Abstract

Located within the Northern Great Plains, with an area that intersects the provinces of Alberta, Saskatchewan, and Manitoba, Palliser’s Triangle is the driest region in the Canadian Prairies. This arid expanse, first reported by early explorers of the North American West and later mapped and confirmed by the Palliser Expedition Report of 1860, holds an important place in Canadian geography. This research asserts that the colonization of Palliser’s Triangle was more than simply putting people on land that “should never have been broken” (Gray 1967: 7); it involved the systematic production of normality through multiple political technologies. This critical analysis unsettles Palliser’s Triangle through an investigation of nature’s normalization. I employ Foucault’s conception of normalization and its hallmark, homogenization through individualization, to re-politicize Palliser’s Triangle’s colonization and settlement. Normalization, I argue, was produced through the individualization of nature, a shift of the spotlight from a delineated problem region to illuminate identifiable and locatable problematic farms and individuals. In doing so, individual parcels of land and the character of male farmers who managed them were made increasingly visible, strategically shifting attention away from the larger political economy of dry-land settlement. The triangulated “micro-physics” (Foucault 1977: 26) of the ‘soul,’ space, and the norm in Palliser’s Triangle settlement pitted the multiple forces of individualization against myriad forces that resisted being individualized including various Aboriginal peoples, male farmers, women farmers, soils, climate factors, weather patterns, flora, and fauna. This research illuminates the exercises of power that enabled and maintained a precarious settlement in the dry-land prairies despite nature’s resistance.
Acknowledgments

I wish to thank my supervisors Fiona Mackenzie and Simon Dalby for their continued support, patience, and inspiration. While their paths took them away from Ottawa to other locations, they have continued to assist me in my endeavours. Committee member Michel Hogue has also been invaluable to this process and has offered much guidance and encouragement. I would like to thank the Department of Geography and Environmental Studies for the funding and teaching opportunities it has provided me over the years. If I had not been accepted as a qualifying-year Master’s student, or PhD fast-tracked, I would not be where I am today. I would like to thank the administrative staff of DGES Carleton, and especially Natalie Pressburger, who has always given me excellent help, guidance, and support in navigating rules and procedures of graduate studies. In terms of financial support, I would like to thank the Government of Ontario for providing me with years of financial assistance through the Ontario Graduate Scholarship program.

Finally, this research is dedicated to my wife Karin and my daughter Sigrid. Without their love and confidence I could never have accomplished this immense task. Karin pushed me forward when I felt like giving up, supported this project both financially and in principle, and created the conditions for my success. Sigrid has inspired me to make her proud, to never stop reading and learning, and to put love and family above all else.
Table of Contents

Introduction 1

Chapter 1  Power, Normalization, and Nature 23

Chapter 2  The ‘Soul’: Birth of Palliser’s Triangle 61

Chapter 3  Space: Fields of Comparison 104

Chapter 4  The Norm: Wheat and Whiteness 127

Chapter 5  Scientific Norms, Farmers’ ‘Souls,’ and Spaces of Judgment 164

Chapter 6  Resisting, Repeating, and Reinforcing Normalization in times of Crisis 199

Conclusion 224

Bibliography 241
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1</td>
<td>Map of Palliser’s Triangle</td>
<td>8</td>
</tr>
<tr>
<td>Figure 2.1</td>
<td>Fertile Belt and Palliser’s Triangle</td>
<td>71</td>
</tr>
<tr>
<td>Figure 2.2</td>
<td>Hector Prairie Steps Map</td>
<td>89</td>
</tr>
<tr>
<td>Figure 2.3</td>
<td>Dawson’s Geological Map of the 49th Parallel</td>
<td>90</td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>Map showing the location of Indian Reserves in 1905</td>
<td>114</td>
</tr>
<tr>
<td>Figure 3.2</td>
<td>GIS map showing location of Indian Reserves in 1902</td>
<td>115</td>
</tr>
<tr>
<td>Figure 3.3</td>
<td>Dominion Township Plan</td>
<td>118</td>
</tr>
<tr>
<td>Figure 3.4</td>
<td>Map of Grid over Western Canada</td>
<td>119</td>
</tr>
<tr>
<td>Figure 3.5</td>
<td>Map showing the location of Indian Reserves in 1902</td>
<td>114</td>
</tr>
<tr>
<td>Figure 3.6</td>
<td>Dominion Township Plan</td>
<td>118</td>
</tr>
<tr>
<td>Figure 3.7</td>
<td>Map of Grid over Western Canada</td>
<td>119</td>
</tr>
<tr>
<td>Figure 4.1</td>
<td>Hime Photograph Prairie on the Banks of the Red River, Looking</td>
<td>135</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Hime Photograph, Hind Expedition Report: Prairie, Looking West</td>
<td>135</td>
</tr>
<tr>
<td>Figure 4.3</td>
<td>Illustrations in Macoun’s Manitoba and the Great North-West</td>
<td>136</td>
</tr>
<tr>
<td>Figure 4.4</td>
<td>Beginning a Farm in Western Canada</td>
<td>137</td>
</tr>
<tr>
<td>Figure 4.5</td>
<td>The Old and the New Home of a Successful Farmer</td>
<td>137</td>
</tr>
<tr>
<td>Figure 4.6</td>
<td>Process of Western Development through Culture</td>
<td>138</td>
</tr>
<tr>
<td>Figure 4.7</td>
<td>Township Plan and Homestead Guidelines</td>
<td>138</td>
</tr>
<tr>
<td>Figure 4.8</td>
<td>A Country of Swift Changes</td>
<td>145</td>
</tr>
<tr>
<td>Figure 4.9</td>
<td>Illustration of Aboriginal Man as Separate from Modernity</td>
<td>145</td>
</tr>
<tr>
<td>Figure 4.10</td>
<td>Now Then, All Together!</td>
<td>155</td>
</tr>
<tr>
<td>Figure 4.11</td>
<td>The Only Drawback</td>
<td>156</td>
</tr>
<tr>
<td>Figure 4.12</td>
<td>Canada: Granary of the World</td>
<td>157</td>
</tr>
<tr>
<td>Figure 4.13</td>
<td>Nature being consumed in British Columbia, Canada</td>
<td>162</td>
</tr>
<tr>
<td>Figure 4.14</td>
<td>Nature transformed in the North-West</td>
<td>162</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>Individualized Male Scientific Farmer 1</td>
<td>186</td>
</tr>
<tr>
<td>Figure 5.2</td>
<td>Individualized Male Scientific Farmer 2</td>
<td>187</td>
</tr>
<tr>
<td>Figure 6.1</td>
<td>Dust mulch summerfallow</td>
<td>204</td>
</tr>
</tbody>
</table>
## List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIAs</td>
<td>Agricultural Improvement Associations</td>
</tr>
<tr>
<td>CPR</td>
<td>Canadian Pacific Railway</td>
</tr>
<tr>
<td>GGG</td>
<td>Grain Growers’ Guide</td>
</tr>
<tr>
<td>PFRA</td>
<td>Prairie Farm Rehabilitation Administration</td>
</tr>
</tbody>
</table>
Introduction

We began to observe symptoms that showed us we were nearing the line of desert country, or the northeast extension of the North American arid basin; towards evening we passed many spots where the soil was poor and stony, and the growth of grass deficient.

John Palliser, September 14, 1857

I. Palliser’s Triangle: Product of Power, Knowledge, and Normalization

Located within the Northern Great Plains, with an area that intersects the provinces of Alberta, Saskatchewan, and Manitoba, Palliser’s Triangle is the driest region in the Canadian Prairies (Fig 1.1). The arid expanse, first reported by early explorers of the North American West and later mapped and confirmed by the Palliser Expedition Report of 1860, holds an important place in Canadian geography. Today, most Canadian Geography and Environmental Studies textbooks feature maps and descriptions of Palliser’s Triangle that are designed to educate students about its precarious environment, the follies of its settlement, and the environmental catastrophes of its droughts in the 1930s. Given Palliser’s Triangle’s established position as a topic of Canadian geography, it is unusual that Canadian human geographers, and critical human geographers in particular, have not revisited this foundational geographic region. It appears that the story of Palliser’s Triangle is largely considered settled knowledge, a well-worn linear narrative of dry-land prairie settlement replete with caveats of mistakes made throughout the process.

This research asserts that the colonization of Palliser’s Triangle was more than simply putting people on land that “should never have been broken” (Gray 1967: 7); it involved the systematic production of normality through multiple political technologies.
This critical analysis unsettles Palliser’s Triangle through an investigation of nature’s normalization. I employ Foucault’s conception of normalization and its hallmark, homogenization through individualization, to re-politicize Palliser’s Triangle’s colonization and settlement. I explain that individualization of lands and bodies, combined with the circulation of scientific farming discourses, allowed for Palliser’s Triangle to be settled and stay settled during the crises of the 1930s with limited political upheaval. Normalization, I argue, was produced through the individualization of nature, a shift of the spotlight from a delineated problem region to illuminate identifiable and locatable problematic sections and individuals. In doing so, individual parcels of land and the character of male farmers who managed them were made increasingly visible, strategically shifting attention away from the larger political economy of settlement. The triangulated “micro-physics” (Foucault 1977: 26) of the ‘soul,’ space, and the norm in Palliser’s Triangle settlement pitted the forces of individualization against myriad forces that resisted being individualized and homogenized including various Aboriginal peoples, male farmers, women farmers, soils, climate factors, weather patterns, flora, and fauna. Some of these non-human forces of resistance, I argue, led to the disasters of the 1930s. Finally, the ‘souls’ of the soil, or the constructed essences of nature, Aboriginal peoples, and colonial settlers were brought into being and made visible through spatial distribution, visual and written representation, and scientific knowledge. Dispossession, starvation, displacement, financial ruin, and environmental crisis were some of the many outcomes of settlement in Palliser’s Triangle, making it crucial to examine the operational politics that made it materialize.
Beyond the direct implications for this case study, this research extends Foucault’s normalization to nature through the triad framework of the ‘soul,’ space, and the norm. This framework furthers our understanding of normalization, and also opens future possibilities for extending normalization to nature. I argue for normalization’s current utility and immense potential in environmental and geographic inquiry. Extending normalization to nature opens new theoretical pathways for Human Geography to research the processes of homogenization through individualization. Normalization, when employed in its full complexity, offers the analytical tools and explanatory power to disturb and dismantle the normalized natures of the Anthropocene. The use of Foucault’s micro-physics approach also challenges current debates of nature’s agency by using force relations as an alternative, or an addition, to other theorizations. Rather than just focusing on non-humans and humans as things-in-relation, or networks of humans and things, micro-physics focuses on the interwoven forces that push, pull, combine, and ricochet, making it more impossible to separate nature from society.

II. Research Foundations

The thesis of this dissertation argues that from 1860-1940 the nature of Palliser’s Triangle was normalized through three interrelated exercises of homogenization through individualization: the construction of individualized human and nonhuman ‘souls’; the creation of individual spatially partitioned fields of comparison; and the production and reinforcement of the norm constructed through visual and written discourses of nature, race, gender, and class. I argue this triangulation of the ‘soul,’ space, and the norm produced normalization in Palliser’s Triangle.
The ‘souls’ of soil, those subjects constructed through their intersection with the dry-land prairie soils, were made visible through individualization in order to normalize nature in Palliser’s Triangle, making the larger politics of dry-land settlement invisible in the process. However, nature resisted its individualization creating a complex struggle and melange of micro-physics between human and non-human forces. These force relations create a dynamic and composite social nature that is not formed in a binary war of humans vs. nature (Worster 1979), but a mixing, pooling, and merging of discursive and material forces of humans and non-humans.

Normalization is a term that is liberally employed in Foucauldian and Foucault-inspired studies, often without careful consideration of its various aspects and complexities. It is regularly used as a synonym for standardization or to explain how something has become commonplace. However, Foucault’s conception of normalization is much more complicated and nuanced. In fact, he uses his book *Discipline and Punish* (1977) in its entirety to accomplish this difficult task. The process of normalization involves the spatial organization of bodies in a relation to power, knowledge, expertise, and other bodies. While Foucault did not discuss nature or environmental implications of his analytics, I argue that nature has been normalized through the same, or similar, tactics as have been employed through most institutions of modernity. The social nature of Palliser’s Triangle is the outcome of knowledge, power, and expertise exercised in relation to the components of normalization: individualization and the norm operating through a spatial field of comparison to produce a system that works through comparison, differentiation, hierarchy, homogenization, and exclusion.
While the factory, prison, and school produce and are produced through normalization upon and within somewhat controlled fields of operation, I argue that the normalization of nature, with the goal of disciplining its ecology, including its human population, takes place both on, and is directed toward, an active field of forces of human labour, soils, flora, fauna, and climate. This means that the effects of normalization are pushed beyond the human body and that resistance can be exercised through a multitude of socio-natural forces. This project examines how constructed ‘souls’ of the land and its populations were connected through normalization’s many operations and dispersions. This research is not a history of Palliser’s Triangle, but an account of power’s circulation through the normalization of the constructed socio-natural region of Palliser’s Triangle.

III. Current Debates on the Settlement of Palliser’s Triangle

While authors who have examined the history of Palliser’s Triangle either celebrate or condemn Dominion scientists and government officials for their part in the droughts (Russell 2012), such authors have rarely explored the role of science, power, and knowledge, and the creation of identities through such knowledge. At the same time, despite the attention that historians have paid to the role of race, gender, and class in the making of the Prairie West, few of those scholars have traced how such categories were central to the production of scientific knowledge. For example, Russell (2012) outlines the historiographical debates on the problematic settlement of Palliser’s Triangle citing research on the change in the gendered division of labour on the dry-land farm, the economic choices made by farmers, and the indictment of specific government officials and the scientific farming experts. Russell argues it is necessary “to look closely both at
the scientific advice and the particular experts who gave it” (2012: 268). I believe this is true, yet I assert that it is even more important to understand the circulation of scientific expertise, the role of scientific knowledge in producing individualized natures and farmers, and the construction of racialized and gendered farming subjects to support scientific knowledge. This dissertation argues that by making power and knowledge central to the discussions of Palliser’s Triangle, it reshapes our understanding of the region and how it became known. It also helps us to understand how normalization was effective in the initial settlement of the land, while at the same time, producing instability as it ignored the most crucial aspects of the homestead farm, the domestic economy and women’s labour, and disregarded the complexity of the land’s forces. I argue that making the white male scientific farmer the central figure of dry-land settlement created the conditions for homestead failure while also removing government responsibility for the entire process of settlement.

Literature on Palliser’s Triangle is mainly found within the discipline of history. While the huge archives of Northern Great Plains literature often reference Palliser’s Triangle, few volumes have studied the region specifically as a subject. Potyondi’s *In Palliser’s Triangle: Living in Grasslands 1850 – 1930* (1995) is an environmental history focussed mainly on human transformation of land which lies solely within southern Saskatchewan. His history is wonderfully detailed yet echoes much history of the Northern Great Plains where the Aboriginal is replaced by rancher, who is finally replaced by the farmer. Potyondi argues rightly that with each wave came a greater loss of biodiversity and that cultural change was behind these great transformations. The larger pre-settlement politics of Palliser’s Triangle are described best in Owram’s
Promise of Eden (1992). His work eloquently describes the expansionist forces and voices of the mid 19th century in their attempts to control and populate the Canadian Prairie West. Jones’ Empire of Dust (1987) vividly portrays the droughts of 1919 in Alberta and examines the politics of scientific experts and dry-land farming in Alberta. McManus (2011) and Anderson (2008) draw inspiration from Jones and point to the opening of more land in 1908 as the cause of the droughts in the 1920s and 1930s. Voisey’s Vulcan (1988) focuses on the settlement of Vulcan, Alberta and farmer’s agency within the crises of the 1930s. All these authors blame settlement on key scientific experts and government officials. On the other side of the argument, James Gray’s Men Against the Desert (1967) focuses on Palliser’s Triangle during the Dust Bowl of the 1930s and the subsequent formation of the Prairie Farm Rehabilitation Administration (PFRA). He argues that Dominion scientists saved the West and, along with innovative and resilient male farmers, should be acknowledged as the unsung heroes of Canadian history.

Only Rod Bantjes (2005) has attempted a Foucauldian reading of Canadian Prairie settlement in Improved Earth. However, he does not specifically discuss Palliser’s Triangle or acknowledge the roles of scientific knowledge, normalization, or constructions of race and gender. Instead Bantjes focuses mainly on the governance of humans rather than governance of the land. Resistance is only witnessed in humans and the land is seen as a backdrop to failed social control and Marxian class relations. Nevertheless, many of Bantjes arguments are insightful and most relevant to this research.
Figure 1.1 Multiple Geographies of Palliser’s Triangle. This map shows the various interpretations of Palliser’s Triangle including the original Palliser delineation (crosshatched) and others based on soil type and ecoregion (Canadian Plains Research Centre Mapping Division 2013). Reprinted with the permission of Encyclopaedia of Saskatchewan.
IV. Methods

This research is grounded in the qualitative methods of discourse analysis. I employ this form of analysis to investigate historical and archived materials that relate to the normalization of Palliser’s Triangle between 1860 and 1940. Discourse analysis seeks to disturb how knowable reality is made normal or natural by bringing its explanations, categories, and definitions into the light and making them visible. A discourse is a grouping of statements of knowledge that makes the phenomena of our realities explicable or knowable. Discourse is incredibly powerful as it describes and produces subjects, guides those subjects toward certain decisions and away from others, and constructs subjects’ conception of reality and themselves within it. Discourse allows us to neatly organize the world into categories while simultaneously producing those same categories. According to Waitt, “Discursive structures set limits on how people can think and act at a specific historical conjuncture. They impose a solidity and normality beyond which is often hard to reason or behave” (2005: 172). As Foucault argues, “It is in discourse that power and knowledge are joined together” (1978: 100). This is because discourse places organized forms of knowledge in a position to affect change, to move bodies, and to maintain particular forms of reality under the guise of the ‘Truth.’ Through an examination of discourses through which Palliser’s Triangle is produced, I am able to illustrate how such a region is brought to life, assessed, corrected, erased, and resurrected. Without discourse analysis, I would be left recounting events of Palliser’s Triangle’s colonization and settlement, unable to link these events to larger exercises of knowledge and power.
Discourse is constantly changing as it connects with new ideas and sheds others in a “multiplicity of discursive elements that can come into play in various strategies” (Foucault 1978: 100). This is evident in Palliser’s Triangle as a variety of discourses are combined and deployed in its attempted governance. Waitt describes the usefulness of discourse analysis in Geography arguing it can help identify the “social effects of discourse through investigating the consequences of how specific sources (institutions, subject-positions) produce particular subjectivities and meanings about the social relationships between objects, peoples, and places” (2005: 176). Indeed, this is exactly what I needed to do in order to answer the questions I have asked and make this project succeed.

Following feminist methodology, I also read the materials for silences and absences (Rose 2012). Women’s voices are notably absent and silent in much of these discursive materials, as are those of Aboriginal peoples and other ‘undesirable’ immigrant populations. I have attempted to make those silences obvious and their absence known where possible. I also make gender, class, and race central to this investigation of nature and normalization, paying close attention to how other categories and subjects are constructed through them.

In selecting the empirical materials, I have been strategic in choosing the documents that would address my specific concerns about the norm and normalization. I include both written and visual materials from a variety of sources. The discursive formations I study specifically in this dissertation are those of colonial scientific exploration and scientific agriculture in their various forms and mutations in relation to Palliser’s Triangle. Within these large sets of discourses, I was able to find unique
discursive formations that were being employed to construct the ‘normal’ prairie and the ‘normal’ farm and male farmer. However, I discovered that such discourses were only visible in the official reports of exploration and colonization, Dominion Land advertisements, Experimental Farm bulletins, and farming periodicals. I have also found such discursive formations being vocalized in archived interviews with Experimental Farm staff that gave me further perspective on how such farming norms were implemented. I searched much wider archives in Library and Archives Canada, the Saskatchewan Archives Board, and the University of Alberta Peel Library in search of material that contained farmers’ journals from the region and letters to the Experimental Farm Stations. However, these materials were not very helpful as they mainly focused on daily routines of farm families and short letters requesting a news bulletin or seed samples. They contained little or no reflection and never addressed or even alluded to the larger questions of power or normalization. Perhaps this would be similar to Foucault reading prisoner journals of their daily events to research *Discipline and Punish*, rather than focusing on the official documents that make visible the larger operations of power. I must emphasise that there was also no single grand normalization strategy from which the government administration were planning and working. Instead, the normal prairie was constructed from a multitude of overlapping discourses and tools of governance.

After many time consuming and fruitless searches, I decided to focus on the materials in which discourses of norms and normalization were made most visible and explicit. These sources were also the most accessible as many had been digitized while others could be found in printed monograph format. In the end, it was my decision to choose these particular sources over others and curate them as I have done. However, I
remained conscientious to not only search for materials that supported my argument, but those that would challenge it as well. I chose a specific set of sources for each chapter to establish different aspects of my argument; however, they all overlap in their attempts to normalize Palliser’s Triangle through the individualization of land and male farmers.

The main groups of sources for this research are the scientific exploration texts from 1860 – 1880 including those of Hind, Palliser, and Macoun, the Dominion homestead advertising texts from 1903-1904, Dominion Experimental Farm and PFRA bulletins from 1910 – 1940, and Farm family periodicals such as the *Grain Growers’ Guide* (GGG) 1910 – 1940. The time period I have chosen highlights the years where there was the largest creation and deployment scientific knowledge and the period where the institutions that produced such knowledge were founded and most active. This extends from the scientific exploration literature to the end of the great droughts of the 1930s where scientific agriculture supposedly claimed victory over nature.

Finally, I recognize that there are some absences in the research which were excluded because of scope. For example, I have not discussed the ranching history of Palliser’s Triangle. The livestock economy has been crucial to the region and remains an important industry today. However, the ranching economy was greatly diminished during the settlement boom, largely made invisible through policies which promoted farming homesteads in the region. Despite the absence of ranching history, I am able to illustrate how discourses of science and operations of normalization increased the land being farmed, thus erasing other forms of agriculture in the region.
V. Historical Ecology of Palliser’s Triangle

This region’s ecology is generally classified as mixed-grass prairie (Anderson 1990) as it is the most northern extent of the southern grass species and the southern extent of the northern grass species. According to Environment Canada (2008), the natural vegetation is dominated by spear grass, blue grama grass, and wheat grass but also contains June grass and dry-land sedge. For shrubs and herbs, sagebrush is the dominant species, and on the driest sites there are yellow cactus and prickly pear. Native tree species include, scrubby aspen, willow, cottonwood, and box-elder. Finally, localized saline areas contain wild barley, alkali grass, greasewood, red sampire, and sea blite. Its soils are comprised of Brown Chernozemic with significant areas of Solonetzic soils. The sand hills of Saskatchewan are another important aspect of this dynamic region as these sand dunes have been shrinking and expanding for thousands of years (Wolfe et al. 2013). The other small eco-region contained within Palliser’s Triangle is the Cypress uplands, otherwise known as the Cypress Hills. This small and elevated region is cooler and moister than the surrounding mixed grasslands of the rest of Palliser’s Triangle. Due to this geography “natural vegetation ranges from fescue and wheatgrass grasslands below 1,000 m to a mixed montane-type open forest of lodgepole pine, deciduous trees, and shrubs at upper elevations. Numerous species, including larkspur, death camas, and wild lupine, are not found elsewhere on the prairies” (Environment Canada 2008).

Prior to European settlement the region’s ecology was mainly shaped by climate, large herds of bison, fire, and Aboriginal peoples hunting of bison and use of fire (Potyondi 1995; Rannie 2001). Being in the rain shadow of the Rocky Mountains, the
region receives only 250mm to 350mm of precipitation annually with cyclical periods of drought every 20 to 30 years. However, looking further back at paleoenvironmental reconstructions Lemmen and Vance show that despite the seemingly erratic climate of the Prairies, “in the case of the last 2000 years in the southern Canadian prairies, the brief (100 year) historic climate record coincides with what appears to be uncommonly favourable climate conditions for agriculture” (1999: 6). Fire caused by lightning and Aboriginal burning practices maintained a grassland environment by preventing tree species from invading as tree growth is stunted by fire as these have exposed growth points, whereas grasses’ growth points are protected because they are located under the soil (Anderson 1990). Not only was fire tolerated by native grasses, it supported and strengthened them. Potyondi asserts, “chemical analysis shows that the new grass that appears after burning is nutritionally better” and “perennial grasses sprout 1 to 2 weeks earlier on burned areas and may remain green longer” (1995: 18). Pre-settler grazing patterns of huge herds of bison, deer, and elk also influenced the extent of grasslands in Palliser’s Triangle. Other pre-settler fauna included plains grizzly bears, plains wolves, swift foxes, and black-footed ferrets (Potyondi 1995). Since 1900 cropland has increased steadily and has almost completely transformed the mixed grass prairie ecology (ibid).

VI. The Unstable Limits of Palliser’s Triangle

In a report published in 1860, explorer John Palliser outlined the exact coordinates of the problem land as “forming a triangle, having for its base the 49th parallel from longitude 100° to 114° W., with its apex reaching the 52nd parallel of latitude” (Palliser 1860: 7). Overlaying these roughly 200,000 square kilometers on a present-day
map, Palliser’s Triangle begins at the US border at the Southwest tip of Manitoba near the town of Killarney, its base continues west along the 49th parallel to the foothills of the Rocky Mountains and its apex is reached south of Lloydminster, Saskatchewan (Figure 1.1). Due to its stigmatization as an obstacle of colonization, Palliser’s Triangle became the subject of much public debate and government scrutiny during the period of 1860 to 1900 (Owram 1992). The identification and mapping of a problem space at the nexus of an international border, 200 000 square kilometers of land soon to be offered to millions of potential settlers, a proposed railway route to the West, and situated on Aboriginal territory created the conditions for special consideration and governance.

Locating the precise limits of Palliser’s Triangle today is not an easy or straightforward task. In the over 150 years since Palliser named the region a desert wasteland, Palliser’s Triangle has disappeared, reappeared, shrunk, and grown; but the name continues to be applied. While Palliser actually believed Palliser’s Triangle to be the northern tip of the Great American Desert, giving Canada agricultural superiority over its southern neighbour, the most stable side of the Triangle remains the political border with the US, the 49th parallel. Even this side, however, has been shortened over time. Once located within all three Prairie provincial borders of Manitoba, Saskatchewan and Alberta, Palliser’s Triangle today is mainly described as being located in southwest Saskatchewan and southeast Alberta. Palliser’s Triangle is also known today as the Dry Belt. In recent years, other scientific interpretations based on soil type (Figure 1.1), precipitation levels, and geological surveys have attempted to make the Triangle more precise in its location (Dale-Burnett 2012; Lemmen and Vance 1999; Marchildon et al. 2009; Wolfe et al. 2013). But there remains little or no consensus as to exactly where the
Triangle is or of what it should consist today. The Triangle has largely changed due to the interplay between human settlement, environmental conditions, and agricultural science negotiating where the line of agricultural possibility and impossibility begins and ends. It also depends on where researchers set its limits.

My wife who grew up on a farm southeast of Swift Current has told me stories of being taught in schoolbooks that where she lived was an agricultural impossibility because their farm was in Palliser’s Triangle. This confused her greatly as her parents were the third generation of farmers on the land. There were hard times and droughts that she remembers, especially in the 1980s, but my in-laws persevered and continued farming operations until 2012. More important than its geographic material reality, Palliser’s Triangle has been employed symbolically to convey an environmental narrative of risk. The name often disappears through years with sufficient rainfall and high agricultural yields and reappears through drought years. The news media continues to find the link to Palliser in times of hardship. Even much of the climate science done in the region over recent years by the Geological Survey of Canada employs the name Palliser’s Triangle in titles of reports, research groups, and academic articles, such as the research group called the Palliser Triangle Global Change Project. What is clear is that the narrative of Palliser’s Triangle never truly disappears and the question ‘was Palliser right?’ also endures.

VII. Dissertation Outline

Chapter 1 details the theoretical foundations of the dissertation. Foucault’s analytics of power, biopolitics and governmentality are explained along with their links
to normalization. The birth of the modern ‘soul,’ the spatial tactics of fields of comparison, homogenization through individualization, and the norm are explored as the key aspects of normalization. Normalization is described as complex and multi-faceted exercises of power where homogenization is produced through individualization. This set of political technologies is explained as working in a descending model of power that places the greatest focus on the individual while moving attention away from the broader questions of political, economic, or ecological circumstances. I also discuss the importance of using a force relations approach based on Foucault’s description of microphysics. I argue that a force relations approach is an important means to discuss the materiality of exercises of power. After the discussion of normalization I offer the theoretical foundations for studies of nature. Social nature, political ecology, and post-colonialism are described as forming the basis of my understandings of nature and form the links to the production of nature through discourses of race, gender, and class. Finally, I argue for the importance of making linkages between studies of nature and studies of normalization in human geography.

Chapter 2 explains how Palliser’s Triangle was first individualized from the larger prairie as a problem region. The birth of Palliser’s Triangle took place when the Palliser and the Hind expeditions confirmed, delineated, and mapped the ‘desert’ region. I argue that colonial scientific assessment and diagnosis produced the ‘soul’ of the arid region based on colonial constructions of its past, present, and future. The ‘abnormal’ ‘soul’ was assessed through the discursive individualization of the land that was delineated, contained, and separated from the ‘normal’ fertile belt. These observations, I argue, led to Palliser and Hind’s call for isolation and containment of Palliser’s Triangle as an
uncivilized and inhospitable space. I explain that identifying and locating the ‘abnormal’ triangle allowed for the ‘normal’ fertile belt to appear homogenously fertile and the problem space to appear contained in geometric certainty. I then describe how the second move of individualization was to discursively separate Aboriginal peoples from their land. Separating the two and producing incompatibility through degradation, regeneration, and pristine past narratives allowed colonial officials to later construct the region as possibly valuable and capable of reform. Dividing the land into visibly fragmented time periods also allowed for colonial imaginaries to sever Aboriginal peoples from the land. I explain how nature was portrayed to be in a state of crisis due to its ‘ignorant’ land managers, and how separating the Aboriginal through constructions of the past and future allowed for a different, and economically productive, nature to be imagined. I link this transformation to Foucault’s analysis of the ‘soul’ in the production and reform of the criminal. After discovering a problem nature, colonial explorers assessed and made known Palliser’s Triangle’s shortcomings, worth, and capabilities. Its present state indicated desert-like conditions, yet reconstructing a pristine pre-human past enabled the possibility of hope for a productive future. ‘Abnormal’ and ‘destructive’ Aboriginal land management was viewed as the root cause of the ‘abnormal’ nature, and the removal and/or eradication of such populations were argued as key to restoring ‘normality.’ These insights allow us to see Palliser’s Triangle as a patient being assessed for future treatment. The future treatment was European culture in the form of the colonial settler. Employing the construction of ‘soul’ illustrates the exercise of power of human forces in classifying and constructing environmental essence with a view to reforming the land.
In Chapter 3, I argue that the land was further individualized through the spatial reordering of the Dominion Lands Survey, which produced the Indian Reserve and Township systems. In enclosing First Nations peoples on peripheral parkland reserves and individualizing land into property through the Dominion Lands Survey, these spatial organizations created both a larger homogenous region and individualized fields of comparison where the decentred micro-physics of settlement would play out. This individualization entailed dividing the prairie into quarter sections, within mile sections, within townships, within ranges, within rural municipalities. This spatial division of land partitioning made Palliser’s Triangle invisible, establishing a sea of squares with minor differences rather than two distinct geographical regions. It brought into focus both the abstracted homestead section and the larger, but equally abstract, Prairie economic region. The spatial organization of the system would allow for the land to be visible both at a distance and by all those who surrounded it, which was integral to the operations of power that took place during the early years of settlement and the crises of the 1930s (Chapter 5 and Chapter 6). I argue that it was not the control of human forces that was the largest concern of government, but the disciplining of the land’s forces through scientific knowledge, surveillance, and labour. What was being made visible and watched was the land and the male farmer’s later ability to ‘correctly’ shape its forces.

Chapter 4 demonstrates how individualization worked through the norms of visual discourses. Once again, I describe how two fields of visibility work together to individualize and homogenize: the individualized homestead quarter section was multiplied to create the homogenized Prairie as an exporting economic region. I explain how the use of ‘before and after’ illustrations and photography allowed for the
witnessing of a transformation of the ‘abnormal’ to the ‘normal.’ The larger economic
Prairie region was constructed through repetition and multiplication of these homestead
tableaus, which asserted the importance of the Dominion of Canada as an export
economy. This individualized and homogenous Prairie region fit well into the tapestry of
exporting regions. However, these visualizations of the ‘normal’ prairie farm erased the
importance of women’s labour and sphere of production. In terms of productions of the
Aboriginal, the construction of the region through representations of industrial modernity
produced individualized whiteness as ‘normal’ and Aboriginal identities as ‘abnormal’
within its geography. Aboriginal figures only become visible for the purpose of seeing
how ‘out of place’ they were in the landscape and as a contrast to progress. In terms of
normalizing environmental forces, a never-ending horizon of wheat is made to seem the
‘natural’ groundcover, replacing and erasing all ecological diversity and difference. The
repetition and multiplication of individualized whiteness and wheat fields created notions
of the ‘normal’ prairie. Palliser’s Triangle is fixed through these constructions of both
homestead and regional ecological uniformity. Finally, this chapter argues that these first
visualizations of the norm established what a prairie farm would resemble, who was out
of place within it, and what was considered normal.

Chapter 5 argues that Palliser’s Triangle’s nature was further normalized through
the development of scientific agriculture and the construction of the white male scientific
farmer. I explain that during this time, the norms of agriculture were established through
agricultural institutions and circulated through bulletins and farmer periodicals. These
norms allowed for the homogenization of the land in that it displayed and defined normal
management practice. During this period, nature was represented as a universal scientific
formula to be applied to the individualized plot of land. These scientific norms were the “value-giving measures” (Foucault 1977: 183) from which to compare, differentiate, hierarchize, homogenize and exclude soils and male farmers. Those male farmers following such advice were deemed progressive, while those who did not were portrayed as backward and ignorant. Discourses of race, gender, and class were employed to solidify the ‘good’ and ‘bad’ categories and to mobilize change toward homogenous scientific agriculture.

However, the individualization of the male scientific farmer encountered some resistance as women struggled to have their voices heard and counted, their economies valued and maintained, and their homestead and dower rights established. Male farmers’ voices also showed limited signs of resistance through the questioning of their continual education as the answer to every problem, but opposing views were largely absent or silenced. Nevertheless, as the repercussions of this precarious settlement began to be experienced, individualization continued to be an effective strategy.

Chapter 6 explains how the force relations of a normalized prairie came to a head in the 1930s when droughts, disease, and pests found opportunities in the uniformly transformed environment. Non-human forces resisted individualization in multiple unexpected ways. Individualized farms grew and blew together covering, crossing, and blurring property lines. Private individualized property was pushed back into the commons of community pastures. One farmer’s erosion problem often spread to adjacent homesteads. Drought, gophers, crop disease, and grasshoppers spread erratically across property boundaries, assisted by established normalization. I explain how the ‘soul’ Palliser’s Triangle re-emerged as a problem region leading to Palliser and Hind’s
seventy-year-old insights being re-circulated among the public and government officials. Despite opening the possibility for a complete reworking of the region’s economy, mortgage companies, the Canadian Pacific Railway, and banks had an investment in keeping families on the land and re-establishing a dry-land wheat economy. In the thick of the crisis of eroding soils and displaced human populations, the region was stabilized through the heightened redeployment of normalization tactics it had used to first settle the region: scientific knowledge creation and distribution, individualization, and the micro-physics of male farmer surveillance.

