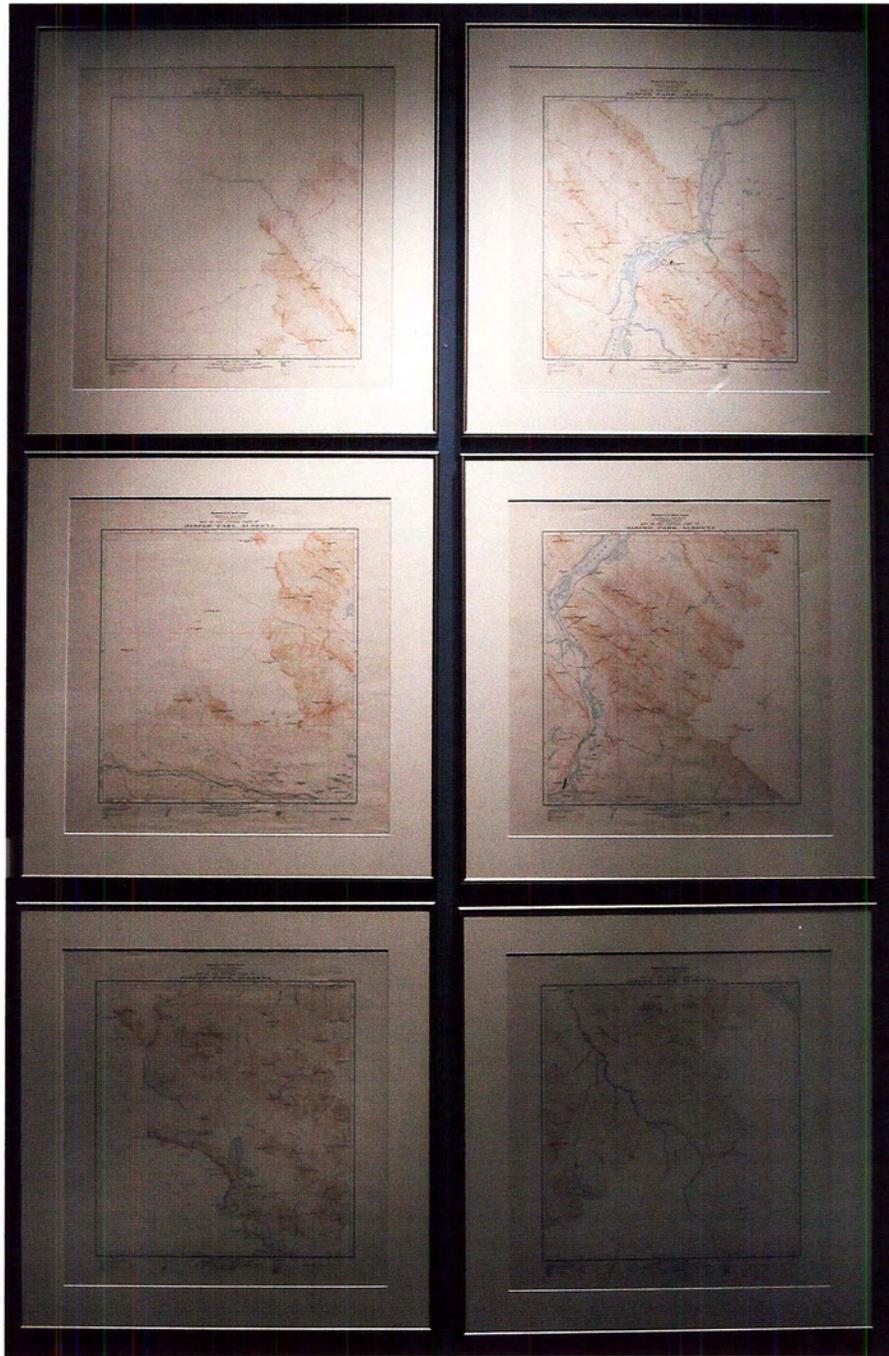
Mapping the park included creating contour lines, as Bridgland writes in "Photographic Surveying":

*Views from different stations showing the same country are then selected. Sufficient points are identified on each of two corresponding views taken from different stations to show clearly the topography of the country. These points are then plotted on the plan and their elevations calculated from the photographs. Using these points as a guide, and with the photographs in front of him, the topographer is able to draw his contours with an accuracy dependent chiefly on the number of points plotted and the scale of his plan.*

Bridgland produced the "Map of the Central Part of Jasper, Alberta" in 1917. He included station numbers and it is possible to locate the sites he photographed from. For instance, Mount Clitheroe, the image on this panel, was photographed from Station #11 located on map sheet #5 (lower left).

Bridgland, M.P. 1924. Photographic Surveying. F.A. Ackland, Printer to the King's Most Excellent Majesty, Ottawa.

Figure 3.7



M.P. Bridgland 1917

Map of the Central Part of Jasper, Alberta  
Set of six map sheets

Each map sheet measures 24" x 26".

Figure 3.8

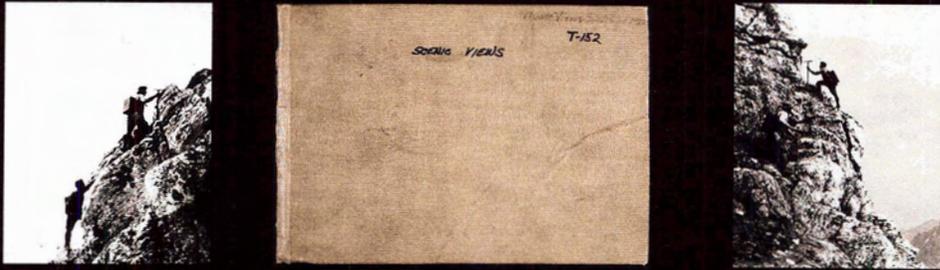
## PHOTOTOPOGRAPHIC SURVEY IN JASPER NATIONAL PARK BEYOND THE MAP

From his experience in Jasper, M.P. Bridgland produced not only photographs and topographical maps of the area but also a guidebook, "Description of & Guide to Jasper Park" (1917).

As the research team notes in "Mapper of Mountains", their forthcoming book about him,

*Bridgland was neither the first nor the most prominent surveyor to use photogrammetry to create maps. He was, however, one of the most important pioneer surveyors in terms of the quantity and quality of his work. Most importantly, he was the first surveyor of Jasper National Park. He was also one of Canada's most accomplished mountaineers, with over sixty first ascents to his credit, and the first chief mountaineer of the Alpine Club of Canada, which he founded with others. ...Through the course of his career, he produced pamphlets and articles of value to both the scientific community and the growing numbers of tourists who visited the Rockies. As well, his exceptional maps were often the only ones available for much of the mountains' rugged terrain. Although he was first and foremost a surveyor for the Dominion Lands Survey, he also made it his personal mission to furnish information that would open the mountains to all who cared to visit them. His maps, the trails he either followed or blazed, the techniques he mastered, the climbing routes he put up, and the landscapes he surveyed form a legacy that continues to shape the mountains as we know and enjoy them today.*

*Survey Techniques and front cover from Bridgland's 1922  
Scenic Views album.*



Bridgland Repeat Photography Project. Mapper of Mountains: M.P. Bridgland in the Canadian Rockies, 1902-1930, forthcoming.

Figure 3.9

## THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT REPEAT PHOTOGRAPHY IN JASPER NATIONAL PARK

In 1996, University of Alberta researchers Eric Higgs and Jeanine Rhemtulla began working with Bridgland's 1915 images of Jasper National Park. They realized the images could become valuable tools - a benchmark for monitoring landscape change in Jasper National Park.



*Repeat Photography (Jeanine Rhemtulla).  
1998/99. From the BRPP field notes.*

Armed with a large format (4"x5") field camera and copies of the original photographs, they scaled many mountains and repeated Bridgland's entire survey from all 92 stations. This undertaking became the Bridgland Repeat Photography Project (BRPP).



*Repeat Photography (Eric Higgs).  
1998/99. From the BRPP field notes.*

*Our purpose: to create the largest comprehensive and systematic collection of repeat photographs in Canada and use them to chart changes in the cultural and physical landscape of the park over the past century.*

- From the project website ([bridgland.sunsite.ualberta.ca](http://bridgland.sunsite.ualberta.ca)).

Rhemtulla, J. 1999. Eighty Years of Change: The Montane Vegetation of Jasper National Park. Unpublished master's thesis, Department of Renewable Resources, University of Alberta, Edmonton.

Figure 3.10

## BEHIND THE LENS

### CAIRNS

To locate original sites the researchers used the photographs, field notes and maps. Once near the site they looked for cairns built by the original survey crew. Many of these cairns had not been visited since the 1915 survey.



Three photographs of cairns adapted from the BRPP field notes.

#### Locating Station #57 - The Palisade.

*It was an incredible feeling of discovery, not really knowing where it was we were going. It's in the most improbable place...nobody ever bothers to walk to the end of this ridge because it's not a destination, it's just this crazy scrambling and you're not really getting anywhere. So there was this feeling of walking and not really being sure where it is that you are going, and then suddenly coming up to the cairn and just knowing at that instant, this was where that man was and this is where we need to be...*

- adapted from an interview with Jeanine Rhemtulla, October 2002.



The cairn in Bridgland's 1915 image (left) from Coronach Mtn. - Station 69. J. Rhemtulla & E. Higgs' 1998/99 repeat image (right) shows a considerably more prominent cairn.

Figure 3.11

## THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT

### Landscape Change - OLD FORT POINT

Using comparison images such as Station #26 - Old Fort Point, researchers have illustrated profound landscape changes. One of the most visible changes is an overall increase in mature forest, and encroachment of forest on grassland and shrubland over the course of the 83 years.

In studying changes in vegetation patterns in Jasper, researcher Jeanine Rhemtulla has found that

*there is a growing recognition that the vegetation in the montane ecoregion may have changed significantly over the last eighty years. Evidence from historical photographs and written materials suggests that, at the turn of the century, grasslands and open forests dominated the main valleys; today, many of these areas are covered with closed-canopy coniferous forests. Shaped for millennia by the regenerative forces of fire, flood, and wind, it seems that the twentieth-century introduction of fire suppression and prevention, forced dislocation of native peoples, and the onslaught of modern human activities may be affecting the composition and structure of vegetation and communities in new ways.*



M.P. Bridgland 1915 (top) and J. Rhemtulla & E. Higgs 1998/99 (bottom) Station #26 Old Fort Point - 214, 215 & 216.

Rhemtulla, J. 1999. Eighty Years of Change: The Montane Vegetation of Jasper National Park. Unpublished master's thesis, Department of Renewable Resources, University of Alberta, Edmonton.

Figure 3.12



M. P. Bridgland 1915  
Station #26 - Old Fort Point  
Photograph # 214, 215, 216  
Map sheet 4  
Looking west northwest towards the  
Jasper Townsite.

J. Rhemtulla & E. Higgs 1998/99  
Station #26 - Old Fort Point  
Photograph # 214, 215, 216  
Map sheet 4  
Looking west northwest towards the  
Jasper Townsite.

Actual size of image panels: 18 x 72.4" each

Figure 3.13

## THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT

### TECHNOLOGY

The use of computer technology (high - resolution flat bed scanners that allow researchers to magnify features in images) made possible a closer look at both sets of photographs, and researchers were able to reveal information about the park.

Increased access to the images via the website has allowed other researchers from Canadian universities to join the project, using the images to illustrate theories, gather data, and bring new information to public attention.

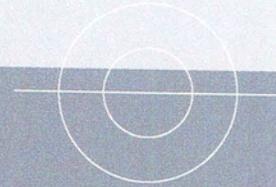
The photographs are dynamic pieces of material culture. From original glass plate negatives, to photographic prints compiled into albums, to topographic maps, they have now entered the digital realm as scanned web-based images.

[bridgland.sunsite.ualberta.ca](http://bridgland.sunsite.ualberta.ca)

Figure 3.14

## BEHIND THE LENS

### LINING IT UP



The re-photography team was able to determine precise camera locations by lining up the foreground objects with background features visible in the original photographs. There is little change in either the foreground or background of Station #18 - Clairvaux I - #157, so it was relatively easy to find Bridgland's original vantage point. The team was not always so lucky. Often, vegetation and geologic features had shifted.



*M.P. Bridgland 1915 (top) and J. Rhemtulla & E. Higgs 1998/99 (bottom) Station #18 - Clairvaux I - #157.*

Figure 3.15

THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT

Glacier Fluctuations: THUNDERBOLT PEAK



Researchers used the photographs to study climate change by examining the shifting size of glaciers over time. Old and recent photographs of the icefield on Thunderbolt Peak reveal considerable glacial recession during the last century.

Calling glacial recession "the most dramatic evidence of climate change in alpine environments," Brian Luckman and Trudy Kavanagh used photographic comparisons to illustrate a warming trend of 1.5 degrees celsius over the past 100 years (Luckman & Kavanagh, 2000).



*M.P. Bridgland 1915 (top) and J. Rhemtulla & E. Higgs 1998/99 (bottom)*  
 Station #13 - Thunderbolt Peak - # 098, 099, 100, 101.

Luckman, B. and T. Kavanagh. 2000. Impact of Climate Fluctuations on Mountain Environments in the Canadian Rockies. *Ambio* 29(7).

Figure 3.16



M. P. Bridgland 1915  
 Station # 13 - Thunderbolt Peak  
 Photograph # 99  
 Map sheet 5  
 Looking southwest at Eremite Glacier.

J. Rhemtulla & E. Higgs 1998/99  
 Station # 13 - Thunderbolt Peak  
 Photograph # 99  
 Map sheet 5  
 Looking southwest at Eremite Glacier

Actual size of image panels: 40" x 28" each

Figure 3.17

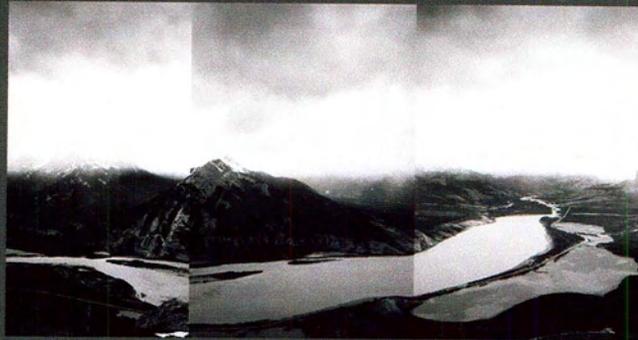
THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT

Hydrology - MOUNT CINQUEFOIL



Researchers have used images such as the ones taken of the Athabasca River Valley from Mount Cinquefoil, to illustrate changes in aquatic ecosystems .

In this case, human activity - placement of a railway and highway along the east side of Jasper Lake - disrupted what were once dynamic flows of sand, water, and nutrients between two bodies of water. Because of the shifting sand dunes in the region, culverts intended to allow water to flow soon filled with sand. Aquatic specialists are working to re-establish these linkages.



*M.P. Bridgland 1915 (top) and J. Rhemtulla & E. Higgs 1998/99 (bottom)  
Station #47 - Mount Cinquefoil - # 381, 382, 383.*

Figure 3.18



M. P. Bridgland 1915  
 Station #47 - Mount Cinquefoil  
 Photograph # 382, 383  
 Map sheet 4  
 Looking north towards Jasper Lake.

J. Rhemtulla & E. Higgs 1998/99  
 Station #47 - Mount Cinquefoil  
 Photograph # 382, 383  
 Map sheet 4  
 Looking north towards Jasper Lake and  
 Talbot Lake.

Actual size of image panels: 28." x 40" each

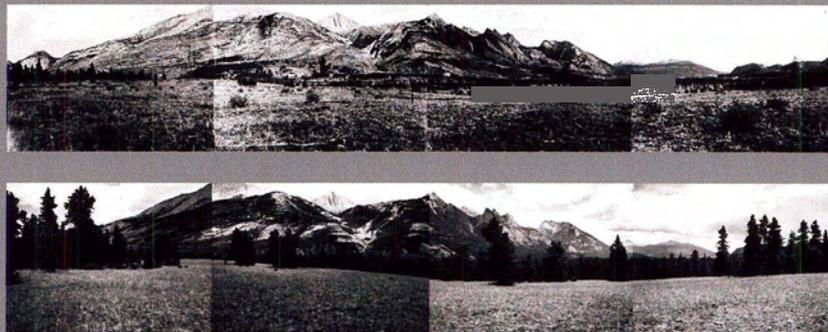
Figure 3.19

## THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT

### Landscape Change: HENRY HOUSE FLATS

The images are one entrance into landscape structure eight decades ago. This information can be helpful to set restoration goals for the park. However, this is a complex process. As Eric Higgs states,

*The wealth of information available through the photographs paradoxically provides us with relatively limited guidance....The more we peer into the past, the more historical complexity we become aware of.*



M.P. Bridgland 1915 (top) and J. Rhemtulla & E. Higgs 1998 (bottom) Station #58, Henry House Flats - #466, 467, 468, 469.

Jeanine Rhemtulla summarizes the vegetation change at Station #58 - Henry House Flats,

*Original photograph shows grassland in foreground with scattered bushes, likely buffalo berry (*Shepherdia canadensis*), and a fair amount of downed woody material. Grassland persists in retake, although shrub density has declined, and forest cover has increased. Tree cover has also increased markedly on the flanks of the Colin Range.*

Higgs, E. 2003. *Nature By Design*. MIT Press, Cambridge.

Rhemtulla, J. 1999. *Eighty Years of Change: The Montane Vegetation of Jasper National Park*. Unpublished master's thesis, Department of Renewable Resources, University of Alberta, Edmonton.

Figure 3.20



M. P. Bridgland 1915  
Station #58 - Henry House Flats.  
Photograph #466, 467, 468, 469.  
Map sheet 4  
Looking northeast towards the Colin Range.

J. Rhemtulla & E. Higgs 1998/99  
Station #58 - Henry House Flats.  
Photograph #466, 467, 468, 469.  
Map sheet 4  
Looking northeast towards the Colin Range.

Actual size of image panels: 20" x 68" each

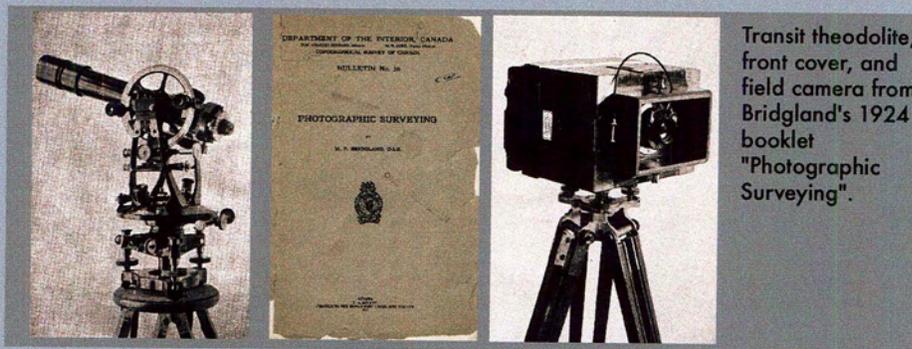
Figure 3.21

## BEHIND THE LENS

### IMAGES

#### THE 4"X5" FIELD CAMERA

Both the 1915 survey and 1998/99 repeat photography project employed large-format camera technology. The large negative size enables the extraction of detailed information from the image.



Transit theodolite, front cover, and field camera from Bridgland's 1924 booklet "Photographic Surveying".

#### Fractured View

This broken glass plate reveals that no image provides an unmediated view of the land. Occasionally, the delicate nature of the glass plate ended up thwarting Bridgland's view. By the time the repeat photographs were taken in 1998, the researchers were able to use a rugged (and shatter-proof), plastic-based film.



Bridgland's 1915 image from Station 32 - Amber Mt. - #262.

Bridgland, M.P. 1924. Photographic Surveying. F.A. Ackland, Printer to the King's Most Excellent Majesty, Ottawa.