Finally, the dissertation’s conclusion provides a summary of the argument and the implications for Palliser’s Triangle scholarship and its wider applications for political ecology, including opening possibilities for social nature, neoliberal natures, the agency of nature, and Scott’s “high-modernism” in Seeing Like a State (1998: 95). In addition, the conclusion offers opportunities for future research based on the re-wilding Palliser’s Triangle in the literary tradition of Wallace Stegner’s Wolf Willow (1962) and the production of prairie nature in relation to current oil and gas pipeline politics in Palliser’s Triangle. In closing the dissertation, I emphasise that while Palliser’s Triangle is the focus of this research, underlying the project is the larger goal of illuminating the forces of normalization, shining the spotlight of individualization back on itself. I argue the lesson to be learned from this research is that when environmental crises arise, it is important to question who and what is made most visible and who and what remains in the shadows. Most often, those who are most vulnerable are targeted, individualized, and directed toward ‘progress,’ while highly influential political actors direct the spotlight away from themselves, their actions, and their motivations.
Chapter 1

Power, Normalization, and Nature

Now, the study of this micro-physics presupposes that the power exercised on the body is conceived not as property, but as a strategy, that its effects of domination are attributed not to ‘appropriation,’ but to dispositions, manoeuvres, tactics, techniques, functionings; that one should decipher in a network of relations, constantly in tension, in activity, rather than a privilege that one might possess; that one should take its model a perpetual battle rather than a contract regulating a transaction or the conquest of territory.

Foucault (1977: 26)

I. Introduction

In the final sentence of Discipline and Punish, Foucault concludes, “At this point I end a book that must serve as a historical background to various studies of the power of normalization and the formation of knowledge in modern society” (1977: 308 emphasis added). Normalization is made central here and serves as the main objective of the book’s investigation and of future endeavours. Foucault calls normalization “one of the greatest instruments of power” (ibid: 184) given its ability to simultaneously homogenize and individualize. Nevertheless, normalization is often overlooked or taken as a given by scholars who focus instead on Foucault’s various iterations of power such as disciplinary, bio, psychiatric, pastoral, and governmental. Foucault explains normalization here:
It brings five quite distinct operations into play: it refers individual actions to a whole that is at once a field of comparison, a space of differentiation and the principle of rule to be followed. It differentiates individuals from one another, in terms of following the overall rule: that the rule be made to function as a minimum threshold, as an average to be respected or as an optimum towards which one must move. It measures in quantitative terms and hierarchizes in terms of value the abilities, the level, the ‘nature’ of individuals. It introduces, through the ‘value-giving’ measure, the constraint of a conformity that must be achieved. Lastly, it traces the limit that will define difference in relation to all other differences, the external frontier of the abnormal. The perpetual penalty that traverses all points and supervises every instant in the disciplinary institutions \textit{compares, differentiates, hierarchizes, homogenizes, and excludes} [my emphasis]. In short it \textit{normalizes} (Foucault 1977:183, original emphasis).

Following an explanation of Foucault’s conception of power, biopower, and biopolitics, I discuss these five operations of normalization through the themes of homogenization through individualization, visibility and fields of comparison, the body and the soul, and resisting normalization. Next, I explain normalization through the lens of governmentality. In order to link normalization to nature, I offer the theoretical underpinnings of nature, and its ties to race and gender, through post-structural political ecology, social nature, and post-colonialism. Finally, I discuss the possibilities that are opened for Geography by extending normalization to nature.

\textbf{II. Power}

Power is a difficult concept to grasp and is often understood in terms of being a thing or something that can be attained or held. Instead, Foucault argues that it is something that is exercised, a verb rather than a noun. Foucault’s analytics of the exercise of power is nuanced and complex. At the same time, it is more grounded in materiality than many have cared to acknowledge. Like the forces and mechanics of nature, Foucault sees humans moving around in a particular field exerting force on one
another, moving and organizing each other in particular ways. Just like all physics, where there is a force, there is a counter force, or resistance, but this resistance is “never in a position of exteriority in relation to power” (1978: 95). Foucault is interested in how certain ideas and practices have been adopted in order to organize and utilize human bodies in particular ways. These are not overarching plans developed by those who have ‘power,’ but rather complex networks of knowledge and discourse built upon ideas, technologies, and institutions that formed in particular places and points in time. Power is not exercised by the political elite alone, as it can be exercised by any individual in terms of reinforcing, correcting, or maintaining normative behaviours. Power is always an action of bodily control over others and oneself in a field of forces that moves, directs, and corrects others and ourselves. As Foucault explains, “It is always the body that is at issue—the body and its forces, their utility and their docility, their distribution and their submission” (1977: 25).

However, what underpins this entire economy of bodies produced by power is knowledge; and knowledge is always produced in a power relation. As beliefs of truth and falsehood or right and wrong change, different opportunities and practices emerge to study and deal with the problems associated with the political organization of bodies. Techno-political practices that had been only a small part of a system of forces, can take over to fill the void in a new political economy of power relations. These systems of forces often mutate and multiply in many unforeseen consequences. This is exemplified in the case of the prison as Foucault explains how incarceration had been employed for some time as part of the economy of punishment, but becomes the primary mechanism as physical torture and execution become unacceptable to rising egalitarian societal ideals
(1977). The new economy of punishment, embodied in the prison system, was built during the rise of the human sciences and this created knowledge offered the opportunity for different technologies of power to become acceptable and pervasive throughout the whole social body. Technologies of human correction involving diagnosis, surveillance, and discipline replace torture and execution, and are reproduced throughout society as efficient ways of creating a law-abiding population. Dean states, “How we punish, also affects what happens in schools, families, barracks, and so on. The existence of such regimes of practices makes possible borrowings across institutions and innovation within them” (1999: 31). Thus, as regimes of truth and structure change, so do economies of power. Power/knowledge, therefore, is power exercised through a system of discursive knowledge creation and is exercised on and through individuals in order to maintain an economy of bodies. As Pickett explains, “A power relation…is the basis for the creation of knowledge. In turn, this knowledge provides the basis for the extension of power. Individuals can be known, compared, worked upon. It is not that power and knowledge are the same. Instead, knowledge can only arise through the exercise of a power relation, and knowledge always has the effects of power” (2005: 14). Imprisoning or institutionalizing an individual allows him/her to be studied, creating knowledge that will again be deployed against him/her and eventually onto others.

When we name, examine, and build truths around objects or individuals, it is an act of power. It is through saying that this is a truth about a thing, and creating categories for similar things with similar truths, that we organize beings and things along with the means to deal with them accordingly. Brass explains that, “power cannot function without knowledge. Power produces knowledge in order to rule regulate, control, and
discipline” (2000: 306). However, I feel his explanation appears perhaps too straightforward for what Foucault intended. Power is exercised in a much more fluid and chaotic fashion and employs what is available to exert its forces. While knowledge does produce reality, it does not invent it from scratch or work from a master plan. Instead it is assembled, stolen, borrowed, and tweaked. Power produced through knowledge dominates because of its ultimate authority. The regime of productive power that gained dominance during the Enlightenment offered a scientific basis to truth and a systematic way of categorizing the world and its inhabitants. Thus, again, the authority of scientific knowledge eliminated certain mechanisms of power, such as the exercise of some forms of religious knowledge, while opening others. The birth of the human sciences created regimes of normalization through naming, studying and organizing those who are seen as threats to societal order. This power was embodied in architecture and organization of the disciplinary institutions. As Brass explains, “The power to confine persons to asylums, hospitals, and prisons…made them accessible for study and observation, which produced modern psychiatric, medical, and criminological knowledge” (2000: 306). In the *History of Sexuality*, Foucault explains that sexual activity between men, or between women, is transformed into ‘homosexual activity’ and into the ‘homosexual’ as a species to be brought in from the shadows, studied, and known (1978: 43). This ‘deviant’ individual is then subjected to disciplinary mechanisms, such as psychiatry or social work, in order to reform his/her behaviour. Thus, power and power/knowledge form the basis of Foucault’s early work and indeed, form the basis of this dissertation
III. Biopower and Biopolitics

Foucault argues that in the nineteenth century the conception of life changes as the power of the sovereign is diminished. With sovereign power, life was seen as something that could be taken away or the right to ‘take life’ and ‘let live’ by the King (Foucault 2008). In the nineteenth century, however, this changes to the right to ‘make live’ and ‘let die.’ This happens due to the emergence of worries and fears about survival or degeneration of humans as a species, particularly by the ruling classes, and the development of statistical methods devised to see a population and manipulate its future. This is the move from what Foucault calls “man-as-body” to “man-as-species” (2003: 242). The multitude in this case is dealt with as a population or mass, a set of averages through the collection of birth rates, mortality rates, crime rates, life expectancies and so on. Foucault states, “Biopolitics deals with the population, with the population as a political problem, as a problem that is at once scientific and political, as a biological problem and as power’s problem” (ibid: 245). Statistical methods become mechanisms of power that can lead to intervention at certain scales to correct a social problem. To Foucault, this creates a power to “make live” or, in other words, creates technologies of power that work to sustain life and constantly improve the averages of a particular population. In biopower, steering the population is the goal, statistical methods are the means of observation, and the tactics employed depend on what goal is to be achieved.

While the term biopower can be understood as the overarching concept of making life live, the term biopolitics can be viewed as the means to accomplish it. Rabinow and Rose (2006) explain that Foucault created a bipolar explanation of biopower. On the one pole devised in the seventeenth century, disciplinary power was employed to control
bodies in order to organize and utilize their forces, while on the other pole devised in the eighteenth century is biopower or control over the species and the “mechanisms of life: birth, morbidity, mortality, longevity” (2006: 196). Foucault states, “This [second pole] is a technology which aims to establish a sort of homeostasis, not by training individuals, but by achieving an overall equilibrium that protects the security of the whole from internal dangers” (2003: 249). Rabinow and Rose explain further that, “By the nineteenth century, [Foucault] argues, these two poles were conjoined within a series of ‘great technologies of power’ of which sexuality was only one” (2006: 196). Foucault describes sexuality as part of both disciplinary and biopower here,

On the one hand, sexuality, being an eminently corporeal mode of behaviour, is a matter for individualizing disciplinary controls that take the form of permanent surveillance…But because it also has procreative effects, sexuality is also inscribed, takes effect, in broad biological processes that concern not the bodies of individuals but the element, the multiple unity of the population. Sexuality exists at the point where body and population meet. So it is a matter for discipline, but also a matter for regularization. It is, I think, the privileged position it occupies between the body and the general phenomena, that explains the extreme emphasis placed on sexuality in the nineteenth century (2003: 251-252).

Thus, sexuality is a very informative example as it attempts to govern the body in order to foster a healthy future population through reproduction. Foucault also gives the example of the combination of medicine and hygiene during this period where the body and the population are regulated to meet certain ends (2003). Biopolitics is therefore the politics of life where the body and population meet in strategies of security.

Valverdie (2007) also argues that Foucault’s use of the term security is future centred. In French there are two terms for security, the first, sûreté, that tries to protect what is already there, as in national security; the second, sécurité, tries to ensure the
future management of risks, such as food security. Foucault used the latter to illustrate how biopolitics worked. When viewed in this way, security is more about ensuring the future of the population through the continued flows of resources. Thus, population and security are seen as moving objects that are capable of being steered toward an objective and not the protection of the state through police and military.

Normalization, or homogenization through individualization, remains central in biopolitics, but these norms rest upon concerns about the body as it relates to population. There is a hierarchy of races created, modes of sexuality that are counted as degrees distant from the norm, and homogenization is achieved through the individualized scrutiny of a person’s ancestry or ‘condition’ which may cause the degeneration of a population. The norms in this case concern the body’s engagement in healthy/unhealthy practices, its race and sexuality, and all other practices that may affect the health of the population. As the population comes into the light and becomes visible, the articulation of normal and abnormal practice aligns accordingly. As Foucault explains, “We see an appearance of State racism: a racism that society will direct against itself, against its own elements and its own products. This is the internal racism of permanent purification, and it will become one of the basic dimensions of social normalization” (2003: 62).

IV. Normalization: Homogenization through Individualization

Normalization is the process of homogenization through individualization (Foucault 1977). It is a descending operation of power as those who are most individualized, or are made visible as individuals, are those who have the least amount of political or social influence, while those with the most political influence are often the
least individualized and not subject to the same intense scrutiny. In Foucault’s explanation, this descending exercise of power is contrasted with the previous ascending form of power where the King was the most individualized and the farther down one was on the social scale, the more individuals were part of the indistinguishable ‘masses.’ In disciplinary power, institutions individualize by assigning a station to a person that brings that person’s behaviour or performance in direct comparison to every other person stationed around him or her. Each individual has a number, a file, and a place. For example, students attending a primary school are assigned a desk for the year, are punished and praised according to the teacher’s judgement of student performance, and evaluated against their peers. This individualization creates an overall homogenization as students fall in line, to varying degrees, with the teacher’s wishes and the norms of educational discipline. If you are a shy or timid student, like I was at a young age, you quickly learn how to not get noticed by falling within the mass of ‘average’ students who are neither troublesome nor the high achievers.

i) The Norm

The norm is the standard of being, the moving measuring stick against which we are taught to judge others and ourselves. In the same classroom, the norms are established in both the learned material and the behavioural code of conduct. Norms become naturalized in us over time to the point that we often feel it throughout our bodies when others or ourselves challenge it with behaviour that is ‘different.’ Butler explains the norm as not a rule or law but, “a measurement and a means of producing a common standard” and in the position of the individual, “to become subjected to an abstraction of
commonality” (2004: 51). The norm is an abstraction because it only exists and is enforced through highly contingent codes of conduct. However, everyone stands within the boundaries of the norm and there is no being outside of it. McWhorter (1999) describes the individualizing power of the norm here:

Norms homogenize the group by enabling all differences among its members to be understood as deviations from a norm and therefore as essentially related to it. No one stands outside of normalization; everyone can be located with regard to the norms. There is no pure difference, only measurable deviance. At the same time, norms individualize each member of the group by enabling a precise characterization of that person (animal, etc.) as a case history of particular, measurable degrees of deviation from the set of norms (156).

Normalization and the norm extend outside the disciplinary institutions as well. Every facet of our lives, internal and external, is judged against the common standard of cultural acceptance. As Foucault explains, “We are in the society of the teacher-judge, the doctor-judge, the educator-judge, the ‘social worker’-judge; it is on them that the universal reign of the normative is based; and each individual, wherever he [sic] may find himself, subjects it to his body, his gestures, his behavior, his aptitudes, his achievements” (1977: 304). Normalization or homogenization through individualization places the individual body at the centre constantly looking beside, behind, forward, and inward again; hiding the homogenizing goals of the norm in the body itself in relation to all others.

ii) Space

Geography and space are integral to normalization. The field of visibility and comparison could be the classroom, the factory floor, the office, or the farm. Comparing two or more things means they have to be in close proximity. The teacher has to see all
the students, the prison guard has to see the prisoners, and the supervisor has to see the workers to compare them. On the other side, the students, prisoners, and workers have to believe they are being compared and judged at all moments by being in the line of sight. Students, inmates, and workers also have to be in a position to judge themselves against their peers’ performance. This is what Foucault means when he says discipline “traverses all points and supervises every instant” (1977: 183). What is also important is that most of these modern work, punishment, and education contexts take place behind closed doors, meaning they are hidden from public view. Foucault traces punishment which at one time was always within public view to contemporary methods in which punishment is always closed to the public. The physical organization of such disciplinary systems is crucial to their efficient operation. The Cartesian grid or Bentham’s Panopticon would be examples of this form of organization. Over time, these fields become embodied in individuals, who carry this way of being through their lives as trained habit, transfer into the operation of society at large. Increasingly, these operations bleed into most facets of our very being from the organization of public life to the way our households and personal relationships are managed. In other words, space and visibility are perhaps most important in training and forming habits of thought and action that will be carried on throughout one’s life and multiplied through everyday actions, interpretations, and judgements.

Visibility within the norm is seen at the two ends of the spectrum: those who are recognized for being closest to the norm and those farthest away from the norm who are deemed abnormal or Other. If something or someone comes into view, it is either for its celebration or its correction. Foucault is interested in why particular practices and
‘problems’ come into view at particular times and why others remain hidden (Foucault 1977; Rajchman 1991). Where power is hidden is also central to his investigation. Power relations under the sovereign sought to make the King’s power visible, whereas later forms of power sought to make the individual central (Foucault 1977). According to Dreyfus and Rabinow (1983), “Disciplinary power reverses these relations. Now, it is power itself which seeks invisibility and the objects of power—those on whom it operates—are made the most visible” (154). This invisibility makes operations of power less vulnerable to attack in that power is able to move inconspicuously and insidiously. Deleuze explains Foucault’s strategy to link “systems of light and systems of language” (1988: 32). The former makes previously invisible objects, acts or populations visible, the second holds the explanatory power for us to talk about them. Knowledge is the connector as “knowledge runs from a visible element to an articulable one, and vice versa” and is “a practical assemblage, a ‘mechanism’ of statements and visibilities” (Deleuze 1988: 39). Yet knowledge for many years remained a hiding place for power. Before knowledge itself became conspicuous, there was little reason to question its invested interests. Thus, what happens when knowledge itself becomes visible and open to attack?

iii) The ‘Soul’

Making the body productive is central to normalization. As Foucault explains, “It is always the body that is at issue—the body and its forces, their utility and their docility, their distribution and their submission” (1977: 25). It is through its refined movements that economies function and the body politic remains controlled and moves with fluidity.
The body *produces* in a Marxian sense, but also in a normative sense. A standardized working day makes bodies move and organize in different ways than they had previously done. A trained soldier is punctual, groomed, strong, and obedient. The body’s docility is central to economic productivity and political stability.

> Discipline increases the forces of the body (in economic terms of utility) and diminishes these same forces (in political terms of obedience). In short, it dissociates power from the body; on the one hand, it turns it into an ‘aptitude,’ a ‘capacity,’ which it seeks to increase; on the other hand, it reverses the course of energy, the power that might result from it, and turns it into a relation of strict subjection (Foucault 1977: 138).

This means that disciplinary power is productive in terms of building normalized skills and capacities, rather than the negative form of power when one simply follows orders. This is what Foucault means when he speaks of the micro-physics or the forces that direct the bodies toward particular ends. As Deleuze clarifies, micro-physics does not mean “a simple miniaturization of visible and articulable forms; instead it signifies another domain, a new type of relations, a dimension of thought that is irreducible to knowledge. ‘Micro’ therefore means mobile and non-localizable connections” (1988: 74).

The ‘soul’ on the other hand is that which is created through the juridical system and has the productive effects of moving the body in particular ways. Foucault calls *Discipline and Punish* a “correlative history of the modern soul and of a new power to judge” (1977: 23). He claims that “the soul is the prison of the body” (1977: 30), and not the opposite as it is normally expressed, for it is the constructed ‘soul’ that impedes the body’s movement through what it deemed acceptable and unacceptable behaviour. The ‘soul’ is so important because on “this reality reference, complex concepts have been constructed and domains of analysis carved out” (1977: 29). Under sovereign power the
crime was central and the body was the point of punishment through torture and execution. In disciplinary power, the ‘soul’ of the accused is made visible by the court establishing his/her ‘nature,’ which then determined the length and severity of punishment. The crime is brought context by judging the ‘nature’ of the individual. “During the 150 or 200 years that Europe has been setting up its new penal systems, the judges have gradually…taken to judging something other than crimes, namely, the ‘soul’ of the criminal” (1977: 19), explains Foucault. There is also the ongoing assessment of an inmate’s ‘soul’ through psychiatric evaluations and behavioural reports of the guards that determine early release or parole. It is the creation of a ‘soul,’ based on the level of deviance from social norms that determines the character of an individual. Through this practice, we have all been made judges of ‘souls’ in our everyday encounters and we consider ourselves through such lenses as well. This constructed ‘soul’ moves the body’s forces in particular ways, encouraging one motion and refusing the next. This combination of the ‘soul,’ space, and the norm offers a powerful triangulated micro-physics of normalization to be applied to the body and nature.

iv) Resisting and Challenging Normalization

Thinking of knowable reality as forces and counterforces, Foucault famously claims that “where there is power, there is resistance” (1978: 95). Those who are placed or act furthest from the norm are often isolated, harmed, or punished. However, these norms change continually, often by those outside the norm who refuse to be labelled and treated as sick, abnormal, or not human (Butler 2004). Through such political struggles the norm is shaken and the possibility of “being otherwise” (Gibson-Graham 2006)
opens. As there is no being outside of power or the norm, even in a place of resistance, there is an argument that when resistance happens the norm simply subsumes these previously ‘unacceptable’ ways of being, making them part of the new oppressive norm. Butler contests this idea that challenges to the norm are eventually simply assimilated.

To intervene in the name of transformation means precisely to disrupt what has become settled knowledge and knowable reality, and to use, as it were, one’s unreality to make an otherwise impossible or illegible claim. I think that when the unreal lays claim to reality, or enters into its domain, something other than a simple assimilation into prevailing norms can and does take place. The norms themselves can become rattled, display their instability, and become open to resignification (2004: 27-28).

Thus, while it is impossible to be outside of the norm, as it is to be outside of power, being otherwise can cause cracks to form in the norm, opening the possibility to be otherwise or what Gibson-Graham also calls the “politics of possibility” (2006: xiv). Normalization is the most significant movement and effect of power as it conceals power as “knowable reality” (Butler 2004: 27) that is witnessed and participated daily from all points of view. The moment this reality is disrupted and power is made obvious, it must realign itself. However, the norm is never erased or made powerless and will yet again swallow the “unreal” action in explanation, where the norm is altered, edited, and resignified. Nevertheless, as Butler illustrates, it is weakened and cracks and vulnerabilities are exposed.

V. Normalization and Governmentality

Governmentality emerges later from Foucault’s ideas about biopower and biopolitics. While biopolitics explains why certain forms of control are employed, governmentality asks how populations and individuals are governed towards the goals
established by the state in a liberal democratic system. Foucault explains that certain tactics are employed to move people in various ways depending on the aims of a particular society, or the ‘conduct of conduct.’ To Foucault the modern liberal government does not operate through sovereign power alone as many political theorists continue to believe which is what he implies when he says that we, “still have not cut off the head of the King” (1978: 89). Foucault writes,

Whereas the end of sovereignty is internal to itself in the form of law, the end of government is internal to the things it directs; it is sought in the perfection, maximization, or intensification of the processes it directs, and the instruments of governments will become diverse tactics rather than laws (2007: 99).

Thus, governing concerns all behaviours and individuals in that they are subject to coercion, movement, and organization through various tactics. Following on his previous analytics, governing is made possible through diffuse, diverse, and the most subtle mechanisms and networks of power that act through institutions and individuals, not just upon them. Thus, political power, like disciplinary power, is de-centred. As Rose and Miller explain, “individuals are not merely the subjects of power but play a part in its operations” (1992: 174). In a liberal democratic system, the state must govern ‘free’ individuals without obvious exercises of power which infringe on the rights of those individuals, as this goes against the ideals of liberalism. Modern liberal government acting through biopolitics asks, what average is acceptable for the multitude of social phenomena and which practices can be used to achieve it? Through statistics, the state is able to test policies and variables against one another to see what effects each has on the whole. The university, and social science in particular, is employed to produce economists, statisticians, criminologists, and most other academic experts who can both
identify ‘problems’ and test, experiment, and measure the effects of certain interventions. From these assessments, techniques are implemented from the macro-economic level down to the various techniques employed by psychologists, social workers, or crime prevention officers on the micro-level. As Dillon explains,

> The accumulation of statistical data, the compiling of statistical tables, the employment of probability analysis to derive socially relevant meaning from data already collected, which in turn stimulates demand for more data—allowed new productive connections to be made between different aspects of the life of populations and new strategic formations of government to emerge (2007: 45).

However, an ‘acceptable’ average, not the total eradication of phenomena, is the goal of governmentality. This is perhaps because it is useful to have a full range of techniques for exercising power. If a problem is eradicated, certain technologies to exercise power are then lost. Therefore, the state and its inhabitants are part of a great balance sheet and depending on the government, the identification of the ‘problem’ and the techniques for addressing it will change.

The ‘expert’ is the cornerstone of governmentality. As the state is often viewed as suspicious or overt in its exercise of power, the expert fills the role of the trustworthy, ‘objective’ participant. Rose and Miller state,

> [G]overnment is intrinsically linked to the activities of expertise, whose role is not one of weaving an all-pervasive web of ‘social control,’ but of enacting assorted attempts at the calculated administration of diverse aspects of conduct through countless, often competing, local tactics of education, persuasion, inducement, management, incitement, motivation and encouragement (1992: 175).

The expert gives advice to government and the public based on his/her expertise in a given field and is called on to deal with ‘problems’ in all areas. The universities create experts who create ‘truths’ which are employed by government and business, reported in
lifestyle magazines and newspapers, and taken by experts in other fields to form diverse networks of governance. Experts play a double game of both supporting state authorities, and catering to the worries of individuals. Rose and Miller (1992) state,

> On the one hand they [experts] would ally themselves with political authorities, focusing on their problems and problematizing new issues, translating political concerns about economic productivity, innovation, industrial unrest, social stability, law and order, normality and pathology and so forth into the vocabulary of management, accounting, medicine, social science and psychology. On the other hand, they would seek to form alliances with individuals themselves, translating their daily worries and decisions over investment, child rearing, factory organization or diet into a language claiming the power of truth, and offering to teach them the techniques by which they might manage better, earn more, bring up healthier and happier children and much more besides (188).

As expertise is perceived as the domain outside of politics and inside that of ‘truth,’ individuals will feel they are not being forced, but given a choice which they can make on the basis of expert opinion. Rose and Miller explain, “By means of expertise, self-regulatory techniques can be installed in citizens that will align their personal choices with the ends of government. The freedom and subjectivity of citizens can in such ways become an ally, and not a threat, to the orderly government of a polity and a society” (ibid: 89). Thus, the expert plays an integral role in shaping individuals behaviour and influencing their choices, and because the expert is viewed as outside politics and inside ‘Truth,’ expert advice is usually perceived as less suspicious.

Discourse within the governmentality literature uses the term political rationalities. These forms of discourse are not simply the articulation of ideology or rhetoric but as Rose and Miller (1992) explain, “[they] should be seen, rather, as a kind of intellectual machinery or apparatus for rendering reality thinkable in such a way that is amenable to political deliberations” (179). They go even further by stating,
Governing a sphere requires that it can be represented, depicted in a way which both grasps its truth and re-represents it in a form in which it can enter the sphere of conscious political calculation. The theories of the social sciences, of sociology and psychology, thus provide a kind of *intellectual machinery* for government (ibid: 182, original emphasis).

Thus, both the techniques and the rationalities play a part in governmentality studies. However, these technologies and rationalities are always shifting. As the welfare state becomes suspect of having too much power, neoliberalism and rationalities of managerialism and efficiency are often taken up by the state. According to Rose and Miller (1992) the rationality of neoliberalism imagines that states should protect their citizens through the international sphere and through a strong domestic legal structure. Outside of this basic government framework, citizens and commercial interests should be free to pursue their individual desires in any way they see fit. However, the rationalities of neoliberal thinking also enter the public domain and the individuals it governs as in Rose and Miller’s (1999) example of the National Health Service in Britain. Discourses of efficiency and managerialism rework institutions and how individuals think about what institutions should be. Although privatization often plays a more obvious and contestable form of neoliberalism, more insidious forms penetrate institutions and our own mentalities about how things, including ourselves, should be governed.

According to much of the governmentality literature, one of the most important aspects of power is how identities are cultivated. How we think of ourselves and the categories we use to justify our actions are linked to greater political rationalities. Having people identify themselves as certain kinds of actors is integral to governing of a population. As Dean (1999) explains,
Regimes of government do not determine forms of subjectivity. They elicit, promote, facilitate, foster, and attribute various capacities, qualities, and statuses to particular agents. They are successful to the extent that these agents come to experience themselves through such capacities (e.g. rational decision making), qualities (e.g. as have a sexuality), and statuses (e.g. as being an active citizen)...How is someone who buys goods at a supermarket to be made to identify as a consumer? How is someone who depends on social security relief from a public authority made to identify as an active job seeker? How are certain men made into or make themselves into a ‘gay community’? (33).

Thus, the way we think of ourselves often fosters various possibilities for the exercise of power through believing ourselves to have certain characteristics. Not only are identities cultivated in particular ways, but characteristics as well. Cruikshank’s genealogy of self-esteem shows how the emergence of self-esteem from its feminist origins is reworked through networks of power into a tool of control. This was not a political rationality that was designed for control, but one that was transformed and utilized as it became part of everyday language. Cruikshank writes,

Self-esteem is a practical and productive technology available for the production of certain kinds of selves, for “making up people,” as Ian Haking might put it. Self-esteem is a technology in the sense that it is a specialized knowledge of how to esteem ourselves, to estimate, calculate, measure, evaluate, discipline, and to judge ourselves (1996: 233).

Although the original goal of self-esteem was that of a liberating technology to make women feel an increased sense of worth and confidence, it quickly got taken up by experts, popular culture, and individuals as a way to explain social or personal problems. Experts then also began to employ this language to explain delinquency in those who had committed crimes or were socially maladjusted. According to this logic, those who lack self-esteem are more likely to commit offences and be a burden to society. Thus, self-esteem must be cultivated in all individuals as a tool for crime prevention and a means to
a ‘healthy’ and ‘happy’ society. As this happened, experts spread this message from social work offices to the cover of popular magazines. In the end, through networks of communication, most individuals come to understand their own and others’ behaviours through this new lens of self-esteem. The technology of the self enables us to measure ourselves against a new norm in which a ‘worthy’ person is one with self-esteem. As Cruikshank explains,

Self-rule remains essential to democratic stability, I argue here, and so the relationship of self to self is a political relationship, although one that is more dependent on voluntarily applied technologies of selfhood than upon coercion, force or social control engineered from above (1996: 248).

Thus, self-esteem became a tool to both govern ourselves and govern others and spread through networks of governance that were not initially top-down, but bottom-up, and later spread in a multitude of directions to become a common standard of human measurement. The most crucial point is that even the ways we view ourselves can be used as tactics for control taken up by institutions.

Governmentality studies is concerned with the tactics employed to achieve particular ends. It relies on ‘how’ questions to understand power’s operations through lenses of political rationalities, expert knowledge, and the formation of identities. As government attempts to govern behaviour toward particular ends, it relies on particular mechanisms to achieve its goals. By investigating these mechanisms, one can attempt to understand how large operations of power are possible and through what channels they are exercised.

In governmentality, normalization and the norm are once again central, but the state, the self, and the expert are brought into Foucault’s light. Elden (2007) outlining the
purposes of Foucault’s governmentality essays explains that one of the main themes is “normalisation as mechanism of security.” The “conduct of conduct” concerns the state’s vested interests in normalization in a liberal democracy. In what Lorey (2006) calls “normalized free subjects” of biopolitical governmentality, “the normal is always woven in with the hegemonic. With the demand to orient on the normal - which could be bourgeois, heterosexual, Christian, white male, white female, national - in the course of the modern era, it was necessary to develop the perspective of controlling one’s body, one’s own life, by regulating and thus managing the self” (2006 http://eipcp.net/transversal/1106/lorey/en). She adds that in such a system “normalization is lived through everyday practices that are perceived as self-evident and natural” (ibid).

To summarize, the norm and normalization are integral to Foucault’s many iterations of power. Power is exercised through individualization, or making visible those bodies and ‘souls’ who will produce normality. Normalization is the process of creating and maintaining homogenization through individualization through the construction of the ‘soul,’ the partitioning of space, and circulation of the norm through bodies and spaces. Homogenization through individualization, made visible through sexuality, linked the individualized body and its practices to the homogenization of a healthy population. Employing Palliser’s Triangle as a case study, I illustrate how in dry-land settlement the body and the land were individualized with the goal of a producing a homogenized nature and economy.

In order to investigate the normalization of nature, the previous discussions of normalization must be linked to current theorizations of nature in Geography. I use this section to explain how nature is being articulated and interrogated in post-structural political ecology and social nature literatures. It is from this literature, and the following discussions of post-colonial studies of nature, that the centrality of constructions of race, gender, and class in the production of nature is made most evident. Post-structural political ecology emerged as post-structural theory spread throughout the academic disciplines in the 1980s and 1990s (Neumann 2005). Prior to this, political ecologists mainly drew on Marxist, cultural ecology, and dependency theorists for their framework or as Blaikie and Brookfied (1987: 17) defined as the combining “the concerns of ecology and a broadly defined political economy.” While much of the earlier theory continues to underpin studies in political ecology, such as the effect of international capital on the livelihoods of local populations or how local populations continue to be the main target for environmental reform, struggles over resources have more recently been largely recognized as being both material and symbolic. In other words, discourse is seen as a powerful tool for framing what environmental problems matter and who is responsible for them (Bryant 2001; Escobar 1996; Neumann 2005; Watts 2000).

Post-Structural political ecology and social nature theorization have linked nature to systems of power and knowledge order to de-naturalize it. Political ecology has used discourse analysis to understand how power functions through discourses such as conservation and sustainability (Escobar 1996). Hence, the use of discourse analysis in
political ecology has enabled the questioning the operations of power exercised by those who claim to speak in the best interests of the earth, nature, or the environment and has given voice to those who are subject to land loss, relocation, violence, and governance through the creation of knowledge. Political ecology and social nature aim to make visible the production of nature linked to power and knowledge.

Post-structural studies of nature and the theme of social nature have also played an invaluable role in shaping political ecology. Social nature can be seen as a double movement as it illustrates the social constructs of nature and how power is exercised through such ideas and, at the same time, works to reverse the erasure of peoples due to such constructs, reinserting the social back into the ‘wild.’ Categories such as ‘unspoiled,’ ‘wilderness,’ and ‘pristine’ or ‘first’ nature have been critically theorised in order to illustrate how ideas about nature, like any other social construct, are created in a specific historical, political context, but continue to shape our views when dealing with environmental issues (Braun 2002; Braun and Castree 1998; Castree and Braun 2001; Cronon 1996). These discourses of nature, built on the legacies of European romanticism and reconstructions of the ‘lost’ American frontier (Cronon 1996) have been employed to exercise power over territory and foster dispossession. Previously naturalized and unquestioned by most, seeing particular natures as ‘wild’ is now recognized as being part of a particular colonial worldview which has continually been performed, represented, and documented in the form of a cultural practice (Braun 2002), a practice which has rendered indigenous claims to land invisible, justified the removal of such populations, and assisted in what David Harvey calls “accumulation by dispossession” (2003: 158).
Discourses of degradation have also been central to post-structural political ecology. Historically, degradation narratives have often been attributed to racial inferiority and pre-modern, unscientific methods of resource use (Grove 1995). For it was the view of the colonizers that unless modern (read European) methods of agriculture and forestry were used, people were harming their environments. Race, order, and ideas of degeneration heavily influenced those who judged the land management practices of non-Europeans. Seemingly ‘chaotic’ or ‘untidy’ forms of agriculture gave the impression, or opened the possibility for a particular reading, that nature was in control rather than humans, and the illegibility of such practices supported the argument that people were mismanaging their environments (Davis 2007; Grove 1995; Mackenzie 2000; Scott 1998). How people used their environment was also seen as an indication of human development. Burning practices were viewed as the ultimate form of mismanagement, running contrary to colonial agricultural knowledge and seen as an affront to nature (Fairhead and Leach 1995). Even today, ‘slash and burn’ agriculture is viewed as a ‘backward’ practice done by those who are ‘ignorant’ of environmental value. Degradation narratives were often the first step and the first justification for colonial control and integration of colonial environments into the metropole economies (Ferguson 1990). Where terra nullius or empty land narratives were not applicable, poor resource management was often used instead as a justifying discourse for expert control. As Neumann states,
Colonial science, with little exception, condemned African land and natural resource use and practices as wasteful, environmentally destructive, and inefficient thereby supporting the state’s moral justification for its proprietary claims. The presumptions of the superiority of western science and of Africans as poor land stewards provided the basis for the construction of a set of “degradation narratives” that were initiated in the early colonial period and persist to the present (2004: 203).