Figure 3.22

## THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT

### Changing Activity in the Park - BRULE LAKE II

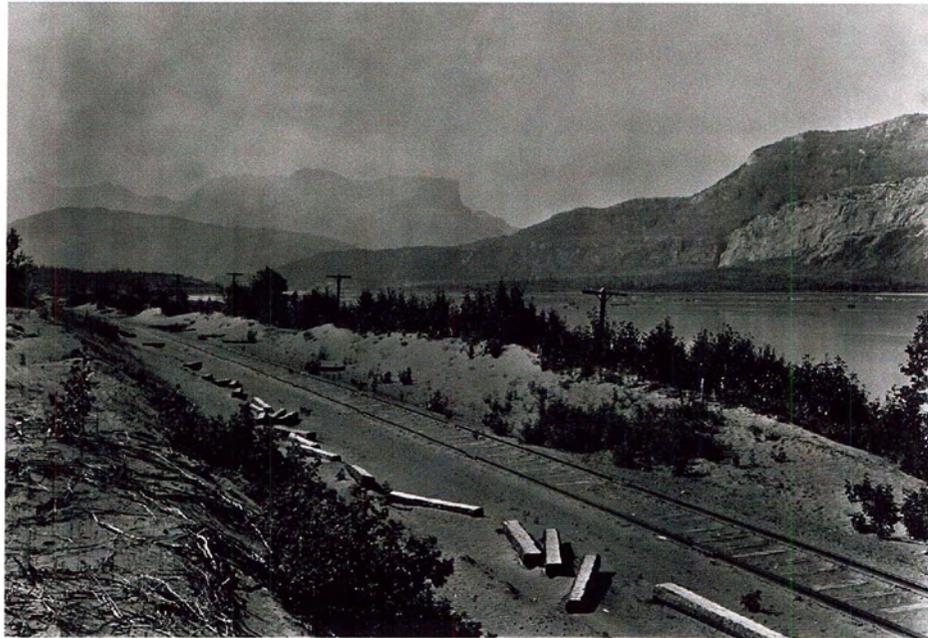
Researchers contrast the difference between our expectation of landscape change and actual landscape change. For example, rather than expected landscape loss due to development, here an old railway bed has become hidden - disappearing under shifting sand dunes.



As Eric Higgs writes,  
*Visitors to Jasper nowadays are mostly unaware that by 1915 there were two entirely separate railways - the Canadian Northern and the Grand Trunk Pacific - that operated in the valley...in the end only one survived (the intense competition), now overlooked and almost entirely forgotten is the sheer ecological influence of these massive rail-construction projects.*



*M.P. Bridgland 1915 (top) and J. Rhemtulla & E. Higgs 1998 (bottom)  
 Station #91 - Brule Lake II - # 730,731,732.*



M. P. Bridgland 1915  
 Station # 91- Brule Lake II  
 Photograph # 730  
 Map sheet 2  
 Looking west towards Brule Lake.

J. Rhemtulla & E. Higgs 1998/99  
 Station # 91 - Brule Lake II  
 Photograph # 730  
 Map sheet 2  
 Looking west towards Brule Lake.

Actual size of image panels: 28" x 40" each

Figure 3.24

## THE BRIDGLAND REPEAT PHOTOGRAPHY PROJECT

### Changing Activity in the Park - THE PALISADE

Researchers have used the technology provided by high resolution scanning of the photographs to search for details. For instance, Métis homesteads have been located in the 1915 images. These findings have been used to challenge our notion of wilderness. They also illustrate the complex historical conditions present in Jasper that make reconstructing the past landscape complicated.

Researcher Ian MacLaren explores the notion of wilderness. He observes that certain groups [Métis and First Nations] were expelled from JNP to make way for the

*legal and practical necessity to ensuring the establishment of effective sovereignty in the park. ... This manoeuvre cleared the way for a different concept of wilderness, one that endures today in the form of the national park as recreational and spiritual refuge for environmentally-committed, deskwork-weary urbanites.*



A Métis homestead is visible in Bridgland's 1915 image from Station #57 - The Palisade. - # 471.



MacLaren, I. 1999. Cultured Wilderness in Jasper National Park. *Journal of Canadian Studies*. 34:3

Figure 3.25



M. P. Bridgland 1915  
Station #57 - The Palisade  
Photograph # 471  
Map sheet 3  
Looking east over the Athabasca River Valley.

J. Rhemtulla & E. Higgs 1998/99  
Station #57 - The Palisade  
Photograph # 471  
Map sheet 3  
Looking east at the Athabasca River Valley.

Actual size of image panels: 13.5" x 38.5"

Figure 3.26



M.P. Bridgland 1915  
Station # 38 - Morro Peak I  
Photograph # 308  
Map sheet 4  
Looking south southeast towards the  
Athabasca River.

J. Rhemtulla & E. Higgs 1998/99  
Station # 38 - Morro Peak I  
Photograph # 308  
Map sheet 4  
Looking south southeast towards the  
Athabasca River.

Actual size of image panels: 28 x 40" each

Figure 3.27

## VISUALIZING A FUTURE

*...our interpretation of the past is contingent on our present values and dispositions. Not only are we accumulating new knowledge all the time but our understanding of this knowledge is changing too. Our account of a place, a site to be restored, is shifting based on new experience of the past. How is this story best continued into the future? What guidance does the past provide?*

-Eric Higgs, Bridgland Repeat Photography Project researcher in *Nature By Design*

*Sets of photographs taken more than eighty years apart help place on view stories that landscapes have to tell about how the environmental goals of humans change, and what the consequences of change are for the non-human realm. The work of M.P. Bridgland permits us to look back not only to understand better our present values but also to anticipate what the future holds for our protected areas and what our policies for managing them perhaps ought to be.*

-Ian MacLaren, Bridgland Repeat Photography Project researcher.

Photographs are not stable sites of knowledge. In both the survey and repeat projects, scientists have reflected meaning onto the photographic images. Certain stories appear, others disappear in a constantly changing reality of what a landscape was, is, or should be; what national parks were, are, or could be. In the future, our ideas of landscape and national parks will continue to shift and new stories will literally become visible within the two sets of images.

Higgs, E. 2003. *Nature By Design*. MIT Press. Cambridge.  
MacLaren, I. 2003. Personal Communication.

Figure 3.28

## ACKNOWLEDGEMENTS

## GENEROUS SUPPORT FOR THIS PROJECT PROVIDED BY:

Museums Alberta;  
 Social Sciences and Humanities Research Council (SSHRC) Standard Research Grant,  
 Eric Higgs, Principal Investigator;  
 Computing and Network Services, SunSITE, University of Alberta;  
 Department of Anthropology, University of Alberta;  
 University of Victoria Interdisciplinary Fellowship;  
 School of Environmental Studies, University of Victoria.

## Special Thanks to:

Glenn Charron, Museum Manager, Jasper Yellowhead Museum and Archives;  
 Eric Higgs, Director, School of Environmental Studies, University of Victoria;  
 Andrea Walsh, Professor, Department of Anthropology, University of Victoria;  
 Jenaya Webb, MA Candidate, Department of Anthropology, University of Alberta;  
 Ian MacLaren, Professor, Department of English & Department of History and Classics, University of Alberta.

## Thanks to:

The staff at the Jasper Yellowhead Museum and Archives;  
 The Bridgland Repeat Photography Project collaborators;  
 The Mountain Repeat Photography Project collaborators;  
 Wendy Cocksedge;  
 Ann Garibaldi;  
 Lynette Hiebert;  
 Sheena Majewski;  
 Natasha Nunn;  
 Jeanine Rhemtulla;  
 Grady Semmens;  
 Steven Thornton;  
 Gabrielle Zezulka-Mailloux.

The Bridgland Repeat Photography Project, on which this exhibit is substantially based, is grateful to the following organizations for support:  
 Jasper National Park  
 Foothills Model Forest  
 University of Alberta  
 University of Victoria  
 Social Sciences and Humanities Research Council of Canada  
 Natural Science and Engineering Research Council of Canada  
 Weldwood of Canada

Figure 3.29

### Context and display

The opportunity emerged for me to develop an exhibition as partial fulfillment of my M.A. degree. In part due to the support and enthusiasm of Glenn Charron, Museum Manager at the Jasper Yellowhead Museum and Archives (JYMA), and RMRPP leader Eric Higgs, I created an exhibition about the Bridgland Repeat Photography Project. Eric Higgs had initial contact in phone meetings with Glenn and me, and I subsequently created the exhibition in a consultative and inclusive manner with project participants. I showcased institutions that supported the creation and delivery of the exhibition.



Figure 3.30  
The Jasper Yellowhead Museum and Archives' façade (left) and the doorway leading to the Showcase Gallery (right).

The JYMA is situated as the primary museum in the town of Jasper. A utilitarian “chalet style” building, it contains a permanent display of the human history in the region and hosts changing exhibitions in a second space, the 67 m<sup>2</sup> “Showcase Gallery” (Figure 3.30). The exhibition fit neatly into the mandate of the JYMA which is to “collect, preserve and make available for research and exhibition documents and artifacts that

serve to illustrate the human history of Jasper National Park and area and the Yellowhead corridor” (<http://asalive.archivesalberta.org:8080/access/repos/rep/display/JAS>).

Tourists are the primary visitors to the gallery. In 2003 the gallery received 7,500 visitors, and 4,000 of those visits occurred between June and August, the high season in Jasper. The exhibition, *Vantage Points: Scientific Photography in Jasper National Park, the Bridgland and Repeat Survey Projects*, opened on July 5 and ran until October 26, 2003. It was intentionally timed to show in the summer and early fall, when the gallery receives the most park visitors.

The structure of the Showcase Gallery is one room, with no windows and only one public access door used for entry and exit (Figure 3.31). The viewer moved through the exhibition by a narrative and physical layout that began at the doorway, routed left around the exhibition space and ended at the same doorway. This layout was similar to other exhibitions that have been hosted in the Showcase Gallery. The walls of the Showcase Gallery had been painted “museum blue” prior to the mounting of the show (Figure 3.32). It was thus a relatively dark room where lighting consisted of a number of spotlight and flood bulbs in a set of track-lighting (Figure 3.32). These were directed at the photographs, text panels and display cases.



The exhibition comprised 18 panels incorporating image and text (henceforth called image/text panels), 15 large-scale photographs (14 were set up in sets of 2), Bridgland's 6 map sheets, 2 computer stations housing the Bridgland Repeat Photography Project website (<http://bridgland.sunsite.ualberta.ca/>), material artifacts including archival material (albums containing the photographs from the 1915 survey), Bridgland's jacket and pistol and the repeat photography project camera.

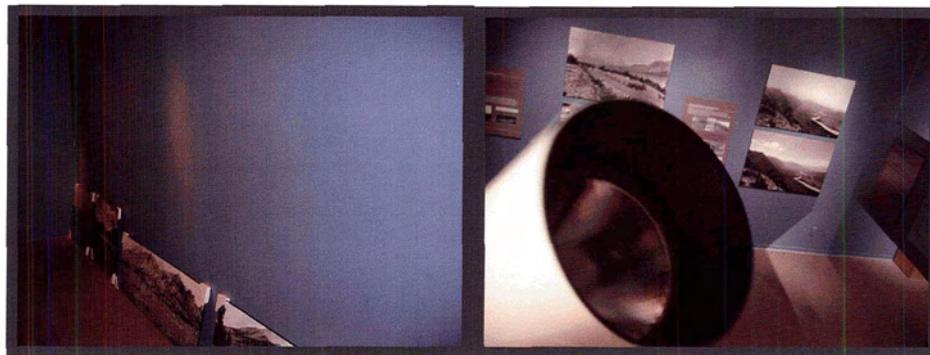


Figure 3.32  
The Showcase Gallery “museum blue” walls – before installation (left) and during lighting set-up (right).

Panoramas were the structural backbone of the show (see Figures 3.13, 3.19, 3.21, 3.26). Time and space constrained the number of the enlarged images of JNP that were made into panoramas (see Figure 3.16 and 3.17). There were eight panoramas in total, four sets of two. All were located in the vicinity of image/text panels. I created panoramas by digitally stitching two or more images together using the tools of Adobe Photoshop 7.0 with the intention of erasing the evidence that they had come from more than one negative. The panoramas varied in size, the smallest was 13.5 x 38.5” (the Palisade), and the largest was 18” x 72.5” (Old Fort Point). Each panorama was created from a different number of originals. For instance, the view from Cinquefoil station is a two-part panorama. A third photographs almost fits, but shows where Bridgland and the

repeat photography project shifted their vantage point (see the Hydrology text panel). All were printed as grayscale digital outputs (as both the 1915 and 1996-99 images were shot using black and white film) on a high-end Epson 9600 plotter. They were then laminated and plaque-mounted onto masonite board.

The image/text panels were each 24 x 30" with the font size between 36 and 40 - point. They were intended to punctuate the large photographs in the exhibition. The image/text panels acted to draw the viewer around the storyline, to instruct them on what they could see in the image. For instance, on the image/text panel about hydrology I write,

Researchers have used images such as the ones taken of the Athabasca River Valley from Mount Cinquefoil, to illustrate changes in aquatic ecosystems. In this case, human activity – the placement of a railway and highway along the east side of Jasper Lake – disrupted what were once dynamic flows of sand, water, and nutrients between two bodies of water. Because of the shifting sand dunes in the region, culverts intended to allow water to flow soon filled with sand. Aquatic specialists are working to re-establish these linkages (Smith 2003:panel *hydrology*).

The intention was that the viewer would read this, look at the accompanying image, and then move to the next panel that contains a similar discourse about the landscape in the park. The use of colour on the image/text panels was intended to compliment the use of 'museum blue' on the gallery walls and the black and white prints. Like most museum displays, each photographic panel was accompanied by a caption that had the photographer(s)' name(s), the year, and the location (station number and name).

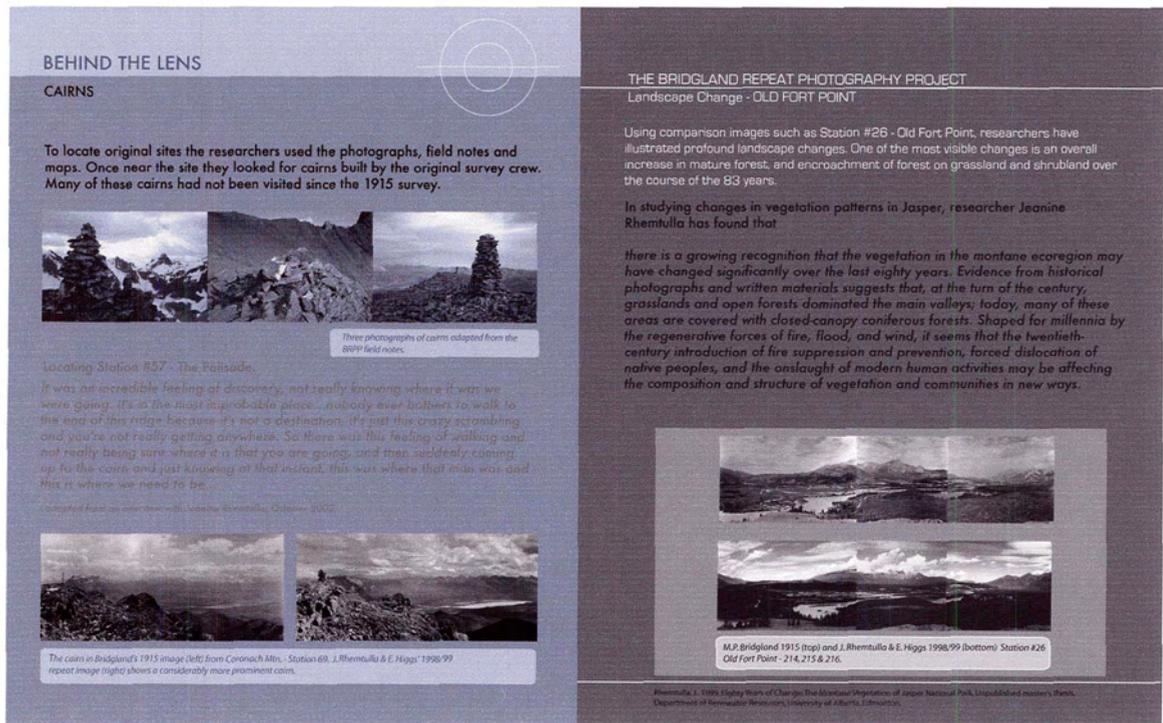


Figure 3.33  
Sample of the two panel styles from the exhibition *Vantage Points*, Behind the Lens (left) and the primary storyline style (right).

There were two styles of image/text panels: A primary set made up of two introductory panels and 11 core storyline panels. This set told the main storyline and explores the official account of the RMRPP, which included a recounting of the 1915 Dominion Land Survey/Bridgland story. The second style of panel, called *behind the lens*, comprised four panels of image and text. These panels were intended to act as a layer in the story, to add depth to the account by explaining what was involved in creating the images. For instance, the process the rephotography team used to determine camera locations (Figure 3.11) or what technology they used (Figure 3.22). The storyline panels were a brown/eggplant colour and the behind the lens panels were light blue (Figure 3.33) and were mounted on gatorfoam and attached to the wall with velcro.

There were three display cases in the Vantage Points layout. The objects, albums from the 1915 DLS set of images, Bridgland's jacket and pistol and the 4 x 5" Linhoff Technika used by the repeat photographers were each situated on plinths with plexi-glass covers (Figure 3.34). They were punctuated by the same style of text panel that accompanied the photographs.



Figure 3.34

The three-dimensional artifacts, albums containing black and white prints from the 1915 survey (far right), Bridgland's jacket, pistol and a copy of the Canadian Alpine Club journal (middle) and the Linhoff Technika 4 x 5" that the repeat project used.

The exhibition housed two computers, provided by SunSITE and Computing and Network Services (CNS) at the University of Alberta (Figure 3.39). An ongoing collaboration with CNS has made it possible for the RMRPP to have the collection of 1,400-plus photographs housed on a website (<http://bridgland.sunsite.ualberta.ca>). Project members can download either 300dpi or 1000dpi images from the site. The website also contains field notes, field note images, technical information about the images and

publications from research projects. In the exhibition, visitors could sit and surf through the entire collection of images. Although it looked like the online website, it was actually hosted from an on-site server.

I did not produce a catalogue, but created an exhibition invitation that was widely circulated. Using a crop from the Powerhouse Cliff station, photograph # 459 is one of the dominant photographs from the RMRPP. It has been used repeatedly as an example of the changing space of JNP. The invitation also contained a graphic of a camera-focusing ring (Figure 3.1). Outside the focusing ring was the 1915 landscape represented in brown, and inside was the 1998 landscape represented in blue. The invitation contained the location and dates of the exhibition, my name as curator and my affiliations with the University of Victoria.

### **Storyline**

How did I tell the story? To begin, I considered my audience. The venue was such that I needed to represent an accessible story for the general visitor. There was also a desire to fit this project within the larger repeat photography project (the RMRPP). It was important to create a storyline that reflected the RMRPP interest, as this was the way to get at the dominant stories about the photographs and JNP. Therefore, I did not have the only voice in this show, though my own story is infused in the account: as stated above. there was also the RMRPP, the JYMA and various supporting funding agencies. To be true to these participants was to tell the story of the RMRPP— what this is as a story at this point in time, rather than critical analysis of the RMRPP in an exhibition. In the actual exhibition text, I chose to emphasize the voice of the researchers with text such as;

Using comparison images such as Station #26 – Old Fort Point, researchers have illustrated profound landscape changes. (Figure 3.12)

By telling the story in the third person (i.e. “researchers have illustrated” or “researchers contrast profound landscape changes...”), I underscored the storied nature of the images, the idea that the researchers are telling stories, and they are using the images as evidence of the legitimacy or truth to the story. This voice is an alternative strategy to the omniscient narrator (i.e. “there are profound landscape changes” or, “these images show profound landscape change”).

As a participant in the repeat photography project, I learned much of the story as I became involved with the research. First I read historical and contemporary accounts of the Bridgland and RMRPP projects and associated research. This research was used to outline the general storyline that I wished to tell. These stories were often already represented in publications or on the website. I read historical accounts, looked at the collection of images both online and as prints, read publications around the current repeat photography project, interviewed both Eric Higgs and Jeanine Rhemtulla, talked more informally with project members such as graduate students Jenaya Webb and Gabrielle Zezulka- Mailloux and had some editorial help from project member Ian MacLaren. These methods of investigation allowed me to determine which stories to tell. I sent forward drafts of the text to project participants to ensure I was telling the story in the way they wanted it to be told – and I was also checking for technical mistakes.

In terms of storyline, I wanted to explore what the scientists were attempting to do – whether it was showing vegetation change, hydrological change, glacial change, cultural change (such as town footprints or Métis homestead ruins). These sets of natural and social science discourse framed the storyline.

The title of the exhibition *Vantage Points, Scientific Photography in Jasper National Park, the Bridgland and Repeat Photography Projects* was intended to reflect the idea that the vantage point is a manifestation of what the scientists created between the space and place of JNP and the documents they produced, as “we live in a relativistic universe, where an individual photographer can, by the choice of his vantage point, change what we think of as reality” (Limerick, 1992:108).