Since the 1970s, political ecology studies have researched how degradation has been used as a tool of power to bring rural populations into the capitalist mode of production, move people off of their land, and ‘modernize’ rural economies (Blaikie 2001; Bryant 2001; Neumann 2005). Political ecology studies recognized how crucial it was not to judge land management practices in isolation of the greater global economy or colonial legacies, which often pushed people into ecologically marginal land use and promoted particular forms of agriculture. Also, using discourse analysis political ecology studies began to focus on how degradation was being used as a political tool being used to justify or hide changes to land tenure by state or colonial powers (Blaikie 2001; Mackenzie 1998). Uncovering such politics of degradation narratives has been central to political ecology. Numerous studies have shown how degradation is a powerful discourse which is often employed to secure international aid, take control of the land, or modernize rural areas (Neumann 2005). Race, played out through degradation, is often expressed in terms of time or ‘anachronistic space’ (McClintock 1995), viewing the rural peasant or aboriginal as a person trapped in time with archaic knowledge, ‘primitive’ methods, and an unwillingness or incapacity to change.

However, political ecology scholars also remind us that no analysis is complete without also looking at class and gender (Neumann 2005), as peasants and women throughout the world are often dispossessed through environmental narratives. While
race is articulated specifically through narratives of inherent characteristics or categories of a people or their ‘true natures,’ and in environmental politics, their ‘innate’ relationship to the land, this is also the case for class and gender. Feminist political ecology has made central the impact on environments when women’s livelihoods, land, and labour are transformed through changes in the political economy (Carney 2004, Mackenzie 1998; Schroeder 1999; Wangari et al. 1996). These scholars examine how gendered struggles over resources are inherent at all scales, including the household. These struggles are also discursive given how constructions of masculinity and femininity emerge through resource and household struggles. It is argued that discourses of gender, however, cannot be wholly separated from discourses of class and race (Mackenzie 2000; McClintock 1995), though I would assert that nature is the discourse which connects them and acts as the binding agent of order. Thus, it is often impossible to trace where the constructions of race end and those of class or gender begin.

Post-colonial theory critically engages with the impacts and legacies of colonialism (Gregory 2004). While post-colonialism has crosscut many disciplines and has produced innumerable volumes, and is still growing, Edward Said’s Orientalism (1978) remains one of its core texts. Said illustrates how an object of concern, such as the Orient, becomes subject to various cultural readings, representations, understandings, and categorizations. These actions not only report and catalogue the ‘Truth,’ but also produce and reproduce material effects, in essence creating the ‘Orient.’ Geography is central to Said’s Orientalism in terms of territorial mappings of ‘us/them,’ ‘occident/orient’ but also in how space is understood and produced. Although Said relies on Foucault as the groundwork for his analysis, Said departs from Foucault in the importance he gives to
particular authors or collections of texts. Said shows how ideas are circulated through the referencing and cross-referencing of particular subject experts. He states, “The unity of the large ensemble of texts I analyze is due in part to the fact that they frequently refer to each other: Orientalism is after all a system for citing works and authors” (1978: 23). He calls Orientalism a “discursive formation” (ibid).

Post-colonial scholars focus on constructions of race introduced or strengthened through colonial rule. They trace theories of race to the first colonial encounters and their effects on the building of the colonial European cosmology (Nash 2004). The Enlightenment, the growing strength of the natural sciences in Britain and France, and later emerging ideas about evolution became the dominant frameworks for ordering the world in the 18th and 19th Centuries, all coinciding with the expansion of European empires. This ordering placed encountered populations within a hierarchy of development, or a ‘natural order’ which placed colonizing white male Europeans at the top and centre and the colonized ‘beneath’ them (McClintock 1995). Just as imperial naturalists documented species of flora and fauna on their travels, they also documented human populations as native species to particular locations. The movement through space combined with scientific narratives created the role of the observer, in charge of making sense of places and cultures encountered. Both Doreen Massey (2005) and Anne McClintock (1995) detail how this was conceptualized geographically, as space was conflated with time. In what McClintock calls anachronistic space, explorers of the empires believed they were encountering earlier forms of humans as they travelled. Thus, the building of race as an area of knowledge, ‘scientific truth,’ or discourse, conferred considerable power to the European colonizers. For if Europeans knew, and
were, the ‘destiny of all men,’ they had the power and duty to lead others to the same destiny.

Most often these discourses justified and supported colonial occupation. Said’s *Orientalism* describes how the ‘Orient’ was represented through knowledge, art, novels and other *imaginaries* which portrayed ‘Orientals’ as sexualized, chaotic, backward, and unable to govern themselves. Said states,

Taking the 18th Century as a very roughly defined starting point Orientalism can be discussed and analysed as the corporate institution for dealing with the Orient—dealing with it by making statements about it, authorizing views of it, describing it, by teaching it, settling it, by overruling it: in short, Orientalism as a Western style for dominating, restructuring, and having authority over the Orient (1978: 3).

Thus, race is conceptualized as a means of giving order to colonial space, as well as a crucial part of the cosmology used to justify or explain European expansion. This initial ordering, however, has an enduring legacy which continues to effect the way people and places are perceived, studied, and subject to colonial imaginaries.

Gender is also made central in feminist post-colonial studies as scholars examine how colonial rule altered gender constructions and relations (Mackenzie 1992). Creating mirrors of power, colonizers asserted and installed their own patriarchal systems to places where they attained rule. Female leadership, land tenure, and control over labour and resources was greatly eroded by the often new control and authority offered to men (Carney 2004). Female labour was largely erased, degraded, and devalued as the patriarchal systems of the colonizers were reproduced in the outposts of Empire. In terms of nature, the struggle over resources placed women within a hierarchy where constructions of their ‘nature’ and their prescribed ‘place’ within nature had a direct impact on their livelihoods and tenure rights. This insight is central to this dissertation as
female labour, tenure, and access to resources was not taken into account in the colonization of Palliser’s Triangle.

More recently, interdisciplinary studies of race and studies of nature are being analyzed together as they have similar origins and have often been used together to explain a people or an environment (Baldwin et al. 2011; Moore et al. 2003). For when we look at how particular environments were shaped through discourses of nature (e.g. national parks), the social politics which allowed or justified the transformation of environments must also be analysed. Kosek explains here:

By learning from and integrating insights from critical race theory, political ecology will be better equipped to untangle forms of social difference from biology and treat nature as more than a fixed set of environmental objects, thus allowing its theorists and practitioners to better illuminate the symbolic and material ways in which formations of nature and difference are made and manifest in resource struggles (2004: 128).

Kosek (2004) also argues it is necessary that, “practices, politics, and effects of racial formation be examined as sites central to the politics of nature” (128). Race can be seen as subsumed under the larger umbrella term of nature, which is an ordering discourse used to explain behaviours of the genders, social classes, and races. The visual diagrams explored by McClintock (1995) and Livingstone (2010) in the Tree of Man and mappings of human origins, illustrate how race was visualized through discourses of nature. The natural order of the races put European males at the top of the evolutionary tree, having passed through the phases of evolution which other humans had not yet done. The family tree metaphor becomes an expression of natural order. Moore et al. describe the 18th Century taxonomies of Carl Linneus and his Systema Naturae in which “the ‘Wild Man’ shared a common species…with homo africanus, whose ‘apelike nose’ betrayed an
external body reflecting an inferior nature ‘ruled by authority’” (2003: 12). Thus, the ‘nature’ or essence of non-Europeans was often described in animal terms in a taxonomy of humankind. This is argued to have created a ‘natural order’ which allowed a particular politics (colonialism) to emerge as natural and beyond questioning.

Race and nature can also be tied through environmental determinism, a school of thought that gained prominence in the 19th century, which attributed peoples’ particular qualities to their geographies. The typical view was that the European climate made for an industrious species, and the tropical climates made a lazy, diseased, and sexual species. Derek Gregory explains that environments that were outside of the temperate European norm such as the infamous ‘tropics’ or ‘deserts’ were viewed as “unnatural nature” by the Europeans (2001: 103). The population living in these environments was subject to the same mischaracterization as their misperceived surroundings, often described using sexualized or dangerous ‘savage’ metaphors. Drawing on Said, Gregory goes on to explain how this Eurocentric gaze used the visual in the form of maps, paintings, diagrams, photographs to order environments and people through colonial imaginaries. Gregory explains that, “Culture involves the production, circulation, and legitimation of meaning through representations, practices, and performances that enter fully into the construction of the world” (2004: 11). Through these colonial readings, great complexity was transformed into what Pratt calls “European-based patterns of global unity and order” (1992: 31). Race and nature, as viewed by the colonials, were a key part of that order.

Another construction of race was the notion that the European had left nature through its taming, while the other ‘races’ had not. Anderson (2001) argues that using
race to measure the distance from nature, or current outrage concerning racial narratives which involve animal comparisons, shows to what extent Europeans consider the human species as separate or outside of nature. She believes discourses of race can tell us a considerable amount about common views of nature and visa versa. By illustrating how the Australian aborigine was portrayed as even less evolved than other farming cultures by the colonizers, Anderson shows how these views continue to justify the treatment of aborigines to the present and their ‘rightful’ place in society, the outback. Braun’s (2003) chapter on race and risk sports illustrates how a common aspect of white male identity is to venture ‘back’ to nature as a form of his purification before modernity. In doing this, Braun also shows us how it is outside of the discursive norm to see non-Europeans pursuing such risk culture. He states, “Within the racial text of primitivist discourse, the figure of the Indian *seeking* danger or the black adventurer wishing to return to nature becomes absurd, even comical. When John Muir asserted that the journey into nature was a universal human need, he did not have in mind non-Europeans: *they were already there*” (2003: 196). Therefore, the distance from nature is often argued through racial narratives, telling us a lot about how race is constructed and where people stand in relation to nature. Thus, race is part of larger narratives of nature, and both are often employed in tandem. Moore et al. explain that “working together, race and nature legitimate particular forms of political representation, produce social hierarchies, and authorize violent exclusions—often transforming contingent relations to external necessities” (2003: 3).

Studies of whiteness have also added much to the race and nature literature (Baldwin et al. 2011; Kobayashi and Peake, 2000). By looking at whiteness made natural,
as the standard to which all others are judged, this theorization destabilizes the often hidden racial normativity. Such scholars argue that focusing on race has, “historically been used to characterize difference” (Baldwin et al, 2011: 5). Baldwin et al. (2011) show how nature is central to white identities in Canada and to the idea of the Canadian nation state itself. They explain,

The Great White North is an enduring Canadian myth. It weaves history, geography, aesthetics, science, and even comedy into a national imaginary that invokes a metaphor of nature’s purity to reinforce the norms of racial purity. The double meaning of white parallels a double movement in our social and cultural history both to assert the dominance of whiteness as a cultural norm and to build a sense of national identity linked closely to nature and wilderness (2011: 1).

Thus, whiteness needs to be researched and understood as both a category and as a means of producing social space, including social nature.

**VII. Bridging Normalization and Nature**

As the illustration of the tree being corrected by being tied to a stake in Foucault’s *Discipline and Punish* depicts, normalization was not exclusively exercised on humans or nature, but both. These operations of power overlapped in many ways. Mastering the earth’s surface, or geo-power (Luke 1995), has been key to human survival for millennia. However, with the rise of the natural and human sciences there was an inevitable overlap in how human populations and environments were being mapped, ‘known,’ managed since the late 19th Century. Normalization strategies have allowed operations of power to flourish under the guises of order, individualism, and competition. Forcing Palliser’s Triangle to blend seamlessly into a larger economic region through spatial ordering and scientific knowledge creation supported a highly precarious colonization project in which
human lives were subject to great suffering and environments were dramatically altered for larger political, territorial, and economic gains by the Dominion and Empire. These normalization strategies were different than the strategies used to protect ‘wilderness’ or the ‘wild’ as they were heavily invested in the nature’s complete transformation into an economic industry where homogenization, standardization, and efficient production were central.

In exploring norms and normalization, I seek avenues and openings to speak about how nature has been normalized through individualization. When normalization is written about, it is most often in the context of the human or the social, and not in the context of nature or environmental management. Nature is perhaps forgotten, or the act of disciplining earth has become taken for granted or secondary to earth’s destruction or ‘degradation.’ Many also speak about the outcomes of normalization, but the operations of power are never theorized in such terms. Scott’s *Seeing like a State* (1998) could be argued to be a detailed study of the homogenization of nature exercised on particular environments, yet Scott does not frame it in such terminology or offer his theoretical inspiration. “High-modernism” (Scott 1998: 95) is limited in its explanatory power as it concentrates on the unidirectional power of homogenization by the state. Normalization, on the other hand, offers the multidirectional operations of power through the five key components of homogenization through individualization: comparison, differentiation, homogenization, hierarchy, and exclusion. Unlike Scott, I argue that race, gender, and class are all central in these five operations by setting the limits and margins of the norm as a “value-giving measure” (Foucault 1977: 183). While Scott was clearly influenced by Foucault in the way the state sees its natures and populations, Scott’s hidden theoretical
foundations, state-centred lens, and blindness to political subject making, leaves much room for a more holistic analysis when it comes to nature’s homogenization through individualization.

While normalization has not been widely taken up in Environmental Geography, I believe there is a great deal to be gained by adding it to the researcher’s analytical tool kit. Inside and outside of Geography, those studying gender have most widely engaged in studies of normalization drawing influence from Butler (2004) who has made the concept central to her work. Mackenzie’s (2008; 2013) research on community land ownership in the Outer Hebrides and additional work troubling the ‘wild’ is an example where the norm and normalization of nature and property is employed with a nuanced and complex understanding. No one, apart from Mackenzie, has linked normalization to studies of nature and environment. Mackenzie’s Places of Possibility (2013) disturbs the normalized categories of property and nature, but argues that new norms can be constructed through community ownership. At the same time there are those who employ the term normalization in relation to the environment (Gregory 2001), yet do not delve into the complex operations of such normalization.

If we take Latour (1993) and Mitchell’s (2002) critiques seriously, we must follow the networks that overlap and connect with all points of being. Thus, normalization is not simply a human phenomenon but one that necessarily spills into the nonhuman, and even invests greatly in such normalization as a strategy for environments and human/nonhuman bodies. I ask the following: When the nonhuman becomes visible, how is it articulated? How are the docile bodies of soils, organisms, bacteria, genes, flora, and fauna organized and made ‘productive’ or marked as a threat? How are their forces
combined with the human body’s docility? Does this not produce and multiply the effects of such normalization on a much larger scale than the human alone? When Braun speaks of the “normal forest” created by British Colombia’s forest industry, he describes the “enormous ecological consequences” of such practices, but also how other claims and uses of the land are made invisible or illegible (2002: 67).

Therefore, I am not just interested in the discursive, but also the material as it produces, and is produced by, the discursive. The body is not the only force to be utilized, as environmental forces are also necessary and should be taken up in a study of the micro-physics of normalization. So you may ask: But how can nature be normalized if it is not capable of self-reflection and self-governance? While you cannot deny nature’s forces, do they not work in different ways? I answer these questions by stating that natural forces collide and combine with human labour and discourse creating the innumerable effects of the Anthropocene (Dalby 2007). Mitchell (2002) illustrates this well through his historical analysis of the mosquito’s role in altering political events in Egypt. While normalization may involve altered tactics to discipline and govern nature, the norms of the nonhuman are where human/nonhuman forces intersect. Despite our attempts, the human has never been separate from nature (Latour 1993; Mitchell 2002; Whatmore 2002). Its forces combine with ours to make life liveable. We have individualized, parcelled, contained, classified, and altered nature on a global scale through networks of knowledge. We have created a global machine, a ‘monster’ comprised of human and nonhuman forces, to feed capitalism through capitalist tactics of normalization.

It may be taken as a given that nature is disciplined by humans in all kinds of
ways. Agriculture in its various historical forms has always shaped the land. However, a shift occurred in the 19th century that allowed for normalization to become part of the tactics of agriculture. Describing Foucault’s definition of an event, Carvalho (2009) explains that, “An event is a shift in power relations that occasions discontinuity at various levels and allows a new form of life or set of practices to emerge. It is the advent of something new: new statements, new objects, new rules” (49). Following the French Revolution, and the writings of Malthus on population, the production and circulation of food became a central problem for governing. The industrial revolution had created urban masses of people who needed to be fed by a thinned countryside (Marx 1954). Thus, the land and the people who farmed it were made visible and led to the birth of agricultural institutions, experts, and farming manuals such as Henry Stephens’ 1844 The Book of the Farm. The television program The Victorian Farm (Elliott 2009) which recreates the many aspects farming life during the Victorian era, could not have been produced if these farming manuals had not been created. However, the Book of the Farm was not about documenting farming techniques, but about modernizing and standardizing farming practices through scientific knowledge. The creation of a standardized knowledge, or norms of farming began to circulate and forever change agricultural production. However, the ‘new world’ offered even more opportunities to base farming on a disciplinary model as ‘new’ land demanded expertise.

Finally, along with most fields, political ecology literature has not delved into the complex aspects of normalization that include the triangulation of the ‘soul,’ space, and the norm, or its five operations of homogenization through individualization: comparison, differentiation, creating hierarchy, homogenization, and exclusion. These operations of
power are inherently spatial and, therefore, would likely be useful to many geographers. As I explain, these complex mechanisms are not limited to human normalization alone and can be extended to nature, which will influence studies of micro-physics of social nature.
Chapter 2

The ‘Soul’: Birth of Palliser’s Triangle

*The soul is the effect and instrument of a political anatomy; the soul is the prison of the body.*

Foucault (1977: 30)

I. A Region Becomes Visible

Can a region have a ‘soul’? If Foucault argues that the ‘soul’ is a construction of juridical discourse that flooded into each of us as a tool of evaluation to judge others and ourselves, it follows that regions, environments, and soils too can have ‘souls.’ And perhaps too, the soil’s body is also imprisoned by its constructed ‘soul.’ The first exercise of power through normalization in Palliser’s Triangle was to establish the ‘soul’ as a visible point of evaluation, correction, and reform. In 1860, the ‘problem’ region of Palliser’s Triangle was born of colonial conquest and knowledge. It became visible as a ‘problem’ space juxtaposed to the ‘normal’ space that surrounded it, the fertile belt. Encountering a ‘problem’ nature overlapping with an international political border and under Aboriginal control made it all the more visible. I argue Palliser’s Triangle’s ‘soul’ was constructed through the making of natural histories that explained the past, observed the present, and projected the future. What emerges through this research is a powerful discursive formation that explains and explores the *past, the present, and future* of the arid southern Prairies. Drawing on Foucault, I assert that the Palliser’s Triangle becomes a geographical subject of reform in which its ‘soul’ is constructed, its ills defined, and its potential identified through the construction of a temporal and spatial narrative. This
form of power enables the ability to judge individuals, human or nonhuman, in “not only what they do, but also what they are, will be, may be” (Foucault, 1977: 18). And not only describing the act or end result but also asking, “How can we assign the causal process that produced it [the crime]? Where did it originate in the author itself?...It is no longer simply: ‘Who committed it?’ But: What would be the most appropriate measures to take? How do we see the future development of the offender? What would be the best way of rehabilitating him?” (ibid:19). Similar questions were asked of Palliser’s Triangle’s nature. To construct the ‘essence’ of Palliser’s Triangle, colonial exploration posed and answered similar ordering questions that construct its ‘soul,’ out of which the ‘nature’ of Palliser’s Triangle is seen as corrupted and degraded, as previously bountiful and beautiful, and as potentially saved and restored through responsible management. At the same time the ‘soul’ of the Aboriginal, who at the point of assessment controlled the land, is painted as a ‘destructive race’ posing a danger to themselves and nature, whose time had passed, and whose future was grim. Gender is silenced as male explorers ignore complex Aboriginal gender relations, focussing on male activities as the only examples of land management. Women are excluded from the discursive frame of the plains, the beginning of a long tradition. A narrative follows that imposes a responsibility to both fix and govern the land and its peoples. Individualizing Palliser’s Triangle as a problem ‘soul,’ capable of rehabilitation, I argue, opened possibilities and provided rationalities for dispossession.

Central to my argument, Said emphasises how the writing of the Orient’s history was a powerful tool in organizing the ‘problem’ modern Orient as only the Orientalist could “rescue some portion of a lost, past classical Oriental grandeur in order to
‘facilitate ameliorations’ in the present Orient” (1978: 79). For Said, the production of the past makes the Orient governable as it signifies that the former greatness that has been corrupted in the present can only be restored toward its true destiny by those who can understand and value its history, the colonial powers.

In what Zeller (1987) calls Victorian inventorial science, colonial exploration sought to know and order the land. With each exploration of the Palliser Triangle, another volume is compiled with teams comprising of natural scientists, military officers and personnel, and Aboriginal and Métis guides. Like Orientalism (Said 1978) these volumes rely heavily on one another with constant referencing and cross-referencing as each new volume appears. Production of Palliser Triangle’s present delineated its borders and problems, studying its past created a story of how the land became corrupted, and imagining its future paved the way to reform. Understanding the subject, and creating knowledge about it, makes the subject open to reform and transforms a political move into a technical puzzle. The debate around whether or not Palliser’s Triangle was suitable for agriculture masked a territorial claim. Like Ferguson’s Anti-Politics Machine (1990), the question was not framed as ‘how do we claim this land for our own?’ but instead as ‘how do we fix this land in order to make it governable?’ or ‘how do we solve the problems of this land?’ This chapter deals with the exercise of power/knowledge, which entailed ‘discovering’ and ‘knowing’ the ‘true nature’ of a place and people in order to prescribe a social and natural fix. This exercise of power entails knowing the ‘Truth’ of a region or nature and asks the questions of its past, present, and future such as the following: What is this place’s true nature or essence? What is this place now? What caused it to become this way? What could/should this place be? What is the nature of its
Aboriginal populations and where do they belong? I draw parallels with Foucault’s *Discipline and Punish* (1978) where the criminal whose ‘problem’ ‘soul’ or character receives evaluation through its past habits, present danger to the public, and future capability of rehabilitation. Like the patient or ‘delinquent,’ the Palliser Triangle becomes explicitly subjected to intense evaluation and characterization in hope of making it productive in the future.

I trace the exercise of power that reads and represents land and Aboriginal land use in the Palliser Triangle by the colonial expeditions from 1857 to 1882. This is an important time as these explorations were sent by the British and Dominion of Canada governments in order to claim the territory as the fur trade was coming to an end (Innis 1956). The goal was a change of governance from First Nations and Hudson Bay Company’s control to Dominion and Empire government control. This region, and all others, needed to be claimed and these explorations were the first step in their colonization. While the fur trade companies also created knowledge in their record keeping of most of the happenings at the trading posts (Binnema 2014), a great source of research for many historians, it was not a comprehensive effort to characterize the region as a whole. The source material for this discourse analysis is the Palliser (1860), Hind (1860), Grant (1873), and Macoun (1882) expedition reports, Butler’s Travel Narrative and Official Report on the status of Aboriginal peoples (1872), and Dawson’s Boundary Line Commission Report (1875). I have chosen these sources because they formed the basis of Anglo-colonial knowledge of the region in the late nineteenth century. Each of these texts is an assemblage, organized as an encyclopaedia, a travel narrative, or a policy document with chapters dedicated to the flora, the fauna, soils, geology, climate, water,
and Aboriginal peoples, alongside major events, adventures, and tales of amusement. Like Said’s Orientalism (1978), science, aesthetics, adventure, and official policy overlap and intertwine, sometimes forming a coherent and impenetrable discursive formation and at other times rendering the discourses fractured, incomplete, and contradictory.

I have organized the chapter beginning with the political context and followed by three sections comprising of the present, past, and future constructions of the Palliser Triangle. The present section deals with colonial constructions of the ‘problem’ state of nature at the time when colonial experts were observing Palliser’s Triangle’s nature. These constructions of the present individualize and solidify the borders of the problem nature. The past section describes the natural histories that are produced to understand the ‘natural order’ or the “inner architecture” (Braun 2002: 58) of Palliser Triangle’s and the Prairies as a whole. The future section engages with how the colonial explorers produce a reformed nature through regeneration narratives, technological fixes, and visual representations. This chapter underpins the following chapters as it presents the construction of the ‘problem’ geography of Palliser’s Triangle. It is central to the argument in that it documents how an ‘abnormal’ nature is individualized, constructed, and assessed in terms of its possibility for future ‘normality.’ This assessment would set the stage for later political strategies of ‘improvement’ and ‘betterment.’

II. (Bio) Political Context

Palliser’s Triangle was anything but normalized before 1860. Aboriginal bands expanded and maintained their territories crossing the 49th parallel and following migrating herds of bison (Potyondi 1995, Ray 1998). Aboriginal peoples lived off the
many food sources available on the land and managed them through fire and foraging. There is archaeological evidence of early farming, which was thought to have been abandoned because of locust plagues (Carter 1990). Trade was also crucial to their survival. Palliser’s Triangle was a dynamic landscape of moving game and human land managers along with more permanent territorial settlements. Other large mammals such as moose, wolves, grizzly bears, and elk were present along with smaller burrowing mammals such as badgers, prairie dogs, and ferrets (Kaye 2011; Potyondi 1995). The Hudson Bay Company had tried without success to maintain a post and gain control over the region (Innis 1956; Ray 1998).

During nineteenth century Victorian scientific exploration, ‘distant’ lands, environments, and peoples are brought into the world of scientific discourse. As Said (1978) observes, these regional discourses begin to take shape through referencing, cross-referencing, and ‘truth’ circulation in which the place being observed is subject to the ontologies and epistemologies of the observers, creating imaginaries. Empires were able to ‘objectively’ see what existed in ‘remote’ parts of the world through teams of scientific specialists trained in geography, geology, botany, zoology, anthropology, and other standardized natural and human sciences. In the nineteenth century, these writings enter and circulate through popular, scientific, and political spheres (Schwartz 2003). Accounts of ‘wild savages,’ ‘strange’ lands, ‘unknown’ plants and beasts, adventures, and dangers work seamlessly, and indeed, coincide with and add value to the scientific observations. Such explorations were the first stakes in the ground toward gaining territory as knowing and documenting new lands gave the Empires an important claim, knowledge. Even the
Hudson’s Bay Company was involved in producing science as part of its operations (Binnema 2014).

Palliser’s Triangle came into being in a time of great transformation of economies and power relations with environments. As industrial capitalism was growing, the importance of luxury items waned and the need for staple items grew to support European stability. In other words, staple food production and the stability it brought became more important than the wealth of furs. In a time of Malthusian fears, industrial growth, and revolutions, food production, and especially wheat production, were of paramount importance. Population was also becoming a problem in Europe as the rural population was uprooted or forced off the land due to the rise in industrial farming and land reform policies (Marx 1954). A surplus population and a growing urban population created a biopolitical need for land and food security created abroad. Individualization of farms and male farmers was required to meet the health and political stability of metropole populations through homogenized food production.

The Canadian North-West was seen as a possible answer to these European problems. As explorer Macoun argues, offering land in the North-West would, “convert rebellious sons into loving grateful children” (1882: 214). In other words, it would pacify the growing mobilization of urban unemployed pushed off the land in Britain during the nineteenth century. Documenting the Sir Sandford Fleming Expedition to survey the route of the Canadian Pacific Railway, George Monroe Grant expresses frustration by the delay of settlement arguing, “For generations, all this boundless extent of beauty and wealth had been here, owned by England; and yet statesmen had been puzzling their heads over the ‘Condition of England’s Poor, the Irish Famine, the Land and Labour
Questions,’ without once turning their eyes to a land that offered a practical solution to them all” (1873: 114).

In the Canadian Prairie context, the North-West had yet to be secured through the transfer of power from Aboriginal and Hudson’s Bay Company control (Innis 1956). Territory and sovereignty are crucial with threats from expansionists in the United States such as the 54-40 movement, a call for the US to expand its territory from the 49th to the more northern 54th parallel, inside British North American Territory (Kaye 2011). Integrating and securing border space becomes increasingly urgent as the border region is under Aboriginal control and no government has a legitimate territorial claim or control over it. Thus, both the increasing need for food production and sovereignty in a place that is not easily settled made Palliser’s Triangle an object of concern or a problem space. At the same time those who controlled the land, Aboriginal peoples of the plains bands of Cree, Assiniboine, Blackfoot, Blood, Peigan, and Saulteaux nations, were at a time of transition as the buffalo populations were dwindling, starvation was widespread, small-pox and other diseases were killing large numbers, and the white population was about to invade their lands (Daschuk 2014; Savage 2012).

III. Constructing the ‘Soul’ through Scientific Observation of the Present

i) Palliser and Hind Expeditions

There have been many judges of Palliser’s Triangle since the first reports of its existence. The mission of the first scientific expeditions was to observe and record the present state of the North-West, including confirming or denying the presence of a desert north of the 49th parallel. What was this place? Was it inhabitable? Could it be farmed?
The Palliser and Hind expeditions were the first to make this land visible through maps, sketches, observations, and reports. Their character assessment would let imperial eyes see the ‘reality’ of the region through scientific observation. In this section I concentrate on these expeditions, as they are the first to systematically assess the state of the land and create its bifurcation of ‘normal’ and ‘abnormal.’ In these volumes the present state of the land was characterized in a binary, ‘normal’ land fit for settlement (fertile belt) and ‘abnormal’ land unfit for ‘civilized’ settlement (the arid plain) (Figure 2.1).

The picture the Palliser and Hind expeditions painted was both favourable and unfavourable for colonization. Both a route to the west coast through the North-West and a problem space were confirmed, mapped, and took the name of the man who designated its co-ordinates despite only wandering its perimeters, Palliser. Palliser’s Triangle was characterized as sterile, dangerous, and chaotic while the fertile belt was treed, fertile, and orderly.

The Palliser exploration party consisted of geologist and naturalist James Hector, botanical collector Eugene Bourgear, secretary and astronomical observer John W. Sullivan, and magnetical observer Thomas W. Blakiston. Spry explains that,

Astronomical, meteorological, and magnetical observations, detailed studies of geographic features and geological formations, collections of specimens and records of fauna and flora sent back for study and classification by experts in Britain, Canada, and the eastern United States, were only the foundation of the Expedition’s vital contribution to knowledge of the vast western territories (1968: cv).

The Palliser Expedition outlined the coordinates of a Triangle deemed unfit for settlement and agriculture and was the first to map and confirm reports of the northern tip of the Great American Desert inside the North-West’s borders. Palliser largely established the
groundwork for future expeditions including the first detailed map of the region. Interestingly, however, the Triangle is not prominent on the map and without the written co-ordinates, it is very difficult to identify it. Previous explorers had established the rough boundaries of a desert which was mainly inside the US and extended across the border, but Palliser, using the 49th parallel, gave the exact co-ordinates of a Triangle to establish what he thought were the limits of agricultural production. Although Palliser successfully completed his mission in identifying a fertile belt surrounding the Triangle, confirming an area of desert was the beginning of a politics of a problem space. Palliser’s Triangle or what Palliser called the arid region was outlined by him as “forming a triangle, having for its base the 49th parallel from longitude 100° to 114° W., with its apex reaching the 52nd parallel of latitude” (Palliser 1860: 7).

Palliser explained elsewhere in the report that the Triangle was only the tip of the much larger Great American Desert. Owram writes that Palliser and Hind both believed that the “bad land in North-West was in fact a northerly extension of that phenomenon” (1992: 68). For all intents and purposes what lay mostly south of the border was an immense desert. While reports of the desert would always haunt the region and brought it into the light, Palliser and Hind contained the region through its mapping, making it a fixed, known and visible obstacle rather than an unknown and shifting object of trepidation. They also made visible a ‘normal’ space capable of supporting both a western railway and farmland. North of the Triangle lay what Palliser named the fertile belt; the area which he argued was perfectly suited for future agricultural production. While Palliser believed that he had truly succeeded in finding both a passage for the future railway and suitable agricultural land along its path, the delineation of Palliser’s
Figure 2.1 Map based on Palliser Map showing Palliser’s Division of Arid Plain (Palliser’s Triangle), Plain country (fertile belt) and Thick wood country (Bush Country) and Aboriginal occupation of Palliser’s Triangle (Ruggles 1993a). Reprinted with the permission of University of Toronto Press.
Triangle has since brought him great criticism.

While it is thought today that Palliser travelled through the West during a particularly dry period (Wolfe et al. 2013), his conclusions were steadfast in reading the character of the land. He was also convinced that the arid region should be isolated, contained, and disregarded. In Foucault’s work, the madness or plague led to “strict spatial partitioning” (1977: 195) or quarantine of the Other. Carvalho explains that, “As with the lepers, those deemed abnormal and exiled are not simply thrown out; they are situated in a system that renders them other to solidify the realm of the same” (2009: 113). Perhaps the case of the freakishly arid plains juxtaposed against the fertile belt made the latter seem all the more green, fertile, and promising.

Hind’s two-volume work covering the Red River Expedition of 1857 and the Assiniboine and Saskatchewan rivers Expedition of 1858 was released in the same year as the Palliser Report, 1860. The Hind Expedition was sent to explore the area west of the Red River Settlement during the same years as the Palliser Expedition. Despite the overlap in exploration and publishing, both reports reference each other, meaning there was considerable collaboration between the two parties. Both reports generally support one another in their conclusions of a fertile belt and an arid plain. Hind released two versions of his report, the first was a general report published in 1859, and a reworking of the reports into a two-volume narrative published in 1860 which was much more widely distributed, read, and circulated throughout scientific, political, and popular travel writing contexts (Schwartz 2003). Hind’s writing in the narrative, however, is much more combative and years later he continued to challenge the government for its approach to western development. Hind is very particular as to naming the natural and social ills of
the North-West and his opinions of how to solve them. The first volume of the Narrative is the travel documentary complete with sketches, photographs, and textual accounts of findings, perceptions, and encounters. The second volume concludes the travel writing and engages on various aspects of the so-called Indian question including land title, customs and superstitions, missionary work, and possibilities for learning agriculture and future integration, as well as encyclopedic chapters on geology, climate, flora and fauna, and history.

ii) Normal and Abnormal Natures

Both Palliser and Hind observe the present state of nature as both promising and problematic. While both speak favorably of the normal fertile belt, both also agree on the limits of an abnormal region that was unfit for settlement. When describing the southern arid lands in the Palliser Report, Palliser speaks of the “region of arid plains, devoid of timber or pasture of good quality. Even in the alluvial points in the bottom of the valley trees and shrubs occur only in isolated patches. The sage and the cactus abound, and the whole of the scanty vegetation bespeaks an arid climate” (1860: 11). On July 20, 1859, Palliser notes, “Continued our journey, found the ground very much broken, and the travelling severe for the horses. Soil worthless. Found a human skull on the plain” (ibid: 140). A human skull on the open prairie is also portrayed by Hime in the photographs of the Hind Expedition (Schwartz 2003, see chapter 4). Palliser’s division of the Triangle was not absolute as he found some good land in the desert and some desert land in the fertile belt. But it seemed to Palliser that the line between the fertile belt and the arid plains was clear enough to simplify the process of settlement. He writes, “There are a
few spots where the soil is rich, but as a rule this region is barren and desolate” (1860: 85). On July 24, 1858 Palliser once again explains the dividing line of north and south regions explaining, “This line marks the boundary of two natural divisions of the country…To the north of this line generally there is timber, a good soil for agricultural purposes up to the 54 north latitude, and superior pasturage; to the south there is no timber, the soil is sandy, with little or no admixture of earthy matter, and the pasture is inferior. Exceptions of course can be found” (1860: 89).

Hind, in his own concurrent exploration, employs the same language and delineates similar boundaries of the desert and fertile belt. The same picture is painted of poor quality dry and sandy soils, scant vegetation, and treeless plains. He explains how parts of the arid region are “permanently sterile and unfit for the abode of civilized man” (1860: 351) and describes the vegetation of the arid plain as “very scanty, the Indian turnip is common, so also is a species of cactus; no tree or shrub is seen, and it is only in the bottoms and marshes that rank herbage is found” (ibid: 352). Hind also distinguishes between the terms prairies and plains (normal and abnormal) naming the former as “beautiful and rich” and the latter as, “desolate and barren” and believed those who conflated them had it “both physically and geologically wrong” (ibid: 349). This distinction was meant to illustrate that Palliser’s Triangle was an altogether separate physical region from the fertile belt. Owram believes that the impact of Palliser and Hind was both their “division of the region into identifiable sub-regions” and the way they had “torn apart old generalizations into more detailed observations” that brought the “geographical picture of the North-West into a clear and dramatic outline” (1992: 67). In other words, Palliser and Hind made the problem space visible. However, Owram argues
rightly that these observations are based not just on the state of land, but the state of the land “in terms of [future] agriculture and settlement” (ibid).

Thus, in an assessment of the state of the land, two distinct regions were formed. The fertile belt offered everything a settler could want and was considered ‘normal’ and familiar, while Palliser’s arid plains were dismissed as an uninhabitable waste which should be forgotten and would be “forever comparatively useless” (Palliser 1860: 21). Of course, such a landscape would have been completely new, strange, and unfamiliar to both Palliser and Hind. However, in observing the land, they were also reading the human impacts they were witnessing.

iii) Degradation Narratives

So what was causing the “sterile” land of Palliser’s Triangle to be so inhospitable? If this land was so ‘abnormal,’ what or who had created its condition? Hind and Palliser both identified anthropogenic fire as the main cause of the denudation of the land. This was first observed by David Thompson who wrote sixty years before Palliser that, "[because of fire] the Great Plains are constantly increasing in length and breadth, and Deer give place to the Bison" (Thompson 1962: 185-86). Palliser sourly describes the bare land he sees stating, “The frequent fires which continually traverse the prairie have denuded the territory of large forest trees, indeed so much so as in some places to render their absence deplorable” (1860: 13). He declares what he believes is the source of these fires, Aboriginal recklessness and mischief.

On October 3, 1857, writing about a fire he sees in the north-east from their camp, he states,
The Indians are very careless about the consequences of such an occurrence, and frequently fire the prairie for the most trivial reasons; frequently for signals to telegraph to one another concerning a successful horse-stealing exploit, or in order to proclaim the safe return of a war party. The disastrous effects of these fires consist principally in denuding the land of all useful trees...Another serious misfortune likewise frequently results from the wanton fires, and from which the authors are themselves frequently punished, viz., they cut off the buffalo sometimes from a whole district of country, and thus often are the cause of great privation and distress (Palliser 1860: 57).

On June 23, 1858, John Sullivan, a member of Palliser’s party records a similar argument,

It is most lamentable to see so often such masses of valuable timber destroyed, almost invariably by wanton carelessness and mischief. The most trivial signal of one Indian to another has often lost hundreds of acres of forest trees which might have brought wealth and comfort to the future settler, while it has brought starvation and misery to the Indian tribes themselves by spoiling their hunting grounds. Indians, however, never taught by experience, still use ‘signal fires’ to the same extent as in former years, driving the animals from their retreats and marring the fair face of nature for the future colonist (Palliser 1860: 89).

This production of the present state of nature and the Aboriginal is meant to show the prairies and the Aboriginal are incompatible in that they both suffer from an unnatural and harmful relationship. More importantly, these passages argue that this threat was spreading to the fertile belt from “reckless” Aboriginal land management. However, Palliser does mention one advantage of this noting that in the fertile belt, “the result of these fires is that the agriculturalist may at once commence with his plough without any more preliminary labour” (ibid: 22).

In his Narrative, Hind goes further than Palliser in claims of Aboriginal fire degradation and the dangers of losing the fertile belt to desertification. He argues, “The aridity of those vast prairies is partly due to this cause. The soil, though light, derives
much of its apparent sterility from the annual fires” (Hind 1860: 336-337). To this he adds,

Migratory bands of Indians dependent on wild animals for their support must diminish or increase with the area over which their sustenance extends, and it is apparent that the extension of absolutely treeless prairies and of sterile soil, the formation of “Plains” in a word, is unfavourable to the increase of the buffalo, the elk, the moose, the antelope and the bear (Hind 1860: 337-338, emphasis added).

Again, the message portrays that Aboriginal burning practices are both a threat to future settlement of the fertile belt and to the Aboriginal population themselves. The prairie and the Aboriginal are represented as incompatible, even though current records show a human history in the region of 10,000 years or more (Sauchyn and Beaudoin 1998). However, the reading of fire as destructive land management was a common view and tactic in North America (Cronon 1983; Pyne 1982; Pyne 2007).

These explorers explain this pyromania through the Aboriginals’ supposed inability to understand consequence. In Hind and Palliser’s accounts the Aboriginal is presented as similar to an animal, in that he/she only existed in the present without reason, foresight, or understandings of history. This narrative of wanton recklessness is performed as the scientific explorers themselves set fire to the prairie. Hector records, “We felt the want of snow a great deal now, many parts where the trail passed being quite bare, so much so that we set fire to the grass, just to say we had done so” (1860: 73). This event is insightful in many ways in that it that it is an act of mimicry that is misinformed. Playing ‘reckless native’ is performed out of frustration and boredom and I argue is a performance of shedding colonial rationalism and experiencing the irrational Aboriginal present. The perceived reversal of roles from rational observer to irrational
actor is an indication of how the colonial explorers viewed the act of setting fire. While continuously denouncing fire as mismanagement, they casually set the prairie ablaze, switching character roles for passing amusement. The moment is created through spontaneous silliness of people pretending to live in the present moment. Forgetting their professional roles, forgetting the possible consequences, they are performing the Aboriginal. As Butler (2004) has commented, fun and play can often reveal a tremendous amount about how identities are constructed and performed. Thus, together with the ‘soul’ of the land, the ‘soul’ of the Aboriginal is also constructed through their supposed misuse of the land. This hybrid soul of land and human is deeply problematic for colonial observers, one that must be surgically separated.

I must strongly emphasise here that fact that the plains bands did use fire for many reasons including communication, hunting, to assert economic pressure by controlling supply, and the regeneration of grass for bison (Potyondi 1995; Rannie 2001). They also certainly shaped their environments through these practices. What is important for this dissertation is how the Aboriginal practices of burning were brought into knowledge circulation and understood through colonial scientific discourses, in order to justify dispossession.

Another of Hind’s accounts of Aboriginal resource degradation is his description of a Cree buffalo pound, a means of hunting bison by directing a herd into an enclosure and then killing all the trapped animals. Hind describes this particular pound as “a dreadful scene of confusion and slaughter” (Hind 1860: 359) as the larger animals trample the younger ones and the animals are simultaneously killed from all directions. In his account, “The sound of the suffering animals is only broken by the shouts and
screams of excited Indians” and he observes, “man in his savage, untutored, and heathen state shows both in deed and expression how little he is superior to the noble beasts he so wantonly and cruelly destroys” (Hind 1860: 359).

Hind also adds comments on the Band’s pride in the pound:

The Indians looked upon the dreadful and sickening scene with evident delight, and told how such and such a bull or cow had exhibited feats of wonderful strength in the death struggle…in all 240 animals had been killed in the pound, and it was its offensive condition which led the reckless and wasteful savages to construct a new one (ibid: 356-357).

This vivid description further reinforces the idea that the Plains bands were irresponsible resource managers who acted without rational thought or in terms of future consequences, much like the animals they slaughtered. For what is a good land manager if not someone who acts today in terms of what the future may bring? Hind, like Palliser, sees the Aboriginal as living freely in the present or moment, something wild that acts on every impulse and immediate desire, the complete opposite of a responsible steward of the land. These narratives of overhunting and reckless slaughter were common throughout North America (Colpitts 2002; Kaye 2011; Warren 1997).

In this case and many more, colonial observation of the present claims the ‘Truth’ or ‘essence’ of the action witnessed and records it, categorizes it, and deems it as good or bad practice. Similar to Foucault’s description of the scaffold, the account of the pound may make us cringe, but like the scaffold, we must think about what operation of power is taking place both in the event itself and in the act of describing the event in such a light. Palliser and Hind both characterize an unhealthy land and population, both suffering and in need of governance. Land and Aboriginal are a made a visible threat to each other in an unsustainable relationship that is inevitably doomed in the near future,
while the larger colonial politics which had led Aboriginal peoples towards the brink are hidden. Hind explains that, “the extension of the prairies is evidently due to fires, and the fires are caused by Indians…These operations will cease as the Indians and buffalo diminish, events which are taking place with great rapidity” (ibid: 337). Thus, environmental degradation and mismanagement discourses were political technologies which created an opportunity to see the problem of territorial occupation as a technical fix rather than a land grab.

In the wider context, throughout the colonial empires in the late 19th Century, colonizers employed narratives of environmental mismanagement by Indigenous populations to secure territory. It was argued that in parts of Africa most savannahs were caused by degradation of forests (Davis 2007; Fairhead and Leach 1995; Grove 1995). Throughout the world British and French Colonial readings of grassland formation relied heavily on degradation and denudation, or what Davis (2007) calls declentionist narratives which blame indigenous or local populations for the destruction of forests, the formation of grasslands and eventual desertification. These narratives survive today in many parts of the world as was well illustrated in Fairhead and Leach’s (1996) *Misreading the African Landscape*. Degradation narratives have worked as political technologies, justifying new forms of land management and displacement of local populations.

iv) Aboriginal Threat

Another key reason for Palliser identifying the Triangle as unsuitable for settlement could have been that it was strongly defended Aboriginal territory. While the
descriptions of the land were of a barren, sterile, and isolated place in the scientific observations, the fact that the expedition was traversing Aboriginal territory is central to the travel narratives. The threat of attack by particular Southern Plains Bands such as the Blackfeet, Piegan, and Blood bands is constantly referenced in the Palliser Report. The fact that this territory was controlled by Aboriginals, despite the Hudson’s Bay Company and others’ attempts to penetrate and influence the area, was just as important as natural observations in Palliser’s denunciation of the region. This fact was addressed by Palliser in the General Report stating that the Hudson Bay Company’s “attempt was abandoned as too expensive and too dangerous, owing to the menacing and often hostile tendencies of the Indian tribes who inhabit that district” (Palliser 1860: 4). The fear of attack was so great during the Palliser expeditions that most of the Triangle was never fully explored (Spry 1995; Wolfe et al. 2013).

Interestingly, the uneasiness with passing into territory is often projected onto the Aboriginal and Métis guides and interpreters. Palliser writes in his general report that, “our Expedition traversed the whole of the British portion of the territory of the Blackfoot, Piegan and Blood Indians, but such was the general terror of the half-breeds whom I had engaged, that it was with the utmost difficulty I could lead them on” (Palliser 1860: 18). “Our Blackfoot guides, Amoxapeta and Petope, are getting frightened, especially the former, and talk of returning, which I am rather glad of, for they are both expensive and useless” (ibid: 140), Palliser writes on July 24th, 1869. Hector accounts on August 5, 1859 that, “Nimrod [Stoney] seemed uneasy about some tracks we had passed to-day, so we tied up our horses all night, and kept guard” (ibid: 143). This clear respect for territory expressed by the Aboriginal and Métis members of the expedition is a source
of frustration expressed by Palliser, who names their guides’ uneasiness as fear and terror. However, it is repeatedly stated in the volumes that this threat continually hangs over the entire expedition.

While representations of race have always been part of European-Aboriginal relations, they often worked within a hierarchy. Within the classification of ‘Indian’ there was a spectra of race in which various bands were deemed peaceful or violent, cooperative or indignant, good or bad, and hardworking or lazy. Palliser described the ‘races’ of Aboriginals in the fertile belt as much more amiable than their southern counterparts. He explains the character of the northern Aboriginal populations,

We do not apprehend that the Indians along the North Saskatchewan are likely to cause serious difficulties to the settlement of the fertile belt. The Saulteaus, Crees, and Thickwood Assineboines have been for many years on the best terms not only with the members and servants of the Hudson Bay Company, but with all the free traders, missionaries, visitors, etc., that have visited their country (1860: 18).

He contrasts this by adding a warning about the southern Aboriginal bands,

The country southward on both sides of the international line is that of the Blackfeet, Piegsans, and Blood Indians, and I should apprehend that these Indians would form large war parties, although first organized without any hostile intention against their agricultural neighbours, yet infallibly would end in attacks on the property of the settler and in loss of life to both Indians and settlers (1860: 18).

To Palliser, the fertile belt not only contained the best route west and the most promising agricultural land, it also had a cooperative Aboriginal population. Timber, game, fish, rich soil, and ‘harmless’ Aboriginals were all found in the fertile belt and its lack of all these defined the Triangle. Palliser believed that these two regions could be made
separate by placing settlers in the north and containing the hostile bands to the south. This is later echoed by Butler’s report on the North-West. He states,

Inhabiting, as the Blackfeet do, a large extent of country which from the arid nature of its soil must ever prove useless for the purposes of settlement and colonization, I do not apprehend that much difficulty will arise between them and the whites, provided always that measures are taken to guard against certain possibilities of danger (Butler 1872: 376).

This statement supports Palliser’s vision of separation and containment of the problem nature and its problem population. Butler, referring to the Blood and Blackfeet Bands, goes a step further by using environmental determinism to explain how the southern desert country had created an “erring race, whose natures have received the stamps of the region in which they dwell” (ibid: 376 emphasis added). Views of the ‘dangerous’ and ‘bloodthirsty’ Blackfoot were well established by this point in time (McManus 2005; Vibert 1997). Thus, the individualized ‘problem’ region was also identified and constructed through its ‘problem’ Aboriginal population.

The present, observed and produced through Palliser and Hind, creates the necessary binaries for a justified colonial occupation including normal and abnormal land, normal and abnormal Aboriginals, and degradation narratives that link the problem nature and peoples on a path of mutual destruction. Palliser’s Triangle is a tainted and broken ‘soul,’ worthy of segregation and containment and on a path, which if not altered, would inevitably turn the whole North-West into desert land. Thus, a crisis narrative is created which begs for colonial intervention to save the remaining prairie and its future ‘endangered’ settlers. The Aboriginal ‘soul’ is constructed as captive to the present, ruled by the base desires of blood lust and pyromania. These actions are also viewed as acts of ignorant self-harm which cry out for governance of the land and its population.
Palliser’s Triangle, this ecological Other comprised of the sterile soil and Aboriginal misuse, becomes the place where all the foreseen problems of settlement would be visibly contained in one region. Situated beside this dangerous anomaly, the fertile belt could be argued to be paradise on earth, a smooth pathway to the West. However, this is only the present state of the land. In order to get a full character assessment and assess the chances of reform, the past had to be investigated, reconstructed, and reproduced.

IV. Constructing the ‘Soul’ of Palliser’s Triangle through the Past

i) Ancient Forest Land

Said (1978) explains how the Orientalists’ ability to understand and construct the past grandeur of Egyptian civilization justified colonial rule over what was seen as a corrupted Egyptian present. Braun (2002) makes a similar argument using Dawson’s geological observations to claim knowledge about the coastal British Columbia’s past. In both cases, constructed knowledge of the past was an act of power and a claim to the land. This same tactic is applied in Palliser’s Triangle as the past is constructed through both observation and scientific orderings of natural history and geology. It is a past that is unspoiled, unpeopled and pristine. Most importantly, the past is treed, not treeless. Constructing an ancient forest past on the prairie places the blame directly on the Aboriginal population for corrupting nature and offers a pathway to make visible its ‘soul.’ Palliser presents this argument here:

Large tracts of country now prairie lands have at one time grown valuable forests, and their present absence is from the repeated ravages of fire. Where a scattered and stunted growth of willows is found, as a general rule, was ancient forest land (1860: 83, emphasis added).
Palliser contextualizes his observations of small patches of trees in what was then a common way of reading grasslands environments. This approach framed such patches of trees as the remnants of great forests which had been destroyed. Davis (2007) describes how this colonial reading was also applied in North Africa where scattered groves of cottonwoods in the grasslands were seen as remnants of ancient forests. Fairhead and Leach (1995) also observe this in their work on forest islands in Guinea, when the case was, indeed, the opposite.

Hind also employs this narrative of a previously forested prairie that has been spoiled by the Aboriginal population.

Putting out fire [setting fire] in the prairies is a telegraphic mode of communication frequently resorted to by the Indians. Its consequences are seen in the destruction of the forests which once covered an immense area south of the Qu’apelle and Assinboine (Hind 1860: 336-337).

This furthers the premise that the Aboriginal population had a long history of degradation, and no idea of what damage it had inflicted on the land over time. Thus, in this sense, to use McClintock’s terminology, the North-West was an “anachronistic space” (1995: 40) as Palliser’s Triangle was believed to be the first to lose its ancient trees and soil fertility, leading to its present desert conditions. The fertile belt held evidence of more recent degradation through its denudation of trees but still maintained its soil fertility. Thus, the further south one travelled, the more one witnessed the increased degradation where the Aboriginal population first began to spread. In an account of Sir Sandford Fleming’s Expedition, Grant (1873) reflecting on the state of the land and on what could have been had the region been settled earlier laments, “the beauty in former years had been still greater, for, though the fires have somehow been kept off
this district for a few years, it has not been long since both hardwood and evergreens as well as willows and aspens, grew all over it; and then, at every season of the year, it must have been beautiful” (114). Much like the Orient, Grant believes the glorious past could only be reestablished by the future settler. “Settlers will plant trees, or will give a chance to those that sow themselves, cut the grass, and prevent the spread of fires” explains Grant (1873: 110). This ancient forest narrative is powerful as it views nature as corrupted yet capable of reform. The ‘true’ nature of the treed prairie establishes a need for the settler to govern the land in order to revive and maintain its former glory. Therefore, there is a glimmer of hope and redemption of the Triangle’s ‘soul’ as colonial experts see a past that was once bountiful, even if now tainted.

ii) Hector and Dawson’s Geology

Braun explains how geological “strata” observations account for a past that has “enabled geologists to develop a visual language (and visual technologies) that made local landscapes legible as part of a larger global order” (2002: 57, original emphasis). He explains further that, “landscapes were increasingly read not as complex integrated cultural and material landscapes, but instead for signs of their inner architecture, a prior structure that appeared entirely unrelated to local sociopolitical contexts” (ibid: 58). Hector, the Palliser Expedition geologist, mapped and described the three geological steppes of the Prairies (Figure 2.2). Hector’s geology described the underlying structure of each of the steppes and gave the land its first geological ordering. He describes the geology of the arid district as follows:
The cretaceous and tertiary strata almost everywhere form the surface, so that the stiff clay soil, which is often highly impregnated with sulphates of lime and soda, bakes under the heat of the sun into a hard cracked surface. This must be the principle reason for the arid plains ranging to such a high latitude, as there is quite a sufficient quantity of moisture in the atmosphere during the summer months to support a more vigorous vegetation (Hector 1861: 22).

While Hector’s observations agree with Palliser’s, he offers a glimmer of hope with his accounts of moisture in the atmosphere and possibility for more abundant vegetation. More importantly, this geological observation strips away Aboriginal and land coexistence by speaking about the strata formations as an underlying objective truth. Building this geologic knowledge of the land furthers colonial claims to those lands, as only colonial experts were capable of understanding the science of its “inner architecture” (Braun 2002: 58).

In his North American Boundary Commission 1873-1876 Report, George Mercer Dawson uses geology to produce further proof of the Palliser Triangle’s past. This was Dawson’s first exploration and was the first report from the border region as all previous expeditions had run along the northern extent of the Triangle. Dawson describing the report states, “a space of 300 miles in longitude has—till the operations of the present expedition—remained even geologically unknown” (1875: iv). While this report is mainly geological, the final two chapters are dedicated to settlement potential and possibilities for the arid region. Dawson relied heavily on those scientists who came to the North-West before him, especially Hector, acknowledging use of his maps, data, and findings in his own work. Large portions of his text are the direct quotations from the Palliser and Hind expeditions. This report is meant to refine earlier works and focusing on what mattered most, the nature of the land and the potential wealth it contained or
possibilities it opened. It cut straight through the great ‘unknown’ arid region where so much speculation and controversy had been created from the Palliser and Hind expeditions. It also described an area of political interest, the international border and its resources. Adding to Palliser’s Map, it contained a geological map showing a cross-section of all the land between Lake of the Woods and the Rocky Mountains which allowed the Empire to both see the surface and what lay below (Figure 2.3). Again, this map shows the “inner architecture” (Braun 2002: 58) and potential of the land, while it clears more complex and contested interactions of Aboriginal land use. Although the surface may have been scarred to the eye, an underlying ordering could map its future potential.

Dawson’s observations generally agree with both Palliser’s and Hind’s expeditions stating, “it would appear that vast areas of the western plains, south of the fertile belt of the Saskatchewan region, and west of the Missouri Coteau, must remain pasture grounds, for which they are in great part well fitted” (Dawson 1875:311). In other words, Palliser’s Triangle could not support field crop agriculture. However, Dawson complicates the ancient forest narrative asserting that glaciation had shaped the plains and that much of the plains had never been forested.

The absence of any remains of old forest, or of roots, or driftwood, in the sub-soil and alluvial deposits of the greater part of the plains, would appear to have a like meaning. It would seem most accordant with the facts, as they are at present known, to conclude that, since the glacial period, the plains have never been entirely covered with forest; but that extensive prairies have continued to exist in the drier regions, from that time to the present day (Dawson 1875: 311-312).
Figure 2.2 Hector Prairie Steppes Map (Ruggles 1993b). Reprinted with permission of University of Toronto Press.
Figure 2.3 Dawson’s Geological Cross-section of the 49th parallel (Dawson 1875)
Nevertheless, Dawson later in the volume supports the degradation narrative by reinforcing the idea that the treeless region had been spreading north through Aboriginal fire use since the first human populations.

The causes now in operation tending to the perpetration and the spread of the treeless area, are sufficiently obvious, being prairie fires and their attendant consequences. Judging from the present origin and influence of these conflagrations, it can hardly be doubted, _that ever since the first peopling of this continent, the area of the treeless prairie has been in the process of enlargement in an increasing ratio_ (Dawson 1875: 312, emphasis added).

Thus, there was agreement that Aboriginal populations had shaped the region’s environments; however, this was again viewed as degradation rather than supporting a particular form of land management that fostered the buffalo economy. This idea opened the possibility of dispossession rather than countering it. As trees and nature were largely synonymous to the Europeans, this ‘wanton destruction’ could in no way be considered sound management as the southern ‘desert’ exemplified. So while the idea of ancient forest may be mildly discredited, the larger environmental degradation narrative survived.

While Palliser’s Triangle’s ‘soul’ was viewed as corrupted in the present, geology claimed to offer a vision of a people-less past which also fit into a simplified physical world-view. Geology ‘uncovered’ the true nature of the land and could peel back time to understand the land prior to the human ‘destruction’ on its surface. It was a means to scrape away the scar tissue of a charred nature in order to understand the land as it ‘truly’ was and as it was meant to be. In other words, geology was a means to _see_ the land without the Aboriginal impact in order to judge its future potential under a more ‘responsible’ form of land management. It was also used to separate the Aboriginal people and the land by employing ordering knowledge and categorization.
This productive knowledge created a past that was legible to European orderings of nature, a nature which was argued to most likely return once the Aboriginal population had been removed or eradicated. While some of this past ‘pristine’ nature would be forever lost, evidence of a different past offered possibility and potential for future rehabilitation and production. Thus, ancient forest narratives along with geological understandings were crucial elements to constructing the ‘soul’ of Palliser’s Triangle. They offered a ‘true’ ‘unpeopled’ vision of the Prairies that could be recreated with the right strategies. This can again be compared to Foucault’s accused who by reading his/her past, finding hints of a different character than the one witnessed in the criminal act, offers a hope of rehabilitation and reform. This ‘soul’ is further produced through a reading of the subject’s past. The Palliser’s Triangle had a tainted present, but a ‘soul’ or character that was read as capable of something else, something with potential. That ‘soul’ emerged by stripping away the ‘corrupting’ forces of Aboriginal peoples, erasing them from the land in a strategy of dispossession.

iii) Absence of History in the Time-in-Between

This divorce of the people and the land later manifests from different constructions of the past as Butler asks, “How should I picture it? How shall we tell the story of that great boundless, solitary waste of vendure?” (1872: 199). He describes the “ocean of grass” that is the prairie stating, “Well the geographers of that period [16th century] erred only in the description of the ocean which they placed in the central continent [North America], for an ocean there is, and an ocean through which men seek the treasures of Cathay, even in our own times” (ibid: 199). The metaphor of the ocean was likely a
deliberate choice as the ocean still represented the power of British imperialism, conquest, and colonialism. The ocean is also used as a metaphor of timelessness in which countless ships have left no historical mark. He explains that looking at this ocean of grass, “One saw here the world as it had taken shape and form from the hands of the Creator. Nor did the scene look less beautiful because nature alone tilled the earth, and the unaided sun brought forth the flowers” (ibid: 200, emphasis added). This sublime landscape (Cronon 1996) described by Butler, further erased Aboriginals from the land. Butler illustrates an attractiveness to the supposed lack of history stating: “Some French writer speaking of the prairies, has said that the sense of this utter negation of life, this complete absence of history, has struck him with a loneliness oppressive and sometimes terrible in intensity. Perhaps so; but for my part, the prairies had nothing terrible in their aspect, nothing oppressive in their loneliness” (1872: 200, emphasis added). In other words, this absence or lack was something beautiful to behold. While Butler was a military officer and not a scientific explorer; this next movement of dispossession takes a form of terra nullius, erasing the past or equating it to a chess board where games have been played, but the board remains as it did when it was first created, in this case by God. To claim that time has been nothing to a place means that it was in its original ‘pristine’ state (Cronon 1996). Adding to the tactics of degradation narratives and the reconstruction of pre-Aboriginal natural histories, reading the plains as ‘pristine’ and ‘untouched’ meant that it was a blank slate without claim. Butler describes his particular privileged position in time writing that “all is silent and deserted—the Indian and the buffalo gone, the settler not yet to come” (1872: 217-218). Thus, Butler portrays the present as the no-man’s land between epochs where the Aboriginal is compartmentalized.
as part of history, yet having made no mark on it, and the settler as its only future. He uses his privileged space in time to reflect on the true nature of the prairies that was ‘revealing’ itself to him. This narrative forms the lasting impression that the Plains Bands played no part in shaping the landscape at all, a reversal in narrative from Palliser, Hind, and Dawson who read the land as degraded by Aboriginal land mismanagement. This shows how colonialism was used to settle the Aboriginal past and to draw a clear line between now and then, and us and them (Fabian 1983). Politics can appear settled if it is created through a seemingly natural delineated timeline.

The creation of the past offers a deeper vision of the prairies that claims to uncover its ‘true’ nature. Ancient forests, geological formations, and sightings of relics of a former pristine nature, all conjure a responsibility to recreate the greatness of the past in future development. Each of these imaginaries strips away all Aboriginal presence in order to see a formerly ‘untainted’ land. Combined with a vision of a disorderly present, this further justifies dispossession through the ability to understand and contextualize the land through scientific observation.

V. Future Prospects for Rehabilitation

i) The Future is Governable

The main emphasis in the colonial reports and narratives is that the most essential aspect of the colonial expeditions was to assess future possibility through an assessment of the present and past. Based on their scientific observations of both the present and the past, the explorers were sent to answer the question of the ‘nature’ of the land, and more importantly, what this land could become in the future. Reform and governability were
based on the idea that Aboriginal nature had to be removed and be replaced with European culture. This was most often articulated in terms a ‘fix’ that would reform the Triangle and make it inhabitable. Finding a ‘fix’ for the problem geography depoliticised its dispossession and created various imaginaries of a future of whiteness. In order to investigate this, I mainly analyze Macoun’s volume *Manitoba and the Great North-West* (1882) as it deals the most directly with the future. The binary of nature/culture works through the construction of the temporal as nature will supposedly be reformed by culture, and nature becomes a marker or signifier of the past. What is common in the future scenarios is an absence of Aboriginal peoples. An erasure takes place through an extinction narrative of the rise and fall of a people, to be completely replaced with a rise of a ‘new’ people. It is only through small clues that a future for the First Nations was presented at all, as future forms of modernity had little or no place for Aboriginal peoples. This absence was closely tied to the colonization process. By this I mean that it was integral to the workings of colonialism that there be a clean break between the corrupted present and the prosperous future.

The ‘soul’ of Palliser’s Triangle rested in visualizations and predictions of a productive future. The last step of producing this ‘soul’ was analysis of the region’s potential for reform. Construction of the ‘soul,’ as Foucault outlines, is future oriented, based on its ability to make individuals productive members of society. All assessment of past and present action is in relation to future possibilities for correction.
ii) Technical Fixes

While Palliser believed the best solution was a form of separation and isolation that would contain the worst of the land and peoples and protect the only reasonable route West, others had different ideas that emphasised cultural reform and integration rather than containment for the land. Even Hind, who agreed with Palliser’s conclusions of inhabitability, believed that some areas of the prairie were capable of such improvement through the demise of the Aboriginal population stating, “If willows and aspens were permitted to grow over the prairies, they would soon be converted into humid tract in which vegetable matter would accumulate and a soil adapted to the forest trees be formed” (Hind 1860: 337). A reading of the past as ancient forestland meant that once the ‘destructive’ force of the Aboriginal was gone, nature would once again flourish in the future unhindered. This regeneration narrative rested on the removal of the southern Aboriginal bands. Hind’s regeneration narrative was framed as the natural unfolding of events where the extinction of a people would help to bring back the ‘original’ land and the ‘natural balance’ would be restored in a Malthusian model of a population crash. Predicting the end of Aboriginal control over the region, explorers believed new land management would solve the environmental problems of the prairies and plains. As I argued earlier, this relegation to the past as the natural progression of time, beginning-middle-end, is also a tidy means of justifying dispossession.

However, other colonial explorers believed that a more interventionist approach was needed to reform the Triangle. Reading Palliser’s Triangle as a problem nature, Dawson identified locusts as a reason it could not simply be isolated and contained. The Palliser, Hind, and Dawson reports all note the devastation of crops and grasses in the
fertile belt caused by locusts, or grasshoppers, that bred in Palliser’s Triangle. Dawson describes several fixes which would both supposedly decrease the pest population and improve the climate of the region. Interestingly, he cautions that the first fix was an impossibility, the breaking of the soil in the dry-land region for agriculture. He argues that this would protect the fertile belt farms from such pest outbreaks stating, “It is now known that a very great area, comprising the chief breeding ground of the locust, must always remain unsettled, or unoccupied only as pasture grounds. It cannot therefore be hoped, that advancing cultivation will restrict the breeding area; yet even here it seems that some effort may usefully be made” (Dawson 1975: 308). So while not endorsing this option, Dawson outlines the benefits of settling and cultivating the driest areas to stop the invading locusts from destroying crops in the fertile belt. This is an interesting thought when one considers why so much of Palliser’s Triangle was eventually broken. He suggests using unemployed men to plow the fields who would be given a bounty for collecting eggs as an alternative to agriculture. He also considers using fire to destroy the eggs in the breeding areas, but cautions that a controlled burn, with natural and ploughed boundaries, would be required to stop the fire from spreading. His final suggestion was to forest the dry-land prairie. This, according to Dawson, would have many benefits once the Aboriginal population was removed and fire legislation was in place. Like Hind, Dawson believed in the regeneration narrative but thought the land needed organized assistance to achieve improvement. First, breaking the land to plant forests would shrink the locust breeding grounds further. Second, forests would be a source of fuel and timber for new settlers, a major obstacle in prairie settlement at the time. Finally, citing experimental farm studies in the US Midwest, he claims it would improve the climate of
the entire Prairies bringing fewer droughts, more moisture in the atmosphere, the filling of streams and lakes, and better overall agricultural conditions. Conversations like this took place across the Great Plains (Smith 1950). Dawson saw government as the main means to achieve this through protection of established trees, new planting wherever possible, and planting by settlers on their land. He implores, “It cannot be doubted that the results of such a policy will be, not only the redemption of great areas of wild, open prairie, but a very sensible improvement of climate” (ibid 221). Grant supports this claim stating, “If there were forests, there would be greater rainfall, less heavy dews, and probably no frosts” (1873: 110). This argument for reforestation to improve the climate was common at the time and reemerged in the dustbowl of the 1930s as a possible solution to the drought crisis. Thus, it was argued that Palliser’s Triangle could not simply be contained, or left to regenerate itself through the restoration of the ‘natural balance,’ but needed some kind of intervention to make it governable and secure the surrounding fertile belt. Seeing the Triangle as a problem space that could be solved through technical expertise and intervention also depoliticizes the risky process of colonization in a problem space. It makes the land into a puzzle to be solved rather than territory to be claimed and controlled. A potential reform of nature allows for the possibility of settlement of a problem space, or at least control over the ills that are born from its existence. As Ferguson (1990) argues, it is a political technological fix to an object of concern or development. Similar to Foucault’s accused (1977), the future potential for reform is addressed through a political economy of potential fixes such as containment, behavior modification, and productive labour. However, in the case of
Palliser’s Triangle, the reforms stem from a political economy of land management and transformation.

iii) Macoun’s Contention

The key explorer who made the future of Palliser’s Triangle most visible was Macoun. Many studying the exploration literature of the time have created a binary of Palliser and Macoun: the naysayer vs. the expansionist. Macoun is best known for his optimism for settling the dry-land West and challenging the Palliser Report, while Palliser is know for his cautionary cartography which divided the prairies and labeled a huge region as uninhabitable. Macoun’s report is normally viewed as the most ‘biased’ because of his connections to government and role in the expansionist movement (Owram 1992). Many today, depending on the year’s climate conditions, will argue either’s case and try to proclaim just who was ‘right.’ However, I feel this is a simplified view that does not take into account the changes which took place, as well as the other explorations, between the two expedition reports. When Macoun’s work was published in 1882, twenty years had passed since Palliser’s report, the bison herds had been largely eliminated, most Aboriginals had signed the Treaties and many had been moved onto peripheral Reserve land (see chapter 3), white settlement was spread further, agricultural science in the arid regions of the United States had progressed, and understandings of what a ‘desert’ was and could be had been greatly refined due to the western expansion period in the US. In other words, Macoun was working under a different social and environmental episteme.
His volume *Manitoba and the Great North-West* is named the most extensive on the region calling itself a “full and complete history of the country...for investors and future settlers” (Macoun 1882). Macoun, a botanist by training, combines his own observations with those of explorers who preceded him. Once again, this building of the volumes that would characterize the prairies would heavily rely on one another in their descriptions and prescriptions. Macoun writes,

> Since the date of my last report I have had opportunities of gaining a much more extended personal knowledge of the region, and I have had access to the reports of all the recent explorations made by others, and had personal conversations with several explorers. I am, therefore, in possession of much additional data and in a position to classify the areas of land with greater general accuracy (1882: 199).

Macoun famously denounces Palliser’s bifurcation of the fertile belt and the Triangle as an error (Owram 1992). In addition, he begins to challenge the way nature is viewed in the arid region. Macoun describes abundance rather than scarcity in vegetation, pointing out that grass is a better indicator of fertility than the presence of trees. He reasserts the idea that the only reason that trees fail to grow is because of prairie fire and the only reason they still stand in particular locations is due to protection from areas with too much moisture for farming or by bordering the sand hills which also protect them from fire. Thus, Palliser’s assertion that the best land was located close to the northern forested land was deemed false by Macoun. He writes, “Experience has taught me that wherever trees and brushwood are found, there we may look for a broken country, and one that contains *too much* water; while the open treeless prairie, generally condemned to sterility, is by far the best farming land” (1882: 88 emphasis added). After exploring the Triangle, Macoun deemed that out of the entire 200,000,000 acres of the Triangle, only roughly
10,000,000 acres were unsuitable for agriculture because they were either too wet (marshes) or too dry (sand hills) (ibid: 198). Thus, treed land was painted as an obstacle rather than a blessing. He saw the grasses as the true indicator of abundance and homogeneity of climate and soil, employing as an example its past ability to support such large bison herds (ibid: 154). Thus, the ‘soul’ of Palliser’s Triangle was constructed here as wrongfully diagnosed, a misunderstood nature whose merits were overlooked by previous experts. It was not just a matter of technical ‘fixes;’ Palliser’s Triangle was argued to have more future potential than the northern wooded regions, at least according to Macoun.

Macoun’s observations are also informed by the farming he sees being carried out in the Triangle north of the Cypress Hills, which was not taking place at Palliser’s time. He describes the division between the land that had been plowed and the adjacent land, which had not. He saw, side-by-side, wheat ripening in the plowed field and cactus flowering in the unbroken field. This led him to the following conclusion:

The problem was solved, that the apparently arid soils were only so in appearance, and that all the land not covered with sand or gravel would yet ‘blossom as the rose’… The soil had been broken up only to the depth of a few inches and the change was astonishing. I could not penetrate the sunbaked clay, but not a yard away, where he had plowed, I could dig to any depth (ibid: 204).