The overriding narrative that I developed from my experience in the project highlighted the photographs as slippery sites of knowledge – stories are told around them that change over time, though the photographs themselves may not. They are in a constant state of reinterpretation. I put this forward as the central theme to the exhibition. It is explicitly stated in the introductory and final panels, but was intended to underlie the entire show. I write at the end of the introductory panel;

Where Bridgland saw a glacier, the Bridgland Repeat Photography Project evidences glacial recession. Where Bridgland recorded a forest, the Repeat Photography Project evidences the effects of fire suppression practices. And where Bridgland recorded a forest preserve with little human activity, the Repeat Photography Project evidences a complex cultural landscape. As this shifting reality of the images shows clearly, the photographs are not simply objective facts; they are complicated products from a culture that has transformed over the past eight decades as radically as the landscape of JNP itself (Smith 2003:panel *introduction*).

In this exhibition, the photograph is considered evidence of changing ideas about the park.



**Figure 3.35**  
The story begins with the story of the Dominion Land Survey and M.P. Bridgland's visit to Jasper to make maps of the region.

The story begins with the Dominion Land Survey and M.P. Bridgland's involvement in the creation of the 1915 set of images (Figure 3.35). Authority is established in the storyline by linking the 1915 project to a larger government mapping initiative, and other nation-building projects<sup>1</sup>. The images evidence a large “empty wilderness” that was captured by Bridgland and his camera. The opening image is from the Clitheroe station and is the only single image in the exhibition (i.e. without pairing with a repeat image). In the accompanying text, I show how the same image was used in Bridgland's book, “Photographic Surveying”, with a grid laid overtop (Figure 3.7). As well, I explain how Bridgland named Mount Clitheroe after a place in Lancashire England. In this case, Mount Clitheroe in JNP represents another Clitheroe, a place on another continent with its own history and significance. This was one of the ways in

<sup>1</sup> In Canada, projects such as mapping and the creation and completion of a railway connecting the country acted to ensure control of the landscape by the Canadian government.

which I attempted to show visually the construction of these images and how they shift in use and meaning.

Authority is also established through other stories, such as Bridgland's role as an early and very active member of the Alpine Club of Canada (Figure 3.9 and 3.36). This part of the story is often told through quotes from a forthcoming book about M.P. Bridgland, "Mapper of Mountains" by repeat project member Ian MacLaren (with Eric Higgs and Gabrielle Zezulka-Mailloux). Next, the storyline moves away from the historical positioning of the photographs to incorporate the 1996 repeat photography project. Researchers Eric Higgs and Jeanine Rhemtulla are introduced (Figure 3.10 and 3.37). Their authority is established through linking them to academic research at the University of Alberta where, "they realized the images could become valuable tools – a benchmark for monitoring landscape change in Jasper National Park" (Figure 3.10).



Figure 3.36  
Installation view of 1915 albums and the story of Bridgland's early and active membership in the Alpine Club of Canada.

The purpose of their research is established, “to create the largest comprehensive and systematic collection of repeat photographs in Canada and use them to chart changes in the cultural and physical landscape of the park over the past century” (Figure 3.10 and 3.37). There are two photographs on this panel – one of Rhemtulla taking what appears to be a repeat photograph and one of Higgs in what appears to be a high alpine environment posing with the camera. These images act as evidence that the project members were actually out at the sites taking the repeat shots themselves.



Figure 3.37  
Installation view of the introduction text to the Bridgland Repeat Photography Project (BRPP).

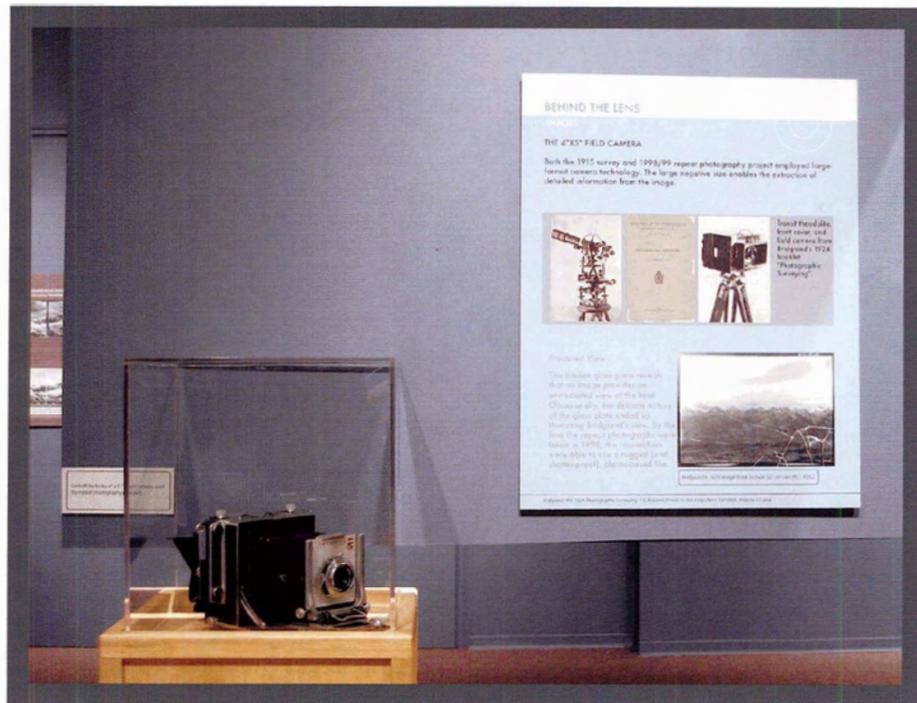
A corresponding *behind the lens* panel about cairns is situated beside the opening panel (Figure 3.37). It explains how the researchers located the original 1915 sites. I adapted a quotation from an interview conducted with Rhemtulla that explains the sensation of hunting down the exact the locations. Again, this situates the researchers in

an active role – discovering a viewpoint that is already in place, or re-placing an existing vantage point.

Next, the viewer is presented with the first large-scale panorama set from station #26, Old Fort Point (Figure 3.13). For the locals of Jasper, this was a view recognized by many. It was taken from what has become a popular short hike overlooking the Athabasca River, with the town site visible in the distance. The text panel that accompanies this set demonstrates how the researchers use the images to illustrate landscape change (Figure 3.12). In Rhemtulla's research she discusses the "growing recognition that the vegetation in the montane ecoregion may have changed significantly over the last eighty years" (Figure 3.12, adapted from Rhemtulla 1999). By reading the accompanying text, the visitor learned that the 1915 and 1990s images, when paired together, show enormous change in the landscape. The image/text panel displays Station #26: Old Fort Point as a set of individual photographs before I digitally erased the edges combining them into a panorama. Likewise, on each of the image/text panels in the exhibition, I show the original 'before' set. This was another way I attempted to show the construction of these images. They are not 'found' objects that I was displaying, but have a complexity; they create and are created by the exhibition.

In the centre of the gallery (behind the visitor as they view the maps) were sets of three-dimensional artifacts (Figure 3.34). They are part of the *behind the lens* storyline. The first set of objects is a collection of 1915 albums that contain the original 1915 Dominion Land Survey prints. The museum manager Glenn Charron and I selected these from the archives in the basement of the museum (Figure 3.36) and they show yet another way the images are circulated. Next, M.P Bridgland's jacket and pistol, donated to the

museum by the Bridgland family are displayed, showing some of the gear that Bridgland would have used in the field. The third case holds the 4x5" Linhoff Technika camera that Rhemtulla and Higgs used during their repeat project (Figure 3.38).



**Figure 3.38**  
Installation view of the Linhoff Technika 4x5" camera used for repeat photography and corresponding text panel.

An explanation of the field camera technology that each project used is given, justifying the size of the negative, as “the large negative size enables the extraction of detailed information from the image” (Figure 3.22).

As the viewer continued around the space, they came to the two computer stations that served up the project website. The computer had been a primary tool for project use, and as I explained, “increased access to the images via the website has allowed other researchers from Canadian universities to join the project...” (Smith 2003: panel *technology*). The use of this technology allows a “closer look at both sets of photographs”

where “researchers were able to reveal information about the park” (Smith 2003: panel *technology*) (Figure 3.39).



Figure 3.39  
Installation view of the computer station.

Passing the computers, the viewer arrived at the other side of the room and was introduced to 1915 and 1990s photographs used to discuss the types of landscape change the researchers examined. Thunderbolt Peak (Glacier Fluctuations) (Figures 3.16 and 3.17), Mt. Cinquefoil (Hydrology) (Figures 3.18 and 3.19), Henry House Flats (Vegetation Change) (Figures 3.20 and 3.21) and the Palisade (Changing Activity in the Park) (Figures 3.26 and 3.27) each explore the dramatic changes to the space of Jasper National Park over the years (Figures 3.40 and 3.41).



Figure 3.40  
Installation view of Mt. Cinquefoil station panoramas and image/text panels in the foreground. The end of the show is on the far left - hand side.



Figure 3.41  
Installation view of Thunderbolt Peak (left), Henry House Flats (middle), and The Palisade (right).

Again, authority is established through both the visual evidence, the idea that the viewer can see for themselves in the photographs and through the fact that I mostly quote from the researcher's voices through peer-reviewed publications. The public read the experts' opinions and words in my quotes, resulting in a belief in the storyline. The final turn in the storyline emphasizes that things are not always as they seem:

Researchers contrast the difference between our expectation of landscape change and actual landscape change. For example, rather than the expected landscape loss due to development, here an old railway bed has become hidden – disappearing under shifting sand dunes” (Smith 2003: panel *Changing Activity in the Park* (Figure 3.23).

The final image panel is from Morro Peak, showing the Athabasca River receding into the distance, running parallel with the highway. The final text, titled “Visualizing A Future,” features quotations from project members about how values change about landscape and how these photographs help “place on view stories that landscapes have to tell about how the environmental goals of humans change, and what the consequences of change are for the non-human realm” (MacLaren 2003: panel *Visualizing a Future*) (Figure 3.28 and Figure 3.42). Finally, I emphasize the storyline that I have tried to put forward with the following text:

Photographs are not stable sites of knowledge. In both the survey and repeat projects, scientists have reflected meaning onto the photographic images. Certain stories appear, others disappear in a constantly changing reality of what a landscape was, is, or should be; what national parks were, are, or could be. In the future, our ideas of landscape and national parks will continue to shift and new stories will literally become visible in the two sets of images. (Smith 2003: panel *Visualizing a Future*).

Visitors found themselves back at the beginning (and the doorway) of the exhibition.



Figure 3.42

Installation view of the final show panels. Morro Peak (left), the final text panel (middle) and acknowledgements (right). The door to the exhibition and a plinth with the comment book are behind the panel on the right. Visitors leave the exhibition on the right side of these text panels.

#### **Chapter 4: Capturing Jasper National Park - *Vantage Points* as a background experience of landscape**

In Chapter 3, I presented the panels from the exhibition *Vantage Points*, provided a setting for the exhibition, and explained the story told in the exhibition. In this chapter, I investigate how and why the telling of the RMRPP through the exhibition *Vantage Points* produces an experience of the landscape of JNP closer to Hirsch's conception of landscape as background potentiality.

In considering photographs through Hirsch's model of landscape experience, background potentiality (an ideal, imagined setting) can be understood as an objective reading or interpretation of a photograph. The other side of landscape experience, foreground actuality (everyday, real, ordinary life) can be understood as a subjective interpretation of a photograph. To take a closer look at the difference between objective and subjective readings of photographs, it is useful to consider anthropologist Christopher Pinney's distinction between two alternative histories of photography in anthropology. In the first history - equivalent to Hirsch's conception of background potentiality - Pinney characterizes photography as:

the final culmination of a Western quest for visibility and scrutiny. It stands as the apex of 'vision', which itself serves as the emulative metaphor for all other ways of knowing. As truth, representation and commodity it is in an unrivalled class of its own (Pinney 1992:74).

Pinney's first narrative creates a case for photography being understood as an objective truth.

In Pinney's second history of anthropology and photography, an uneasiness with objective readings of photographs produces an alternative reading (Pinney 1992:82). He writes that "certainty is fragile" (Pinney 1992:82), and that "once these objects –

photographs, images – are brought to the surface it is we as viewers and interpreters who determine their meaning” (Pinney 1992:90). This is a subjective reading of photographs and closely parallels Hirsch’s foreground landscape experience, whereby landscape is understood from the inside, it is a subjective point of view.

The focus of this chapter is a reading of photographs as objective – how photographs produce a background landscape experience. I investigate the exhibition *Vantage Points* to show how a background experience of landscape is produced, and as a result how the collection of photographs is understood as objective truth. In the first part of the chapter, *Imaging Jasper National Park*, I explore scientific invention – the convention of photography – and how it naturalizes what is a very specific view of the space and place of JNP. Beginning with a history of photographic survey in Canada I discuss how phototopography is tied to a legacy of Cartesian views that are treated as an accurate reflection of the world. Next, I follow the history of panoramic photography, from its invention as a painting to mimic nature; to its adoption in Victorian exploration to provide minute detail about the world; through its influence on survey photography; to its use in the repeat photography project; and, finally, to its inclusion as the dominant form of representation in *Vantage Points*. I trace this history and contemporary use of panoramic photography to illustrate how panoramic photographs are understood as objective views of the landscape, both scientific and colonial, and aesthetic and popular.

Another way that a background experience of the landscape of JNP is produced through photographs is through their use in multiple contexts. I describe how both Bridgland and the repeat photography projects continually circulated the photographs in a

way that maintains authority and a belief in the photographs to inform the viewer about the space of the park.

In the second part of the chapter, *Narrating Jasper National Park*, I explore the scientific discourses – the narratives that accompany the photographic record – that create and maintain an illusion of truth about the space and place of JNP. I contrast Bridgland’s narratives about the space of the park with the narratives from the repeat photography project. I show that, despite the changing narratives, and multiple uses of the images, the photograph remains an objective point of reference. In part this is due to the close ties to science and ways of knowing the world that privileges the visual.

These scientific photographs and the scientific narratives are hinged and work together to create a background experience of JNP’s landscape through the exhibition. Unpacking the construction of the scientific photographs and narratives brings the main themes represented in *Vantage Points* into focus. In turn, these themes begin to reveal some of the ways national park landscapes are represented by scientific pursuits and, as a result, how they are understood by a Canadian public.

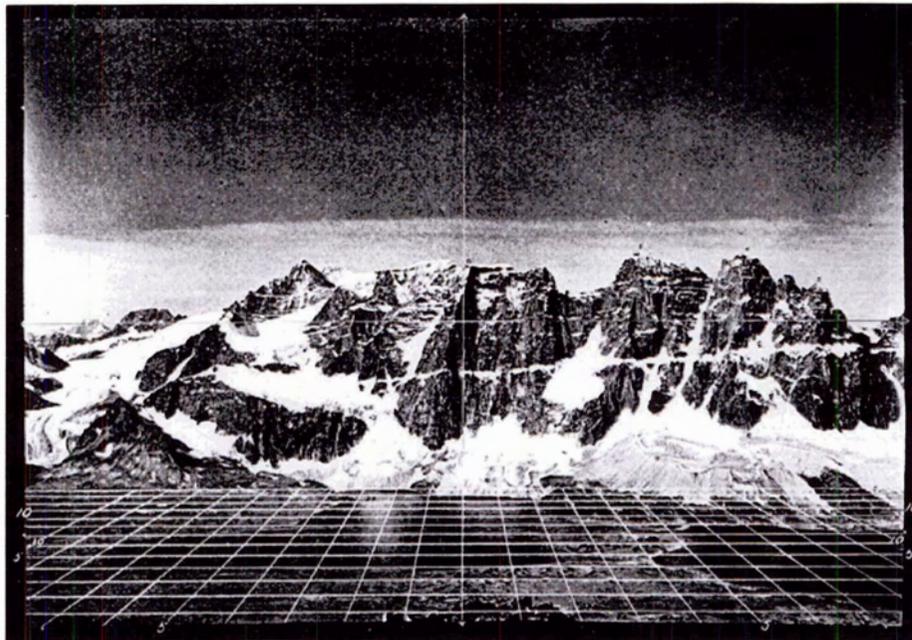
### **Imaging Jasper National Park**

The use of scientific photographs as objective portrayals in the *Vantage Points* exhibition is tied to a legacy of survey, mapping and image making in Jasper National Park. From the onset of topographic surveying in the late 1800s in the mountainous regions of Canada, photographic views have been accepted as a legitimate form of inquiry for knowing a space. In writing about the history of surveying in Canada, Andrew Birrell explains that:

survey photography was always the handmaid to scientific interests and by the end of the century it was indispensable and highly technical. Canada adopted the camera early and frequently as an adjunct to the exploration of its great plains and

mountainous West for scientific observation, for general documentation and for public relations (Birrell 1996:113).

There has been a continual association between scientific inquiry and photography in the efforts to map Canada. As surveyors moved across the prairies of Western Canada, they employed a chaining technique to map space. This method allowed surveyors to divide the landscape such that they produced the rectangular parcels of land still visible on the prairies today. Yet, when survey teams reached the Canadian Rockies, they abandoned the chaining method as their primary way to collect information in favor of a new technology: Phototopographical survey (Figure 4.1).



View No. 2—From Station No. 11

Figure 4.1 View showing part of the phototopographical mapping technique, from M.P. Bridgland's 1924 book, *Photographic Surveying*.

In the late 1800s, E.G. Deville, Surveyor General of Canada introduced photographic surveying into Canada (Bridgland 1924:2). Deville designed instruments

and developed a method to harness the camera as a way to gather data in the complex, high-relief space of the Rocky Mountains (Bridgland 1924:2). The result, phototopographical survey, was employed beginning in 1886 by The Dominion Land Survey (DLS) and incorporated a series of black-and-white photographic images that fit together to create a 360-degree record of an area. In combination with transit theodolite<sup>1</sup> measurements, the photographs were components necessary for the creation of a topographic map (Bridgland 1924: 3-5). Although phototopographical surveying abstracted the place it attempted to locate, it maintained authority through its close ties to science and scientific methods and therefore its institutionalized ability to inform scientific work. Indeed the camera was recognized as a crucial part of scientific work, as illustrated by the following passage first published in 1864:

This is the noblest function of photography, to remove from the paths of science...the impediments of space and of time, and to bring the intellects of civilized lands to bear upon the phenomena of the vast portion of the earth whose civilization has either not begun, or is passing away, is coming every year more widely into operation...For the purposes of science, an explorer and a photographer should be convertible terms (Anon. in Birrell 1996:120).

In Canada, the DLS believed in, and advanced, the authority of the camera to gather information more perfectly than the human eye. Pioneering mountain surveyor A.O. Wheeler illustrates this belief in an article he presented at the 1920 conference of the Alpine Club of Canada:

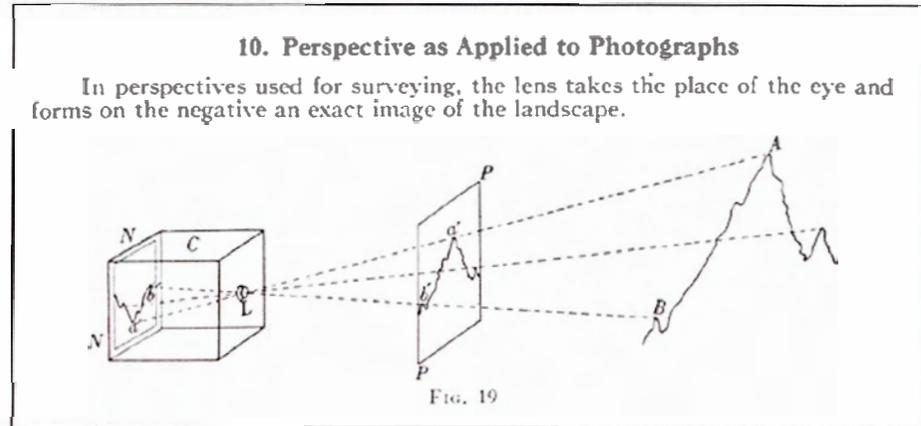
[t]he photographic method is especially suited to geographic exploration and quick reconnaissance surveys of required areas... Commanding points bounding the margins of the valleys may be occupied by the camera... the photographs gathering all requisite topographical information more accurately than by actual investigation (Wheeler 1920:81).

---

<sup>1</sup> A theodolite is a portable surveying instrument to measure angles of altitude and depression (OED online 2004).

These “commanding points” enabled the surveyor to capture the lay of the land and take it back to the office. The use of photography, standing as the authority of what was in a place, allowed for a domestication of the act of mapping. The surveyor was tasked with translating the images onto maps, making previously remote space visible and therefore knowable, without needing to be at the site. As Wheeler advised his colleagues at the 1920 conference, the photograph clearly reflects a measurable reality, and moreover it supercedes actual human sight or any visual translation of field notes that the surveyors would have produced. Photography helped fulfill the goal of mapping a space, which is to “produce as accurate a reflection of the world as possible” (Duncan and Ley 1993:2).