In this statement, the problem with the land was that the plough had not yet touched it. Through the magic of the plough, the land could show its true ‘soul’ emerging through culture. This was the ‘soul’ being visualized, produced, and witnessed. Thus, like Dawson, Macoun believed the key to the future governing of Palliser’s Triangle was to break it, making an ‘abnormal’ land ‘normal.’
Macoun’s insights of the future individualize the Triangle, but this time as the key target area for development rather than a problem space in need of containment. Identifying semi-arid grasslands as the ideal conditions for growing wheat, and the plough as the remedy to aridity, allows for the ‘improvement’ of land to begin through settlement. Palliser’s Triangle is identified as a misdiagnosed patient as proof of potential is witnessed through the transformation of the soil through the plough. These insights open possibilities of reframing of the region, making it visible as a site of unmatched fertility.

VI. A ‘Soul’ Emerges

This chapter explained how Palliser’s Triangle was first individualized from the larger prairies as a problem region. The birth of Palliser’s Triangle took place when the Palliser Expedition and the Hind Expedition confirmed, delineated, and mapped the ‘desert’ region. I argued that colonial scientific assessment and diagnosis produced the ‘soul’ of the arid region based on colonial constructions of it past, present, and future. The ‘abnormal’ ‘soul’ was assessed through the discursive individualization of the land that was delineated, contained, and separated from the ‘normal’ fertile belt. These observations led Palliser and Hind to call for isolation and containment of Palliser’s Triangle as an uncivilized and inhospitable space. I explained that identifying and locating the ‘abnormal’ Triangle allowed for the ‘normal’ fertile belt to appear homogenously fertile and the problem space to appear contained in geometric certainty. I then described how the second move of individualization was to discursively separate Aboriginal peoples from their land. Separating the two and producing incompatibility
through degradation, regeneration, and pristine past narratives allowed colonial officials to construct the region as possibly valuable and capable of reform. Dividing the land into visibly fragmented time periods, allowed for colonial imaginaries to sever Aboriginal peoples from the land. I explained how nature was portrayed to be in a state of crisis due to its ignorant land managers, and how separating the Aboriginal through constructions of the past and future allowed for a different, and economically productive, nature to be imagined. I linked this transformation to Foucault’s analysis of the ‘soul’ in the production and reform of the criminal. After discovering a problem nature, colonial explorers assessed and made known Palliser’s Triangle’s shortcomings, worth, and capabilities. Its present state indicated desert-like conditions, yet reconstructing a pristine pre-human past enabled the possibility of hope for a productive future. ‘Abnormal’ and ‘destructive’ Aboriginal land management was viewed as the root cause of the ‘abnormal’ nature, and the removal and/or eradication of such populations were argued as key to restoring normality. These insights allow us to see Palliser’s Triangle as a patient being assessed for future treatment. The future treatment was European culture in the form of the colonial settlers’ ploughs. Employing the construction of ‘soul’ illustrated the exercise of power of human forces in classifying and constructing environmental essence with a view to reforming the land. Finally, the scientific exploration texts create a normalizing discursive formation where lands and Aboriginal peoples were individualized in order to assess the possibility of creating a homogenous region. Scientific knowledge production created the ‘soul’ of Palliser’s Triangle and then challenged and supported each other’s insights about the possibility of reform and means to achieve it.
Chapter 3

Space: Fields of Comparison

The domain of panopticism is...that whole lower region, that region of irregular bodies, with their details, their multiple movements, their heterogeneous forces, their spatial relations; what are required are mechanisms that analyse distributions, gaps, series, combinations, and which use instruments that render visible, record, differentiate and compare.

Foucault (1977: 208)

I. Spaces of Normalization

i) Visibility

This chapter explores the spatial aspects of normalizing nature which allows for the five aspects of normalization, or homogenization through individualization, to function: comparison, differentiation, hierarchy, homogenization, and exclusion. The organization of space in relation to power is central to Foucault’s conception of normalization. This first aspect of normalization “refers individual actions to a whole that is at once a field of comparison, a space of differentiation and the principle of rule to be followed” (Foucault 1977: 183). These architectures of power or “fields of comparison” (ibid) are an integral part of the normalization process with each body or thing is individualized having its place, number, and file in order that he/she/it can quickly and easily be identified and located. The modernist grid that Foucault describes makes it easy for a person’s labour or behaviour to be contrasted with those around him/her. With each individual in the line of sight of a supervisory body at all times, there is no place to hide. It is this architecture of seeing that enables power to function efficiently. Each person is individualized
through space in order to homogenize and normalize the whole. In the psychiatric unit, the ‘mad’ individual is contained, observed, and diagnosed (Foucault 1988). In the Bentham’s panoptic prison, each prisoner is in the line of sight at all times, yet strategically blinded as to not know for certain if anyone is actually watching him/her or not (Foucault 1977). Being located, individualized, and contained in order to be judged and rehabilitated is the goal of such political architectures. Foucault writes “This machinery works space in a much more flexible and detailed way. It does this first of all on the principle of elementary location and partitioning. Each individual has his own place; and each place its individual…Disciplinary space tends to be divided into as many sections as there are bodies or elements to be distributed” (ibid: 143, emphasis added).

But how does this relate to the ‘soul’ of the land created in Palliser’s Triangle? Other than being a convenient and seemingly equal means to settle the land, what is accomplished by individualizing and partitioning a region such a Palliser’s Triangle? This chapter investigates the first movement toward homogenization of that troubled ‘soul’ through its structural reordering and partitioning. I argue that the creation of Indian Reserves and the Dominion Lands Survey, including the Township Plan, were the first phase of homogenization through individualization for Palliser’s Triangle. After it was generally accepted that most of the land could be improved and settled, a system of property was surveyed and staked across the region. However, Indian Reserves were set apart from this system both spatially and administratively.

In terms of visibility, both Indigenous peoples and Palliser’s Triangle were made invisible through the process of the survey. Aboriginal peoples were largely hidden on peripheral Reserves and Palliser’s Triangle vanished in a sea of a million squares that
uniformly crossed the entire prairies. Instead of two distinct geographical regions, the fertile belt and Palliser’s Triangle, there were to be minor variations from ¼ mile square to ¼ mile square. In other words, instead of a normal region and an abnormal region, each small square of property was contrasted with the squares beside it in terms of quality and possibility. What became visible were property at the smallest scale and a coherent Canadian Prairie region at the largest, and both lenses supported and produced each other. Laying a continuous grid of property homogenized the land through its individualization. What is most crucial here is that the land and male farmers were the objects organized within a constructed normalizing space, bringing the human and non-human together in a double movement of normalization. Reforming the ‘soul’ of Palliser’s Triangle involved the spatial strategy of homogenization through individualization, a change of focus, and a shift toward a micro-physics of the ‘soul’ where the individualized land and land manager were in the line of sight. Of the five operations of normalization, this chapter explains the spatial fields of comparison, which enables comparison, differentiation, homogenization, hierarchy, and exclusion to function.

**ii) Foucault, Space, and Normalization**

While many disciplines attempt to claim Foucault as one of their own, Geography is no exception. It remains clear that Foucault’s work is heavily focused on the spatial, if geographers can continue to solely claim this territory (Crampton and Elden 2008; Foucault 1980; Philo 1992). This attention to space and its orderings opens possibilities for geographers to explore Foucault in meaningful and sometimes narrow ways. Hannah
writes that many of Foucault’s books “are rich with empirical accounts of the ways in which spatial relations and techniques of confinement, exclusion and ordering are inextricably woven into wider social processes and transformations” (2007:101). Foucault looked at two forms of normalizing space, isolation and disciplinary. The former is where containment and separation are the mechanisms of homogenization. This was one of the first techniques of normalization and the leper and ‘mad’ are the examples employed by Foucault (1977; 1988). Setting apart the ‘mad’ and sick allows for the homogenization of society (Foucault 1988). In terms of nature, this is much like Palliser and Hind wanting to set Palliser’s Triangle apart and isolate it from the fertile belt in order to protect the fertile belt from the arid region’s spread (see chapter 1). Disciplinary space, which evolved out of containment, materialized with the plague and the measures that allowed for the deepening of social knowledge, individualization, and intervention (Elden 2003; Foucault 1977; Norris 2003). The two systems can and do exist together with both spaces of containment and isolation working in tandem toward a coherent normalization of society. While separation and containment support a disciplinary regime, disciplinary systems also stretch widely across societal domains and deeply into its individuals.

Foucault’s analysis of disciplinary space focuses on the spatial organization of asylums, prisons, workhouses, schools, and hospitals but recognized that these spread throughout society (1977; 1978; 1988). He uses the extremes of Bentham’s Panopticon and the industrial workhouse, designed in order that there can be constant visible surveillance of inmates and workers by those who supervise, to express the culmination of disciplinary technologies (1977). While inmates and workers are in full visibility,
those watching are placed strategically in positions that allow for full surveillance yet they are often hidden from those being watched. Inmates and workers know they are being monitored as the lines of sight are visible, but are never sure of the position or location of those watching. Although disciplinary studies has focused much attention on the Panopticon (Elden 2003; Wood 2007), surveillance is only one aspect of spaces of normalization. Addressing aspects of surveillance in *Discipline and Punish*, Wood argues, “the Panopticon is not the only point of the book. It is not even the only exemplar of panopticism” (2007: 247). Foucault describes space in other ways that are equally, if not more, important.

The grid or ‘field of comparison’ individualizes in that it establishes a separation among larger groups or entities. A heterogeneous group is made homogenous through individualization of space. Individualized workstations, desks, cells, and quarters set people and things apart from one another yet close enough to be constantly aware of the actions of other individualized. Equal spacing, straight lines, and uniform compartments create a homogenous space of individuals. As Foucault articulates how “Discipline fixes; it arrests and regulates movements; it clears up confusion; it dissipates compact groupings of individuals wandering about the country in unpredictable ways; it establishes calculated distributions” (1977: 219). For example, each student in a classroom is an individual compartmentalized from other students with his/her own desk, number, and file. Each student sits in relation to every other student arranged in a grid that allows for an individual’s work to be compared and for students themselves to notice the slight variations between them. They are better behaved than some students and worse behaved than others; they are better at maths than some students yet worse at
French compared to others. This constant individualized comparison by both teacher and student is essential to the functioning of the disciplinary nature. The students themselves know that they are individuals being compared to others who are set as examples of the ‘good’ and the ‘bad.’ The norm is the metric which is the basis of comparisons, and is that which is enforced and reinforced at all times.

The grid also individualizes in that it gives a precise location of all individuals at all times. This is especially important if the object being individualized and governed is at a distance from state control. As an example, Scott (1998) discusses the agricultural grid’s importance in locating individuals in order that they may be taxed. But Scott does not go far enough to investigate other aspects of spatial normalization, an oversight which I address here. The grid opens points of visibility; it individualizes, enables comparisons, locates, and homogenizes. As such, a large region such as Palliser’s Triangle becomes individualized segments of property that I argue, enable the mass homogenization of land.

II. Northern Enclosure and Normalization in Palliser’s Triangle

If the leper colony and plague measures are the two spatial models differentiating isolation and discipline, which model was the Dominion Indian Reserve? I believe it would be the leper model as “The leper was caught up in the practice of rejection, of exile-enclosure; he was left to his doom in a mass among which it was useless to differentiate” (Foucault 1977: 198). Through the process of Dominion Land Survey and the signing of the Indian Treaties, First Nations peoples were largely removed to the northern wooded and watered margins while the grassed fertile belt and Palliser’s
Triangle were staked and opened for white colonization. This social normalization of Palliser’s Triangle, achieved through a variety of negotiations, events, and circumstances, resulted in the removal, isolation, and containment of First Nations peoples, opening a wide swath of uninterrupted land for white settlement (Figures 3.1 and 3.2). First Nations of Palliser’s Triangle ended up being set apart, mostly in isolation, and at times, with no ability to leave the reserve without government approval (Carter 1990; Ray 2010).

Each Treaty set out the terms of land rights which would enable colonization and grant Plains First Nations particular rights for their agreement (Martin-McGuire 1998). First Nations groups had the right to choose, or at the very least to be consulted on, the land to which they would relocate their peoples as part of the Treaty agreements (Ray 2010). However, First Nations bands were strongly encouraged to seek land where they would be out of the way of the new settlers, would have close access to game for fishing and hunting to continue their traditional way of life, and would have access to some farmland for their gradual evolution toward becoming farmers. In July 1879, the surveyor general Col. John Stoughton Dennis advised:

Reserves should be selected in such manner as to not interfere with future settlement or of land for railway purposes...If the Minister approve, it might be suggested to the commissioner that, in setting apart any Reserves, the interests of the Indians should be considered so far as to give them all the necessary frontage upon a river or lake, to include an abundance of land for farming purposes of the Band, at the same time, the tract should be made to run back and include a fair share also of land which may not be so desirable for farming but would be valuable for other purposes of the Band such as hunting, etc. (Dennis 1879).

This “setting apart” in the “interests of the Indians” and their traditional ways of being was perhaps a convenient means to clear the land as the regions which contained such conditions of water, timber, and game were mainly on the periphery of prairie lands. It is
important to ask, but beyond the scope of this dissertation to completely answer, to what extent colonial administrators fostered or employed the Aboriginal connection to the land and traditional ways of life as part and parcel of the colonial process of enclosure. In other words, was this connection further encouraged as a convenient means of achieving geographical segregation? It seems that, through the Treaty process, being “out of the way” and “continuing a traditional way of life” accomplished the same goal. Also, creating subsistence-based pieces of land, at least in theory, meant that First Nations would not have to leave the reserve but could be isolated with no valid excuse to leave and ‘disturb’ the settler population. Such policies, I argue, relegated Aboriginals to a subsistence past in peripheral geographies while offering an unimpeded economic future to the white settlers.

Alexander Morris, the individual responsible for negotiating Treaties 3 to 6, attempted to persuade the First Nations leaders to choose isolated land saying, “It is better for the Indian to be away a piece from the white man. You will be near enough to bring your furs to a good market, and by and by I hope you will have more potatoes than you require, and have some to dispose of” (Morris 1880, 244). On the other side of the negotiating table in the Treaty 6 negotiations, Pitikwahanapiwiyin [Poundmaker] states, “I beg of you to assist me in every way possible—when I am at a loss how to proceed I want the advice and assistance of the Government; the children yet unborn, I wish you to treat them in like manner as the advance in civilization like the white man” (ibid: 210). Clearly, both had a different idea about the future path and place of First Nations in the region, potatoes vs. wheat.
Aboriginal populations were vocal about making the transition to an industrial agricultural economy (Carter 1990; Ray 2010). Macoun documented the interest being taken on missionary lands and rested the future prosperity of Aboriginal populations on being farmers and English speakers. However, as Carter (1990) has documented, the government failed to give adequate land and technical support for their endeavours. The Yeoman Farmer policy promoted by Hayter Reed was based on the belief that Aboriginal populations had to slowly transition or evolve from being hunter-gatherers to farmers the way European populations had, one slow stage at a time. They were given out-dated equipment, supplies, and little to no training. In general, they had little farmable land and few livestock and much of their best reserve land was later bought back by the government through a series of created legal loopholes and schemes.

Central to the argument of homogenization, there was one geographic anomaly which illuminates the surreptitious process of colonization, the Cypress Hills. The ceremonial meeting place for many if not all of the plains bands contained forests, lakes, and game, all those necessities named above for First Nations to continue their ‘way of life,’ but the land but was directly in the centre of Palliser’s Triangle (Bonnichsen and Baldwin 1978; Hildebrandt and Hubner 1994; LaDow 2001). In the first attempt to make the land of Cypress Hills a recognized reserve, Cree leaders Minahikosis and Piapot applied for contiguous land for their bands. The application for the large reserve was first accepted but then overruled in 1880 by Edgar Dewdney, the Indian Commissioner for Manitoba and the North-West Territory, “fearing a large native settlement could be a threat to the government authority in the region” (Ray 2010: 16). Another important example of how this was a spatial strategy of dispossession and removal, rather than for
the benefit of Aboriginal peoples, was the case of the Assinaboine of Cypress Hills. While this land was chosen and briefly occupied by the Assinaboine as a Reserve and officially surveyed for a Reserve by A. P. Patrick, the Assinaboine people were eventually forced to leave and relocate in the North East (Canada, ICC 2008). Even more intriguing is the fact that the survey completed by Patrick was lost, leaving no official records other than correspondence which indicates the survey was completed and sent to Ottawa in 1882. Despite all the qualities of good water, wood, game, and farmable land that existed in Cypress Hills, it appeared to be too centrally located for Dominion settlement plans. Therefore, it seems that the fostered need to continue a traditional lifestyle for the future benefit and well being of Aboriginal peoples was largely a tactical means to spatially segregate. This case was brought to court by the Kettle Lake Reserve and then studied by the Indian Claims Commission in 2008. Despite the overwhelming evidence of injustice, the only recommendation made by the Commission was to allow the First Nation to hold ceremonial events in Cypress Hills (Canada, ICC 2008).

With the aid of disease, buffalo decline, and starvation tactics (Daschuk 2013; Savage 2012), the Aboriginal and colonial settler farmer were spatially and systematically segregated with the Aboriginal yeoman farmer having no chance to compete or compare with their white counterparts. The removal of the populations who had controlled the southern Canadian plains for millennia worked both politically and within racialized views of progress. Had all plains peoples been given homestead rights and choice of property anywhere on the Prairies and the agricultural support received by other farmers, their prospects could have been much different, though it is impossible to
Figure 3.1: Map showing the location of Indian Reserves in 1905. This map shows the extent to which First Nations peoples were removed from Palliser’s Triangle. The pink reserves are placed outside the Triangle forming a Triangle themselves if you were to connect the squares. Alberta and Saskatchewan: The view in 1905 (Canadian Geographic 2004). Reproduced with permission from Canadian Geographic.
Figure 3.2 Map of Indian Reserves in 1902 illustrating the expanse of land without reserves in Palliser’s Triangle. See the large open space along the 49th parallel crossing the Prairies where there are no southern reserves.

http://www.historicalatlas.ca/website/hacolp/national_perspectives/native_canada/UNIT_15/index.htm

Reproduced with the permission of the Historical Atlas of Canada Data Dissemination Project.
speculate how and to what extent. Instead, Palliser’s Triangle became a white space or a space of exclusion, in that Aboriginal populations were literally excluded from it by the need for government permits to leave their reserves (Ray 2010). Thus, the dispossession of Aboriginal peoples from the land created a largely coherent, uninterrupted, and homogenous space.

Like the leper, the spatial segregation and isolation of the Aboriginal population, assisted through starvation, disease, and promises of government assistance (Daschuk 2013; Savage 2012), could be viewed as a step toward social normalization of the land and population. It opened a space to introduce a continuous grid. While other disciplinary technologies later seeped into reserves in efforts to normalize the ‘Indian,’ including the Indian Residential School system, the first stage was to separate and normalize the Prairie region.

III. Land Individualization and Homogenization: Dominion Lands Survey and the Township Plan

The Dominion Lands Survey 1871-1879 divided the land into a series of ranges and townships that were repeated and multiplied across the prairie transforming a commons system with multiple fluid territorial claims to a system of legislated private property. The checkerboard was laid over the land where the claims were mapped, staked, and demarcated, giving every square a numbered and directional co-ordinate. Covering 800,000 square kilometers, it is the largest uninterrupted survey grid in the world. Each township had 36 square mile sections, 144 quarter sections, with each individual homestead on a quarter section of 160 acres. This Township template (Figures
3.3 and 3.4) was repeatedly stamped across the entire Prairies by the Dominion Lands Survey teams who collected samples, staked the squares, and documented the condition of each township. Property lines were laid down ignoring the particular geographical features of rivers, lakes, coulees, and other natural boundaries. The only geographical aspect taken into consideration, the curvature of the earth, was rectified through correction lines. These too were only employed in order to ensure complete and overall conformity of the grid. According to Bantjes, “the simplicity of the grid would ensure that misunderstandings about boundary disputes would be rare” (2005: 20). The only land outside this grid form was the Indian Reserves, which were intended to work in a completely separate system of tenure.

This Cartesian grid pattern, copied from the US land survey system of Thomas Jefferson, was a fast and efficient means of ordering and distributing land (Bantjes 2005). Each homesteader could receive 160 acres of land so long as they paid the $10 registration fee and met the terms and conditions of the Dominion Lands Act which allowed three years to achieve full patent. These conditions were the first form of land norms legislated into the homestead contract. The requirements, meant to inhibit land speculation, demanded the land to be occupied six months per year, with a permanent dwelling built within three years, and cultivated at least 40 acres per year. The system also allowed for the inevitable future growth of farms by allowing the purchase of adjacent land after the terms of the original homestead had been met. Not all sections were open to homestead immediately as Hudson’s Bay Company owned particular numbers and some were set aside as land for schools.
Figure 3.3 Dominion Township Plan showing 36 sections each broken into quarter sections. School lands on numbers 11 and 29 and Hudson Bay Company squares on numbers 8 and 26 (Canada 1881). Canada Library and Archives http://www.bac-lac.gc.ca/eng/discover/land/land-grants-western-canada-1870-1930/Pages/land-grants-western-canada.aspx.
Figure 3.4 Map showing the multiplication of the individualized grid (Canada 1882 Library and Archives Canada NMC-044310).
Foucault emphasises that in a disciplinary system, “individualization is descending” (1977: 193), meaning that those who are most subjected to operations of power are the most individualized, whereas with sovereign power, individualization was ascending and the King was the most individualized. This descending power is a “physics of a relational and multiple power, which has a maximum intensity not in the person of the king, but in the bodies that can be individualized by these relations” (ibid: 208). In Palliser’s Triangle, the visibility of the ‘soul’ of a larger region was refocused toward an individualized micro-physics of compared and differentiated land sections and male farmers. This shift in visibility allowed for the problem space to be viewed and framed through a different perspective. Through this individualizing grid, the land was cut off from its long history of being part of a larger integrated environment. Bison and fire were no longer primary factors in its ecology as each parcel was under the control of a settler individual to manage according to a norm. This replicated system of Townships normalized property and spatial relations. It allowed for land to be conceptualized from both the position of the individual homestead and the township. A name could be placed on each numbered quarter section in an operation of location and identification. Environmental conditions were made invisible and the immensity of the prairies was made more comfortable when viewed from this small, segmented perspective. For this reason, the Township Plan, rather than larger scaled maps of the North-West were more predominant in immigration advertising (see chapter 4). The settlers could see in an abstract sense where their children would be educated, where they could purchase more land to extend their homestead, and get a sense of how their neighbourhood would be organized. Palliser’s Triangle and the fertile belt were no longer two distinct regions.
Instead, they were merged through townships and quarter sections which could fit anywhere in the region with minor differences and variations between them. Uniformity abstracted the differences in land and gave the impression that no piece of land was different than any other. Each township of 23,040 acres had two or three lines of description from the survey and it was more or less a gamble when choosing land at the Dominion Lands Office, unless the applicant had visited the land. Even then, the purchaser knew no weather patterns, longer climate patterns, or history of growing crops. Only a brief description of soil type and class and major geological features were given such as given for the following townships in Range XXII West.

Township No 14—Level prairie, traversed by Moose Jaw Creek, here from a chain to a chain and half wide. No wood exists except brushwood along the creek, Soil—a clay loam, twelve inches to sixteen inches deep, with very rich black clay sub-soil; first class.

Township No 15—Level prairie, part undulating. No wood. Water obtainable everywhere. Soil—twelve inches to fourteen inches deep, with black clay sub-soil; first class (Canada: Department of the Interior 1884: 161).

This also left a gendered landscape as male names were attached to the land through their homestead rights. Women did not have the right to homestead unless widowed or, in a later amendment, if a woman could prove she was head of the family. This head of the family clause was meant to include women but was almost impossible to achieve (Russell 2012). According to Russell (2012) there were only four homesteads obtained through proof of being head of the family during the entire homestead period of 1872 to 1930. In terms of normalization, this was the operation of exclusion, where the categories of landowner and farmer could only be male. It was also a move of individualization where one person would be identified with the piece of land.
IV. Fields of Comparison

The township plan acted as a field of comparison according to Foucault’s description of normalization. Whether it was the factory floor, the classroom, or the prison, 19th century technologies of power relied on individualization and comparison. The architectures of these technologies often employed a place on a grid where a person could be identified and located spatially, where the person could observe the work or behaviour of those surrounding him/her, and she/he could also be observed and compared to others at all points. While Bentham’s Panopticon is the most haunting of these structures, the organization of most disciplinary society is moved through similar or related architectures of files, locations, cubicles, time tables. While many focus on the power of authority to watch such as CCTV in the United Kingdom, it is important to recognize the normalizing power of observation, or possible observation, by anyone at all. When one has a place, number, name, or file, they are understood and come to understand themselves in relation to others.

Rod Bantjes argues that the grid system was an ineffective architecture of power on the Prairies because of the mass organization of farmers in the early 20th century. While the grid did not stop the organization of farmers, the grid was extremely effective in disciplining the land through the docile body of the farmer. The grid worked to normalize the land, the main object of power for the Dominion at the time. It individualized the focus, allowing the ‘soul’ of the region to be viewed instead as a series of comparable and differentiated relations between man and soil. The homestead pattern perhaps did not stop farmers from meeting and organizing, but it did make the land and the farmer visible in a very systematic way. Through the Dominion Lands Survey, what
was once a larger shifting multi-year system of grasses, fires, humans, and bison, was separated and individualized into parcels of ranges, townships, sections, half-sections, and quarter sections. Any piece of land could be located, identified, and purchased at a distance. The land was transformed from multi-year, multi-vegetation, production and succession cycles to annual mono-crop growth. The arrangement of each farm meant one single owner, a male head of household, was identified with the coordinates and surrounded by other single owner farms. This arrangement was similar to the factory work floor or school, but on a much larger geographic scale and longer time scale. In the case of the factory, “by walking up and down the central isle of the workshop, it was possible to carry out supervision that was both general and individual: to observe the worker’s presence and application, the quality of his work; to compare workers with one another, to classify them in terms of skill and speed; to follow successive stages in the production process” (Foucault 1977: 145). In the case of agriculture, the Dominion Land Survey made the individual piece of land visible at all times and identified it to a location and an owner. While distributing a large incoming population was important, it was land, and its power to produce and hold territory, which was the main object of political power. Land was the key to bringing a population west, to claiming the territory as Dominion Lands, and to building a staples economy. With the birth of scientific agricultural norms (discussed in chapter 5), the land was going to be supervised for its yields, the straightness of its rows, its uniformity and neatness, its percentage of weeds, and its overall management. The Township plan made such visibility possible. Unlike the fast-paced production floor of a factory, the farm field is a slow process where the male farmer’s actions are visible for days, weeks, months, and entire growing seasons. Thus,
supervision can take place in slow motion with the labour of the male farmer etched on the soils. As road allowances intersected and connected all sections, the land was visible at all times and could be viewed and judged by a passing neighbour, agricultural extension expert, or anyone with a means of transportation.

While not stated explicitly, the Township Plan offered control of the land by placing a name and body on a square and making that square visible. The person or persons responsible for that land could see how their crops compared to those of neighbours, would judge others and their fields on their cleanliness and order, and know that they too were being judged. While this observation may have been purely based on survival for the first homestead years, it became more normalizing with the rise in agricultural science, institutions, and the spread of farming norms. Eventually, agricultural extension workers, Experimental Farm experts, and community agricultural improvement association members would be scouring the countryside seeking out examples of ‘good,’ ‘bad,’ and ‘useless’ male farmers. This grid made it possible for these experts and concerned neighbours to see the land and identify those who were jeopardizing colonization. Although it may not be a pure Benthamite disciplinary nature, with a tower to watch every action and every moment of an individual, it worked as a disciplinary nature for the much slower docility of the land.

As Bantjes (2005) correctly acknowledges, the purity of the Homestead Act was never a completed project. Because of unsatisfactory immigration rates and political pressure, there were numerous exceptions made to fit particular groups who wished to settle communally with varied forms of tenure. However, the overarching spatial ordering and individualization of the land was largely accomplished. The land was occupied,
individualized, and the fields of comparison were materialized and repeated over a great geographical area.

V. Homogenization through Individualization

Finally, this chapter argued that the organization of space was the first stage of reform and normalization of Palliser’s Triangle. The Dominions Land survey and Homestead Plan accomplished three things: it set apart First Nations in an act of creating a homogenized social region, it individualized space into a multiplication of ranges, sections and quarter sections making Palliser’s Triangle disappear, and it created fields of comparison which would make every homestead visible creating the conditions for future forms of normalization. Setting Aboriginal people apart in the margins allowed for a particular form of land tenure and settler agriculture to be dominant and largely uninterrupted. As Aboriginal management was seen as detrimental to prairie nature (see chapter 2), this containment opened a solution. First Nations were persuaded to take land which prioritized subsistence over the development of commercial agriculture. This land was supposed to support their every need, as they were discouraged and, at times, not permitted to be off reserve without a formal pass. While most of the land deemed good for the Aboriginal was peripheral, the cases involving Cypress Hills show that what was ‘good’ depended more on their geographic isolation than any other aspect. This process opened a wide swath of land where normalization could be implemented.

The Dominion Land Survey individualized the land into a homogeneous region of property partitions. This material individualization was the first step in homogenizing the region. Palliser’s Triangle disappeared in a sea of squares meant to both communicate
and create uniformity. The Township Plan offered an even more abstracted view of the land emphasizing the visible procedures of the patent more than its environmental reality. Lastly, this ordering allowed the land to be brought into view both from a distance and in situ. In terms of the ‘soul’ of Palliser’s Triangle, it was fractured and individualized into millions of sections that could be compared, differentiated, supervised, improved, and homogenized. In other words, the ‘soul’ of the semi-arid region was repositioned toward the micro-physics (Foucault 1977) of the land-man relationship produced and made visible through the township plan. The ‘soul’ became a hybrid reference comprised of the soils’ capabilities blended with the male farmer’s aptitude to harness that potential. That which was previously visible as a problem region, was made invisible through a shift of focus, an individualization of vision situated and operationalized in fields of comparison.
Chapter 4

The Norm: Wheat and Whiteness

In a sense, the power of normalization imposes homogeneity; but it individualizes by making it possible to measure gaps, to determine levels, to fix specialties and to render the differences useful by fitting them one to another. It is easy to understand how power of the norm functions within a system of formal equality, since within a homogeneity that is the rule, the norm introduces, as a useful imperative and as a result of measurement, all the shading of individual differences.

Foucault (1977: 184)

I. Visualizing the Norm and Defining its Margins

While the ‘soul’ of Palliser’s Triangle was judged as abnormal yet capable of reform and the overlay of the cadastral grid reduced the visibility of the problem region through individualization, the norms upon which forms of agriculture would be dominant were yet to be created. Some of the first norms to emerge were visual norms that began to fill in the gaps of legibility (Braun 2002; Scott 1998) on the prairie. What was a prairie farm field supposed to look like? What did a farm family look like? Where were the women? Where were the men? What should nature resemble? Where was the Aboriginal population? What was presented as ‘normal’ and ‘abnormal’? What was allowed to be seen and how was it intended to be seen? This chapter adds to the argument of nature’s normalization by illustrating the creation of visible “value-giving measures,” exploring the “constraint of conformity” through reproductions of wheat and whiteness, and examining the visualization of “the external frontier of the abnormal” (Foucault 1977: 183). These exercises of power are evidenced in the representations and erasures of grasslands, women, and Aboriginal peoples, and contrasted with the produced norms of wheat and whiteness. This chapter explains how the norms of individualization were
made visible, what this accomplished, and how the visual established the margins of normality. It also shows how visual texts individualized the homestead to produce a homogenous economic region. Thus, once again the homestead and the economic Prairie region are the two scales of visibility and produce one another.

While images of the North-West in the early 20th century are mainly propaganda, they are the first to articulate a norm. This norm is perhaps made more extreme to convince possible migrants to settle in the North-West, but is nevertheless the projection of European cultural norms onto the land. Through such images the land was made both the object of normalization and a means in which to achieve social normalization. First, Palliser’s Triangle was made invisible, replaced with a universal homestead as the scale of visibility is made the quarter section, not the semi-arid region. Visualizations of the evolution of the prairie farm offer the path where the native grasses are replaced by a new legible and monetised land cover, wheat. Second, the Aboriginal population is made strategically visible as a counterpoint to the constructed modern prairie, as well as to illustrate the Aboriginals’ ‘abnormality’ in prairie space by making them strangers on their territorial lands. Third, making the Prairie a coherent homogenous category or region enabled Palliser’s Triangle to be integrated into Canadian nationhood. This category was created through the discursive and material multiplications of wheat, whiteness, and maleness. The ‘soul’ of Palliser’s Triangle was fractured through placing male farmers and their fields in a microphysics of comparison and differentiation, but a new ‘soul’ is constructed through the mutually reinforcing representations of the individualized homestead section and the homogenized economic region.
Again, Foucault explains the norm and normalization in terms of the movement of human forces through a double movement of individualization and homogenization (1977). While naming the essence of a person or thing by looking at its past or present places the ‘soul’ within a category of understanding, moving it toward a future requires the establishment of a norm. The norm must be visualized before it can normalize or homogenize. It is always just out of reach of being fully attained and maintained as a future goal that is never fully realized. Indeed, while it is impossible to fully reach the norm, it is possible to uphold and embody it as a standard. The soldier, the Olympian, or any other, will never have a day or even a moment where his/her body does not in some form disobey, trip, slouch, un-tuck, misstep, misplace, or hesitate, and it is often this imperfection that allows us to move in alternative ways and challenge such norms. Perfection is never achieved through the norm, but homogenization of the average is accomplished. The social system rewards and sets examples of those who live closest to it and at the same time excludes, punishes, corrects, or intervenes in the actions of those who stray from it. We are all implicated in such corrections as every individual upholds them in others and ourselves.

The environmental and social normalization of Palliser’s Triangle occurs in several stages. First, the land is judged for its character and divided into normal and abnormal land. Second, it is normalized through the removal and containment the Aboriginal population outside its borders through racial ideas and materializations of nature and traditional ways of being. Third, private property in the form of a grid creates a field of comparison that works to both individualize and homogenize the land, making it open to colonization and part of a larger geographical region. Fourth, the basis of this
chapter, the Prairie becomes a visible and legible category in which its norms begin to take shape. Native grass and Aboriginal land management are made to appear abnormal and white settlers and wheat become the norm, making it both a legible and economically governable space for the Dominion of Canada. While perceptions of the arid country had changed, so much so that the Canadian Pacific Railway ran through Palliser’s Triangle by the 1900, lingering doubts about its capabilities made it crucial to homogenize the Prairies as a coherent region. As Thompson (1998) argues, “the concept of the ‘Canadian Prairies,’ was the creation of European colonizers and their descendants” (ix).

The main research materials for this chapter are archived Department of the Interior’s Canadian West promotional documents between 1900 and 1905 and, in particular, the 1904 books, *Canada, The Granary of the World* (1903) and *Canada, A guide to its Resources and Development* (1904). These were important years for the department of the Interior as Minister Clifford Sifton was tasked with marketing the West to potential immigrants and foreign investment, a job in which he was greatly successful (Owram 1992). While some may argue that these source materials are simply propaganda, I argue they play an important role in producing prairie space through representations of land. The sources contain and create ‘Truth’ in the form of ‘facts,’ figures, and photography, but also employ the excesses of advertising through humour, exaggeration, and aesthetics. They are overtly political in particular ways and covertly political in others. The big political messages of empire, states, borders, and immigration, work together with the more naturalized discourses of nature, race, gender, and class.

While a book of cartoons published by the Dominion Government may seem trivial, *Canada: The Granary of the World* is a powerful visual and textual discourse that
offers insight into imaginaries of the Prairie and acts as a link to state formation. It is in the extreme of a cartoon that discourse is made most visible and obvious. There is much at stake by its publication in 1903 as the railroad has been re-routed through Palliser’s Triangle, a change in course from original plans to route it north through the fertile belt (Thompson 1998). The land had also been surveyed and transformed into a property scheme to fund the railway (Marchildon 2009). Immigration was also slow to start in Canada with most migrants continuing to move to the United States of America (Russell 2012). Immigrants from the US and Europe were still hesitant to move to Canada, partly because of the discourse around Palliser’s Triangle, and the Dominion was struggling to occupy the country (Owram 1992). The 1903 Department of the Interior text represents prairie space and asserts its place in Canada and the world through maps, cartoons, songs, and stories. While the claims are exaggerated in the cartoons to communicate a political message, these views were central to placing the Prairie in the Canadian and international context. The main characters in this book are the male political characters John Bull, Uncle Sam, and Jack Canuck, a Mountie, with cameo appearances of Lady Canada and Miss Columbia. The overtly gendered political messages tell a story of a land that is being “spied out” by the US and Britain for its bounty. The Prairie West is constructed as a place of commercial export, as trade routes are made visible in illustrations of Uncle Sam and John Bull carrying a large cart of Canadian grain and produce to their markets. In other illustrations, American immigrants are leaving the US in search of better opportunities in Canada, Britain is being fed by Canadian grain, and settlers are becoming prosperous through their hard work. However, on closer examination, other
political messages come to light as nature, nationalism, race, gender, and class are central to producing this new prairie space.

The visual was integral to the goals of colonization, which was to populate a place that was previously viewed as inhospitable, dangerous, and isolated. Visibility is also crucial in exercises of normalization (Foucault 1977; Rajchman 1991). Therefore, interrogation of visual aspects of the source materials, such as maps, photographs, cartoons and illustrations, is an important part of this chapter. I draw inspiration for the visual again from Foucault and employ the techniques from Rose (2012) and others who have written on interpreting visual discourse (Howells and Matson 2009; Olson et al. 2008; Patin 2012; Thompson 1998). The visual presentation of a flat, treeless landscape must be thought about in political terms. The composition in terms of the placement of the horizon, the position of the viewer, and the placement of the subjects are all crucial to the message or vision being created. In these texts, both an aerial, or god’s eye view, along with a ground level perspectives create different opportunities to express messages of abundance, limitation, infinite possibility, and national space. Each illustration exaggerates its message by erasing the complexity of the land, peoples, and politics at play. In most cases state politics are overt while other exercises of power are more insidious in constructing the normal prairie and its margins. Thus, the visual is used to both hide and emphasise a particular politics of place making.

II. Visual Individualization

The first visual encounter of the southern plains are Hime’s photographs The Prairie, On the Banks of the Red River, Looking South (Figure 4.1) and The Prairie,
Looking West (Figure 4.2). These images of ‘empty’ lands were circulated in the world’s news media and became an international phenomenon (Schwartz 2003). Schwartz (2003) describes how one of these stark images, The Prairie, Looking West, was intentionally altered with superimposed blue skies and flying birds to make them more accessible and legible. Looking at these photographs, it is not surprising that the chance to fill in the ‘empty space’ was made too tempting. Since these first photographs in 1860, visualizing a different, more welcoming, and familiar prairie was made a priority. In 1880, Macoun interprets the present and future of the prairie:

Limitless stretches of pale yellow prairie grass, a glorious boundless expanse that will some day be dotted over with countless farm houses, and be the home of a hardy, wealthy, and prosperous community, both which is now only pressed by the stealthy tread of the coyote as he chases the timorous hare, and where even the lonely moose is seldom disturbed by the prowling half-starved savage (92).

Macoun’s written description is that of an unclaimed and unused land waiting for the future settler communities to fill in the gaps. Adding to the descriptive account, the Macoun volume (1882) also employs a more powerful discourse to support his claims of future prosperity, the visual. The perspective chosen to display progress is the individualized homestead. Macoun’s Manitoba and the Great North-West contained illustrated landscapes of what the prairie could or would be, a stark contrast to the photographs, art, and sketches from earlier explorations which depict the documented state of the land (Figure 4.3). These illustrations visually ‘document’ the progress of a bush country farm compared to that of a prairie farm. Through these powerful images, the visual of the flat ‘empty’ prairie begins to be transformed from the ‘strange’ “unnatural nature” (Gregory 2001: 103) into the Euro-American familiar or normal. Perspective is an important aspect of these images as the horizon moves up the page.
Encountering the prairie from the standing position is a difficult perspective as is made clear in the Hime photographs. In contrast, the illustrations in the Macoun text are taken from a bird’s and god’s eye perspective, meaning they are both taken from above and over a period of time that shows the past, present, and future. This perspective is key as the grounded view challenges the imagination to fill the space, as in the Hime photos. *The Prairie, On the Banks of the Red River, Looking South* and *The Prairie, Looking West* portray a stark emptiness (Hime 1858; Schwartz 2003). While according to Schwartz (2003) this emptiness can be read in several ways by reading the context from which they emerge, they remain ominous, unfamiliar images of an ecological Other. In short, these were not the images needed to attract future migrants and capital investment. In contrast, the illustrations in Macoun’s *Manitoba and the Great North-West* superimpose the normal onto the unfamiliar and tell a story of progress, bounty, and betterment. In the first illustration, *Two Years after Settlement on the Prairies*, trees begin to grow between the fields and around the farmhouse, other homesteads are visible on the horizon, and the male farmer tends to an abundance of crops and livestock. Its counterpoint photo, *First Year in the Bush* representing the northern homesteads outside the Triangle, the scene appears quite messy and chaotic with the clearing of woods and draining of swamps looking endlessly laborious compared to the flat treeless prairie. No neighbours are visible and few livestock are shown. This is meant to illustrate how long it would take to clear to simply prepare and clear the bush land before any sort of crop could be grown.

In the next illustration, *Three Years after Settlement on the Prairie* the bumper wheat crop has been neatly harvested and stooked, the trees and hedges are larger, the
Figure 4.1 Hime Photograph, Prairie, on the banks of the Red River, Looking South (Hime 1858, Library and Archives Canada).

Figure 4.2 Prairie, Looking West (Hime 1858, Library and Archives Canada).
Figure 4.3 Illustrations in Macoun’s *Manitoba and the Great North-West* (1882) contrasting Prairie development (Right) and Bush Country Development (Left) (Top left: First Year in the Bush, Bottom left: Fifteen Years in the Bush, Top Right: Two Years of settlement on the Prairie, Bottom Right: Three Years of Settlement on the Prairie)
Figure 4.4 Move from homesteaders to affluent agriculturalists (Canada 1903).

Figure 4.5 The Old and the New Home of a Successful Farmer (Canada 1904).
Figure 4.6 Transformation of the prairie into a legible region (Canada 1904).

Figure 4.7 Township Plan and Homestead Guidelines (Canada 1903).
buildings and farmhouse have expanded; a church is seen in the distance nestled between yet more settlements, and rolling hills line the horizon. The counterpoint to this lithograph, *Fifteen Years in the Bush*, illustrates from ground level perspective the same level of farm development seen in the *Two years after Settlement on the Prairies* with a few surrounding homesteads in what is beginning to look like a traditional European farm. The northern scene also appears untidy with logs, waterfalls, and tree stumps with no clear organization. The final lithograph *Three Years after Settlement on the Prairie* shows a fully fenced farm which could be placed in central Canada or Europe. The livestock are fattened and have lush coats, the trees are maturing, the wheat crop is bountiful and neatly stacked and the house is a large Victorian model. The northern equivalent in development is seen after *Thirty years in the Bush* where the scene begins to be comparative. Thus, in terms of ‘progress,’ three years on the prairie is constructed as equal to thirty years in the bush country.

These visualizations invert the narrative of the fertile belt and Palliser’s Triangle as Macoun and the expansionists intended. Trees are presented as an obstacle rather than an advantage and the farms in the bush are presented as an anachronism when placed alongside the clean lines of the modern prairie farm. The contrast of the uniformly planted prairie trees to the suffocating conifers of the bush creates the prairie as a place better suited to the future and the bush as better suited to subsistence agriculture of the past. Thus, the bush farm was made abnormal and the prairie farm normal. Employing the visual tricks of time on the individualized homesteads, progress unfolds in a manner that could tempt any prospective homesteader or investor.
In Canada: Granary of the World (1903), the illustration Beginning a Home in Western Canada (Figure 4.4) the individualized homestead scene is almost identical in perspective and message as Three Years after Settlement on the Prairie in Macoun’s text. So much so, that I suspect the former Macoun image had been the basis for its composition. In these illustrations the horizon is once again close to the top of the page, from the perspective of looking down from a hill, in order to visualize the land’s transformation. Employing the same visual before and after tactics of the illustrations in Macoun’s Manitoba and the Great North-West, these images express the same message of early future prosperity and order. In the 1893 illustration, a subsistence farm is depicted where a woman picks berries from the uncultivated prairie while the man breaks the land. The couple’s house is small with a few chickens and a cow. There are a few homesteads in the distance but the land remains mainly unbroken prairie. The prairie land is simply dotted and without detail save the few bushes being picked. By 1903, ten years later, the man, woman and their children sit and watch seven horse teams harvest the last field in an endless sea of crops. The house is several times its original size, there are two new barns, their residence has extended off the page, a new road passes in front of their residence, telegraph and railway lines run on the distant horizon, and they now have more than twenty head of cattle. However, the biggest transformation is in the fields as they have all been transformed into harvested or soon-to-be harvested wheat. The family’s cart sits right on the very spot where the woman had previously picked berries and their sturdy draft horses have been replaced with a more elegant breed.

Through these two images, the land has been visually transformed into straight fields, uniform homogenous crops, and capital production. The only discursive space for
a pre-wheat nature, wild berry picking, is as a reference point or yardstick in which to witness the present progress unfold. It also signals that the land is gentle and provides for all stages of agricultural development, from the subsistence homesteader to the capitalist male farmer. The landowner and his family are now in the position of the capitalist watching others labour increase their production and capital. So while wheat becomes the norm on the land; at the same time, it re-produces social hierarchy through class through the American dream of class ascension. As in the Macoun illustrations, the treeless prairie is made normal through the placement of the individual homestead. It shows the ‘progress’ of a ‘normal’ family, a ‘normal’ residence, and a normalized nature. The scale of the quarter section and the household makes the prairie legible in ways that a map of the region could never have done.

Significantly, in terms of producing a gendered norm, this normalization process erases women’s economic contributions to the survival of the farm. Wheat and large livestock, typically male in the division of homestead labour, are made central while women’s economy is downplayed. Women’s economic activities included gardening, care of poultry and egg collection, milking, butter and cream making, and various other forms of production that allowed for the success of agriculture across Canada (Russell 2012). The woman who was previously picking berries as a new homesteader is now no longer a “co-producer” (ibid: 244), but a woman of leisure in the later 1903 illustration. Early depictions of gardening and small livestock are erased through the ever-expanding wheat and large livestock production. Subsistence forms of economic production are made an anachronism and made visible only as markers of progress. Importantly, these activities which stabilized the homestead economy were not only erased visibly but were
also much less prominent on homesteads in Palliser’s Triangle when it was settled. This, in part, contributed to large abandonment of farms in the region during the 1920s and 1930s (Russell 2012). Russell explains that in Palliser’s Triangle, “the weakness in the domestic economy put much greater demands on the market economy” (2012: 249). Thus, the illustrations of the bush land in the Macoun text were likely more viable and secure in that it would have provided a larger role for the domestic economy and income for sons clearing forests as was the case in other parts of Canada (ibid). However, the bush farm was not portrayed as progressive, scientific, or modern. The bush homestead did not highlight or exaggerate the male economic sphere, as did the images of the Prairies.

What was perhaps an exaggeration in the illustration of progress and modernity in the Macoun illustrations and Canada: The Granary of the World (1903) had seemingly materialized and was ‘proven’ through before and after photography in Canada: An Account of its Resources and Development (1904). In this volume, photography is the technology of propaganda, meaning it seemingly captures the ‘truth’ of a moment in time (Schwartz 2003; Braun 2002). It relies on truth making rather than humour to create a coherent vision of the Prairies. The photograph in Figure 4.5 shows a farm family’s first house next to their much larger new house, photographic evidence of class ascension. Figure 4.6 shows three photographs of breaking of prairie land. This first page of ‘before’ photographs illustrates the homestead’s transformation. The land appears empty of any previous vegetation, but labour and technology are transforming it in the form of horses, tractors, men, and ploughs. Thus, culture is about to transform the land from nature to a productive homestead. The decorative illustration is an oak branch and acorn, perhaps
representing the beginnings of a natural transformation. In the ‘after’ photographs, wheat
stooks uniformly dot the landscape as they did in Figures 4.3 and 4.4, the wheat spills
outside the photographs’ borders and onto the page, and the decorative illustrations are of
wheat. The photograph at the top of Figure 4.6 is labelled as a farm near Moose Jaw,
(inside Palliser’s Triangle), the middle photograph is labelled “A field of grain in
Western Canada,” and the bottom is identified as the Indian Head Experimental Farm.
Importantly, through this cluster of three photographs, a connection is made from the
Experimental Farm to the generic “field of grain” which could be anywhere, and finally,
makes the link to a specific farm near Moose Jaw. This provides visual evidence of the
process of normalization, homogenization through individualization, unfolding on the
prairies. The “value-giving measure” of the norm produced on the Experimental Farm
(see chapter 5), the high-yielding fields of grain on any given prairie farm, and localized
Moose Jaw field are all witnessed here on this one page. Thus, homogenization is
produced through these visualizations of individualization. Again, the domestic economy
is diminished and erased in these images, as there is no image of women or their
production.

Through these series of before and after images, the prairie has been made visible
in particular ways, and invisible in others. The scale of single unit farm homestead,
combined with the homogenized result, replaces larger questions about the region’s
suitability. Palliser’s Triangle disappears as the vignettes of the quarter section
homestead come into view to produce the Prairie region. Each illustrated view of the
quarter section is easily replaced with any other quarter section on the map, making it
easy to envision and transpose one’s life into the frame. Normality is produced through
visualizations of an inevitable transformation from point A to point B, one that could be replicated on every square by every settler family. These images erased women and their economic production, while highly emphasising the male economic sphere. This is not surprising as these images were tied with gendered homestead process that was working to attract males and establish a male-centred wheat economy.

The Dominion Township Plan and Homestead regulations were also included in all three volumes (Figure 4.7). It is displayed on the first page of Canada: The Granary of the World showing its importance and prominence in selling colonization. The text explains the rules and regulations of first obtaining land and receiving its full patent. Each township had 36 sections, each a square mile and divided into quarters, and each homestead on a quarter section. This Township template was repeatedly stamped across the entire Prairies and staked by the Dominion Lands Survey. As explained in Chapter 3, property lines were laid down ignoring the particular geographical features of rivers, lakes, coulees, and other natural boundaries. The only lands outside this grid form were the Indian Reserves are not shown in these volumes. As argued in the previous chapter, the homestead system ensured the population and land were individualized, equally distributed, and made visible.

Working within these texts, the visibility of Township Plan is another means to homogenize through individualization. Visually, property erases Palliser’s Triangle into both smaller individual sections and a larger homogenous entity. The township template is an abstraction of space, as it is not tied to a particular place, yet it represents a universalization. In what Scott (1998) calls a global movement of high-modernism, the land was made into an abstraction based on equality, homogeneity, and order. The
Figure 4.8: A Country of Swift Changes (Canada 1903).

Figure 4.9: Illustration of Aboriginal Man as Separate from Modernity (Canada 1904).
abstracted grid system made it appear as if all the land was naturally ordered and capable of supporting agriculture as part of a larger geographical unit, the North-West or the Prairies. Through the same movement, each individual homestead becomes symbolically equal to all the others. Thus, the great transformation that was being portrayed in the illustrations and photographs could be replicated in each identical square.

Macoun’s *Great North-West* (1882), *Canada: The Granary of the World* (1903) and *Canada: An Account of its Resources* (1904) all rely on the visual to express environmental and cultural norms. They employ the tactics of before and after to show the inevitable transformation of land, gender, and class. Palliser’s Triangle and the fertile belt are erased and replaced by the quarter section square of land and labour that could be replicated across the millions of square sections, representing homogenization through individualization.

III. Visualizing Marginalities and Producing the Abnormal Aboriginal

Marginality, as Braun (2002) explains, “is produced in, and integral to, forms of colonial power; it is that which *must be excluded* from conceptual frames in order for identities—such as “nature” or “nation”—to appear coherent and complete” (63, original emphasis). If this is the case, then why and how do the marginalized strategically appear? The cartoon *A Country of Swift Changes* (Figure 4.8), included in the 1903 Department of the Interior book *Canada: The Granary of the World*, illustrates an older and seemingly frail Aboriginal man standing in the foreground and a large red grain elevator, telegraph poles, and a busy train station in the background. The man stands next to a buffalo skull and is wearing mostly European clothes that are torn, ill fitting, and patched with pieces
of flour bags. He also adorns the legible symbols of American ‘Indian’ such as a feather in his top hat, long hair, moccasins, and a pipe. He is named the “Man-With-That-Tired-Feeling,” stating in the cartoon, “Waugh! Immigration heap no good- Injun’s best hunting grounds six moons ago just where big red tepee stands” (Canada 1903: 10). In this comment, we are made to think the man does not understand or is ill informed about the transformation happening, as he calls the grain elevator a teepee and sees immigration and ‘development’ as a waste of good land. His inability to fathom change and modernity is the basis of the racist humour. Here, race is illustrated through ignorance and an inability to comprehend or transform with the modern times. The Aboriginal character performs a form of failed mimicry in wearing mismatched European clothes but is unable to shed the core of his Aboriginal being of the feather, pipe and moccasins. The ‘XXX’ flour patch covers the character’s genital area could symbolize poverty, promiscuity, impotence, or that the wheat economy has taken his manhood. The text that accompanies this cartoon states, “Where once the buffalo was the only thing raised, and the Red Indian the only husbandman, now stretch vast wheat fields…The same piece of prairie that was needed to pasture one buffalo, now yields enough wheat to feed a score of families” (Canada 1903: 9). The description of inefficiency in the Aboriginal bison economy justifies the current/future control and ‘improvement’ by the settler populations. Overall, this cartoon says much about the future place of Aboriginal peoples in the Prairies, and throughout Canada, as separate and abnormal.

In terms of composition, the man is standing in the foreground on one side of the railway tracks. This space could be argued as the past as the man stands with the bison skull while the present and future are on the other side of the tracks, represented by the
towering grain elevator and the railway. He could also be argued as the juxtaposition of
the abnormal placed in a normalized space that no longer suits him. What this image tells
us in terms of space is that Aboriginal space is separate from white space, as is the divide
between nature/culture and modernity/pre-modernity. The dividing line of the train tracks
is significant as the railway promised to bring culture and modernity to the Prairies, as
well as integrating the Prairies into Dominion and Empire. Thus, the man with that tired
feeling appears strategically to prove that he is marginal and abnormal on his lands.

Another image from the book Canada: An Account of its Resources and
Development shows a younger and stronger Aboriginal man, once again separated by
railway as well as a river, looking at a dam and modern settlement from a forest across
the river (Figure 4.9). Both these images place the pre-modern or ‘primitive’ Aboriginal
apart from society or economy, looking on with confusion and wonder from the outside.
A physical and cultural divide makes participation and comprehension impossible.
Instead of total erasure as is accomplished in other images in the volumes, the visibility
of the Aboriginal in these is strategically positioned as a reference point of progress, time,
and development from an pre-modern abnormal space to a modern normal space. The
‘Indian’ figure appears as a counterpoint of western evolution in terms of both racial and
environmental improvement.

Both Aboriginal men in these illustrations are individualized as the excluded
cases that are furthest from the norm, helping to produce and reinforce the norm of wheat
and whiteness. Again, the norm is reproduced by placing the spotlight both on those
closest and most distant from it (Foucault 1977). The man on the plains is made to seem
powerless by appearing on the margins, making the forces of modernity appear more
central and powerful. In another variation of this exercise, the man in Figure 4.9 is constructed as the strong noble-savage. He is marginal as well, yet ‘pure’ and ‘untainted’ by modernity in his separation (Braun 2002). Being glimpsed on the margins was also a reoccurring theme in the colonial literature as explorers made reference to sightings on the horizon of a ‘half-starved savage’ (Butler 1872; Macoun 1882). The Aboriginal is made a similar figure to a rare bird or animal that one can catch glimpses of and be reminded of an earlier time. Again, why are they made visible in this instance? In terms of race, wheat was constructed as discursively incompatible with the Aboriginal and thus, the Aboriginal is incompatible with the prairie dominated by wheat. The erasure of Aboriginal women is also important in portraying the men as weak individuals living on the periphery, excluded from society, and without family or community. While Aboriginal men are made markers of another time, Aboriginal women and their land management and use are erased along with their claims to the land. One male land manager was replaced by another, ignoring the rights and labour of women in both economies.

Discourses which produced the West placed progress and economy as the counterpoint to the Aboriginal. Creating a vision of economy and modernity that would attract immigrants and investment meant the creation of coherence and categories of meaning. This convenient incompatibility produced a social and economic space of centralized whiteness and a marginal Aboriginal space, prairie land vs. bush land, wheat vs. potatoes. While in most Dominion advertising texts the Aboriginal is erased altogether, Canada: Granary of the World lets the Aboriginal be visible to communicate both progress and difference. The Aboriginal category created by this text is placed
strategically as a point of contrast: the old ways vs. the new way, history vs. progress, primitive vs. civilized. The Aboriginal figure stands outside the norm to contrast the modernist landscape. These new norms were white men, wheat, and capital. The Dominion texts express this by using the counterpoints of the Aboriginal, the bison, and the prairie grasses. The homogenized Prairie appeared as a modern landscape transformed by the Europeans with no discursive space for any of the three. As a discursive action, these images are quite powerful in the way they express isolation, difference, and mockery. The illustration does not say “this was our land” but “Injun’s best hunting grounds,” similar to saying our best fishing spot, erasing any claims or Treaty rights. Finally, the human/land relationship of the Aboriginal is made abnormal as the bison economy is portrayed as wasteful and inefficient when compared to the new form of industrial scale farming.

IV. Homogenized Wheat and Whiteness

The cartoon *Now Then, All Together* depicts the Mountie Jack Canuck, conducting the male caricatures of the European identities and nations in the singing of the Maple Leaf Forever (Figure 4.10). The characters, all men, are named “Germans,” “Icelanders,” “Scotchmen,” “Belgians,” “Englishmen,” “Russians,” “Englishmen,” “Americans,” “Austrians,” “Irishmen,” “Frenchmen,” and “Scandinavians.” They are stereotypically constructed images, including the Scotsman playing the bagpipes and the French man sporting an artist’s beard and coat. John Bull and Uncle Sam hold the songbook while the others follow. The choir of nationalities and ‘races’ belt out the anthem from a field of wheat, with labels of identities above their heads in case the stereotypical costumes
and gestures were unclear. The sheet music and lyrics for the first verse and chorus of The Maple Leaf Forever are printed in *Canada: The Granary of the World* so anyone who owned the book could play and sing along. The printed verse is as follows:

In days of yore, from Britain’s shore  
Wolf the dauntless hero came  
And planted firm Britania’s flag  
On Canada’s fair domain  
Here may it wave our boast and pride  
And join in love together  
The lily, Thistle, Shamrock, Rose entwine  
The Maple Leaf Forever.

While the lily was added to this later version of the song to appease French exclusion (note that it is still not capitalized in the volume), total erasure of Aboriginal peoples is accomplished in this vocal and visual performance of nation building. Not only was normalization exercised in the cartoon, but could also be reproduced and re-performed in the living rooms of the new nation with the inclusion of the sheet music. Again, along with the absence of other ‘undesirable peoples’ such as the Italian or Jewish population (Thompson 1998), there is no place for Aboriginal peoples in the building of the West or the Canadian nation. If there is a place, it is subsumed by the white masculinity of the Mountie, Jack Canuck. This cartoon tells us that Prairie coherence may include particular forms of European identity that lay outside the lily, thistle, shamrock, and rose, but makes invisible those who are labelled as undesirable. Harmonized whiteness is the intended message for this cartoon as Canada’s song is being performed by the white nations in a field of prairie wheat. The performance of this song links the occupied land and the new settlers to the nation, making it a coherent category or regional patch in Canada’s quilt.
Women are also excluded or subsumed into the male racial or state categories in this chorus of patriarchs. The men stand in the fields occupying the male economic domain of wheat, producing the idea that wheat and whiteness alone will successfully transform the prairie. The absence of women is indicative of the rights that were being denied to women settlers: the right to homestead, the right to vote, and the dower right which guaranteed a percentage of a deceased husband’s estate (Russell 2012). Normalization produces this individualization of minor differences of whiteness toward the region’s homogenization, or what it is referred to here as “all together.”

Importantly, Now Then, All Together transects the visible, legible, and interconnected scales of the individualized wheat field, the homogenous region, the state, and the international market through race, gender, and class. Canada, or Jack Canuck, conducts the other nations from outside the wheat field, while the other settler nations sing within it. John Bull and Uncle Sam hold the music as the main importers of the homogenous commodity. The binding ingredient, both literally and figuratively, of markets, nation, immigrant, and land was wheat. The golden crop is a form of discursive and material occupation that visually covers and erases all that was there before and hides ecological difference. Wheat replaces grasses while whiteness replaces the Aboriginal. Women’s labour is also erased or dismissed as a form of agriculture that is less modern or industrial. Together, wheat and whiteness represent the victory of a ‘superior’ form of culture, gender, and nature. To show anything else such as an Aboriginal in the choir, women with her chickens, or a grassland prairie instead of wheat field would disturb the continuity of the discourse which neatly divides the past and future and produces
normalization. Women, the grassland prairie, and the Aboriginal have no place in nation building, other than a continual point of reference for the measurement of progress.

The dominance of wheat is again represented in a cartoon depicting the heads of John Bull and Uncle Sam riding a wagon through an endless field of wheat (Figure 4.11), Uncle Sam saying, “They say it’s a fine lookin’ country, John. But durn it all. You can’t see it for all the wheat.” The composition of the illustration emphasizes both the height of the wheat and the endless horizon of it only broken by a distant grain elevator. The text that accompanies it reads, “An Ocean of Wheat: No grander or more beautiful sight can be witnessed during the summer months than the Canadian prairie, with its sea of red and golden wheat. In through the various districts the traveller, as far as his eye can reach, beholds nothing but the waving grain” (Canada, Department of the Interior 1903). This strategically replicates and reproduces the sentiments of colonial exploration writings, taken up in Chapter 2, when various authors such as Butler (1872) speak of the prairie as an infinite ocean of grass. The idea of an undivided, uninterrupted expanse of frontier is only improved with such an expanse of a cultural economic commodity. Simply replacing native grasses with wheat, tames the landscape with culture and prosperity. It also communicates that there are no boundaries or limits to its production and that wheat is the great normalizer and equalizer. Individuals would prosper from it and together form a prosperous regional economy.

Wheat as a norm buries any other difference, history, claim, or use of the land and it is infinitely replicable across space. Thus, wheat is imbedded in the Canadian psyche as the natural vegetation and the ‘normal’ nature. In this sense it is a convenient and powerful groundcover which helped to visually erase other claims. Wheat discourses also
established what a prairie farm looked like, offering the mental groundwork for future settlers and their plans. Again, the cartoon visualizes a coherent region through an economic commodity that links it to Canada as a nation, and to the trade relations of the US and Great Britain in the form of John Bull and Uncle Sam.

Throughout *Canada: The Granary of the World*, nature has been normalized, made productive, and improved. Only one cartoon, *Everything in Canada’s Favor*, subtly alludes to Palliser’s Triangle and the existence of a desert. The illustration shows an American man reading a daily bulletin from the Associated Press in an American city. The bulletin reads, “The Canadian Northwest can easily take care of forty millions of people. *There is no desert country there; all the land is productive and highly so*” (Canada, Department of the Interior, 1903, emphasis added). Palliser’s Triangle is actively discounted here and the land is made equal in value and potential for the possible forty million who could immigrate there. It could be understood through this statement that Palliser’s Triangle remained a thorn in the side of nation building.

A representation of flat homogenous wheat fields is found in most depictions of Canada as a patchwork confederation. Wheat is both an economic commodity and symbol of the Prairie West. As wheat is so ‘natural’ to the Prairies, it is difficult to think of the region without it. In the promotional Dominion texts wheat was both a material tool and symbolic representation of culture that easily normalized and erased all previous forms of land use, ecological history, ecological diversity, and Aboriginal land rights. It also offered a myopic vision of the West’s economic development that was easily inserted into discursive frames of the quarter-section homesteads advertised by the Dominion. Wheat again made the land legible from the micro-scale of the homestead to
Figure 4.10 Now Then, All Together! Canada, Department of the Interior (1903)
Figure 4.11 Multiplied Individualization (Canada 1903).
Figure 4:12 Homogenized Region (Canada 1903)
the macro-scale of a Prairie economic region. Representations and materializations of wheat normalized the land and replaced what was seen as nature with this economic embodiment of culture. Golden fields symbolized capital accumulation to prospective white settlers and capitalist investors. More importantly, wheat was the commodity that integrated the West into the Canadian Nation by making it a legible region to be sewn into the economic patchwork of Canada. At the same time, wheat also further normalized and integrated Palliser’s Triangle into the larger Prairie region, offering a vision of an uninterrupted and homogenous expanse of individualized wheat-producing homesteads.

V. Nation Building through the Constructed Prairie Economic Region

Employing wheat and whiteness, the larger Prairie region is produced as a homogenized industrial space. In the title page of *Canada: The Granary of the World*, (Figure 4.12) the visual normalization of prairie space, and nature, into sites of manufacture and exportation is representational of government dreams and plans to completely transform the Prairie. Space is abstracted with Canada being compressed into a factory floor, production in the West and export in the East. This illustration employs the land’s perceived uniform flatness favorably by invoking modernity, industrialism, and homogeneity. Flatness becomes discursively advantageous in a time of industrial modernity, producing an environmental space that works and appears like a factory floor. In this way, wheat, whiteness, and flatness become natural or normal. Discursively, modernity fit the constructed Prairie region like a glove.

While *Canada: The Granary of the World* (1903) is intended as a light-hearted promotional cartoon book where the Prairie West is the main subject, as stated earlier,
Canada: An Account of its Resources and Development (1904) is communicated as a documented photographic and illustrated study of all the regions of Canada. It highlights Canada’s ‘nature,’ resources, and industry through both visual and textual accounts from coast to coast. The Canadian Prairies are brought into the patchwork Dominion of Canada through the representation of a coherent and homogenous regional scale. As a whole, the book neatly divides ‘natural’ spaces and industrial spaces. Mountain views, recreation in the Muskoka region, hunting, and forest vistas are separated from industry and institutions. ‘Nature’ is mainly painted and illustrated, while industry and culture are generally photographed. The Aboriginal in Figure 4.9 appears as part of the watercolour decorated margins as part of nature and clearly separated from modernity and industry. Each Canadian region is highlighted for its industry, its natural resources, and its natural beauty. However, the Prairies are bound to the nation’s quilt only through representations of overcoming nature through industrial wheat production. The volume solidifies the Prairies as a place that has overcome its nature through the cultural materializations of wheat and whiteness.

While other regions of Canada contain images of sublime ‘nature’ (Cronon 1996), the Prairies have no places of ‘natural’ beauty illustrated. While the magnificence of the Rocky Mountains, Niagara Falls, and Stanley Park are highlighted in other regions of the volume (Figure 4.13), the Prairies focus on farm machinery and the conversion of grassland to wheat land (Figures 4.6 and 4.14). The book produces the Prairies as a site of industrial production and homogenization, the opposite of ‘pristine’ natural beauty. Describing the highlights of each region, and following a description of the ‘wild untamed’ nature of British Columbia, the volume explains the Prairie as follows.
The prairie, with its frequent stacks of grain and innumerable rows of stooks, converging on the horizon, tall elevators and comfortable farm houses, its herds of cattle, its bands of horses, growing communities and general promise of fatness, usefulness and population (Canada, Department of the Interior 1904: 40).

There is no discursive space for anything but progress and industry in the Prairies. Whereas other regions have spaces of ‘wilderness’ that tie the region to the Canadian national identity (Braun 2002; Baldwin et al. 2012), modern agricultural landscapes dominate the margins, the photographs, and the illustrations. Discursively, the Prairies fit into the nation as a representation of progress and dominance over its nature. The regional frame allows for coherence and order.

Settler history is also made central in this volume with stories of suffering mothers, starving children, hard-working fathers that broke their backs to overcome nature. The construction of where history begins in the Prairie West is often based on this story of ‘nature’ versus the pioneer. This story is told in a very interesting way in *Canada: An Account of its Resources and Development*. It is an account of a historian addressing the Prince of Wales who visited Canada in 1901. It states,

> This land was added to civilization and your father’s glorious crown, your Royal Highness, with toil and perhaps tears. Greater courage was displayed here, and vaster fields won for the Empire than at Badajos or Waterloo…The greatest of battles of the Empire have been fought on these fields, where the arms of the combatants were the axe and the hoe (Canada 1904: 57).

Thus, more territory for Empire was gained in Canada through a greater battle against nature and victory was won through the farmers’ toil and tears. ‘Nature’ was the enemy
and it was being defeated. This passage established the male farmer as a cultural soldier of Empire, a theme that continued through the first and second world wars (Evans 2001). Like Canada: Granary of the World prairie women are not used to construct the region and are made invisible as masculinity, industry, and science dominate the region’s representation. Women, however, do appear in the portrayals of the upper class consumption of ‘nature’ in British Columbia and Niagara Falls. While some children are presented in the photographs from the fields, the women are absent from the masculine domain of farming. Again, this adds to a discourse of a particular kind of nature, one which is solely based on industrial masculinity and has erased completely or limited the importance of the domestic. It also hides the fact that while women were solely responsible of the domestic sphere, they were also regularly working in the fields during busy periods of seeding and harvest (Russell 2012). Class is also central to the separation of nature and culture in these two images as the upper classes enjoy the spectacle of the red woods in nature, while workers and machinery are central to the Prairie scenes. Therefore, gender, class and marginality are employed as yet another way of separating nature from culture and of creating a coherent industrial and economic region.

VI. Visibility through the Visual

This chapter further demonstrated how individualization worked through visual materials. Once again, I described how two fields of visibility work together to individualize and homogenize: the individualized homestead quarter section was multiplied to create the homogenized prairie as an exporting economic region. I
Figure 4.13 Nature being consumed in British Columbia (Canada 1904).

Figure 4.14 Nature transformed in the North-West (Canada 1904).
explained how the use of ‘before and after’ illustrations and photography allowed for the witnessing of a transformation of the ‘abnormal’ to the ‘normal.’ The larger economic Prairie region was constructed through repetition and multiplication of these homestead tableaus, which asserted the importance of the Dominion of Canada as an export economy. This individualized and homogenous Prairie region fit well into the tapestry of exporting regions. However, these visualizations of the normal prairie farm erased the importance of women’s labour and sphere of production. The construction of the region through representations of industrial modernity also produced individualized whiteness as normal and Aboriginal identities as abnormal within its geography. Aboriginal figures only become visible for the purpose of seeing how ‘out of place’ they were in the landscape. In terms of normalizing environmental forces, a never-ending horizon of wheat is made to seem the ‘natural’ groundcover, replacing and erasing all ecological diversity and difference. The repetition and multiplication of individualized whiteness and wheat fields created notions of the ‘normal’ prairie. Palliser’s Triangle is fixed through these constructions of both homestead and regional ecological uniformity. This chapter argued that these first visualizations of the norm established what a prairie farm would resemble, who was out of place within it, and what was considered normal.
Chapter 5

Scientific Norms, Farmers’ ‘Souls,’ and Spaces of Judgment

Those who are set in authority over us seem to think that education is the remedy for everything. If the farmers are not prospering the call goes forth “educate them.” When the high cost of living begins to pinch in the cities they trace the whole trouble to the farmer and someone yells, “educate them!” No matter what goes wrong, the only solution that occurs to anyone is “educate them.” Now [the farmer] is being educated so thoroughly that almost any farmer you meet is ready to sit down and have a breezy chat about the way soil particles are held together by water menisci or to discuss intelligently the value of (PbHAs04) in destroying coddling moths.