In truth, it was relatively unproblematic for surveyors to incorporate the photographic view into their work, as mapping and photography were a part of the same way of viewing the world. The invention and use of photography for popular consumption overlapped developments in cartography and map-making in Western Europe (Hirsch 1995:17). Each utilized Cartesian perspective, a way of visualizing place that “centers everything on the eye of the beholder. It is like a beam from a lighthouse – only instead of light traveling outwards, appearances travel in” (Berger 1972:16) (Figure 4.2).



**Figure 4.2**  
Sample of phototopographical view using Cartesian perspective from M.P Bridgland's 1924 book, *Photographic Surveying*.

Since the Renaissance, painters have made use of Cartesian perspective through a device called the “camera obscura,” literally a “dark room,” or box with a lens that helps the user to trace perspective lines (Trachtenberg 1989:4). In 1838, when Louis Jacques Daguerre successfully fixed an image on a silver-coated copper plate (essentially inventing modern photography), he used the camera obscura technology to produce the view. Daguerre advertised that “the daguerreotype is not merely an instrument which serves to draw nature... [it] gives her the power to reproduce herself” (Daguerre 1838 in Sontag 1977:165). Despite the fact that the view was a product of a lens designed to produce a particular effect, Daguerre’s claim confirms that the camera produced a view already considered “second nature – the true look of reality” (Trachtenberg 1989:4). Thus by 1915, when Bridgland arrived in JNP, it was not difficult to utilize the camera for mapping as the view created during this process was already naturalized, producing particular (and anticipated) views of place.

The camera was also considered perfect tool to capture the “commanding points” (Wheeler 1920:81) of Canada’s Dominion Land Survey project. When, in 1996, Eric Higgs and Jeanine Rhemtulla began to replicate Dominion Land Surveyor M.P. Bridgland’s 1915 views, they used a similar camera body and lens and attempted to find Bridgland’s exact vantage points. The photographic views they created – virtually identical to Bridgland’s - were inherited from the legacy of mapping, surveying and photography. The landscape that I produced for the exhibition at the JYMA was from this same Cartesian tradition.

Of the photographs included in *Vantage Points*, I chose panoramas as the dominant form of landscape representation. The panoramic view first gained international popularity in Europe and North America in the late 18<sup>th</sup> century. The term was first coined to describe a painted exhibition composed of a large, 360-degree painted cylinder (Hyde 1988:41). The spectator stood in the centre of this cylinder and experienced the view, which was intended to mimic nature. (Wilcox 1988:17). Though the popularity of the panorama as a 360-degree exhibition painting wavered in the following two centuries, the word panorama and the influence of the 360-degree structure is enormous. The panorama was imagined to produce an unbroken view of an area, resulting in the transformation of *panorama* as a term, to representing “an overview or comprehensive survey of any subject” (Hyde 1988:41).

In photography, the panorama was linked to both sensational popular subjects as well as to the Victorian-era exploration and collection of records. Considered the virtual reality experience of the day (Kirby 1997:6), the panorama offered “explorers and geographers ... an ideal means of reporting back on the world they were opening up”

(Hyde 1988:181). In Canada, the phototopographical method of map-making developed from the influence of the panorama as a way to survey the land. The panoramic photograph and resulting map was often a distanced view, a beam to a mountaintop, reinforcing the convention of perspective itself. As M.P. Bridgland and later Jeanine Rhemtulla and Eric Higgs<sup>2</sup> produced sets of photographs from each station in the survey of JNP, they revolved the camera on a tripod and took a series of photographs in succession, each one continued the space/subject at the point where the previous picture left off. By rotating the camera on the same axis the images would line up with one another horizontally edge-to-edge. The result of this endeavor was a series of prints that could be trimmed down and lined up to create one large panoramic view (Jones 1974: 390).

However the phototopographical survey often required two or more locations at the top of the mountain and the resulting sets of photographs are often made up of two or more approximately 180-degree tripod rotations. This broken view was likely inconsequential to Bridgland as the photographic panorama was not intended as the final product. There is no evidence that Bridgland or the DLS ever constructed panoramas from the collection of photographs. Yet this method of photography (and the view it afforded) was established as the most effective way to “capture entire scenes whilst simultaneously – and indiscriminately – recording every minute detail” (Hyde 1988:181).

As Bridgland writes in 1924:

It is customary to take enough views from each peak to cover the complete circuit of the horizon. This means very little more work for the surveyor in the field, and the extra views are often of assistance in the office (Bridgland 1924:18).

---

<sup>2</sup> Rhemtulla and Higgs never made maps, but used the photograph as the primary data set.

Therefore, to the DLS, the photographic panorama was the most accepted, economical and efficient way to capture the necessary (and detailed) view of the surrounding land.

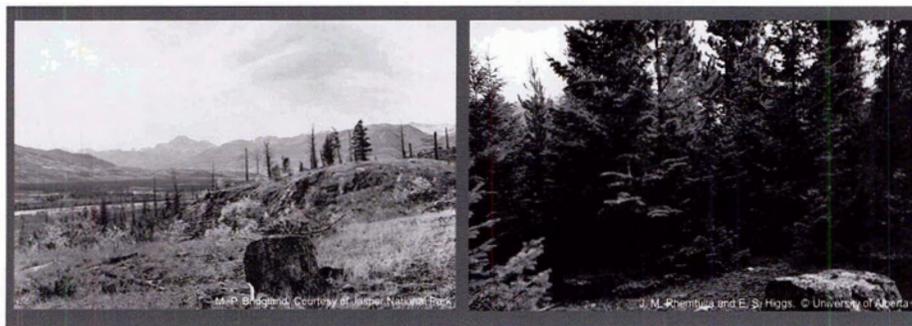
Although the DLS and Bridgland did not harness the panoramic form or method of display, it is clear that the repeat photography project members acknowledged and in fact used to their benefit the aesthetic power of the photograph and the panorama to depict a central narrative about the space and place of JNP. The repeat project deliberately harnessed the power of the panorama as a format for story telling and as evidence. The panorama is often used in project-related publications, notably in the website launch postcard-style invitation, various scientific publications, and in illustrations for Eric Higgs' book, *Nature By Design*<sup>3</sup>. The panorama is a central element of the repeat project lexicon.

The exhibition is an extension of the harnessing of the panorama. In *Vantage Points*, I spring boarded from the use by the RMRPP to employ the panorama extensively, and most significantly, in a new large scale on the wall of the gallery. I chose images (in collaboration with RMRPP members) primarily considering aesthetics. Specifically, the images that could best visually support the dominant project narratives. Of the 700-plus images in the Bridgland and repeat collections, many were not appropriate for use in the exhibition. Frequently, both Bridgland and the repeat photography team had technical difficulties such as haze from weather or clouds causing problems of contrast on landscape features in the photographs. At times, negative damage

---

<sup>3</sup> As part of my Research Assistantship with Eric Higgs in January 2002 I stitched together images for his book, *Nature By Design*. However, it was Jenaya Webb, at the University of Alberta, that first put together the 1915 Bridgland and 1998 Higgs/Rhemtulla images for comparison. Her work, under the guidance of Eric Higgs became the invite for the website launch in the fall of 2001. Subsequently Jeanine Rhemtulla and Eric Higgs used the same image in publications.

(mostly in the 1915 collection) or the impossibility of repeating images for comparison because of tree growth caused problems (Figure 4.3).



**Figure 4.3**  
Tree growth interrupting panoramic view of land. From Station # 57 Power House Cliff.

To build a panorama, the images also had to line up horizontally. They could not be from separate locations on top of mountains. As well, multiple vantage points from one station often made it difficult to find sets of images that gave an uninterrupted panorama (see Figures 3.18 and 3.19 for examples of interrupted panoramas).

In the repeat project, the panorama continues to be harnessed as a tool for measurement and classification and is a natural (and naturalized) extension of the original colonial project. These panoramas are single views that survey large areas of land and are imagined to be indiscriminate and capable of providing “minute detail” about the world (Hyde 1988:181). Through the repeat photography project, particularly through the *Vantage Points* exhibition, the panorama is returned to its origin - coming full circle - as a popular public exhibition intended to mimic nature. Not only are the photographs in the exhibition part of the legacy of surveying and map-making, they are actively being returned to their purest form: The panorama. The viewer experiences the space and place of JNP through the photograph, a background experience of landscape, one that is

official, colonial and scientific, and at the same time, aesthetic and popular. *Vantage Points* therefore encompasses the entire scope of panoramic photography.

In the exhibition, the circulation of images from scientific data to aesthetic objects transformed and expanded their meaning. However, the recirculation of this set of photographs beyond their original intent as survey material was not novel, as this act can be chronicled from the onset of the survey projects. For example, Bridgland used the images to illustrate parts of his popular *Description of and Guide to Jasper Forest Park* and in early volumes of the *Canadian Alpine Journal*. As well, the RMRPP have used the images for more than data collection. For instance, project members have created small, framed photographs from the 1915 and repeat surveys as gifts to various collaborators and people who have contributed to the project in some way.

When a photograph is hung on a museum wall it changes meaning, and, as art critic Douglas Crimp puts it, “once there, photographs will never look the same” (Crimp 1999:8). The RMRPP photographs were transformed from an academic, scientific realm into aesthetic objects through recirculation into the visual arena of the gallery. Viewers were able to stand back from the images and view them as instructed by the accompanying text and the gallery layout. By simply placing them in a different context, the photographs became museum objects rather than scientific data.

This new formulation of space and place comes from blurring of the boundary between art and science. As RMRPP member Eric Higgs noted in an interview, the exhibition provided an experience of seeing the photographs as if for the first time (Higgs in interview with Trudi Smith August 2004). The new size and panoramic form of the photographs make the photographs difficult to recognize. Likewise, other project

members considered the photographs differently in their new setting. Ian MacLaren notes in the comment book, “the blow ups are superbly done and most revealing” (comment book October 4, 2003), and project member Gabrielle Zezulka – Mailloux writes, “I think the composite photos offer an especially powerful panorama and overall effect” (comment book Sept 26, 2003). The exhibited presentation of the objects did not provide data for research about glacial recession and the like, but rather it created a new view of the images, with powerful effects.

Capturing and containing Cartesian panoramic views on film, the scientists produced a view of JNP for analysis. The object that fixed this view — the photograph — was the basis for the exhibition *Vantage Points*, and it is in this exhibition that I embraced the strategic way to represent this view —the panorama. This view lays out the space and place of JNP in such a way that it is imagined and experienced in a passive manner. Objective and unmediated as such, it is a production of a pure background *experience* of landscape à la Hirsch.

### **Narrating Jasper National Park**

Another way in which an objective background landscape experience is produced by the exhibition is through the use of scientific discourse to create and maintain an illusion of truth and authority about the space and place of JNP. The narratives told through the exhibition use highly specialized scientific data and are contingent on a history of scientific research and colonial scientific projects in Canada, and specifically in the space of Jasper National Park. This scientific account begins with the Dominion Land Survey (DLS) in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries and continues today through to present-day research, including the RMRPP and the exhibition.

In the late 1800s the DLS reached the Canadian Rockies, developed the necessary photographic survey technique, and in 1915 began surveying in the newly formed Jasper Forest Park (later Jasper National Park). In 1915 M.P. Bridgland, working for the DLS set up ninety-two survey stations. Surveyors referred to this act as “occupying” mountain peaks, cliff edges and prominent points on valley floors (Figure 4.4).

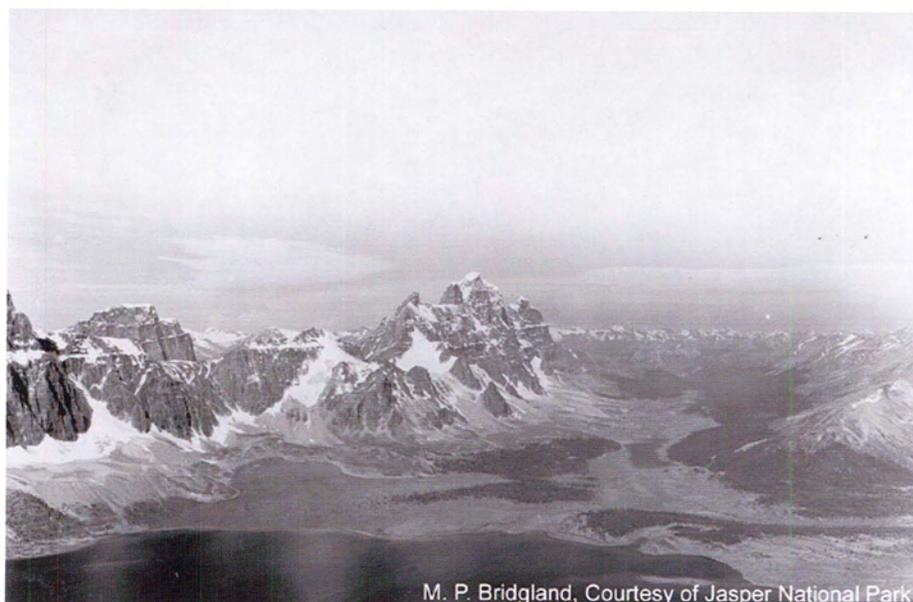


Figure 4.4  
1915 view from Mt. Cinquefoil. Survey photograph created by Dominion Land Surveyor M.P. Bridgland.

Upon exiting the mountains, Bridgland returned to Calgary with the photographs to create topographical maps. The photographs acted as evidence, what one DL Surveyor refers to as “permanent records from which to study at one’s ease the country or feature portrayed, when far away from it” (Wheeler 1920:81) (Figure 4.5). To the DL Surveyors, the photograph contained “... the height of surrounding peaks and fall of glaciers, as well as a record of their action and effect, the drop of waterfall, the depth of precipices,” and it was from the phototopographical method that a large amount of “most valuable

information” could be attained (Wheeler 1920:81). This most valuable information was primarily about economic potential in the park, as Canada’s Department of Interior asked surveyors to make detailed lists of resources and maps of the land’s traversable routes (Zezulka-Mailloux 2002:unpub).

The development of phototopographical survey in Canada coincided historically with the development of other colonial survey projects that utilized the technology of photography. As Andrew Birrell writes in his article on the North American Boundary Commission, in the mid 1800s, England began training Royal Engineers to take photographs while abroad. The primary interest of the War Department included “all objects, either valuable in a professional point of view, or interesting as illustrative of History, Ethnology, Natural History, Antiquities &c.” (Birrell 1996:113). Indeed, by the mid-1850s there was a desire for a “network of Photographic Stations spread over the world, acting under systematic instructions and having its results permanently recorded at the War Department” (Birrell 1996:113). The same approach to photography was present in the Canadian government’s Dominion Land Survey where, like other colonial survey projects such as anthropology, “photography was used extensively in the colonial effort to categorize, define, dominate and sometimes invent” (Scherer 1992:33). Acting for the Dominion Land Survey, Bridgland helped define and invent the place of JNP as he occupied mountain peaks and created a six-part map of the Jasper Forest Reserve (Figure 4.6).

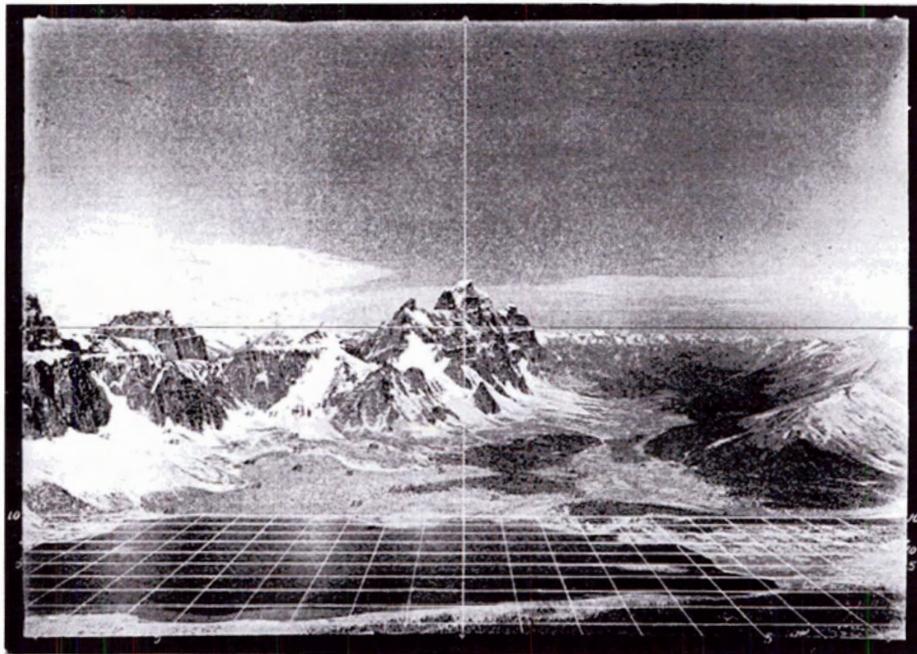


Figure 4.5  
1915 view from Mt. Cinquefoil. Survey photograph created by Dominion Land Surveyor M.P. Bridgland (top) (from RMRPP website) and the transformation of the image with mapping information (bottom)(from M.P. Bridgland's *Photographic Surveying* 1924).

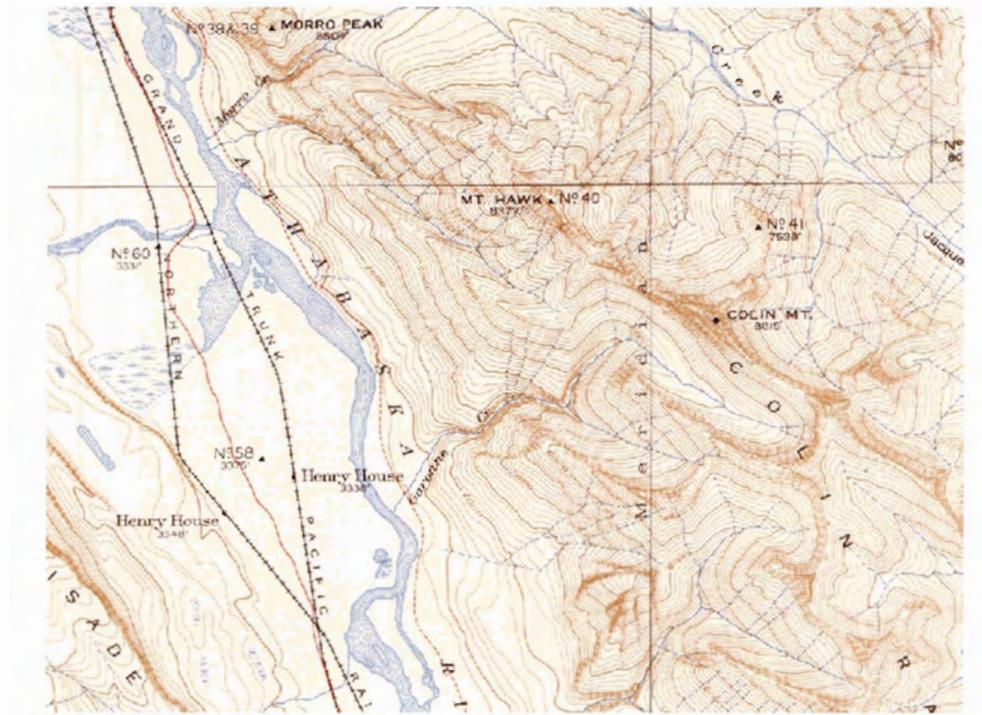


Figure 4.6  
Detail from six-part map “Map of the Central part of Jasper, Alberta” by Dominion Land Surveyor M.P. Bridgland.

Economic development was the primary interest of the DLS in mapping JNP (Webb 2003:42). Parks policy reflected this same interest as it was “based on the assumption of limitless natural resources capable of exploitation as a shared venture between government and private enterprise” (Carter - Edwards 1998:95). In 1924 Bridgland writes about surveying: “So far, the work has been confined chiefly to Government surveys of large areas on comparatively small scales, but surveys of small areas on large scales are frequently required for various purposes such as reservoir sites,

mineral claims, etc.” (1924:41). Employed by the DLS, Bridgland mapped features relevant to resource potential and tourism in the park (Webb 2003:42). In addition to the maps he produced, Bridgland was hired by the DLS to create inventories listing relevant items for economic development in the park. In the park, “profit, rather than any intrinsic aesthetic value inherent in the landscape, was the government’s primary concern” (Carter-Edwards 1998:95).

As a result, the maps that Bridgland produced for the DLS were not the whole story of the space and place of the park. Bridgland selectively defined the place of Jasper and created a map that partially represents the activities and physical features that were present in the space. For example, in 1915 the space and place of Jasper Forest Park was already an important point of activity for thousands of years, evidenced in fur-trader outposts, Métis homesteads, and First Nations pathways that remain visible today (Figure 4.7).



**Figure 4.7**  
Site of Ewan Moberly homestead in JNP. RMRPP researcher Jenaya Webb discusses the memorial grave marker of Suzanne Cardinal Moberly (left) and a detail from one of the original buildings on the site (right).