I. Introduction

As the problem land of Palliser’s Triangle became invisible through spatial and visual normalization, two new subjects appeared to further bury it in the discursive dark; scientific farming and the scientific farmer. The development of normative laws of scientific agriculture transformed the diversities of land into knowledge, making the land appear universal and therefore manageable. As the land was made universal through science, the male farmer’s aptitude and attitude were made the centre of concern, as only the ‘brightest’ farming individuals were viewed as having the capabilities to access and harness such knowledge. Both the universal and the contingent (scientific law and the male farmer’s soul) were placed in the centre of dry-land settlement discourse as both the solution and the problem, while environmental conditions were made increasingly invisible. This chapter continues to trace the normalization of Palliser’s Triangle by engaging with the discourses of scientific dry-land agriculture that circulate from 1900 to 1920. I argue the discourses of scientific agriculture, including the creation of natural laws and universal methods, further normalized Palliser’s Triangle through its farming
population. As agricultural science made the land ‘known’ through the creation of norms for farming, an arid-land problem was reframed into an individualized problem with the male farmer’s character repositioned at the centre of concern. Depending on the degrees of separation from the norms of farming, it positioned the male farmer as either ‘progressive’ or ‘backward.’ This research illustrates how scientific discourse manifested in particular ways and created a new normalized subject, the male scientific farmer. I argue that strategies to improve the land formed a human/land relationship which was motivated, understood, and read through discourses of personal and population betterment which strongly exemplify Foucault’s analytics of normalization, biopolitics and governmentality.

This chapter adds to the central argument by connecting the circulated norms of scientific agriculture to the normalization of Palliser’s Triangle. With the creation of the scientific norms, normalization could function efficiently through the steps described in the previous chapters on a field of comparison where individual fields and farmers can be compared, differentiated, homogenized, and ranked in a hierarchy. However, to transform an entire region based on scientific agriculture, nature’s normalization had to occur through the circulation and distribution of knowledge. That knowledge must also contain a “value-giving measure” (Foucault 1977: 183) against which male farmers would be judged. In order to normalize Palliser’s Triangle, every male farmer needed to be able to both access and embrace scientific knowledge, embodying the norms of universal truth. This standard was made visible through formal male farmer education, Experimental Farm bulletins and field days, farming and rural newspapers and periodicals, and even a travelling scientific farming train. The land was also made visible, illustrating the male
farmer’s commitment to progress and betterment. Along with the norm being visible, identities were created in relation to the norm, built on constructions of race, gender, and class tied to land management practice. I argue that the wide circulation and positioning of the norm in relation to expertise, race, gender, and class encouraged male farmers to adopt certain practices which brought about the homogenization of land management and led to the normalization of Palliser’s Triangle.

I offer these arguments based on my readings of the scientific farming movement which emerges in the late 19th and early 20th Century. I employ the western farming journals, and in particular the Grain Growers’ Guide (GGG) 1900-1920 to understand how the discourses of science and male education were circulated, taken up, and employed. I have chosen these sources because they offer insight into the various forms in which such discourses circulate as news stories, expert columns, advertisements, women’s pages, short fiction, readers’ letters, and editorials. Again, normalization is homogenization through individualization. Now that farmers were placed on the grid, both the land and the male farmers were individualized and bound together in relation to the norm. They could be seen and be judged, and judge others, based on land practices. As the norms of scientific farming were developed, deviations could be witnessed materially in the land and categorized as good or bad practice.

Biopolitics is the politics of making life live where the body and population meet in strategies of future security. In Foucault’s example, sexuality sits where the body and population meet. In this research, I argue that settlement farming is placed where the body, land, and population meet. In Palliser’s Triangle, farming was at the centre of the economy-population-land problem where the body, or multitude of bodies, had to be
trained for a particular economy in a problem nature at a “distance from power” (Bantjes 2005). The individualization of the grid and the norms of scientific farming solved a biopolitical problem of population and food production. The farm becomes a political site where the building of Canada’s population and economy overlaps with securing food for Europe. Along with the problem of land, population was clearly identified as an issue in settling the Canadian Prairies as debates over which groups made the most desirable immigrants were commonplace (Marchildon 2009; Shepard 1997; Stambrook and Hrynuik 2009). Therefore, land and population become objects of governance to improve each other through individualization and governmentality. Similar to how the land becomes homogenized through individualization at the scale of the quarter section (see Chapter 3 and 4), a homogenous population is targeted at the scale of the individual male farmer’s body on the individual quarter section of land in relation to agricultural knowledge and expertise. This individual’s ‘soul’ or character is written in the fields. In other words, tactics to improve the land depended on, and overlapped with, the betterment of its population and vice versa.

While these goals were aimed at the larger economy and productive abilities of the population, the tactics were aimed at the household and the individual. In terms of governmentality, male farmers were private landowners who could not be forced to farm in a particular way, meaning a use of political tactics was subtle and diffuse through governmentality. While there could be little racial ‘purity’ in a region occupied with immigrants from many European nations, science and education fill the role of a normalizing standard. However, this educational betterment was presented in racialized, gendered, and classed language and images. I argue that the focus on the individual and
the household works as an “anti-politics machine” (Ferguson 1990) whereby nature is made neutral and the farming population is re-centered as the political problem, making colonial settlement geographies seemingly apolitical. The message being sent was that if the farmer adhered to the scientific principles of agriculture, geography was irrelevant. If the farm failed, it was the male farmer’s responsibility to brush up on the science, seek the help of his neighbour, or consult the Experimental Farm. In other words, look inside, not out.

While the norms of farming and the subject of the scientific farmer were well established in the farming periodicals, it is also necessary to contemplate how power operated on the ground. I illustrate again how visibility was involved in the operation of power. If, as Foucault argues, our ability to be seen, or simply our perception of being seen, affects our behaviours and is employed as a tool of disciplinary governance, then it is important to ask in what ways male farmers were placed in the line of sight (Rajchman 1991). In farming, success or failure is always visible in the fields. Each ploughed row can be judged for its straightness, its order, and its depth. Each crop is tied to the body of the male farmer with its yield, height, and lack of weeds. This can be seen in the long tradition of taking a photo of male farmers standing in their crop. This measurement of success depends on how tall it grows up his body, and yield by how much of his body you can see through the heads of wheat. Neighbours’ fields and crops are visible as well in the grid pattern of prairie settlement. The land is a visual means of categorizing a male farmer as progressive, sloppy, or backward. Throughout the farming periodicals there are calls to “Look to your neighbours” for both success and failure (Pure Seed Movement, GGG March 15, 1911: 9). Like any other social space, the visibility of prairie fields
enabled judgement to be passed, comparisons to be made, and categories of male farmers
to be established.

It is also important to look for who was made invisible, as it was not just
Palliser’s Triangle that was pushed into the darkness through the creation of these
scientific norms. Women were erased from the fields and hidden in the household despite
their struggles for homestead rights and other forms of equality. Being a farmer, even
today, means largely belonging the category male despite attempts at larger recognition
for women who farm (Mackenzie 1992). First Nations and Métis were erased, as were
other groups such as Hutterites and Mennonites. Being a scientific farmer was not seen as
compatible with these other identities. These absences solidified the white male
progressive farmer as the norm.

II. Farming Norms and Land Universality

One of the most important aspects of normalization is the creation of a “value-
giving measure” or the yardstick with which to judge. Agricultural science produced the
norms of agriculture, the methods upon which lands would be altered and male farmers
would be measured. Nature became a product of knowledge, a known formula that could
be mastered though cultivation methods. Agriculture became a science in the late 19th
century. Farming manuals such as the Book of the Farm (Stephens 1844) and Dry
Farming (Widtsoe 1911) began to be published and distributed widely, agricultural
institutions emerged and multiplied, and agricultural scientists graduated and travelled
the world to further their research. This great shift transformed agriculture and opened
new avenues for governing farmers and colonizing lands. One of the most important
developments of the scientific farming movement was the establishment of the experimental farm networks and the agricultural training institutions (Taylor 1994). The *Report of the Select committee appointed by the House of Commons to obtain information as to the agricultural interests of Canada, 1884* gave a detailed report of the historical development of the experimental farm idea and implementation citing the visit of the French Minister of Agriculture, Mr. L. Grandeau, to Germany in 1868 to tour the German network of experimental farm stations. After returning, Grandeau encouraged the French government to adopt this “truly fruit-bearing movement” (Canada 1884: 7 - 8). The report detailed the first experimental station in Saxony developed and supported by German farmers in 1852. The report then outlined the creation and adoption of subsequent institutions throughout Japan, France, Denmark, and Belgium. Strangely, the experiment stations established in the US are not mentioned in this report, but were established by 1880 (True 1928).

Taking recommendations from this report, Canada established the Central Dominion Experimental Farm in Ottawa and the Dominion Experimental Farm network across the country. In the Prairie region, the Indian Head Experimental Farm was the first to be established, followed later by Lethbridge and Swift Current. These farms employed agricultural specialists, usually trained internationally, in such areas as soils, botany, and entomology. Their job was to experiment in regional conditions and develop the best crop varieties and cultivation methods for such environments, publish the results, and disseminate these varieties and methods to farmers (Gray 1967). Communication to farmers was done through educational field days, pamphlets, bulletins, and even a travelling Experimental Farm Train that had a car dedicated to a farming topic (Jones
During the drought years of the 1930s, Dominion Experimental Farm operations were extended to smaller sub-stations and working model farms in order to reach as many farm families as possible (Gray 1967). Experimental Farm experts also travelled the region visiting farm families and offering advice.

The prairie experimental stations concentrated on the development of dry-farming, or farming in regions which get 17 inches of rain or less annually. Dry-farming was first developed in the semi-arid regions of the US such as Nebraska, Utah, and Colorado as a means to deal with the settlement of land in places which could not be irrigated (Campbell 1902). Irrigation farming was entirely different from dry-farming, though some farms had both irrigated and dry-land operations. The Canadian dry-land Experimental Farm stations followed and shared studies with other agricultural studies in other dry regions in the US and around the world. Due to Malthusian anxieties over food production and with the need of the nation state to control its frontiers, there was a global effort to incorporate the arid regions of the world into the world system agricultural economy. The Dry Farming Congress held annual conferences where scientific papers on dry-land farming were presented and crops grown in dry regions were displayed. The Congress was held in Lethbridge, Alberta in 1912 and brought hundreds of scientists from 14 nations and farmers throughout western Canada and the US. Dry-farming manuals were developed for male farmers to help them deal with the arid conditions and to standardize practice, the most famous of which is *Campbell’s Soil Culture* (1902).

Importantly, the development and implementation of scientific agriculture further normalized the land as knowledge was created on soils, seeding, harvesting, and every other aspect of farming. As nature was now universalized, and the rules and laws of
farming created and distributed, it was placed on male farmers to adhere to the norms. A normal field and an abnormal field were illustrated through photos, descriptions, and depictions, giving each farm family the power to judge themselves and others. Normal land practice could be attained through reading academic research published in farming periodicals or by taking part in activities such as listing bee competitions on Experimental Farm field days.

III. The Norm and the Individual in Expert Columns

On May 14, 1886, in a debate over the Experimental Farm Station Bill, Senator Allan proclaimed, “The days of ship-shod husbandry, when farming was a business that any man might take up successfully, no matter how ignorant he might be of the simplest principles of agriculture, have passed away” (Canada 1886, emphasis added). This bill enabled the establishment of Dominion Experimental Farms throughout the country to conduct scientific research in the various climes and disseminate the results to those farming in similar conditions. In Canada, the public discourse of scientific farming, or farming using the principles of agricultural science, began with this quote in the House of Commons and eventually disseminated through farmer periodicals and Dominion Experimental Farm publications. By 1909, the language of scientific farming and the male scientific farmer is a recurring topic in the Grain Grower’s Guide (GGG), a periodical produced by the Grain Growers Grain Company co-operative who voiced the concerns of western grain farmers with regular anti-government and anti-capitalist sentiments. While anti-government sentiment is a predominant aspect of the publication, there are regular articles and reports by Dominion Experimental Farm scientists. Despite
the fact that these authors were Dominion government employees, agricultural science was seemingly viewed as separate from the political state. The rules, laws, and even “commandments” (Jones 2002: 137) of scientific agriculture were outlined by experts in weekly columns, often depicted with photographs and illustrations. At least one advice column was present in most of the weekly editions of the *Grain Growers’ Guide* from the time period of 1908-1920, including such titles as “Requisites to Success,” “Tillage Process,” “Experimental Work is Ruling Out the Risk of Farming” and “Conserving Soil Fertility.”

Dominion Scientist Seager Wheeler writes in an article titled Conserving Soil Fertility that, “every tiller of the soil should know something about the make up of the soil and its requirements. The tillage operations that I shall outline here are simple and direct in effect and apply to our western conditions, and I want every reader to note them carefully and impress the principles in their memory” (Wheeler 1916: 7). However, Wheeler is careful in his advice, prefacing the article with the comments, “In presenting this article to the readers of The Guide [GGG] I am doing so after serious consideration of some time past. One of the reasons why I have not done this sooner is partly because I do not wish to force my methods on the attention of those engaged in agriculture” (ibid). Wording an advice column to farmers seemed to necessitate a tone that was informative, while not being a forceful imperative. As government employees, Dominion scientists likely needed to appear as helpers and not puppeteers in order to maintain the farmers’ trust and ear. However, the rise of the importance of the ‘unbiased’ expert in governmentality also assisted in this process.
In the article “Dryland Farming,” soil scientist W.R. Motherwell explains the importance of following the scientific methods he describes earlier in his article.

A great portion of eastern Saskatchewan has been settled for from ten to twenty-five years, and the farmers located therein are familiar with the best methods of tillage necessary to secure the best results under semi-arid conditions. In the western and newer portions [Palliser’s Triangle], however, large tracts of land have recently been taken up by settlers unfamiliar with such conditions…with the result that have experienced some loss and disappointment during the summer of 1910, and yet ample rain fell practically throughout the whole province to give profitable and satisfactory results, had the principles of underlying dry farming been understood and carried into effect (Grain Growers’ Guide Oct 19, 1910: 7).

Motherwell’s message underlines the importance of knowledge over nature in successfully transforming the dry-land regions. These ‘new’ areas were not a problem because of their geography but because of male farmers’ lack of knowledge. Motherwell adds, “In all semi-arid regions the besetting hindrance to successful farming is drought, consequently the basic principles underlying dry farming must and do apply a system of scientific and timely tillage” (ibid, emphasis added).

In other expert articles, the message is more forcefully directed at the male farmer’s individual character. James A. Colvin writes:

Only those who follow the correct methods will have any measure of success in the future, because the ignoramus and the sloven will come in competition with the man of brains, the scientific farmer, and unless you can keep up with the procession, you had better drop out entirely…You are fortunate to be living in a progressive age. Be progressive farmers (Grain Grower’s Guide, 1909, Aug. 7: 8, emphasis added).

W.T. Tregillus further argues with a similar approach.
Scientific culture [is] being developed to defy drought; and so all the uncertainties of the agriculturalist are becoming fewer than those in any other avocation…and can be made a greater success by those who are determined to make it so, but of course, it depends on the individual, the incompetent, the shiftless and the indolent will always fail (GGG Dec. 21, 1910: 12, emphasis added).

These passages are typical examples of how agricultural science was being employed in the farming periodicals. The character or ‘soul’ of the male farmer is under scrutiny and is situated in Darwinian terms of the successful ‘man of brains’ and the failing ‘sloven.’ Both the farmer who is closest to the norm and the one who is farthest from it are identified to produce the average. The category of the male scientific farmer laid out by the experts is established as male, rational, and progressive. The male scientific farmer is set against his opposite, the traditional male farmer, whose flawed character and intelligence would lead to his evolutionary demise. Being a non-progressive farmer manifests in racialized language. Markers such as ‘lazy’ or ‘indolent’ are constantly contrasted with terms ‘progressive’ and ‘successful.’ The discourse of the male scientific farmer strongly identifies that the success of farming lies in personal betterment, the education of the farmer, and not the shortcomings of environment, climate, and weather. Again, human nature rather than environmental conditions is to blame for successes and failures. The prairie environment is normalized through expertise, while the ‘soul’ of the individual is responsible for moving its forces in compliance with such norms.

Professionalization of farming through male farmer education is also a reappearing theme in the farming periodicals and other media (Taylor 1994). An article entitled ‘Collegium Agricolarum’ states, “Thirty years ago the agriculturalist was looked upon as
a backward member of society, conservative, with little education...So to be able to farm scientifically, higher education was required. This enabled the male farmer to see what position he held in society and what part he played in progress” (The Gateway October 1, 1912: 20). In the article ‘Agriculture as Profession: The Dignity, Importance and Possibilities,’ W.T Tregillus writes,

> There is no other calling which is so conducive to thorough-going manliness as that of farming, nor in which he may so nearly attain his full stature...Those now engaged in agriculture are demanding schools, colleges and courses on practical instruction for themselves and for their sons which will fit them to make of the farm a plant for the scientific and skilful production of all that it will yield. The soil is being searched for its mysteries just as are the sea and stars, and is being made to yield its secrets (GGG December 21, 1910: 12, emphasis added).

In such professionalization, the male farmer could be seen as part of the scientific elite holding an integral place in the project of modernity. He would be able to read and know the secrets of the land. Above all, the male scientific farmer is produced through this “thorough-going manliness” (ibid) as the categories of scientist and farmer align through gender. Women were excluded from these categories and erased from the progressive dry-land farm.

The appeal of professionalization was also cited as the antidote to outmigration of children from the farm. If farm work was made professional and scientific, sons would not have the desire to leave the farm for the city in search of betterment, and daughters could be proud to marry a professional male farmer and stay in the countryside (ibid). In the Edmonton Capital, a news story about a famous wrestler who is returning to farming quotes the athlete saying, “They’ve got me wrong about being a corn sucker, I’m a scientific farmer and while I have old-time practical knowledge about how to conduct things, I am adding to my store of knowledge every day by experimenting and all that”
(Edmonton Capital, January 31, 1911: 3). While this is a sports story, this comment reads as if taken directly from an Experimental Farm bulletin. It illustrates how the idea of being progressive and scientific is being circulated through popular reporting as well as agricultural journalism.

While most farmers were being increasingly persuaded to be industrial and scientific, dry-land farming employed science as its foundation. Dry-land farming, as stated earlier, was identified as farming in regions which received an annual rainfall of 17 inches or less (Palliser’s Triangle). The dry-farming movement played a major part in these arid regions being settled. If the science indicated it was possible to farm these regions, then opening the driest areas to settlement would not be a problem. In the 1914 Proceedings of the International Dry-farming Conference in Lethbridge, John H. Worst explains how dry-land science will elevate the male farmer to a scientific professional.

Under dry-farming conditions, therefore, agriculture will, of necessity, assume the dignity of a science and the farmer in a larger sense, becomes a scientist. Moreover, the thought and painstaking skill necessary to win success under dry-farming conditions will impress themselves as visibly upon the habits and character of the husbandman as the laboratory impresses itself on the habits and character of the scientist. For not until the farmer becomes master of nature’s skill to adjust his energies to her demands, can he take his place and rank among the truly great men of action…What hitherto has been looked upon as the curse of drought may yet, in light of science, be interpreted as the mercy of an overwhelming providence (GGG November 15, 1911: 8 emphasis added).

Here, science is embodied in the male farmer through dry-land farming, leading to his betterment, while drought is simply masked bounty waiting to be unveiled through the hand of science. Nature is referred to as a female, meaning a feminine nature will be mastered through the masculine rationality science. Addressing the same conference John T. Burns declared that, “Dry Farming is better farming—it is scientific farming… it
develops the best farmers in the world” and is “elevating the farm home and crop yield through systematic scientific tillage and conservation of moisture” (GGG August 14, 1912: 7). Therefore, the problem land will help the individual better himself if he is open to learning scientific methods.

These messages make it seem to a blessing to live and own land in a drought-prone area. The rationale states that the farming man will become a better individual because of the necessity of innovation and training, raising his and his family’s class status through education and improved income. It also implies that the male farmer is responsible for the success of the dry-land farming operation. If one understood the natural laws, drought was not a factor. The male scientific farmer could manage such conditions if the expertise was followed. During a drought, the question was reframed from ‘what is wrong with this situation?’ to ‘what is wrong with me?’ Again, the problem is individualized as it directs the male farmer to look inward at his ‘soul’ rather than outward at the political context which opened the land in the first place. Thus, it is made normal and even advantageous to live in such arid circumstances.

Expert articles in the farming periodicals are made the new norms of agriculture widely available. In doing so, they also created a subject who would embody these norms. The category of the scientific farmer was educated, progressive, professional, and male. The abnormal or backwards farmer was constructed in racial and evolutionary terms as a species destined to fail. As told by the experts, with the knowledge that had been created the land was no longer an issue, it was an issue of the male farmer’s ‘soul.’ It was the male farmer who becomes a category of good or bad when being compared to
the norms set out by the agricultural experts. In a form of environmental determinism, dryer conditions would lead to better farming and better farmers.

**IV. The Norm: Class, Gender, and Individualization.**

Scientific discourse did not stay isolated in the expert columns of the Dominion Experimental Farm scientists but was circulated through many other formats. In the summer of 1913, the short story ‘Ezekiel’s “Daughter”: Scientific Versus Common Sense Farming’ by Clarrisa Mackie was published in most of the small papers throughout Palliser’s Triangle (Cayley Hustler, July 16, 1913: 5). In May, it appeared in the Redcliff Review; in June, the Empress Express; and in July, the Cayley Hustler, and the Gleichen Call. While the title alone is interesting in terms of scientific farming being included, this story embodies the messages of the expert columns. The fictional short story, written by a woman, tells the tale of Earnest Hartwell, a handsome young scientific farmer who has recently homesteaded next to a grumpy “old-time” farmer, Ezekiel Flinder, who had homesteaded many years previous. Hartwell applies scientific methods to his farm but is continually being ridiculed by Flinder, who is suspicious of the new scientific approaches and argues with Hartwell daily over its principles. While Flinder sits “lazily” on the rail fence ridiculing his neighbour, Hartwell works hard even with all the distracting comments coming from Flinder. It comes to light that Hartwell is also an artist, a sculptor, which Flinder argues is a weakness and another reason Hartwell will fail at farming and will “starve to death.” But secretly, the ill-educated Flinder is in admiration of his neighbour’s artistic talent. Flinder tells Hartwell that he is lucky that Flinder does not have a daughter because he thinks Hartwell would be set on marrying her, and Flinder
would never allow it because Hartwell is far from the more preferable “simple farm boy.” A young woman, Christine Davidson, appears whom Flinder emphasises is “like a daughter” to him. Flinder remains suspicious of the time the young Hartwell spends in his workshop and asks to see his sculptures, telling him he could judge if they were good enough for war statues. Finally, Hartwell allows him into his studio and first unveils a large statue of a lion, interesting in its own right for its monarchical symbolism, which Flinder acknowledges as lifelike and frightening but also so good that Flinder does not believe that the young man actually created it. On hearing this, Hartwell unveils the second sculpture which depicts the neighbour Flinder himself sitting on the rail fence, swinging his one leg and “cowhide boot,” and chewing on a long piece grass, as he did daily. Flinder is so taken aback and humiliated that he says he will never doubt Hartwell again and that if he had a daughter, he would allow her to marry him, as long as he did not show this sculpture to anyone. Finally, it is revealed that Ms. Christine Davidson, the girl Ezekiel said was like his “daughter,” is actually Hartwell’s fiancé and their wedding was planned for the following month.

In addition to being a love story, this work of fiction embodies the dichotomy of the white professional male scientific farmer and the ignorant, old fashioned, lower class Other. Hartwell is the new breed of male farmer being cultivated, a well-spoken Renaissance man and professional scientist. Flinder, on the other hand chews on grass, spits, and uses poor grammar with a so-called ‘hick’ accent and dialect. Hartwell is blue-eyed which becomes a major theme in the story after Flinder asks him why he has a “funny kink” in his eye, to which Hartwell replies, “I pride myself on my china-blue eyes, and to be told there is a kink in one of them is heartbreaking.” Hartwell is also
represented as being rational whereas Flinder is the complete opposite. Flinder questions Hartwell’s scientific farming methods by stating, “You ain’t never going to make a farmer of yourself… your head is too full of ideas. P’taters is P’taters even if you call ‘em ‘tubers’ or any other fancy name.” Hartwell replies, “You can’t deny that Mrs. Flinder’s baked beans are more delicious since she learned how to cook them at the domestic science club,” to which Flinder replies, “Maybe so, maybe so…Still when it’s all said and done with, whether she learns these notions at the minister’s hysterical culture club or Miss Patty Dunn’s domestic science thingamabob, the beans she cooks is just plain beans after all. I don’t take no stock in theories or science or nothing but plain common sense.” Note how in this exchange both a minister and a women’s domestic science club are responsible for the scientific betterment of beans. This irrationality is expressed throughout the story and always countered by Hartwell’s measured responses. When Ezekiel criticises his farming methods, Hartwell answers, “What’s the matter with it, eh? See any taller cornabouts? See any thicker stocks? See any larger ears?” Thus, irrationality is countered by proof of betterment, whether it is beans or field crops.

Constructions of gender and class are central in this story. It is important that Ezekiel’s “daughter” is actually from a perceived higher class, and not his blood daughter, making the marriage acceptable in terms of reproducing the right kind of population; note daughter in quotations in the article title. An ideal of masculinity and whiteness is constructed through Hartwell, while the Other is represented through Flinder. Throughout the story, Flinder’s character is constructed through ignorance, laziness, and backwardness. When Ezekiel sees himself in the statue, he is humiliated by his own image, his class, his ugliness, and his ignorance as they are represented. The
statue itself is a representation of the constructed ‘truth’ created by Hartwell’s ‘objective’
hand of rational observation. Flinder secretly wishes he were Hartwell with all his looks,
smarts, and talents. This is much like the colonial constructions of Other that place those
outside whiteness in a position of envy and mimicry (Bhabha 1994). In terms of gender,
the “daughter” takes on the recognizable role of the princess in disguise who when her
true identity is revealed, will marry her rightful prince. Again, only Hartwell and Flinder
are constructed as farmers while Mrs. Flinder specializes in beans and the ‘daughter’ is
simply made a prize to be won. Scientific expertise and progress is embodied in a model
of progressive masculinity, while its opposite is constructed through discourses of its
Other. Hartwell is the norm incarnate while Flinder helps to construct and support that
norm by delineating the limits of the undesirable and the abnormal. In short, scientific
farming is the yardstick to determine the worth of the individual and the betterment of the
population as those outside the norm are constructed in classed terms.

Because of its form, this story was clearly aimed at a wider audience with a
message that had, by WWI, penetrated all forms of writing in the farmer periodicals, the
betterment and professionalization of the male farmer through science. It worked as a
love story, with the protagonist as an idealized vision of manliness defined by looks,
racial background, and in this case, by good land management. The villain is constructed
as mean, ugly, ignorant, and stands in the way of true love, much like Cinderella’s
stepmother and stepsisters, and is defined by his appearance, mannerisms, and
‘backwards’ form of land management. This story illustrates how social relations were
being shaped through notions of class and gender embodied and reinforced through a new
metric of scientific land management. It captures both biopolitics and govenmentality as
betterment is achieved through population education, while political state expertise is embodied in, and promoted by, Hartwell. It is clear that the idea of the progressive self was being embodied in male farmers, aligning them with the economic aims of the state. They were being normalized through a discourse of the normal male scientific farmer. Yet this normal farmer was also created as the exception, a rogue progressive who railed against traditional ways of being. Thus, embedded in the norm was the idea of being the exception, the ‘man’ who led and set the example. Foucault’s (1977) ideas of hierarchy and differentiation in the norm are embodied here as leaders are rewarded and those who resist are subject to increased scrutiny and reform. This story asked its readers to look at themselves and judge if they or their partners were Flinder or Hartwell, and into which category their neighbours and friends fell.

V. Norms in Agricultural Advertising

As cited in the previous section, there were constant calls for male farmers to be educated by attending short courses and sending their sons to agricultural schools. However, as full time education was not possible for those needed in the fields and living long distances from institutes, it created opportunities for different forms of male farmer education such as correspondence courses. With its motto of “Better Farming,” the Correspondence School of Scientific Farming (CSSF) offered courses to Western Canadian farmers on a variety of agricultural topics. The existence of this business suggests that there was a demand for information that was difficult to get for farmers who did not have time, were too far away to visit Experimental Farm stations, or just wanted more information than what was contained in the Experimental Farm bulletins.
Advertising from the school had some interesting ways of illustrating the male scientific farmer. Before 1911, the advertisements for the CSSF were only texts that promoted training for male farmers and their sons. But between 1911 and 1912, the school ran a series of two large illustrated advertisements. The first of these depicts a large powerful Euro-Canadian male farmer dressed in overalls holding a piece of his field in his hands (Figure 5.1). The illustration could be mistaken for a communist propaganda poster with the accentuated forearms, statuesque posture, and romanticised working-class male farmer. The individual male farmer is larger than life and stands on rock, elevating him above the world. The caption, “The Scientific Farmer Holds His Crop in the Hollow of His Hand” references “Hollow of His Hand” a popular church hymn of the period. This play on a religious message makes this man a god of his fields, which is interesting in that, as Jones (2002) has argued, scientific farming was presented in the form of wise men and the commandments of religion. Here, being a male scientific farmer seems to mean having control over the land, being a strong individual, and being larger than natural forces. The male farmer stands in an objective space of complete mastery, outside of nature looking at it from a distance. Other messages come from the subtext where the man is likened to a doctor, industrialist, and scientist:

He takes no chances. He farms his land as a manufacturer runs his factory. His harvest is the result of planning— and knowing how to plan—long before the grain is ever sown. Aware that every crop failure can be traced to some definite cause, his knowledge and skill enable him to safeguard himself. The scientific farmer is a doctor, not only of plant diseases, but of the soil as well (GGG Oct 18, 1911: 21, emphasis added).

The reference to manufacturing and the farm as ‘his’ factory is important as it suggests that there could be standardization through the land as a factory floor. Every problem is
overcome by knowledge and skill. Despite the communist propaganda style, this advertisement depicts the construction of an idealized individualized capitalist subject. Like the Aboriginal figures in the previous chapter (Figures 4.8 and 4.9) he stands alone; however, unlike the Aboriginal man the male scientific farmer is the norm and the centre rather than the abnormal and peripheral. Rather than being an onlooker and outsider to progress, he embodies it by using knowledge to understand and make visible the land’s essence. The individual is made the focus, which aligns again with the tactics of normalization. There is no reference to the work of the farmwomen, hired labour, or community. The individual possesses and controls nature through both brute strength and scientific knowledge. Thus, in this advertisement, salt-of-the-earth sentiments mix with the formation of a new individualist class comprised of those with enough ambition to better themselves and make their livelihood a standardized profession.

The second advertisement (Figure 5.2) features a different vision of the male scientific farmer. Instead of the overalls, straw hat, and plaid shirt, he wears a three-piece suit, shiny shoes, and a fedora. He is no longer a pillar of yeoman strength, but a stocky, successful professional. As I found in the farming periodicals, this new image of the male farmer was common in both agricultural propaganda and advertising. It represented the possible transformation of class from homesteader to business (Russell 2012) and scientific elite. Most depictions of this new breed of male farmer show him as an observer, watching the actions of his machinery and hired men, however this particular advertisement is much more exaggerated. The farmer is once again made to be an
Figure 5.1 The Individualized Male Scientific Farmer 1 (Correspondence School of Scientific Farming, *Grain Growers’ Guide* October 18, 1911: 21, Peel Prairie Archives Ar02100).
Figure 5.2 The Individualized Male Scientific Farmer 2 (Correspondence School of Scientific Farming, *Grain Growers’ Guide* June 26, 1912: 44, Peel Prairie Archives, Ar 04400).
individualized giant, but instead of being outside looking in and holding the soil in his hands, he stands over the land examining every row of his fields from high above. The spotlight of scientific knowledge shines from the top left corner, lighting up his fields and helping him in his examination. The rays of light project words of ‘Truth’ stating, “The farmer whose task is illuminated in the light of knowledge, plans his efforts in harmony with the laws of nature, and works hand in hand with the great master workman of the universe” (Grain Growers’ Guide June 26, 1912: 44).

Like the first advertisement this message created ‘objective truth’ through the conflation of scientific and religious perspectives. The man again stands visible as an individual, with the focus on him and his expert knowledge. The god’s-eye-view means he has complete power through such knowledge. Through such insights, the man seeks advantage as the subtext reads, “Light is might. Knowledge is power. Everywhere the man, who knows how, is the man who wins” (ibid). Invoking the idea that with increased knowledge, nature is no longer a factor, it states that scientific farming is “elevating farming from a blind attack to a science, from drudgery to a highly skilled profession, they are in short making the farmer master of the work in which he is engaged and rendering him to a large measure independent of the climatic and soil conditions under which he is obliged to operate” (ibid, emphasis added).

Both of these advertisements emphasise the farming individual as the centre of the land problem. A knowledgeable male farmer will rise above his environmental conditions and safeguard his livelihood. Land is also in the spotlight as it becomes truly visible and universal through scientific knowledge. The omniscience of male scientific farmer is a hybrid of white male identity, comprised of scientific knowledge and technology,
industrialism, capitalism, individualism, and professionalism. In other words, this white male category was not shared by those who were necessary for farming operations such as women farmers and hired labour (Danysk 1995). This category was also not extended or available to First Nations on reserves experiencing failed subsistence farming projects (Carter 1990). It placed the male landowner at the centre of power, and at the centre of responsibility, outside environmental, household, or economic relations. Women’s role in farming operations was again completely erased placing all the emphasis on the male aspects of the division of labour. The progressive scientific farm did not appear to need women, an error made clear in the 1930s (Russell 2012; Sundberg 1983). However, the flip side of this meant that the male farmer could also be placed at the centre of any form of failure, for not living up to example of giants.

VI. Gender, Individualization, and Expertise in the Women’s Pages

While women’s voices are generally absent in the majority of sections of the farming periodicals, the women’s pages of these newspapers give political space to women and offer some insight into how expertise is gendered. In each periodical the women’s pages had various names over time such as “Around the Fireside,” “Concerning the Women’s Sphere” and “Country Home Makers.” These pages offered a space for farmwomen to vent frustrations and concerns of the gendered division of labour on the farm, and also political struggles over the right to vote, the right to the dower, and the right to homestead. Giving women a venue to air their grievances allowed them to challenge the norms of farming through wide circulation that entered most rural households. Making the fight for homestead rights visible allowed women to challenge
what it was to be a farmer. In an anonymous letter signed under the pseudonym Wife of Norway the woman claims, “Many think women are not capable of farming and fulfilling the duties of a homesteader, as they lack the physical strength, business ability etc., but that is a big mistake” (GGG December 25, 1912). She adds that women in the US, who have homestead rights, have “made a success of homesteading.” Unfortunately, women fighting for homestead rights also tended to pit themselves against immigrants in racist arguments. Wife of Norway argues, “I think it would be better to let our girls own the land than to give it to undesirable foreigners and outcasts of other countries who do nothing to improve the West and are a drag on the wheels of progress” (ibid). A letter by Jean Stevenson entitled “Women and Homesteads” (GGG February 23, 1916: 10) echoes these biopolitical sentiments of population and land:

> The Dominion government has sunk millions of the country’s money dusting around the dirty corners of Europe, trying to scratch together a population for our own western provinces. And they have succeeded. Thousands of Turks, Bulgarians, Hungarians, Austrians etc., have been dumped on our prairies knowing nothing of our language, our laws and institutions, and caring as little...But a Canadian or British born woman, no matter how highly educated and capable she may be, nor how loyal and patriotic she is...cannot acquire one foot of Canadian land without paying the down cash for it.