The maps produced in JNP selectively represent this history omitting such features as the sites of homesteads that were standing empty (or in ruin) after the recent

eviction of the Métis from the newly formed forest reserve. Historian Ian MacLaren explores how certain groups such as Métis and First Nations were expelled from JNP to make way for the:

legal and practical necessity to ensuring the establishment of effective sovereignty in the park... This manoeuvre cleared the way for a different concept of wilderness, one that endures today in the form of the national park as recreational and spiritual refuge for environmentally-committed, deskwork-weary urbanites (MacLaren 1999:21).

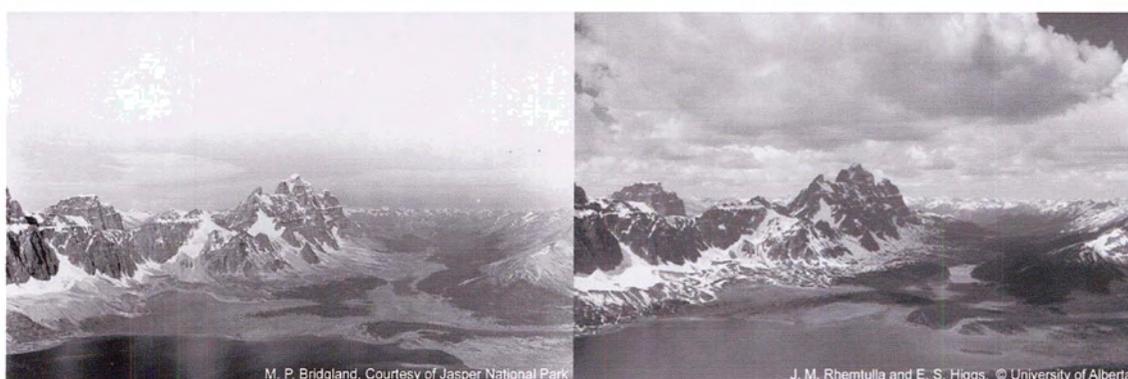
As MacLaren makes clear, these sorts of inclusions would have interrupted an understanding of the park as a wilderness refuge. Omissions in mapping the park helped to contribute to the way Jasper was to be visualized and understood as a landscape by future generations.

As a result of the Dominion's specific interest in cataloguing and defining JNP, the space that Bridgland produced through photographs, maps and inventories selectively represents JNP. This was achieved through the emphasis on recording economic features such as resource potential and tourism, and through the exclusion of certain activities in the records. Therefore, a primary narrative that emerges from the DLS project casts JNP as a space and place of *potential*.

In 1996, Eric Higgs and Jeanine Rhemtulla began working in Jasper using Bridgland's photographic views from the 1915 survey. The first step the researchers took was to re-photograph the entire survey and compare 1915 and 1996 views. Soon after, they created a website of the 1915 and repeat images to be viewed in pairs (<http://bridgland.sunsite.ualberta.ca>) (Figure 4.8). As in 1915, photography is still a "handmaid to scientific interests" (Birrell 1996:113), it is used to categorize and define the space and place of JNP. Repeat project member Jeanine Rhemtulla writes:

Used to construct the first topographic maps of JNP, the photographs were systematically taken and comprehensive in coverage, thus providing a complete and unbiased view of the landscape. Because the Bridgland photographs were explicitly taken for analytical purposes (i.e. to create topographic maps), we hypothesized that they could be effectively used to quantitatively analyse relative vegetation change over time” (Rhemtulla et al. 2002:2011).

Whether the photographs are tools to measure the “depth of precipices” or to “analyse relative vegetation change over time”, the photographs act as evidence of scientific narratives and sites to which such narratives are then sutured.



**Figure 4.8**  
Two views of the Tonquin Valley. 1915 view by M.P. Bridgland (left) and 1990s view by J. Rhemtulla and E. Higgs (right) images from RMRPP website.

While the 1915 Bridgland and 1998 repeat project accounts about the space and place of Jasper National Park derive from this single scientific legacy, the specific narratives the Bridgland and repeat photography project members tell using the photographs are very different from one another. The same views that charted the wilderness of Jasper National Park, rendering it a space and place of potential in 1915 – are now evidence of the park’s transformation over 85 years. Moreover, the repeat project uses the photographs to portray the park as a place that is actively constituted by Canadian culture. As Eric Higgs writes:

... national parks are shaped by our cultural values. Once realized, that fact obliges us to acknowledge that cultural values change; they do not tend to resist time well; like us who make them, they are mutable (Higgs et al 1999:13).

Whether these values manifest in emphasis on the idea of wilderness as a land beyond civilization or as wilderness as a playground (MacLaren 1999:20), values shape our attitudes about park spaces and in turn affect how we treat this park. Understanding that these values are mutable illustrates the current view of the place of JNP as an *active* space and place rather than a potential space and place. Indeed, wilderness is now viewed as a reflection of a changing culture. Through the RMRPP, this theme, the conception of JNP as an active space and place, manifests in narratives about culture, ecology and restoration. This theory of the space and place of JNP stands in contrast to Bridgland's concerns with nature, raw material, and economic potential. For instance, images that appeared as empty to Bridgland have now been re-viewed and the new narrative is about the space of JNP as inhabited (Figure 4.9 and 4.7).

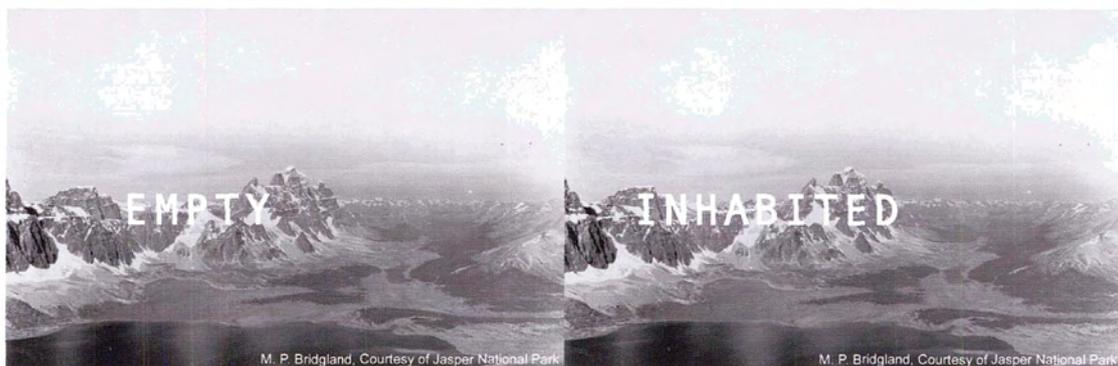


Figure 4.9  
Two views of the Tonquin Valley. 1915 view by M.P. Bridgland (left) and 1990s view by J. Rhemtulla and E. Higgs (right) images taken from RMRPP website (with my text).

Project members now interpret an inhabited space in JNP through the digitization and examination of the 1915 and repeat collection. They use digital technology (i.e. Adobe Photoshop) to mine the images for features that support ideas about the ongoing history of the park. Specifically this can be found in the RMRPP's presentation of the ruins of Métis farm sites in some of the 1915 photographs. This kind of information is actively sought after by the project members as they continue to look for farm sites and other features of historical, cultural and ecological significance. Therefore, inhabitation in JNP is part of a primary theme where JNP is cast an active space and place. The motivation of RMRPP members is a concern with the ecological stability of the park, and they use the narratives about landscape change to counterbalance cultural beliefs about the stability of the landscape of JNP. These beliefs were in part created by the DLS and others as they depicted an unchanging (potential and stable) JNP. The photographs are used as a striking portrait of this change.

The exhibition is a sight to look at the narratives and how they are constructed. In *Vantage Points*, the photographs are positioned as a sort of "before" and "after", a representation of the park around the time of its creation and in its current state 85 years later. A typical example of how I represented JNP in the museum show is the set of panels that display Station 26, Old Fort Point (Figure 3.13). Two 72"-wide panoramas set up in a comparative structure - stacked one on top of another - create the space and place of the Jasper town site from the popular look-out of Old Fort Point. This structure encouraged viewers to look for differences in the two panels and it is likely the viewers anticipated the text that reads, "One of the most visible changes is an overall increase in mature forest, and encroachment of forest on grassland and shrubland over the course of

the 83 years" (Smith, text panel: *Old Fort Point*). In this narrative, the land has undergone a process - the encroachment of more trees - and this was made evident via the structure of comparison. All of the panels in this exhibition display a sort of change, less trees vs. more trees, more glacier vs. less glacier, more water flow vs. less water flow, and so on (Table 4.1). The narratives construct the active landscape of JNP using the photographs as evidence of change.

STATION NAME (in viewing order)	WHAT IT DEMONSTRATES
Old Fort Point	landscape change (trees and townsite)
Thunderbolt Peak	glacier fluctuations
Mt. Cinquefoil	hydrological changes
Henry House	landscape change (grassland)
The Palisade	human activity change
Brule	human activity change
Morro Peak	summary panel encapsulating ideas of change and visualizing a future in JNP

Table 4.1. *Vantage Points* stations/photographs that were chosen (left) and attached narratives (right).

The narrative of change in JNP could have easily been a narrative about the stability of JNP, and each photograph's content and the resulting narrative could be re-worked to emphasize those things that are the same. In the panorama of Old Fort Point, much of the land appears unchanged and it would be simple to evidence stability in the views of the river, the mountains and the general view of the town site. Despite being contrary to the emphasis of the show, there were some viewers that reflected this way of seeing: "it is amazing how there is something that can remain relatively the same in this fast changing world" (Sue, Wisconsin, comment book August 5, 2003).

Likewise, the narrative of change can be transformed to a narrative about how things stay the same with a small revision to the text. The panel accompanying the panoramas of Old Fort Point reads, “Using comparison images such as Station #26 – Old Fort Point, researchers have illustrated profound landscape changes.” To change the text “profound vegetation changes” to “profound vegetation similarities” would overthrow the narrative. Nevertheless, the same photographic image could act as evidence of either text. The potential for multiple and contradictory narratives from one photographic image illustrates the “ambiguity that allows one photograph to serve different masters under different captions on different stages” (Trachtenberg 1988:52). The narratives are therefore crucial to inform what we see in the images. It is through these narratives that the RMRPP and the exhibition become an act of vision, “constituting what is present” (Berger 1972:9).

Furthermore, most of the photographs in the set of 735 Bridgland and repeat images do not actually evidence change. Instead, my experience selecting images for the exhibition and conversations with project participants made apparent the sheer number of images that show little or no obvious change. Within the space of JNP, the Athabasca Valley, the main wildlife corridor and the location of the town site, provides much more evidence for radical change than the higher alpine survey locations. A viewer only has to look as far as the first set of images on the RMRPP website, Cavell Meadows I ([http://bridgland.sunsite.ualberta.ca/main/compare.php?photo\\_number=001](http://bridgland.sunsite.ualberta.ca/main/compare.php?photo_number=001)), to challenge the photographs to evidence visible change (Figure 4.10).

There is no evidence of trees encroaching, and the rocks and mountain forms appear relatively stable between the 1915 and 1998 views. Yet perhaps the most

significant reason this station appears to have no visible change is that Cavell Meadows I is a narrative-less station. As anthropologist Christopher Pinney writes, “to be buried deep in the negative is to be true” (Pinney 1992:83) and there is a truth not yet evident buried in these photographs. However, as the photographs are processed through the project research, new narratives will form around them.

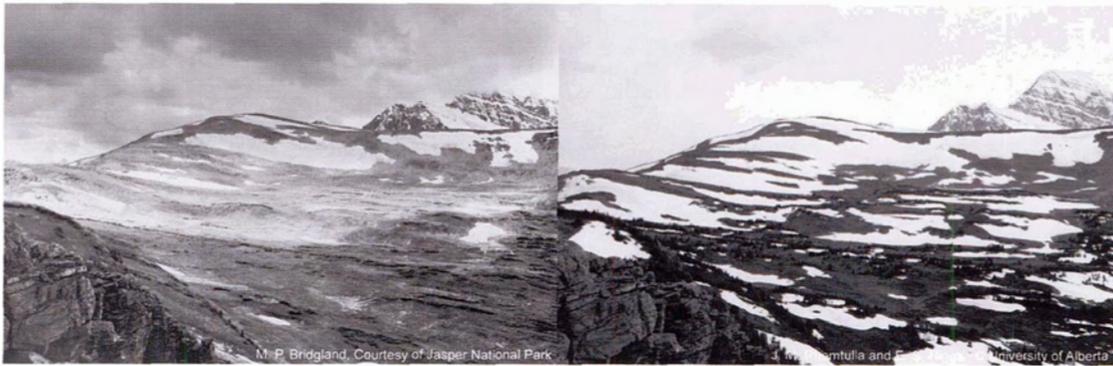


Figure 4.10  
Two views of Cavell Meadows. 1915 view by M.P. Bridgland (left) and 1990s view by J. Rhemtulla and E. Higgs (right) taken from RMRPP website.

For the time being, there are only a select number of images that have a specific RMRPP narrative attached to them. As these select photographs are in frequent use, they in turn become central to the RMRPP story and representation of JNP itself. In the exhibition, I used these same central photographs in frequent use by the scientists. Tracing the circulation of the photographs from Powerhouse Cliff (station 57) – the first images completed for use by RMRPP members - is a useful example to evidence how project members re-use images that support their story. They are frequently used to demonstrate the effects of fire suppression practices in JNP. These photographs in turn are used to sustain a story of an active landscape in JNP about current concern over the

management of forests over the past century. Such concerns have stimulated a debate on whether prescribed burns can return the health of the forest before high-intensity fires damage both the natural park area and the town of Jasper itself (Rhemtulla et al 2002:1). The photographs from Powerhouse Cliff show a landscape that has become densely forested in the 85-year span between photographic accounts, and some project members are using the photographs as evidence of the need for fire to maintain what is believed to be a healthy ecosystem.

There are seven 1915 and seven repeat photographs that were taken from Powerhouse Cliff evidencing landscape change. In various combinations, these photographs have been circulated in scientific journals, books, promotional materials for the project, on park interpretive signs and finally, as the invitation I created for the opening of *Vantage Points*. Project member Jeanine Rhemtulla uses a panorama of four of the images in her co-authored article, *Eighty years of change: vegetation in the montane ecoregion of Jasper National Park, Alberta, Canada* (Figure 4.11). The photographs act as evidence of the “greatest vegetation change over the last 80 years”, which is an increase in “forest cover and crown closure throughout the study area” (Rhemtulla et al 2002:2010). Eric Higgs writes in his book *Nature by Design: People, Natural Process, and Ecological Restoration* (2003) about the same figure:

[t]he results of suppression techniques are clear: there have not been any major wildfires in the montane ecosystems in eighty years. The valley bottom, which previously resembled a complex quilt of grasslands, forests, and savannas, is now almost a carpet of green trees. A study conducted by Jeanine Rhemtulla to compare photographs from 1915 and repeat images taken by her eighty – two years later in 1997 shows a stunning shift from early to late successional forest types (Higgs 2003:33).

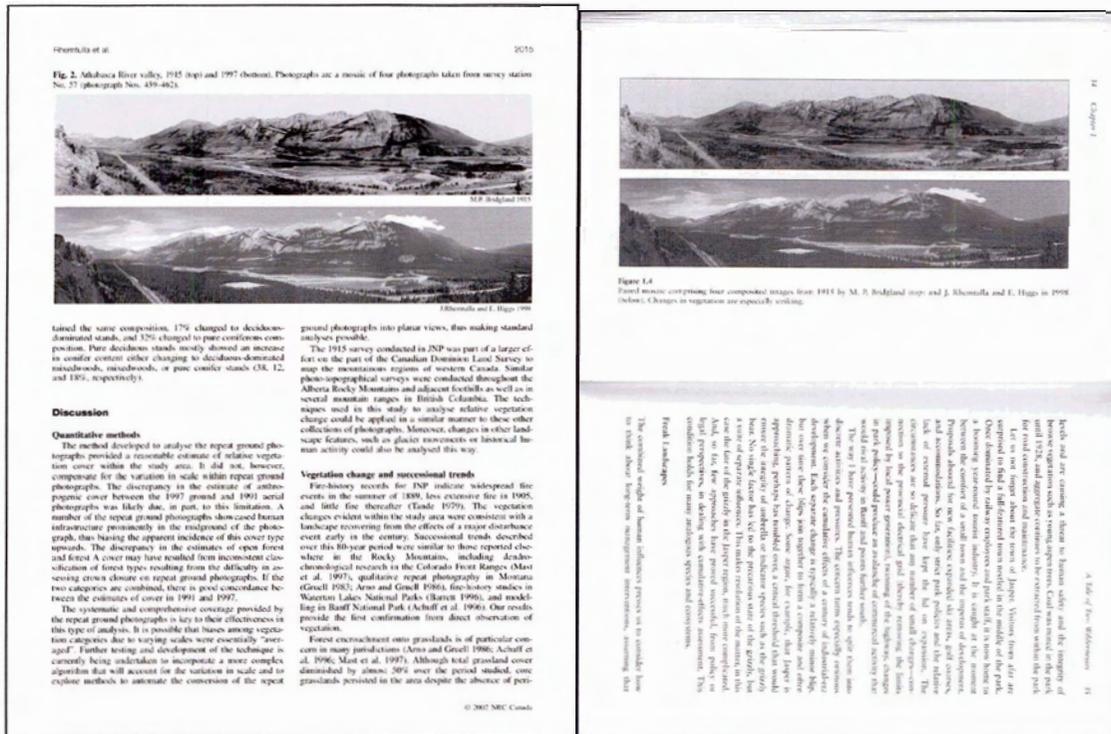


Figure 4.11 Two uses of the photographs from Old Fort Point. Jeanine Rhemtulla’s article (left) and in Eric Higgs’s book (right).

As stated and seen in both Rhemtulla and Higgs’ articles, the images from Powerhouse Cliff evidence a stunning shift in tree cover. The same set of photographs are used in panoramic form on the invitation for the BRPP website launch in 2001. Here the 1915 and repeat images are separated by the title of the project and the website URL (Figure 4.11). Another use of the same image can be found on an interpretive Parks Canada sign located in JNP. Here, a single photograph rather than a panorama tells the story about landscape change through fire suppression practices. This story justifies prescribed burns in the area:

Smokey Bear warned us about the danger of forest fire in the 1950s. Today, the science of ecology is telling us that many ecosystems have evolved with fire and depend on it for renewal. Suppressing fire is shutting out an essential element of nature – like wind or rain (from Parks Canada sign in JNP – see Figure 4.12).

Frequent authoritative use of the images, such as the photographs from Powerhouse Cliff are entered into the project lexicon and will continually circulate to support the scientists' stories. The photographs and narratives focus our attention to those things that are a prominent concern in Canadian culture – notably here, fire suppression practices and the consequences of such a practice. The photograph and narrative is used as a message to understand JNP.

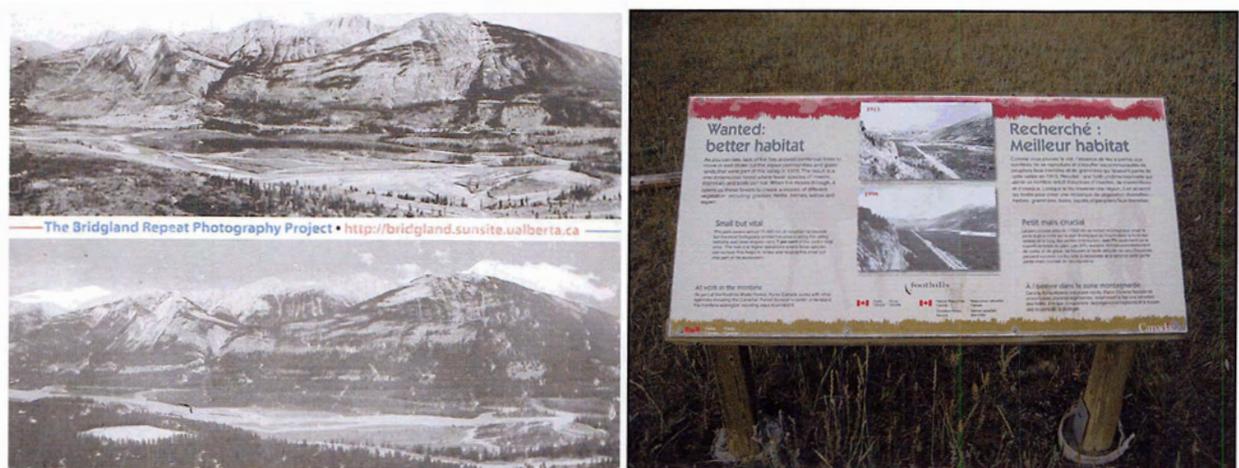


Figure 4.12 The Bridgland Repeat Photography Project website launch invite (left) and Jasper National Park's interpretive signage (right).

As in the Parks Canada illustration, I used a single image from the Powerhouse Cliff set to present my ideas in the *Vantage Points* invitation design (Figure 4.13). One of my central intentions in the design was to create an aesthetic and compelling view of the JNP landscape while using an image (and idea about that image) that was representative of the central project narrative about process, comparison and landscape change. Station 57, Powerhouse Cliff fit into this intent. As demonstrated, it is a frequently circulated image - perhaps the most circulated and published image from the project. In JNP images such as these become part of the official and popular narrative about the park. The exhibition

uses images such as these to depict the space and place of JNP. For this reason, in as much as the exhibition recalls the space and place of JNP, it recalls accounts of it.

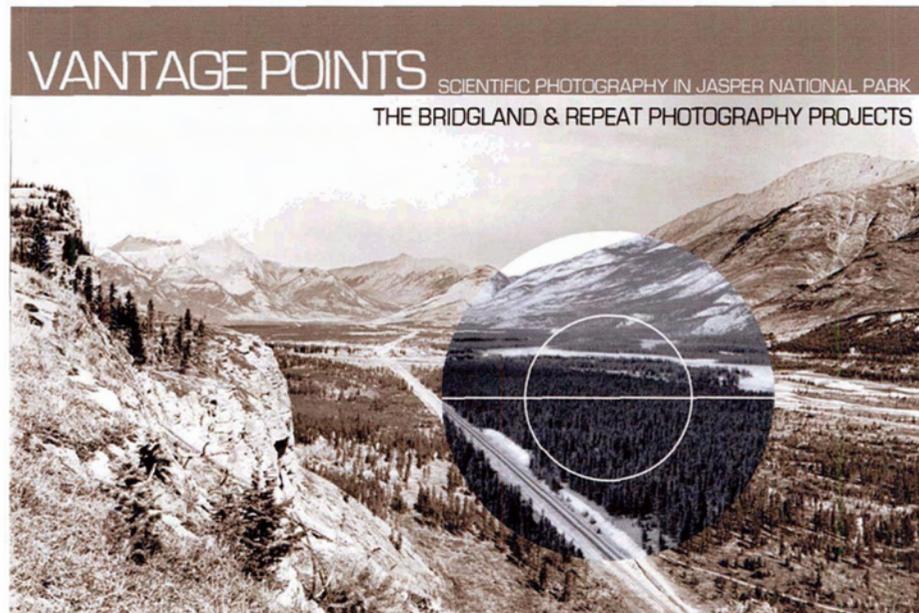


Figure 4.13. *Vantage Points* invitation.

Over the past 100 years, the place of JNP has been formed and transformed both physically and visually, and the scientific narratives have created and used the photographs as an illustrative handmaid to this endeavor. As such, scientific narratives condition what we see in the photograph. Yet the primary themes encountered in the exhibition, and discussed in this chapter, put onto view particular inconsistencies in the depiction of the place of JNP. Bridgland formed a view of the park that, in concert with painting, literature and film<sup>4</sup>, helped create a wilderness that reflected a narrative of potential in Jasper exacted in the maps he drew. The RMRPP used the photographs to illustrate an active space that draws on the themes of process and change to make clear

<sup>4</sup> These include painters such as Paul Kane, Group of Seven members Franklin Carmicheal, A.Y. Jackson, and Lawren S. Harris; writing such as early explorer accounts Ross Cox and Alexander Ross; and popular films such *River of No Return* starring Marilyn Monroe and Robert Mitchum (MacLaren 1999).

that the wilderness of JNP reflects our own values. It appears that like the wilderness itself, the photograph is a mirror that “we gaze into and too easily imagine that what we behold is Nature when in fact we see the reflection of our own unexamined longings and desires” (Cronon 1996:69).

In both sets of photographs and the exhibition, Bridgland, the DLS, the RMRPP and myself have elucidated the unknown for the viewer, illustrating theories that become clearly evidenced in the images. The photograph remains an objective point of reference containing quantifiable evidence, even when referring to our own unstable view of nature. In discussing the production of visual knowledge, anthropologist Anna Grimshaw explores this type of view, which she labels an *illuminatory* view. As she writes:

Such a way of seeing has at its centre the belief that the world is ultimately knowable, that it may be rendered transparent through the exercise of the ‘clear light of reason’. Vision is a key strategy by which the world is investigated and ultimately controlled (Grimshaw 2001:58).

As we site the space of the national park through this illuminatory view, an ambiguity emerges. JNP, as viewed through the photographs simultaneously represents empty wilderness and boundless riches, seen via the 1915 Bridgland maps, and a highly inhabited and shifting place illuminated by the RMRPP. The scientific photograph becomes a site of multiple realities. This ambiguity, as photo-historian Alan Trachtenberg argues, becomes visible in the “comedy of choosing to ask, what appears in a photograph?” (Trachtenberg 1988:52). How do the images maintain their authority while obviously having multiple realities? Despite the fact that I have shown that the images are not a concrete reality, scientific images of Jasper remain a primary source of knowledge about the park. It is through the close ties of photography with the scientific project that it

has remained a legitimate way of knowing about space and place. The photographs of JNP are translated through contemporary cultural experiences and illuminated through the discourses of science.

The translation and illumination shield from our view the multiple natures of photographs and they mirror back at us our culture in the form of the understanding we bring to the photographs. Thus, the reality that they produce is processed through the cultural context through which they are deciphered. These contexts are always in flux, and whether these photographs are consumed in 1915 or 1999 or 2004; in an academic journal, a gallery space or a parks interpretive sign. In Canada and around the world, these photographs of national parks create and influence an experience of reality. They indicate empty wilderness, occupied landscape, vegetation change and they can act as aesthetic objects to appreciate. Understood as having multiple realities, what these photographs reveal is twofold. First, their ambiguity reveals that our cultural ideas about the space and place of JNP are constantly changing – meaning is unstable. Secondly, attempting a reading of this ambiguity can give a more complex and layered understanding of the meaning of space and place that is JNP.

### **Fixing Jasper National Park**

Through scientific invention – photography - and scientific discourse - the narratives that accompany the photographs - *Vantage Points* produces what Eric Hirsch would cast closer to the idea of background potentiality in landscape experience. In Hirsch's model, representation is the purest form of background experience – cast as an objective experience of landscape. Hirsch argues that most cultures strive for representation, the “timelessness of a painting”, in the pursuit of an understanding of

space and place (Hirsch 1995:3). The exhibition – as a representation of the space and place of JNP - attains a sort of timeless permanence. It is encountered as a stable, fixed moment in time, telling a story about the landscape that is stable and fixed – literally printed onto panels on the wall. Hirsch cautions however, that this background landscape can be “achieved only momentarily, if ever, in the human world of social relationships” (Hirsch 1995:22). *Vantage Points*, though produced and circulated as an ideal, objective landscape - based experience, is consumed through a complex, often contested world of human social relationships. The rigid, fixed background experience of landscape is usurped when the account enters the social world. The exhibition thus destabilizes the landscape of timeless permanence. It is this experience that I investigate in the next chapter, when looking at the consumption of the exhibition as subjective, as a foreground landscape experience.

## Chapter 5: Consuming Jasper National Park - The making of a foreground landscape through *Vantage Points*

In Chapter 4, I argued that the act of scientifically photographing JNP produced an account about space and place understood as objective. An objective interpretation situates the photographs as a persuasive and transparent medium (Pinney 1992:75), and the accompanying narratives are treated as an authority about the space and place of JNP. I used this understanding of space and place in displaying and writing *Vantage Points* resulting in the production of what Eric Hirsch would characterize as a background landscape experience. This landscape experience is idealized, existing in Hirsch's model closer to an imagined setting than to real life.

This chapter will investigate why and how *Vantage Points* simultaneously produces what I see as a foreground landscape experience. In contrast to the omnipotent background experience of landscape that Hirsch characterizes as separate and detached from everyday experience, foreground experience emphasizes a landscape understood from the inside. An inside understanding of landscape is subjective and comes out of everyday social practice (Hirsch 1995:4). Applied to the exhibition, a foreground landscape experience comes from viewing and interpreting the story of *Vantage Points* whereby the visitor generates their own meaning about the landscape of JNP.

The chapter begins with a portrayal of the social discourse, or popular account, through a re-telling of the narratives<sup>1</sup> produced from the opening of *Vantage Points*. I describe personalized, inside, foreground landscape experiences generated by key locals.

---

<sup>1</sup> When I refer to the *scientific account*, I am referring to both the photographs/*photographic conventions* and the *narratives* that accompany them, whether this is read as part of *Vantage Points* or part of the original Bridgland and repeat projects. The *popular account* is comprised of *narratives/stories* derived from *Vantage Points*.

In the next section, *Interviewing using Vantage Points*, I ask a selection of RMRPP members and associated participants to walk through the gallery with me and discuss the exhibition. The result is three separate narratives about the landscape of JNP. In combination with the responses to the opening, and the responses in the comments book, these interviews help to reveal that *Vantage Points* is read and responded to in individual and complex ways. The multiple landscape experiences are distinct from the scientific account that I produced and put on display, and effectively “undermine photography’s single-voiced authority” (Pinney 1992:74).

Next, in *Complicating the view of JNP through Vantage Points*, I address issues attached to varied understanding of the park space through the exhibition. First I discuss the production of diverse understandings of the park space through individual readings of the exhibition. I argue that viewers initially see the background landscape experience and then transform it into a foreground experience. This act of transformation complicates a clear reading of the scientific account.

In the final section of the chapter, *Interrupted Viewing*, I build on previous sections to discuss how an ideal, imagined space of JNP (Hirsch’s background) is interrupted by competing discourses, alternative readings and multiple themes. Not only is this found through viewing the exhibition, but through other ways of viewing the photographs of JNP, such as on the RMRPP website. This lays on view the ambiguous nature of the images and this understanding of photographs can be applied to viewing *Vantage Points*.

In this chapter, the exhibition rather than the photographs and narratives themselves were the focus of my analysis, and the installation and display of *Vantage*

*Points* was my field site to draw out responses to the visual representations and text. I used the method of photo-elicitation to see how the viewers used the photographs to situate themselves in relation to the space and place of Jasper National Park. As anthropologist/archeologist Barbara Bender writes about producing an exhibition, this act allows for a “multi-faceted understanding of how people’s experience of the land is shaped and changed, and the way in which the land engages with experience, rather than simply reflecting it” (Bender 1999:66). In this chapter a description of the way in which the “land engages with experience” through *Vantage Points* was a primary focus.

As Bender cautions however, my position as curator in the production of the exhibition was challenging, if not a bit awkward. As she writes:

One moment I am totally involved in putting together the exhibition, I am engaged and partisan. At another, the exhibition becomes this chapter, I don my ethnographer’s hat, stand back from the action and try to account for what is happening. What is concrete becomes abstract; what might seem objective to the groups involved becomes subjective and relative (Bender 1999:153).

Her solution is to acknowledge this problem and to try to “speak with and to people — try to invest in dialogues, rather than subsume others within monologues” (Bender 1999:153). Therefore, in this chapter I am speaking with people through the use of narrative story telling and direct interview quotes.

### **Opening *Vantage Points***

Glenn Charron, the museum manager said, “the opening was an experiment.” His reasoning was that the museum usually advertised openings in the local community paper, the *Jasper Booster*, rather than mailing out invitations as we had done for *Vantage Points* (Figure 3.1). I agreed that the opening was an experiment, but for my own reasons. My hypothesis was that during the opening, viewers would look at the images, be

surprised and dazzled by the evidence of glacial recession, radical vegetation change, alterations in park use, and above all, the viewer would understand that images are a part of a changing culture – what we see in the photograph is different over time. I expected this, because this is the dominant scientific discourse about the space and place of Jasper National Park that I drew upon to construct the exhibition.

There were 55 guests at the opening of the exhibition on July 5, 2003. This event gave me the opportunity to investigate responses of key local people from the town of Jasper and the nearby town of Hinton (Figure 5.1). RMRPP project members and related researchers were invited, but graduate student Jenaya Webb and myself were the only two present from the RMRPP team. Many of the guests at the opening were familiar with the project and had been involved in some way, such as locals who worked in the research centre (the Palisade Centre) where researchers Eric Higgs and Jeanine Rhemtulla stayed during the repeat photography project research. We were also fortunate to have members of M.P. Bridgland’s family attend the opening (Figure 5.3).



Figure 5.1 Photographs from the opening of *Vantage Points* at the Jasper Yellowhead Museum and Archives, July 2003.

I arrived at the opening with an uneasy feeling. My eyes darted about the room, scrutinizing the scientific account of landscape I had produced in the exhibition. I was aware I was part of something in motion, as anthropologist Kathleen Stewart writes:

Imagine yourself standing not on the cleared ground of realist ethnographic description but an intensely occupied and imagined space fashioning an ‘object’ of analysis out of filled spaces, with the power to deflect and transform desire, to dramatize and fabulate, to stimulate and surround. Imagine yourself caught in the middle of things, tracking movements already in motion and the traces of remembered impacts (Stewart 1996:28).

Here I was, an anthropologist, an artist, a curator, a designer, and an RMRPP participant, trying to shape an object of analysis out of this space, trying to find out how this representation of the space and place of Jasper National Park is made meaningful. How would people respond to the photographs? How would viewers interact with the exhibition? What would be said about it? How did this representation of a scientific representation of a prominent Canadian National Park impact the various people standing around observing the images? How would the viewers locate themselves in this space and place through the exhibition?

Then it began to happen. I tracked a movement out of the corner of my eye while standing in front of the camera display with M.P. Bridgland’s son, Edgar Bridgland. Edgar was explaining to me how the theodolite, a survey tool that I had presented on the panel before us, was decidedly not the one that Edgar’s father had used to make maps. Edgar was attempting to explain something I couldn’t quite understand about a table and a level. I never totally comprehended the process of map-making even after writing an entire exhibition that was rooted in this not-so-simple pursuit. Out of the corner of my eye, I saw a penlight and a magnifying glass in the hand of a local historian, Bob Hallam.

“I have a suspicion there is a disturbance in this area,” I overheard Bob say to a small group as he gesticulated with his penlight and magnifying glass. The group was crowded around a pair of photographs from Morro Peak (Figure 5.2).



Figure 5.2  
Bob Hallam (right) tells a story using photographs from Morro Peak at the *Vantage Points* opening.

The photographs from the Morro Peak station were included in the exhibition because they showed a balance of ecological and cultural features in the Athabasca Valley. It was an image that had frequently been used by project scientists to evidence reforestation, and changing activity in the park, as it included various roads, rail lines and the river. It was the parting shot in the show, and had an aesthetic appeal as it had a hazy river tapering off into the distance. Bob continued, “This might be Adolphus Moberly’s house. It was right across the river from Isadore’s,” he searched with his magnifying glass around the photograph. Bob continued to tell stories about the various settlers, then turned his attention to the rail line and fur trader pathways. He illuminated these stories with his flashlight and focused in with his magnifying glass. The result — place unfolded before me.

What was particularly remarkable about this account was that none of the stories Bob told were found in the text on the walls, nor were they the stories that I had intended for people to read from the photographs. It became clear that everyone present at the opening was doing the same thing. They were participating in a kind of story making, as described by photo-historian Alan Trachtenberg:

To read an image is to write upon it, to incorporate it into a story. This is not to say that an image is a blank writing pad. There is something there to be seen, and we want to see it. We never (or rarely) read nakedly, however, it is always through a veil, the screen of previous interpretations, of intervening contexts or discourses, and of our own motives, hidden and known (Trachtenberg 1988:45).

The viewers of the exhibition looked at the background landscape experience that the exhibition produced and created their own personalized, inside, foreground landscape experience. They read the images and wrote upon them — and used the photographs for their own ends. As Amos Rapoport writes, “the meaning of many environments is generated through personalization — through taking possession, completing it, changing it” (Rapoport 1982:21). At the opening, visitors viewed, reacted and changed the spaces and places so that they provided no single meaning. The exhibition therefore provoked acts of vision whereby each viewer constituted for herself what was present in the exhibition, the photograph, and the space and place of JNP, and this varied greatly.



Figure 5.3  
The Bridgland family poses for a photo at the opening of *Vantage Points*.

The Bridgland family shaped their own foreground experience of landscape. The family members that attended the opening included M.P. Bridgland's son Edgar, Bridgland's niece, Marmie Hess, and Edgar's three children, Peggy, Janet and James. They came together from across North America, and as Janet writes in the comment book, the family made the exhibition the basis for a family reunion. They were most interested in M.P. Bridgland's part of the story and the way he was represented. Marmie Hess writes in the comment book, "Great memories of a patient teacher of the younger generation of the precious planet earth" (Figure 5.4) (comment book July 5, 2003). Conversations that I had with Edgar focused around memories of his father, survey techniques, and the 1915 photographs. The Bridgland family read/consumed the *Vantage Points* exhibition through their family history and memories, and they wrote their own

story onto the images. It was in this way that the family produced a local account from the scientific.

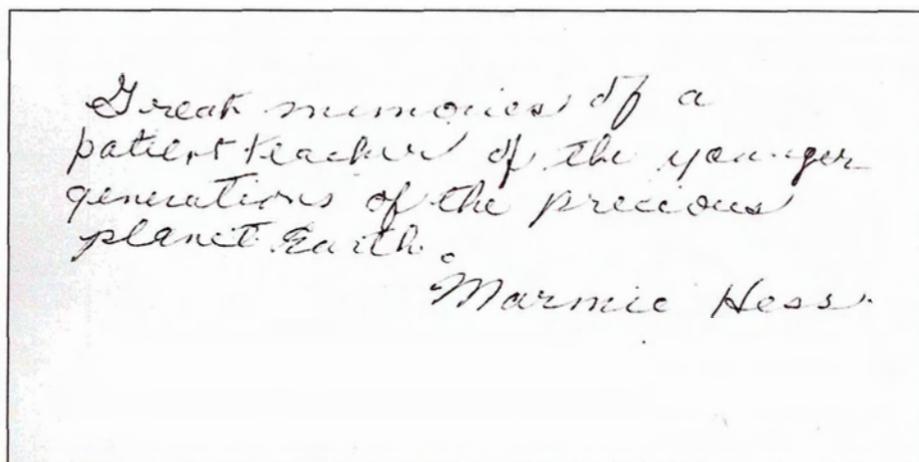


Figure 5.4  
Marmie Hess's entry from the *Vantage Points* Comment Book.

The locals from Jasper and Hinton who attended the opening looked at the images for recognizable features – a bike path, their houses, places they knew or thought they knew. There were as many responses as there were visitors that night, prompting me to write in my field notes:

Most people who knew the landscape placed themselves and their experiences into the photographs. People were attracted to what they knew in the images, and less interested in the overall text. The images seemed 'louder' than the text (field notes July 5, 2003).

Overall, visitors accepted the scientific narratives and photographs put on view in *Vantage Points*. Yet the viewers also produced their own narratives from the scientific account, re-using the images to tell other stories.

### Interviewing using *Vantage Points*

After the opening, I came to recognize the gallery space and exhibition, while creating a foreground landscape experience, became a place to elicit the resulting stories about the experience of the landscape of JNP. This prompted a series of interviews with people who had worked with the project. I had conducted interviews with project members Eric Higgs and Jeanine Rhemtulla in the fall of 2002, and I had ongoing conversations with project participants throughout the making of the exhibition. However, I decided to re-interview Higgs and Rhemtulla, as well as interview local historian Bob Hallam during the run of the show, in the summer of 2003<sup>2</sup>. Hallam was involved with the repeat photography project and had an interest in using the photographs for his own interest in the history of the region. These interviews took place in the gallery space as I explored what the exhibition produced through the viewers as an experience of landscape. I used the gallery as a springboard to elicit and evoke a distinct landscape experience in JNP.

---

<sup>2</sup> I interviewed Higgs and Rhemtulla, in part, as follow-up to an original set of interviews I conducted in 2002. As well, they were the two key members of the RMRPP. I wished to interview other RMRPP members, but could not co-ordinate interview times. Hallam was one of two historians in the area who I wished to interview, but was the only one available.

**Bob Hallam**

Figure 5.5  
Bob Hallam in the Showcase Gallery during interview in July 2003.

**Brule Lake:**

This is very interesting here, station number 91, Brule Lake II, because here we can see Roche Miette and this is Brule Lake, the south end of Brule Lake, and this is Ochre Canyon and you can see it was built... the whole east side of Brule Lake is pretty much sand dunes to this day, the kids go there quading. About two miles north of here is where the old park gates station is, and it is still standing although it is in a collapsed condition right now. But originally... the boundary of Jasper Park was out by Hinton and included a lot more territory, including this territory here, that's how this station got named Jasper Park. They had a hell of a time keeping this railway grade open because of the drifting sand. When they had to make a choice, when the two rail lines amalgamated to form the Canadian National, they decided they'd get rid of this line and they went to the Canadian Northern grade on the other side of Brule Lake... it goes through a tunnel right down here on Bedson Ridge (Hallam interview 2003).

I met Bob Hallam in the Showcase Gallery in August, 2003 (Figure 5.5). Hallam is a local historian whose has a strong interest in 19<sup>th</sup> century Jasper and surrounding areas. He says that, “a lot of people know my interests, they say ‘oh, there’s no history around here, what are you talking about?’ of course it’s pretty hard to tell those people that they’re just not informed.” The primary narrative that I encountered as Hallam walked through the exhibition was the depiction of the human history in the region. He provided detailed stories about fur traders, Métis homesteads, rail lines and place names. At times, the photographs became a starting point for his stories about human history of which there is no evidence of in the photographs. For instance, while we looked at the photographs from the Old Fort Point station, he told me a story about Prisoner of War (P.O.W.) camps that were in Jasper during the wars. He showed me where the camps would be located in the photographs. But Hallam did not use visual evidence of a P.O.W. camp in the photographs. In the 1915 photographs there is not yet a camp and in the 1990s photographs there is no longer visible evidence of a camp. Using the photographs Hallam tells a story of an event that happens between the times the two photographs were taken and is not visible in either photograph or narrative about the park. This is a good example of how photographs can be read – often what is invisible in the photographs becomes as important as what is visible. Anthropologist Elizabeth Edwards writes that, “the photograph isolates a single incident in history. It can make the invisible visible, the unnoticed noticed, the complex apparently simple and indeed vice versa” (Edwards 1992:7). As Hallam’s narrative shows, viewers can activate the photograph in the same way, making the invisible visible and the unnoticed noticed. As a person reads a

photograph and brings their experience, interests and knowledge to the reading, the content of the photograph is constituted.

Hallam consistently placed himself in the space and place of the park through the images. He discussed his own history in the region, and connected himself to the scientific account that he encountered through *Vantage Points*.

I worked for the Eastern Rockies Forest Conservation board in 1948. It existed as a working government body for about five years... we worked very closely with Alberta Forest... and Irvin Frew... We used Bridgland's maps for Southern Alberta. Irvin Frew used to work for Bridgland and told me that when they went out on a day's work doing the surveying, that the rule of the camp, laid down by Bridgland was, the first thing you do when you get to camp is you take your boots and your socks off and you wash your feet. And God help anyone who didn't... they were out the door (Bob laughs). It was an unforgiving rule (Hallam interview 2003).

Hallam placed himself in JNP by orienting himself in the landscape through the photographs. Standing in front of one of the first image/text panels in the *Vantage Points* exhibit, Hallam sited JNP through a photograph detailing an image with cemetery crosses, the river and a mountain in the background. As he tried to locate the photograph he said, "I've lived here for fifty years and when I see a mountain, it usually hits me like that". Most often JNP is easy to recognize for Hallam, yet in some cases these photographs undermined his understanding of the park. At one point he pulled out of his story telling to react to the photograph with the comment: "When you see these pictures like this you say to yourself, where the hell am I? Is this Jasper Park"? These photographs do not reflect the JNP that he can recognize.

As we walked through the exhibition, Hallam constituted the space and place of JNP with stories of human history. Hallam used the photographs to tell stories whether or not visually evidenced in the photographs, and sometimes the photographs undermined

his expectations about what JNP looked like. In this reading of JNP, a photograph is not a mirror held up to space and place reflecting it for all to see. Instead, it is a springboard to specific knowledge and ideas that, in turn, create a specific space and place of JNP.

### Jeanine Rhemtulla



Figure 5.6  
Jeanine Rhemtulla, RMRPP member in Waterton Lakes National Park, August 2003.

### Brule Lake

In the exhibition somewhere you mention how the physical vantage point is stable, but in this particular case the physical vantage point is not stable at all. I mean, you could tell the dunes had totally shifted and it was really bizarre to stand there and think, there should be a way to line this up, but I mean, the winds can shift and there can be a metre of new sand here where there was no sand before. And they were extremely difficult pictures to take... (Rhemtulla interview 2003).

Though the interview I conducted with Jeanine Rhemtulla in August 2003 was not in the Jasper Yellowhead Museum and Archives, we were able to use smaller reproductions to the exhibition panels and photographs for our discussion of the exhibition (Figure 5.6).

Jeanine made these photographs newly meaningful through a narrative of comparison between the landscape that she experienced while conducting the repeat photography, and the landscape that is represented in the photographs.

It's a funny thing to be looking at this exhibit... I think it's a couple of things. I mean partly I find myself as a viewer and just watching this whole exhibit and just reading it and being intrigued by the way you perceive the whole process and the story you have told about the stories we told you and this whole process. So, there's part of me that's the interested viewer. There's the scientist in me who's looking at some of the pictures and remembering again the incredible landscape change that we see in these pictures... (Rhemtulla interview 2003).

Her narrative is primarily about the feeling of being in place and how it stands in contrast to, or similar to what she experienced. For instance, Jeanine's reaction to the panorama of Old Fort Point:

When I stand on top of Old Fort Point, the landscape I see around me is panorama. But when I see it through the lens of the camera I see only this little 4 x 5"... I think in the past when I have looked at them (the photographs) and when I did the analysis, it was always individually (Rhemtulla interview 2003).

Likewise, Jeanine uses comparison between "being there" and looking at these photographs to structure her memory and experience on the repeat photography project, and to place herself in the space of JNP:

I can look at this picture, and look down at the railway bridge over the Snaring that's there and we have another station that's there (pointing) – so while I can look at the picture, I can also remember what it was like to stand on that bridge (Rhemtulla interview 2003).

The space and place of JNP for Rhemtulla is directly related to the making of the photographs. This photographic record is like a diary, a springboard for her experiences. For Rhemtulla, there is an association between the memory of being there and the photograph produced and circulated in the exhibition. Rhemtulla's experience with the photographs is therefore an embodied one, a "being-in-the-world – that is, the existential and phenomenological reality of place: its smell, feel, color, and other sensory dimensions". Embodied space - lived experience, spatial orientation and movement (Low and Lawrence-Zuniga 2003:2) - are central to Rhemtulla's storytelling through the photographs about space and place in JNP.

### Eric Higgs



Figure 4.7  
Eric Higgs in the Showcase Gallery during interview, August 2003.

#### Brule Lake

We had quite a time finding it... I like them because... my constructed image is that this is not Jasper National Park, it is outside the park. It is legally outside the park. Yet in Bridgland's time, presumably it was the Forest Reserve and it extended out to there. That's something really interesting because he would have seen it as part of the area that he was surveying, obviously, right? To my mind it is something outside of the park (Higgs interview 2003).

I interviewed Eric Higgs in the Showcase Gallery in August 2003. In a manner that echoed Rhemtulla's account, Higgs's narrative during the interview tacks between the personal experience in creating the photographs and the photographs themselves. At points in the interview, it became clear that the space and place that is represented in the exhibition was not the JNP that Higgs previously understood, and like Bob Hallam, Higgs took a few moments to orient himself to some of the landscapes. For instance, he finds "these photographs of Old Fort Point quite disorienting, the landscape has so profoundly changed".

In contrast, there was also a prominent narrative about "being there" and like Rhemtulla, Higgs produced an embodied experience of the photographs. Many of the stories that Higgs told about the space and place of the park conjured up specific days, climbs and experiences. About the Henry House set of photographs, Higgs says:

Jeanine and I went back to this Henry House site I don't know how many times to find the exact location... we spent hours out there... this one marker tree I am convinced this dead tree (pointing) is actually this tree here (pointing) (Higgs interview 2003).

Another primary narrative was about the photographs as data. Higgs is fascinated by the capacity of the photographs to answer specific questions. He creates a technical narrative about the capability of the photographs:

A small disappointment about this image is the cloud cover over Pyramid at this moment because there's that telecommunication tower that's sort of one of the prominent changes in the landscape... you can see this in other Pyramid shots... (Higgs interview 2003)

In talking about the Cinquefoil Station he states:

This is a remarkable dune complex along Jasper Lake and I think this pair of photographs... would be just a wonderful pair of photographs to do some intensive

study of the changes along Jasper Lake and of course the formation of Talbot Lake. The wetland complex is really impressive along here. I am fascinated by these photographs... let's say you're an aquatic biologist... and you are interested in studying Talbot Lake area changes. Once you have the high-resolution images and you have the capacity to manipulate these digitally and so on, you could zoom in and say, 'I really want to know about vegetation composition on the dune's surface here or, I want to know the exact alignment with the railway versus the highway'. It becomes quite powerful that way, once you have the specific question (Higgs interview 2003).

As an embodied experience of the photographs, Higgs represents JNP through as a relationship between the photograph as an event and the photograph as data. Like Rhemtulla, Higgs creates an embodied space, where:

We transform experience to symbol and then remake experience into an object, such as an artifact, a gesture, a word. We use objects to evoke experience thus, molding experience into symbols and then melding symbols back into experience (Low and Lawrence-Zuniga 2003:5).

Likewise, Higgs transformed his experience of JNP into a photograph and then in the gallery space used the photograph to evoke "being-in-the-world" (Low and Lawrence-Zuniga 2003:5), the space and place of JNP. Higgs' interest in data is equivalent to the creation of symbols – a way to *articulate* the space and place of JNP - he then melds back into an *understanding* of the space and place of JNP

The three interviews demonstrate the multiple stories that emerge from one (scientific) account of the space and place of JNP: *Vantage Points*. Each of the participants in the interview created a different idea of the space and place of JNP from the scientific photographs and narratives. In all three interviews the photographs from the Brule Lake station prompted personal recollections. Brule Lake is at once:

1. a location, "About two miles north of here is where the old park gates station is, and it is still standing although it is in a collapsed condition right now" (Hallam interview 2003);

2. a springboard to memory, where “it was really bizarre to stand there and think, there should be a way to line this up, but I mean, the winds can shift and there can be a metre of new sand here where there was no sand before. And they were extremely difficult pictures to take” (Rhemtulla interview 2003);
3. and a definition as “my constructed image is that this is not Jasper National Park, it is outside the park. It is legally outside the park. Yet in Bridgland’s time, presumably it was the Forest Reserve and it extended out to there” (Higgs interview 2003).

Through these multiple narratives about the photographs it is evident that “we never look at just one thing; we are always looking at the relationship between things and ourselves” (Berger 1972:9). Here the three narratives attest to the emergence of a relationship between the landscape of JNP and the individual self through photographs.

### **Complicating the view of JNP through *Vantage Points***

In the multiple narratives that I investigated through the opening and the interviews, viewers locate themselves differently in JNP, and each embraces and produces a different understanding of the park space and place because of such diverse personal realities, or foreground experience. In the exhibition, the scientific photographs and accompanying narratives are made newly meaningful over and over. This varied understanding depended on the viewer’s relationship to the scientific narrative or the park space itself, whether they are Bridgland’s family, RMRPP members, tourists that write in the comment book, or locals. Eric Hirsch would characterize these multiple narratives produced through the exhibition as stimulating a foreground actuality, “the context and form of everyday, unreflexive forms of experience” (Hirsch 1995:4). This insider account

of landscape experience is located on an opposite pole to the background landscape experience (Figure 2.1). Hirsch separates the landscapes as:

the landscape we initially see and a second landscape which is produced through local practice and which we come to recognize and understand through fieldwork and through ethnographic description and interpretation (Hirsch 1995:2).

Applying this idea to the exhibition, the landscape we initially see is experienced through the production and circulation of the scientific narrative - it is a background landscape. Local practice, Hirsch's second landscape experience – foreground, then blends with the scientific narrative. Or characterized a different way, the viewer's consumption of the exhibition is within Hirsch's background experience – what can be understood as a separate and detached landscape experience that the exhibition produced - and attaches it to real, lived experience, the foreground.

As the exhibition reattaches the inside landscape experience to the scientific account of landscape, it complicates the view of a clear scientific account. The insider account exposes competing discourses, alternative readings and multiple themes found in the photographs and narratives.

### **Interrupted Viewing**

Like a glass plate from the 1915 account that has been broken or cracked (Figure 5.8), or an image doesn't load onto the website (Figure 5.9), or the computer loading the wrong comparison (Figure 5.9), the ideal, imagined, objective space and place of JNP (the background) is ruptured by the competing discourses and multiple accounts that *Vantage Points* produces.

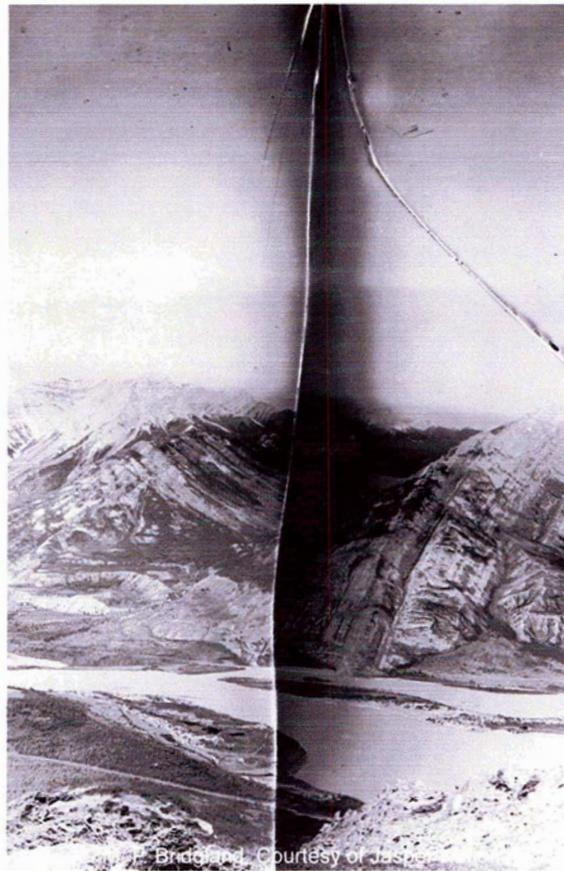


Figure 5.8  
M.P. Bridgland 1915. Cinquefoil station. Digital scan of glass plate reproduction taken from the RMRPP website.

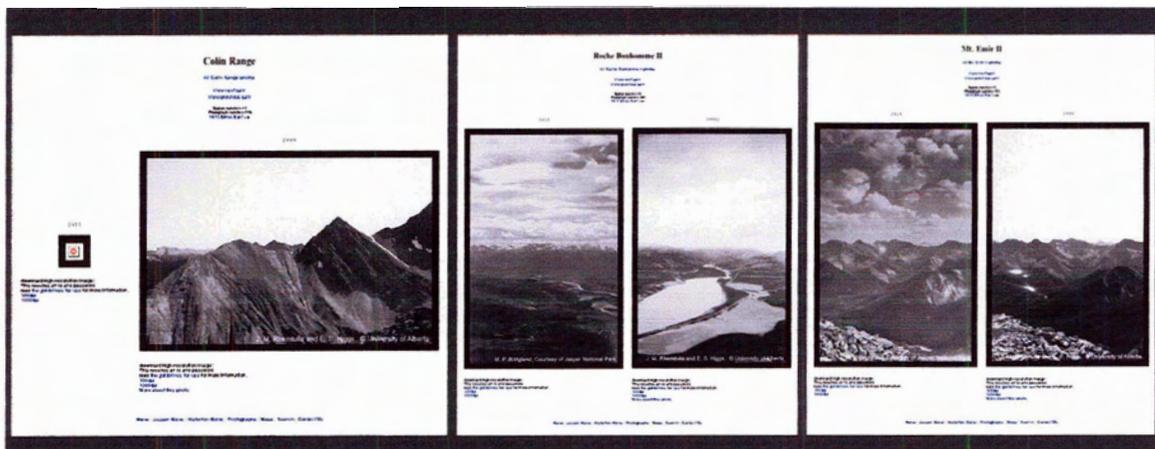


Figure 5.9  
Images from the RMRPP website. Some links are broken (left), the wrong sets are set in a comparative structure (middle) and negative damage (right) each bring the viewer to the awareness of the act of looking and the contrived nature of the photographic representations.

During the act of viewing a broken glass plate online, or viewing a broken link or wrong sets in comparison, the medium of display – a website on a computer – becomes more visible. Rather than delivering the space and place of JNP, this type of viewing delivers a glass plate photograph, or a website (Figure 5.9). These encounters or interruptions reveal the act of looking and we become conscious of our own viewing. This undermines the seamless view of photography that has been naturalized through time and culture as Roland Barthes articulates, “whatever it grants to vision and whatever its manner, a photograph is always invisible: it is not it that we see” (Barthes 1981:6). As the broken glass plate contaminates our view it creates an unclear message and reveals the ambiguous nature of the images.

In *Vantage Points* the scientific narrative is interrupted by the act of looking at the images in the gallery setting. The result of looking - the multiple personal, insider accounts - stand between the viewer and the background scientific narrative. This position between opens up a space for maneuver<sup>3</sup> (Chambers 1991:xi) and results in the entrance of new narratives. As the interactive public space of *Vantage Points* creates such movement, it also results in a place for the viewer to come into contact with the multiple narratives. For example, the comment book featured statements that illustrate a debate about wilderness spaces, “Trudi... we found this exhibition very interesting. We were constantly debating whether the environment was “better” eighty years ago” (Comment Book August 2003).

---

<sup>3</sup> Ross Chambers develops “room for maneuver” to be “that space of ‘play’ or ‘leeway’ in the system that oppositionality arises and change can occur” (1991: xi).

The multiple narratives initiated from the singular scientific account create an ambiguous experience of JNP as accounts contradict one another, re-direct our ideas about national parks, and complicate our clear view of the park that was created through the scientific view. Ultimately *Vantage Points* creates access to this foreground experience of landscape and as a result reveals the complicated space and place that is JNP. This experience — no longer Hirsch's background of cultural imagining and representation — forces open a view of the everyday foreground reality of the image, consequently exposing its various meanings and unstable position as evidence. Yet this blending between foreground and background is a sort of freedom, allowing for space to maneuver, for access to the complex space and place that is JNP, to contemplate values about wilderness and landscape in Canada; whether this is a story of change, of Métis farm sites, about being there, about family, or a story about the landscape produced by an MA student project looking for responses to an exhibition about scientific photography.

## Chapter 6: Conclusions – Locating a Sense of Place

And academics can – temporarily – leave their ivory towers and join in. The legitimate boundaries for academic involvement are not clear-cut. But, just as the past cannot be unhooked from the present, so academia cannot be unhooked from the larger body politic. Passively or actively we are involved. We might as well be active... We might as well play a part in creating, to adapt Foucault's terminology, a 'counter-archaeology of social knowledge' (Bender 1999:171).

Art is necessary to society as the sun is to nature, for it sheds light, to paraphrase Gauguin, on who we are, where we come from and where we are going (Grande 1994:2).

There are two results from this research. First, it is a documentation of scientific discourse about photographic images of the space and place of Jasper National Park. I investigated how the exhibition *Vantage Points* reflects a chronology of scientific discourse. In the 1915 account, JNP is a wilderness of potential and a space and place considered static and pristine. In the 1990s account JNP is an active space and place undergoing change. Despite their contradictory appearances, the two accounts are in fact part of the same scientific discourse. The photograph is utilized as evidence in the scientific way of knowing and shares its history. Science and photography are therefore intertwined. In *Vantage Points*, I used these scientific narratives and photographs to formulate a storyline. As a result, I produced and circulated a landscape experience closest to Hirsch's idea of background potentiality, an experience that is considered rational, objective, and as a result, a landscape experience beyond the everyday.

The second result of this research was the creation of a new social discourse about the images. I observed and recorded details about viewers' interactions with *Vantage Points*, and used these observations and subsequent interviews to illustrate new understandings of the space and place of JNP as they were produced through the

presentation of *Vantage Points*. While interacting with the exhibition space where I had produced a landscape experience closest to Hirsch's idea of background potentiality (a detached view) the scientists and the public created a landscape experience closest to Hirsch's idea of foreground actuality (a view from the inside) or new articulation about place through their individual narratives. As each viewer creates her or his own narratives while looking at these scientific images, the photographs literally become worth at least a thousand words. The visual has a different value than text and viewers are able to produce knowledge from the space and place of JNP through the photographs. In part, this results from the status of the visual in western culture, "associated with intuition, art and implicit knowledge" (Scherer 1995:32). The exhibition therefore offered something that a text version of the same information about the space and place of JNP could not.

Thus the exhibition and by extension this thesis achieves, I would contend, the goals of visual anthropology. It is an attempt to open up ethnographic/scientific photographic accounts through an examination of varying contemporary experiences. The exhibition provides a social space to write and speak about the photographs and the space and place of JNP. This is an alternative to traditional anthropological research, and I consider it a release from the closed loop of academia. Accounts such as the one derived from producing, circulating and consuming *Vantage Points* reach beyond interested academic parties to a wider audience.

To return to Hirsch's discussion of landscape experience, he proposes that the relationship that exists between the foreground and the background poles of experience is landscape in a culture (Hirsch 1995:5). According to Hirsch, the emergence of landscape is cultural process. This tension between the foreground and background, between actual

and potential and between the everyday and experience beyond the everyday is revealed and experienced (and realized) through the exhibition. The foreground pole (personal, insider accounts) mix with the background pole (scientific, official accounts). Simply, the tension between the scientific discourse and the social discourse, or the account I put on display and the interactions and reactions to it, becomes landscape. Or as anthropologist Keith Basso would say, a sense of place.

Missing from the discipline [of anthropology] is a thematized concern with the ways in which citizens of the earth constitute their landscapes and take themselves to be connected to them. Missing is a desire to fathom the various and variable perspectives from which people *know* their landscapes, the self-invested viewpoints from which...they embrace the countryside and find the embrace returned (Basso 1996:54).

If Basso is right, anthropologists need to find new viewpoints and variable perspectives to locate people's sense of place. I contend the *Vantage Points* exhibition locates a sense of place by providing a space for individuals to interact with scientific photographs and narratives — the key documents in shaping ideas about landscape in JNP. This research was not only an analysis of the photographic material and ethnographic photographs of the space and place of JNP, but an active creation a new space to engage with the various understandings of the space and place of JNP. The comment book, the interviews, my observations, the gallery space itself, created a space and a means for the public to respond and to be heard (Bender 1999:171). I observed a transition between the background landscape that the exhibition offered, to viewers creating their own foreground view of the same space and place. The result – a blend between background and foreground experience – was landscape.

My research has shown that the way people respond to place through photographs is as varied as the way they might experience being in place itself. At the same time, I

have shown that visual images inscribe space and place as much as they are inscribed by space and place. In the exhibition, it is the narratives about wilderness, process, data, home, Jasper National Park that inscribe, and are inscribed by space and place. As the two landscape experiences, foreground actuality and background potentiality “exist in a process of mutual implication” (Hirsch 1995:23), so too do the aforementioned narratives (wilderness, process, data, home, Jasper National Park) mutually implicate each other. The mutual implication – for example between scientific accounts and the resulting consumption in *Vantage Points* – produces a varied and changing landscape experience. The mutual implication is culture, landscape, sense of place. As such it is important to study these experiences as I do in this thesis. I consider this experiment in anthropology – the exhibition – a success as it takes a scientific and historical account and recirculates it into real time and current interactions. Therefore, as the exhibition engages with the idea of cultural process, it also becomes a part of it, returning “the embrace of place” (Basso 1996:54). In this way, this research is ethnographic as it examines the photographic record of JNP and subjects it to contemporary analysis using methods that are both product (writing) and process (fieldwork) (Sanjek 2003:193). The exhibition is active, it is “the building blocks and testing grounds of anthropological theory” (Sanjek 2003:193).

In looking at the varying stories about JNP it becomes clear that broader sources of information, such as those derived from the exhibition space could be used to better understand the complex nature of both photographic images and national parks. The exhibition offers an alternative to gain understanding about the meaning of space and place in Canada. This information could be used to enrich our understanding of the complex meaning of these important spaces in Canadian culture.

### **Limitations of research**

When I began my MA studies in January 2002, I was looking for a way to use visual methods to gain a greater understanding of space and place in Jasper National Park. Despite the fact that they can be difficult waters to navigate, interdisciplinary scholarship was a way to bring together diverse yet related perspectives and methods to critically engage with both the photographs and the narratives that were attached to them. I chose to produce and at the same time investigate an exhibition yet there was no straight-forward approach to this research. Therefore, while curating *Vantage Points* I drew on numerous disciplines and literatures, none of which offered a clear method or approach to this study. As a result I blended the literatures from humanities, social science, art, and museum studies. At the end of this study, it seems clear that some of these literatures and methods were more useful than others. As a method I chose an ethnographic approach to answer my research questions and I spent much of the next year learning how to be a good ethnographer -- how to remember that I was "in the field", to look at competing discourses, relationships between people and images. The exhibition became a visual manifestation of these forms of cultural production and my learning process itself. It seems clear that this approach, ethnographic field work, was the most suitable for the questions I wanted to answer. Yet as I was still learning an ethnographic approach there were some limitations in how this research was conducted. Future research using exhibitions as field sites should include a more defined approach to interviewing and recording narratives. Conducting more interviews and recording more field notes during the production would likely have produced a more complex and thorough reading of the exhibition. Given more time and planning, I certainly would have

conducted more interviews in the exhibition space, the result of this would have been a more diverse set of narratives about the space and place of JNP. Of these interviews, I would have included accounts from other researchers on the project as well as other key locals.

### **Future research**

Hirsch claims that representation (i.e. photographs, painting etc.) are located in the background of landscape experience. To him, this is a formalized and absolute position that can only achieve momentary coherence in the human world of social relationships before receding into its background location (Hirsch 1995:22). In this research I show that it is an interaction with the background – representation - that allows for the entrance of foreground experience. Yet, are experiences of landscape representation (i.e. photographs of a landscape) always background? Can there be an inside account about space and place that is derived from representation (for example, a visual project that somehow addresses the formalized, objective space of photographs)? I believe that an inside account of space and place — a foreground experience of landscape — can be produced through forging a connection between a critical visual art and social research.

The production of *Vantage Points* lacked critical engagement with the scientific account. Though I argue that the act of looking at *Vantage Points* provoked tensions between foreground and background experience resulting in a particular landscape, the actual physical production of *Vantage Points* did not provoke tensions between these two landscape poles. Rather, the exhibition re-produced the relationship that North Americans/Europeans have with scientific accounts. It harnessed the photograph

uncritically and used the panorama and scientific discourse to unravel the story of research and image-making in JNP. Attempts to find anyone who responded with doubt about the truthfulness of the account are fruitless. The comment book, the opening, the interviews each lay on view a complete belief in the account of space and place. Beyond a few questions about proper credit, there were no comments that undermined the way the story was told. In fact, there were blatant mistakes in the exhibition<sup>1</sup>, that, even when brought to the attention of viewers did not undermine the seamless account produced in the rest of the show. This limitation of the account as a background landscape experience is expressed here through the customs by which people view and comment upon exhibitions. The account I produced is part of a background landscape experience.

A critical art practice using historical and contemporary accounts can radically create or transform our beliefs about a story, in this case, a place. This will expose the tensions between what we imagine and what we see, between history and the right now, between mandates to protect the ecology of parks and the day-to-day reality of parks as places of use and recreation. It can expose the tensions between knowing – as mediated by representation, and knowing – by being out there in a place. As part of this critical art practice it is necessary to engage with art, and, in my interest, photography and film, through what visual anthropologist Anna Grimshaw has characterized as a “recovery of vision.” This is a style of account making (Grimshaw is talking about documentary filmmaking) that emphasizes intersubjective storytelling as a way to derive knowledge about a place as opposed to scientific narratives that claim rational objectivity while

---

<sup>1</sup> The Métis farm shown in the Palisades panorama is in fact some sort of rail yard. This fact was pointed out/noticed on the first day of the exhibition by local historian Tom Peterson.

recording space (Grimshaw 2001, Feld 2003). This style of account seeks to create a new way of seeing in order to know the world differently

To some art theorists, the need for a new way of seeing is connected to a conflict between nature and culture. In the introduction to his book, *Balance: Art and Nature*, John K. Grande criticizes current environmental art practice, and:

Any attempt to discover the dark heart of real creativity must involve a redefinition of human culture within the context of nature. Meanwhile, nature remains oblivious, yet intensely affected by human endeavour. It is now up to us to regenerate our social and environmental landscape, to adapt ourselves to it in more provocative, new and varied ways. It is only by a radical reinterpretation of the terms nature and culture that art will find new avenues for regeneration (Grande 1994:5).

The idea that a radical reinterpretation of nature and culture is crucial to art, parallels ideas from the environmental sciences about our conflicted relationship with nature. In environmental science the bringing together of such disciplines as history and art, geography and art, restoration and art, and ecology and art is fast becoming a new strategy in thinking about and acting towards space and place. Each discipline can learn from the other. Art can use social science to investigate the meaning of nature and culture and environmental science can use art to expand ways of knowing about space and place. Art is considered a separate way of knowing from science (Young 2001:95), and as Robert F. Sayre writes in the Introduction to *Recovering the Prairie*, numerous perspectives are important so that we can begin to see place differently. The research in this book focuses on the premise that how we see a place effects our action towards it. Art, as a different way of knowing, can help forge a different type of connection between how space and place is seen and used. As a result, Sayre contends that new strategies are needed to envision place.

All this research is interdependent, each activity benefits the others. The early surveyors' records of the plants that were growing in a certain place help the restoration ecologist, and the ecologist, in turn, can help the reader of the documents to identify and actually see the plants and animals named in them. Thus does the slow and yet exciting process of imagination and recovery go on and on (Sayre 1999: 4).

The process of imagination and recovery encourages and relies on multiple disciplines and multiple ways of knowing. Art can serve to enhance ways of knowing about the world and through art we can know the world differently.

The exhibition hinted at the idea of knowing the world differently. While it broke down the boundaries between “photography-as-art/photography-as-science/photography-as-technology” (Schwartz and Ryan 2003:18) it released the account for an exploration of the contemporary meaning in Canada of space and place. Most simply, the exhibition *Vantage Points* revealed what appears to be radical environmental change in a Canadian national park that is imagined to be stable and unchanging, allowing for an analysis of scientific photographs in Canada. Most complexly, it revealed and was witness to a layered, complex and multivocal testament of place. *Vantage Points* enables new ways to know the place of JNP, and these new strategies for knowing create a starting-point for the process of imagination and recovery.

## REFERENCES CITED

- Banks, Marcus and Howard Morphy  
 1997 Introduction: Rethinking Visual Anthropology. In *Rethinking Visual Anthropology*. Marcus Banks and Howard Morphy, eds. Pp. 1-35. New Haven and London: Yale University Press.
- Banks, Marcus  
 2001 *Visual Methods in Social Research*. London: Sage.
- Barthes, Roland  
 1981 *Camera Lucida: Reflections on Photography*. New York: Hill and Wang.
- Basso, Keith H.  
 1996 *Wisdom Sits in Places: Notes on a Western Apache Landscape*. In *Senses of Place*. Steven Feld and Keith H. Basso, eds. Pp. 53-90. Santa Fe: School of American Research.
- Bender, Barbara  
 1998 *Stonehenge: Making Space*. Oxford: Berg.
- Berger, John  
 1972 *Ways of Seeing*. London: Penguin Books.
- Birrell, Andrew  
 1996 *The North American Boundary Commission: Three Photographic Expeditions, 1872-74*. *History of Photography* 20:113-212.
- Bridgland, Morrison Parsons  
 1917 *Description of and Guide To Jasper National Park*: Ottawa: Department of the Interior.
- Bridgland, Morrison Parsons  
 1915 *Land Survey Diary Jasper National Park*: Government of Canada.
- Bridgland, Morrison Parsons  
 1924 *Photographic Surveying*. Department of the Interior, Canada. Bulletin No. 56. Ottawa: FA Ackland, Printer to the King's Most Excellent Majesty.
- Bridgland Repeat Photography Project/Rocky Mountain Repeat Photography Project  
 2003 *The Bridgland Repeat Photography Website*. Electronic document, <http://bridgland.sunsite.ualberta.ca/index.html>, accessed January 2004.
- Carter-Edwards, Dennis  
 1997 *The History of National Parks in Ontario*. In *Changing Parks: The History*,

Future and Cultural Context of Parks and Heritage Landscapes. John S. Marsh and Bruce W. Hodgins Eds. Pp. 94-106. Toronto: Natural Heritage/Natural History Inc.

Chambers, Ross

1991 *Room For Maneuver*. Chicago and London: University of Chicago Press.

Crimp, Douglas

1999 *The Museum's Old/The Library's New Subject*. In *The Contest of Meaning Critical Histories of Photography*. Richard Bolton, ed. Pp. 3-13. Cambridge: MIT Press.

Cronon, William

1996 *The Trouble with Wilderness; or, Getting Back to the Wrong Nature*. In *Uncommon Ground*. William Cronon ed. Pp. 69-90. New York: WW Norton & Company.

Duncan, James and David Ley

1993 *Introduction: Representing the Place of Culture*. In *Place/culture/representation*. Duncan, James and David Ley eds. Pp.1-21. London; New York: Routledge.

Edwards, Elizabeth

1995 *Introduction*. In *Anthropology and Photography, 1860-1920*. Elizabeth Edwards, ed. Pp. 3-15 London: Royal Anthropological Institute.

Feld, Steven

2003 *Introduction*. In *Cine-ethnography*. Jean Rouch and Steven Feld. Minneapolis: University of Minnesota Press.

Francis, Daniel

1997 *National Dreams: Myth, Memory, and Canadian History*. Vancouver: Arsenal Pulp Press.

Grande, John

1994 *Balance: Art and Nature*. Montreal: Black Rose Books.

Grimshaw, Anna

2001 *The Ethnographer's Eye: ways of seeing in anthropology*. Cambridge: Cambridge University Press.

Higgs, Eric

2003 *Nature By Design, people, natural process and ecological restoration*. Cambridge: MIT Press.

Higgs, Eric, Sandy Campbell, Ian Maclaren, Julian Martin, Carol Murray, Andie Palmer and Jeanine Rhemtulla.

1999 Culture, Ecology and Restoration in Jasper National Park. Report from Culture, Ecology and Restoration: An Interdisciplinary Research Project (available at [www.arts.ualberta.ca/~cerj/cer.html](http://www.arts.ualberta.ca/~cerj/cer.html)).

Hirsch, Eric

1995 Introduction: Landscape: Between Place and Space. *In* The Anthropology of Landscape: Perspectives on Place and Space, Eric Hirsch and Michael O'Hanlon eds. Pp. 1-29. Oxford: Claredon Press.

Hyde, Ralph

1988 Panoramania! The art and entertainment of the 'all-embracing' view London: Barbican Art Gallery/Trefoil Publications.

Ingold, Tim

1993 The Temporality of the Landscape. *In* World Archaeology. Volume 25:2. Pp. 152-174.

Jakle, John

1987 The Visual Elements of Landscape. Amherst : University of Massachusetts Press.

Jasper Yellowhead Museum and Archives Website

2004 <http://asalive.archivesalberta.org:8080/access/repos/rep/display/JAS>. Accessed January 2004.

Jones, Bernard E.

1974 Panoramic Camera, Panoramic Views. *In* Encyclopedia of Photography. New York: Arno Press.

Kirby, Lynne

1997 Parallel Tracks: The Railroad and Silent Cinema. Duke University Press: Durham.

Limerick, Patricia

1992 Second Views and Second Thoughts. *In* Revealing Territory, a collection of landscape photography by Mark Klett. Pp. 90 - 110. Albuquerque: University of New Mexico Press.

Low, Setha M. and Denise Lawrence-Zuniga

2003 The Anthropology of Space and Place: locating culture. Malden: Blackwell Publishers.

Low, Setha M. and Denise Lawrence-Zuniga

2003 Introduction: Locating culture. *In* The Anthropology of Space and Place: locating culture. Pp. 1-47 Malden: Blackwell Publishers.

Marsh, John S.

- 1998 Introduction. *In Changing Parks: The History, Future and Cultural Context of Parks and Heritage Landscapes*. John S. Marsh and Bruce W. Hodgins Eds. Pp. xiii - I. Toronto: Natural Heritage/Natural History Inc.
- MacDougall, David  
 1997 The visual in anthropology. *In Rethinking Visual Anthropology*. Marcus Banks and Howard Morphy eds. Pp. 276-295. New Haven and London: Yale University Press.
- MacLaren, Ian  
 1999 Cultured Wilderness in Jasper National Park. *Journal of Canadian Studies* 34(3): 7-58.
- Mitchell, W.J.T.  
 1994 Introduction. *In Landcape and Power*. W.J.T. Mitchell ed. Pp. 1-4. Chicago: University of Chicago Press.
- Oxford English Dictionary  
 2004 *Theodolite* Oxford University Press. Electronic document <http://80-dictionary.oed.com.ezproxy.library.uvic.ca/entrance.dtl>. Accessed June 2004.
- Sanday, Peggy Reeves  
 1988 The Reproduction of Patriarchy in Feminist Anthropology. *In Feminist Thought and the Structure of Knowledge*. Mary Gergen ed. Pp. 49-68. New York: New York University Press.
- Pinney, Christopher  
 1992 The Parallel Histories of Anthropology and Photography. *In Anthropology and Photography, 1860-1920*. Elizabeth Edwards, ed. Pp. 74-91. London: Royal Anthropological Institute.
- Pink, Sarah  
 2001 *Doing Visual Ethnography: Images Media and Representation in Research*. London: Sage.
- Rapoport, Amos  
 1982 *The Meaning of the Built Environment*. Beverly Hills: Sage.
- Rhemtulla, Jeanine  
 1999 Eighty Years of Change: The Montane Vegetation of Jasper National Park. Unpublished M.Sc. Thesis. Department of Renewable Resources, University of Alberta.
- Rhemtulla, Jeanine, Ronald J. Hall, Eric S. Higgs, S. Ellen Macdonald.

- 2002 Eighty Years of Change: vegetation in the montane ecoregion of Jasper National Park, Alberta, Canada. *Canadian Journal Forestry Resources* 32:2010-2021.
- Sanjek, Roger  
1996 *Ethnography*. In *Encyclopedia of Social and Cultural Anthropology*. Alan Barnard and Jonathan Spencer, eds. Pp. 193. London: Routledge.
- Sayre, Robert  
1999 *Recovering the Prairie*. Madison: University of Wisconsin Press.
- Scherer, Joanna Cohen  
1992 *Photographic Document: Photography as Primary Data in Anthropological Enquiry*. In *Anthropology and Photography, 1860-1920*. Elizabeth Edwards, ed. Pp. 32-41. London: Royal Anthropological Institute.
- Scherer, Joanna Cohen  
1995 *Ethnographic Photography in Anthropological Research*. In *Principles of Visual Anthropology*. Second Edition. Paul Hockings, ed. Pp. 201-216. Berlin and New York: Mouton de Gruyter.
- Schwartz, Joan M. and James R Ryan.  
2003 *Introduction: Photography and the Geographical Imagination*. In *Picturing Place: Photography and the Geographical Imagination*, Joan M. Schwartz and James R. Ryan eds. Pp. 1-18. London and New York: I. B. Tauris & Co. Ltd.
- Searle, Rick  
2000 *Phantom Parks: The Struggle to Save Canada's National Parks*. Toronto: Key Porter Books.
- Sontag, Susan  
1977 *On Photography*. Toronto: McGraw-Hill Ryerson Ltd.
- Smith, Trudi  
2003 *Vantage Points: Scientific Photography in Jasper National Park*. Exhibition July – October 2003.
- Stewart, Kathleen  
1996 *A Space on the Side of the Road: cultural poetics in an "other" America*. Princeton: Princeton University Press.
- Trachtenberg, Alan  
1989 *Reading American Photographs: Images as History Mathew Brady to Walker Evans*. New York: Hill and Wang.
- Trachtenberg, Alan

1988 From Image to Story: Reading the File. *In Documenting America, 1935-1943*, Carl Fleischhauer and Beverly Brannan eds. Pp. 43-73. Berkley: University of California Press.

UNESCO

1993[1983] Nomination to the World Heritage List. ID 204. Electronic document. [whc.unesco.org/pgcfm](http://whc.unesco.org/pgcfm), accessed September 29, 2004.

Webb, Jenaya

2003 *Imaging and Imagining: Mapping, Repeat Photography, and Ecological Restoration in Jasper National Park*. Unpublished M.A. Thesis. Department of Anthropology, University of Alberta.

Wheeler, Arthur

1920 *The Application of Photography to the Mapping of the Canadian Rocky Mountains*. *Canadian Alpine Journal* XI: 76-96.

Wilcox, Scott B.

1988 *Unlimiting the Bounds of Painting*. *In Panoramania! The art and entertainment of the 'all-embracing' view*. Ralph Hyde ed. Pp. 13- 44. London: Barbican Art Gallery/Trefoil Publications Ltd.

Young, James O.

2001 *Art and Knowledge*. London and New York: Routledge.

Zezulka-Mailloux, Gabrielle

2003 *From the Ground Up: Contouring the World of M.P. Bridgland*. Unpublished manuscript, Department of English, University of Alberta.