Like the discourses in the other sections, expertise and betterment (Mackenzie 1998) is also made explicit in these columns. A column in the Around the Fireside section of the *Grain Growers’ Guide* titled “Advance to Betterment” states, “The advance to betterment must be made by the individual. We must awaken to the fact of the value of understanding the science of personal daily life” (GGG February 22, 1911: 35). Here too, the individual is made the centre of the scientific embodiment of progress. In most of the women’s pages columns, expertise is found in the form of domestic science.
“Better farming and better home making go hand in hand,” states an article on Alberta Women’s Institutes (Grain Growers’ Guide March 3, 1915: 29). However, in this research I found that unlike the scientific farmer, women’s farm labour is rarely equated with being a profession and farm women are almost never portrayed as scientists. Instead, domestic science is directed at hygiene and efficiency, a worker’s discourse rather than a professional’s. In a letter to the women’s pages, Mrs. V. McNaughton sarcastically writes, “As a woman with ‘no occupation’ I naturally have a great deal of leisure. To show that I have, I have enumerated a few things that I do: (I have four children, the eldest nine). I cook, milk, make butter, raise chickens, garden, sew, wash and iron, and keep a six room house, with no help….yet I have ‘no occupation’ ” (Lewis 1998: 130). The concerns of this quote continue to echo in the more recent struggles of farm women researched by Mackenzie (1992). There is evidence of resistance to scientific professional discourses as is captured in the poem “Scientific Motherhood” (GGG 1910, August 31: 21).

Oh, deary me! Oh, deary me!  
That such a thing should ever be  
That motherhood should come at last  
And ‘mongst the sciences be classed  
With chemistry, astronomy,  
And go an entomology!  
I’m mighty glad you may be sure,  
My mother was an amateur.

There is also animosity and household struggles over the professionalization of men’s activities and lack of progress in women’s labour. A Francis Marion Beynon column in the Country Homemakers explains how women are concerned that men’s work has the latest technologies whereas women’s work continued to be manual drudgery.
trapped in the Middle Ages. She describes the complaints of women who argue, “There is nothing to lighten the work of the farmer and his male help that has not been supplied. But…the washing is done by the old primitive method of rubbing on the board. The water is carried ten to twenty yards into the house and out again” (Beynon, GGG, July 30, 1913: 8). An article from Good Housekeeping, “Making a House Hum,” by Allan L. Benson is also reproduced in The Country Homemakers stating, “No man would think of building a factory without machinery; but almost every man is willing to have his wife or some other woman work in a house that contains no machinery…He has been too busy doing his own work in quite another way—with steam, with electricity, with every sort of motive power” (Benson, GGG, November 4, 1914: 23).

Women are never portrayed as farmers in the Grain Grower’s Guide. They are usually only made visible in prescribed gender norms that are largely segregated from most sections of the periodicals. However, there are a few instances where this is challenged as it is in the GGG news story “Girl Graduates in Agriculture.” The story involves a US farmer with no sons who sent his daughters to study agriculture at Cornell University. It describes how the girls, “assisted and learned to do well all kinds of farm work, and in the outdoor life developed remarkable strength and endurance” (GGG, April 20, 1910: 11). The illustration accompanying the story depicts the young graduate and labels her as “Manager of the Dairy” which adds a level of professionalism but continues to leave her out of the category of farmer. Finally, when addressing the question of whether this education would be a loss of investment when the girl marries and moves away, the writer explains that, “surely the [future] husband needs the co-operation of a wife who can do this work scientifically.” Thus, despite the story’s opening of the
category of farmer, the writer falls back on the workers’ discourse rather than a professionalization of a “co-producer” (Russell 2012: 244).

Generally, in the gendered division of farm labour, women were responsible for the household, milking, gardening, poultry and eggs, and the farmyard, while field crops and large livestock were spaces of men. Both spheres ensured the survival of the family farm in Canada as women could produce subsistence goods as well as through sales of dairy products and eggs (De Brou and Moffatt 1995; Russell 2012). However, the importance of female farmer economy was being erased through progressive male scientific farmer narratives. Letters written by farm women express worry and frustration with the lack of investment in the domestic economy and the erasure of women as co-producers. The undermining of the women’s sphere through the male scientific farmer discourse was further challenged, as Palliser’s Triangle was not capable of supporting much of women’s economic production. Normalization of the land did not take the necessity of female farmers’ production into consideration as it individualized the male farmer and the field crops. While Dominion scientists were busily trying to normalize the desert and support the male sphere through dry-land agricultural science, the female farmer economy was largely ignored or forgotten.

Despite being a place for opposition and struggle, women’s page columnists also contribute to and circulate the narrative of the male scientific farmer. The main columnist for the Country Homemakers page, Francis Marion Beynon, describes dry-farming and scientific agriculture below.
All over the country one finds farmers who succeed while their neighbours fail and vice versa. *It isn’t just chance or luck that decides these things. As a rule it is traceable to good management*…It is true that not all misfortune of the farmer is blameable on himself for he has the climate and weather to contend with, but by studying dry farming and northern farming even these difficulties are being largely overcome by the “lucky man,” who is really the hard working, keen thinking person rather than one who is an especial favourite of providence (GGG June 16, 1915: 10, emphasis added).

Here again, the farmer’s ability to govern and better himself is laid out as the cause of success or failure in the dry-land prairie. While there is some allowance made for weather and climate, the statement clearly blames the individual and not the circumstances of settlement.

Overall the women’s pages offer a counterpoint and resistance to the discourse of the individualized male scientific farmer. There were household struggles when it came to modernization, professionalization, and individualization. As the female farmer was being undermined and erased through male scientific discourse, this space offered women a chance to be heard and made visible as part of farm operations. However, while women could be scientific, they were never professionalized into scientists. They embodied scientific knowledge in a different way, as a labourer or employee rather than a professional expert or scientist. Despite the household struggles, there are also instances where the male scientific farmer is upheld as the norm and the Other continues to be constructed through racialization. Thus, the norm is both resisted and supported in the women’s pages. However, the ‘soul’ of the female farmer is neither examined nor constructed. Women were not individualized, but some challenged the individualization of the farm operations and resisted forms of its normalization.
Letters of farmers were also published weekly in the *Grain Growers’ Guide* and other farming periodicals. Describing the situation of the homesteader, one farmer stated, “We had a fresh, clean start, no landlords, no woods, no old crooked Roman roads, no dictator” (Green 1912: 11). This comment can be related to what Foucault means by not cutting off the head of the King (1978), in that society continues to believe that power is only exercised from above. In other words, because there were no landlords or dictators, this farmer believed they were outside the operations of power. This “clean start” was without a form power exercised by landlords and dictators; however, it was not outside the networks of normalization and governmentality. Nevertheless, most correspondence is positive in its comments about the work of agricultural experts and the sharing of scientific expertise. Farmer F. B. Sulman writes, “We were very glad to see a team and rig pull up and our pleasure was intensified on discovering the driver to be the government farm instructor, before whose wisdom we expected the difficulties to melt like snow in June” (1912: 8). Contributors also self-identified as scientific farmers, and one described his story as having “traveled the weary road from homesteader to scientific agriculturist” (*Alberta Non-Partisan* Nov 14, 1917: 9). However, there is one important editorial of resistance and criticism, the quote which opens this chapter. In his editorial “Educate Him,” Farmer Peter McArthur (1912) writes a strong critique of government and farmer education programs This critique is unique as it is the most direct criticism of farmer education programs in the time period of this research. It boldly argues that these programs are a political tactic used to ease social unrest or uncertainty. The betterment of the farmer through education is argued as an anti-politics strategy
(Ferguson 1990) by “those who are set in authority over us” (McArthur 1912: 9). While there is no response to this editorial, it proves that some farmers were not blind to these tactics and that the farmer’s lack of education could not be blamed for every failure. Its attack on the panacea of scientific knowledge reminds the reader that there are other forces (environmental, economic, social) at play in the risky business of dry-land agriculture. Individualizing farmers as the point of success or failure is criticized here for its faulty logic. The critique highlights the role of the farmer in being the scapegoat for the ills of prairie settlement and development, while the government was the main beneficiary of its westward expansion. The lone voice of resistance pushes the reader to look beyond the farmer and for farmers to look beyond themselves and their ‘souls’ for political answers.

In all of the sections of the western farming periodicals the narrative of the betterment of the individual is the key to mastery of nature. Geography is made flat through the discourse of science, while the individual is made into categories of good or bad, successful or unsuccessful, progressive or backward, scientific or yeoman. It is through these categories, and their circulation that I believe governmentality was achieved at a distance. Politics is silenced, as the farmer looks both inward to ‘his’ own character and skill and outward to the objective ‘Truth’ of homogenized knowledge. Finally, governmentality makes farmer education seem like innocuous help and personal betterment.

As seen in the examples above, the male scientific farmer was a new subject that appeared in many forms throughout the farming periodicals in the early 20\textsuperscript{th} Century. This subject was born out of a political, economic, and environmental context and
necessity. The focus on the topography of personal character, compared and differentiated, made even a precariously dry nature appear flat and universal. This constructed universal nature was an object of knowledge only revealed to the ‘educated man.’ Palliser’s Triangle’s problem nature was only made governable through the scientific knowledge networks that rendered it ‘known.’ As it was ‘known,’ and as there were methods to deal with its ‘known’ qualities, it made settlement in the region seem apolitical and individualized the problem.

VIII. Individualized ‘Souls’

The rules of agriculture were established through the development of scientific farming methods. These norms were the yardstick against which male farmers were measured and judged. Their ‘souls’ were made visible through soil management where they could be compared, differentiated, and placed in a hierarchy from backward ‘slovens’ to progressive scientific leaders. Circulation of these scientific norms took many forms including books, short courses, pamphlets, and newspapers. In order to explain and promote these norms, they were produced through discourses of nature, gender, class, and race. The male scientific farmer was produced through this assemblage of science and identity, biopolitics and governmentality. As a result, the female farmer, her sphere, and her position as co-producer was undermined and erased. Thus, scientific discourse produced a norm, a homogenous nature, and an individualized subject, who could be compared and differentiated, further excluding women and racialized Others.

Settlers were essential to the colonization process. Their lives were subject to risk, financial and personal, as part of a national/international economic and territorial project.
In Palliser’s Triangle, I argue part of what made this project successful in a harsh environment was how the ‘soul’ of the male farmer was individualized and repositioned at the centre of a territorial problem. The subjectivation of the male scientific farmer brings a category into being, a norm to be followed, and a scapegoat for settlement problems. I argued here that governmentality was employed to align state goals with the farming subject through the use of expert scientific discourse. This discourse, as illustrated, found its way into many formats. In each one, the male scientific farmer was individualized and directed to look inward at himself and toward his neighbours, instead of outward at the precarious political situation in which he and his family had been placed. At the same time, the individual ‘problem’ farmer was in the crosshairs of the Dominion. Biopolitics, combined with scientific discourse, allowed a land problem to become a population problem, solved through education and betterment of farmers and their households. As seen in the examples above, discourses of the male scientific farmer were reinforced through the language and ideas of race, gender, and class. Nature became a formula, a universal object of scientific knowledge, allowing for a precarious region to be settled and stay settled. The ‘good’ farmer knew ‘his’ land and could master it while the ‘bad’ farmer failed and abandoned the land due to a faulty character.
Chapter 6

Resisting, Repeating, and Reinforcing Normalization in times of Crisis

In the course of the drought years Sean had changed from a bewildered man, watching the dry winds lick up the topsoil from his land, to a man with a message. He was the keeper of the Lord’s Vineyard, literally. And now as he often did, he launched into one of his evangelical denunciations. “Awful! She’s [farming] plum awful, Gerald! Stupid!” he cried “They never hearda strip farmin’ an’ they don’t wanna hear! ‘Plant yer crops,’ I tell ‘em, in strips across the prevailin’ winds—fight the wind an’ fight the driftin’—quit clawin’ her plumb back fer wheat or oats or barley or flax! Farm her with her hearts an’ brains, you stubble-jumpin’ sonsa hunyacks!”

W.O Mitchell 1947 Who Has Seen the Wind

As Canada’s prairie population surveys desolation wrought by one of the worst droughts in history, science strives to ameliorate for all future time conditions.

Western Globe 1936: 3

Nature as active partner acquiesces to human interventions through resilience and adaptation or; resists; human actions through mutation and evolution.

Merchant 1989: 25

I. Normalization in Crisis

The normalization of Palliser’s Triangle comes to a head in the droughts of the 1930s when the Prairie Farm Rehabilitation Administration (PFRA) is created to deal with the crisis. The complex environment resists its normalization and the lack of variety in the homestead economy makes it more vulnerable to its forces. At this point, all of the aspects that normalized Palliser’s Triangle become visible as they are redeployed to ‘fix’ the problem. This chapter explores how all of the tactics of normalization converge during this period. The ‘soul’ of Palliser’s Triangle once again becomes a policy question in terms of whether to abandon or reform the highly eroded region. Space is reorganized to locate and contain the worst eroded lands and place individualized surveillance on the
remaining farmlands. New modified scientific farming norms were established and made visible on demonstration farms throughout the region. Farmers are assessed, compared and differentiated in a hierarchy where the best farmer were made leaders in each municipality and placed as heads of agricultural associations. In light of the crisis, normalization became law as legislation was passed to allow a municipality to take action against farmers who do not use the recommended scientific methods. Finally, the ‘soul’ of the farmer is once again individualized and made central as discourses circulate of good men and green islands. The pattern of Palliser’s Triangle’s homogenization through individualization is resisted, repeated, and reinforced during the period of 1937-1940.

II. Nature Resisting Normalization

The methods established by the Dominion Experimental Farms were widely practiced by the 1930s including the technique of summerfallow (Figure 6.1), where farmers left up to half the land without a crop, working it into a fine dust mulch to remove weeds, in order to improve yields on that fallowed land the following year (Jones 2002). With a permanent vegetation cover, dry conditions would not have likely produced such soil erosion. As Anderson argues, “The main reason for the severe soil drifting that occurred on the prairies was that a cultural system was introduced that was not adapted to the ecological environment. The introduction was very rapid, on a large scale, and it coincided with periods of low precipitation, high winds, insect and disease outbreaks, and economic distress” (1975: 23-24). The Royal Commission into Farming Conditions in Saskatchewan states that, “while [summerfallow] stabilized grain growing it was learned that when the root fibres of the native prairie plants had been worked out
or destroyed by frequent ploughing and cultivating, the land developed a tendency to blow and drift...Soil drifting is one of the most serious conditions in connection with grain growing on the lighter soils in Saskatchewan and calls for immediate action” (Royal Commission cited in Gray 1967: 14-15). Mono-cropping also opened the possibility for widespread diseases like rust to destroy the majority of crops. With the assistance of drought, the land was resisting or pushing back in another direction after years of being normalized into agricultural timetables, methods, and cash-crop groundcover. Today, farmers are more aware of the risks of monoculture cropping, and have the pesticides, herbicides, fertilizers, and genetic modification to suppress the direction of the lands more aggressively. In industrial agriculture today, it continues to be an all out war to stay ahead of the forces and mutations of ecologies from super weeds to resistant crop diseases (Gilbert 2013). While some forms of contemporary agriculture attempt to work more in tandem with the forces of the land, others continue to push it to its limits. When any force is pushed, as Foucault reminds us, there is always a counterforce. Normalization of land would be no different. Gray writes that it could be seen by the “nature worshiper” that nature was resisting.

Nature had anticipated the campaign which the PFRA would launch to beat back the desert and had committed its reserves and secret weapons long before the PFRA counter-attack was even thought about...Native insects were reinforced by clouds of invaders that blew in from the United States. Minor blights suddenly became totally destructive to crops over vast areas. The trash cover [summerfallow] and stubble strips left to protect the surface of the soil from the winds became incubation beds for new insect threats to whatever could be made to grow. Russian thistle growing on abandoned farms became the host plant for the Say’s grain bug that destroyed the nearby stands of wheat and barley...The ubiquitous gophers moved into the abandoned fields by the thousands, and out of the abandoned fields into whatever crops were growing by the tens of thousands (1967: 35-36).
While Gray’s views are described in war-like terms, where in the great battle over Palliser’s Triangle “science plus human ingenuity is worth five times as much as nature could provide” (Gray 1966: R-20), a form of resistance and mutation cannot be denied. When the land is forced in a particular way, or normalized to such extremes, it pushes back in unexpected and incalculable ways. When normalized over such a large geographical region, such resistance can be catastrophic, as it was in Palliser’s Triangle during the 1930s. In such a micro-physics of social nature, a ‘threatening’ force stopped by poison or cultivation methods opens a niche for another, or possibly tens of thousands of other, mutations (Merchant 1989). The droughts experienced in the 1930s were part of a longer cyclical pattern of droughts (Wolfe et al. 2013), an established part of the land’s ecology, and not at all an environmental anomaly. Bringing these lands into a normalized annual production timetable was bound to cause serious problems, which it most certainly did in many drought years in the 1920s and even more so during the 1930s (Russell 2012). The land was not universal, as had been claimed by the scientists for the previous 30 years (see chapter 5). Once again, agricultural science was called upon to individualize the land and educate the ‘ignorant’ farmer’s ‘soul.’ Again, the individualized piece of land and farmer were made visible, while silencing larger political questions of a settlement project in crisis.

However, there are other gendered aspects at play here as well. Russell (2012) explains how the normalized dry-land prairie farm did not allow for many forms of the homestead economy controlled by women such as gardening, milk and butter production, and poultry. Normalization of the land in terms of wheat production overlooked the necessity for other forms of the agricultural economy to support the farm family and
agricultural industry as a whole during times of crisis. As the land resisted normalization, gendered normalization of the farm economy made the dry-land farm even more vulnerable. Those focussing on the transition of Palliser’s Triangle to a wheat economy through scientific agriculture did not consider the importance of the whole homestead or farm economy which allowed agriculture succeed in other parts of the Dominion. While ‘mixed-farming’ was promoted by the Dominion Experimental Farms post WWI, focus continued to be on mixing the male-dominated large livestock and wheat. Normalization had allowed for the male farmer and the grain economy to be central, erasing all other necessary aspects of the agricultural operation. Thus, nature’s resistance could not be buffered enough through the women’s sphere as it had been overlooked and undermined.

III. Too Much (Investment) to Lose

Why did government officials not heed the calls to simply abandon the region during this period of crisis? It appears as though there was too much economic investment at stake. The political ecology of Palliser’s Triangle rested largely on saving and sustaining the investments made by the railway and mortgage companies. The railway ran directly through the drought areas and those who were farming that land were subsidizing the railways through their taxes. Mortgage companies also had a lot to lose if the people were relocated (Jones 2002). The PFRA was formed in the 1935 to deal with the financial, economic, and environmental crisis that threatened the region, containing board members from the CPR, banks, and the mortgage companies. The Canadian Parliament brought into law The Prairie Farm Rehabilitation Act which would enable relocation of farm families off the most troubled land, allow the takeover of most severely eroded land by
Figure 6.1 “This method of summerfallowing should be discontinued.” Dust mulch summerfallowing. This image is portrayed as an example of what was deemed as bad management practice. However, it was previously recommended practice and was widespread by 1930 (Hopkins et al. 1946).
the Federal Government, and expand the mandate of the Experimental Farms and experts to extend their educational sight and reach. The PFRA created community pastures on land that was beyond reclamation due to the large-scale soil erosion.

According to Gray (1967) and the interviews with Experimental Farm scientists and administrators, these pastures were also established to keep the ‘good’ farmers in the region and tax income flowing, while economics and nature took care of weeding out the ‘bad’ farmers. The PFRA relied heavily on the existing networks of Dominion Experimental Farm scientists and experts to help manage the disaster and the scientific discourses they employed appeared to have helped manage the crisis and keep many people on the land. Of course, they had already had twenty years of experience in giving farmers hope and guidance through the creation of scientific education programs.

These crisis management tactics are acknowledged as the means by which mass exodus was averted. J.G. Taggart, Superintendent of the Swift Current Experimental Farm during the 1930s, spoke about the various economic interests involved in stabilizing the region. He explains that, “the mortgage people of course were heavily involved financially, the railways were certainly interested because if the farmers didn’t recover the railway wouldn’t be worth much, and business enterprises generally depended entirely on the production of agriculture” (Gray: 1966: R-32). Taggart also explained how he lobbied for the continuation of relief funds to farmers and not to abandon the region by persuading them that the region was an industry that would be lost through evacuation.
I told them… in Saskatchewan, we were not only obligated to sustain these people as people, but also we felt that we must sustain their industry. Because if we allow that industry to fold, and you merely fed the people, at the end of this period, you had no asset at all except your living people. Your industry would have been destroyed… We are sustaining here a productive industry (Gray 1966: R-32).

These statements are important as they illustrate the larger political interests involved in keeping people on the land. Maintaining a risky industry was important to recovering the former investments in the West such as the Canadian Pacific Railway (CPR) line and the formation of a tax base.

Reassuring investors in the state of crisis, CPR President Sir Edward Beatty stated in a 1937 address that, “It may be an opportune moment for me to express the most profound disagreement with any theory that the prairie provinces are unsuited for a lasting settlement” (Blairmore Enterprise 1937: 9). He argues that had the original plan for the CPR route from Winnipeg to Edmonton been implemented, “the consequences would have been to abandon to penetration, both economic and political, from the republic to the south, a great portion of the prairie provinces” (ibid). Thus, he claims the railway route through the Triangle was the right decision to ensure and secure territorial sovereignty at that time. In order to ease the growing fears around the CPR investment he proclaims that, “I again assert my lasting confidence in the future of western Canada as an agricultural area quite capable of supporting a much greater population than now resides there” (ibid). Economic interests were very concerned that their investments would be lost and governments were worried that a huge part of their tax base would be gone. Therefore, the PFRA was mandated with saving the industry by stopping the erosion and keeping a farming population within the region by any means necessary. This would entail the reorganization of land and bodies as well as reinforcing that the farmer
once again had to look inward at his own situation rather than outward at the larger questions of why settlement was really being saved in the region.

**III. The Return of the Palliser’s Triangle’s ‘Soul’**

Nature resisted its normalization so vehemently during the 1920s in Alberta, and the 1930s in both Alberta and Saskatchewan, that all the elements of disciplining Palliser’s Triangle over the previous seventy years became visible and active simultaneously. As the norm was shaken and exposed through the drought crisis, the settlement project became vulnerable and open to criticism and change. However, it is through a more intensive form of normalization that the agricultural industry in Palliser’s Triangle was maintained. Palliser’s Triangle reappeared as a geographical space, a constructed ‘soul’ and a legacy of the colonial imaginary. To control the problem, the land was further individualized and placed in a hierarchy, compared, differentiated, homogenized, and excluded. At the same time these same five forms of normalizing processes were also placed on the farmer. The discursive and material tools of discipline, and their embodied institutions which had been operational over the eighty years, were available at this critical point in time and became more intensive and extensive to maintain the settlement of Palliser’s Triangle.

The cartography and the ‘soul’ of the reoffender, Palliser’s Triangle, was brought back into existence and overlaid across the now neatly separated Prairie Provinces and homogenous homestead grid. As the topsoil blew away with the wind, Palliser’s nineteenth-century insights and the construction of Palliser’s Triangle reappeared in public discourse with its existence declared by both those who wished to
abandon the region and those who wished to fight to ‘save’ it (Bryant 1932). Some used this mapped colonial artefact to call for the abandonment of the region while others argued that the existence of Palliser’s Triangle created special circumstances for more scientific farming and the further improvement of the farmer. At the same time, the ‘soul’ of the farmer is brought further into question and both the farmer and Palliser’s Triangle are targeted simultaneously in order to contain the crisis.

Gray’s *Men Against the Desert* (1967) outlines the extent of the crisis of the 1930s stating, “each year the disaster area had expanded until it now [1937] embraced 250 municipalities and 18,000,000 acres—a quarter of all the arable land in Canada…it threatened the social and economic survival of 900,000 people” (ibid: 3). In 1937, 13 million acres were planted and only 2.5 million harvested. There were over eight thousand farms abandoned (*The Globe* 1936), and an estimated ten to twelve thousand people migrating north to escape the droughts, many of whom ended up squatting on northern Crown land (Gray 1967). People were in poor health and starving necessitating the emergency efforts of government aid. This was an environmental, economic, and humanitarian emergency. Ninety percent of the population were forced to take government relief to survive and many were reduced to using flour sacs to make clothing, picking wild berries, and consuming gopher meat. Donations flooded in from the rest of Canada in relief efforts by the Canadian Red Cross. Adding to this drought crisis, the dramatic crash of wheat prices from 1930 to 1933 helped to further harm the population. Not only drought, but also plagues of grasshoppers, crop disease, and violent storms destroyed harvests throughout the first seven years of the 1930s.
The scale of the emergency once again led to questions about the region’s past, present, and future. Many looking for answers employed Palliser’s insights eighty years earlier as proof that Palliser’s Triangle existed. With the October 29, 1936 headline *Palliser’s Triangle in Western Canada Section of Comparatively Low Rainfall*, the *Western Globe* reports, “As Canada’s prairie population surveys the desolation wrought by one of the worst droughts in history, science strives to ameliorate for all future time conditions in a vast semi-arid area which some hold was never suited to support a permanent population” (1936: 3). Science is made central here once again as the only possible savior. The article details the eight years of consecutive drought and the region’s longer human history. It explains how, “The buffalo roamed the country then in huge herds, migrating across the plains to new pastures when the grass in one area failed.” In other words, there was flexibility for the grasslands system outside of fixed settlement agriculture. It argues that historically there was a healthy balance of population and land comprised of bison, grass, Aboriginal peoples, and settlers, which did not exceed its carrying capacity. To exemplify the region’s carrying capacity, the article compares the one person to 36 square miles of 1856 to the 1:1 ratio, or one person to one square mile, in 1931. The idea of carrying capacity (Sayre 2008), originating in the mid-nineteenth century and becoming increasingly employed at the turn of the twentieth century, was being used here to explain the return of Palliser’s Triangle. Carrying capacity theory states that given the finite resources of an environment, there is a maximum population size that an environment can support. After reaching this maximum, a population will crash. However, this gets more complicated when you are discussing an export-based economy and not subsistence agriculture. Carrying capacity, along with Palliser’s
proclamations, was being taken up to explain the situation in Palliser’s Triangle and argue for its abandonment or drastic reorganization. Many were calling for the region to be evacuated to avoid the expensive efforts to try and stabilize the region that they argued again had never been suitable for agriculture (Gray 1967). Policy makers and the media were digging up and reproducing the arguments of Palliser, establishing the region as the place that “was never suited to support a permanent population” (*Western Globe* 1936: 3), a slogan that has continued to haunt the region. Interestingly, the Great American Desert is also resurrected during this period (Campbell 1971) as well as some of the ‘fixes’ first conceived by the explorers (see chapter 1) such as reforestation. Since the 1930s, Palliser’s arguments have been repeated and reproduced. This appeal to the scientific ‘truth’ of Palliser’s argument has continued to replay itself as frequently as the cycle of droughts.

**IV. Science, Space, and Surveillance**

Like the plague discussed by Foucault (1977) and elaborated on by Elden (2003), the drought crisis warranted a deepening of individualization, monitoring, and control. Any piece of land could be at risk of contaminating the others around it and destroying the region’s economic viability. Those lands that had been completely lost to erosion were contained, taken over, and rehabilitated. Farmers also had to be further educated, not just by mailed bulletins, short courses, and circulated articles, but trained and monitored within their communities and on their homesteads. Normalization would be more dispersed and far reaching than it had been previously. All of the five aspects of normalization, homogenization through individualization would be employed:
comparison, differentiation, hierarchy, homogenization, and exclusion. In terms of the land, each piece was compared and differentiated in terms of its erosion or the possibility of erosion. Each piece of land was again homogenized through the new farming norms being both recommended and made into law. The worst lands were excluded, taken out of a system of private property and made into community pastures. Farmers were also compared as individuals and differentiated in terms of their skill and openness to advice. A hierarchy of farmers was established within communities where ‘good’ farmers were made community leaders and ‘bad’ farmers were singled out and brought to the attention of farm inspectors. Farmers were excluded in that many were forced to relocate or their lands were bought out by the PFRA.

To deal with the crisis, the PFRA was given the ad hoc power to take over abandoned lands, relocate farmers who wished to be moved out of the drought affected area, and buy out and relocate those farmers who were situated in the worst areas but were determined to survive the crisis. This process began even earlier in Alberta with the creation of the Special Areas in 1926, after the province had suffered major droughts from 1917-1926 (Marchildon 2009). This move toward plague status (Elden 2003; Foucault 1977) situated the land and the bodies of the region under very close scrutiny. The plan devised by the PFRA and the Experimental Farms was to use farmers’ bodies and labour to control the crisis and establish a clear distinction between ‘good’ and ‘bad’ land and ‘good’ and ‘bad’ farming practice. To control the worst erosion and to give the remaining farming families a place to pasture their cattle, the most eroded land was isolated and planted with prairie wool and crested wheat grass and set aside as community pastures. Some of these eroded areas were established as demonstration farms.
to prove that rehabilitation of the land was indeed possible. To keep the remaining ‘good’
farmers on the land, the PFRA offered paid work to farmers including planting grass seed
and tree rows, maintaining roads, building fences, and digging dugouts or small
reservoirs meant to give access to water on each farm. Most importantly, the “PFRA
funds would enable the Experimental Farms researchers to launch massive field tests all
over the Palliser Triangle, to evaluate under farm conditions the theories they had grown
on the experimental plots at the stations” (Gray 1967: 123). Thus, science would once
again play the role of the “anti-politics machine” (Ferguson 1990).

As a means to avert a political and economic disaster, expertise was dispersed
wider and deeper into the communities through the conversion of lands into model
reclamation stations, the establishment of more experimental sub-stations, and the
creation of Agricultural Improvement Associations (AIAs) within the rural municipalities
(Anderson 1975). Spreading expertise into each and every area affected by the drought
was the mandate of the Experimental Farms. Smaller, localized sub-stations would be
able to monitor local conditions and make farm visits and could model the norm in each
and every area, and AIAs could establish farmer ‘leaders’ in each township and
municipality to bring Experimental Farm knowledge to their communities. Reclamation
stations were established on the largest and most eroded lands. Experimental Farm sub-
stations were set up by the farm family agreeing to the placement of a superintendent on
their land by the PFRA in exchange for $600 (Gray 1967). The farm would be used for
experiments and to illustrate proper methods in each district. Gray explains “the
government would select 30 or 40 successful farmers scattered thinly over the entire
Palliser’s Triangle. It would subsidize these farmers to let the Experimental Farm experts
plan their cropping systems and procedures for them” (Gray 1967: 101). AIAs were run by other farmer leaders who had been selected because they had been in regular contact with the regional Experimental Farms. AIAs held meetings of farm improvement and would often have Experimental Farm experts give lectures or demonstrations. Municipalities were given tax breaks for the establishment of AIAs. In Gray’s battlefield language, the AIAs were the “shock troops for the battle to contain and beat back the desert of the Palliser Triangle” (1967: 111-112).

By 1939 there were 109 AIAs in Saskatchewan, all organized and funded by the Experimental Farm. “In each group there would be a half a dozen exceptionally capable male farmers, the acknowledged leaders in their own localities, who could be made into overnight experts on soil drifting control,” says Gray (ibid: 113). These male farmer ‘leaders’ were celebrated, rewarded, and made role models in their communities through AIAs while ‘bad’ male farmers were supposed to learn from the leaders in their communities or be made examples of how not to farm. When asked how open people were to the ideas being presented at the meetings of the AIAs, Gideon P. Matte, head of land resettlement, who attended many of these meetings said the male farmers were mainly positive, but “there were a number of laggards, because, on the whole, they were not the pick of society. But like any group of people, the better element prevails” (Gray 1966: R-25).

In this crisis situation, everyone’s eyes were on their own land and their neighbour’s land. The emergency measures of the drought crisis represent an expanding and deepening of discipline of the land. The dynamic of substations, demonstration farms, and AIAs are quite close to the ideal model of disciplinary normalization that
Foucault describes (1977). Normalization is accomplished through individualization on the grid and ranking those individuals against their acceptance and implementation of the norm to achieve homogenization. With this crisis, the funds were made available to put almost every quarter section and farmer under surveillance. The land was being monitored, as eroding land was a risk to all surrounding farms. Inspectors made surprise visits to farms to look at male farmers’ fields and judge how they were changing their practices (Gray 1967).

In addition to these measures, emergency land management practice was also brought into legislation. Alberta signed its Soil Drifting Control Act in 1936 and Saskatchewan followed in 1938 with its own act by the same name. In these acts rural municipalities could take legal action against male farmers who were not following the dictated soil control measures. These rules were the emergency measures dictated by the Experimental Farms and the PFRA are outlined below (Hopkins et al. 1946: 47):

Emergency methods may have to be employed to control soil drifting that has been caused from improper handling of the fallow or from any other cause. These emergency methods include the following:
(a) Scattering straw or manure
(b) Ridging with the lister or duck-foot cultivator
(c) Ploughing with furrows about one rod apart at right angles to the direction of the wind.
d) Listing with a disk lister during winter months when the frozen soil becomes bare.
e) Reploughing deeply

The Alberta Act as cited by the Experimental Farm bulletin (Hopkins et al. 1946: 44) “places the responsibility on the owner of the land for damage done to adjacent property by soil drifting on his farm, unless he has used drift control measures as
prescribed by the act.” The Alberta Soil Drifting Control Act makes the following demands:

It shall be the duty of the occupier of the land which is being summerfallowed to till the same in such a manner as to prevent soil on any part of the summerfallowed land from drifting so as to cause damage to adjacent land and property.

The occupier of any land which is being summerfallowed shall be deemed to have discharged the duty imposed upon him by this Act if each quarter-section upon which land is being summerfallowed is cultivated by any of the methods following (44-45).

The Saskatchewan Act was “designed to supplement by legislation the efforts of male farmers and groups of male farmers to control this problem” (Hopkins et al. 1946: 45). Its by-law based legislation is outlined here:

The council of a rural municipality may, and shall on a receipt of a petition signed by 40 resident ratepayers requesting the council so to do, pass a by-law providing for the regulation and control of tillage practices which, in the opinion of the council, are liable to cause rapid soil deterioration by wind erosion (ibid 46).

Other powers legislated by the Act are listed below:

6. (1) A municipality may, by by-law, provide for the regulation and control of tillage practices which, in the opinion of the council, are liable to cause rapid soil deterioration by wind erosion.

7. The by-law may provide that the reeve or other designated officer of the municipality may make orders for the purpose of giving effect to the by-law requiring the person occupying any land to do the work specified therein.

8. If the person against whom an order is made fails to comply therewith the council may, by its agent, enter upon the land affected by the order and perform the required work, and if the occupant of the land is the owner thereof, the cost of the work done shall be forthwith added to and form part of the taxes on the land (ibid).

These by-laws illustrate that all the land was under close surveillance by neighbours, inspectors, and municipality leaders. While, previously, farming methods were based on
advice and were spread through courses, bulletins, and articles, this emergency form gave municipalities the power to enforce such methods themselves. It was recognized that communities had to enforce themselves and neighbours needed to be watching neighbours. Normalization is presented in its extreme state in Experimental Farm Soil Drifting Control bulletin (Hopkins et al. 1946). It contains the new norms of farming, the possible consequences of not following the norm, and the mandate to closely assess the farming practices of those surrounding. As Hopkins et al. explain, “While the control of drifting on any farm is primarily the concern of the individual farmer, his success may be aided or hampered by the action of his immediate neighbours” (1946: 44, emphasis added). Here, individualization of the problem is maintained in a field of comparison comprised of concerned neighbours and municipalities.

V. Good Men and Green Islands: Individualization of the Male Farmer in Crisis

W.O. Mitchell’s literary classic Who Has Seen the Wind features the violent tempered and indignant farmer Sean O’Connal. He is the embodiment of scientific agricultural knowledge being promoted by the Experimental Farms experts from 1900 to 1940. In the passage that opens this chapter he curses his neighbours for their poor and backward management practices. Sean is depicted as the ‘good’ farmer, suffering due to others’ ignorance in the middle of a disaster. This celebrated Canadian novel captures the way in which male farmers watched and judged each other through the established norms of scientific farming, even through the worst years of the 1930s. Sean’s character represents the subject of the ‘good’ scientific farmer that was created through the first decades of the 20th Century, a subject tied to knowledge, betterment, and expertise.
Sean’s rant carries the narrative of the ‘bad’ “hunyack” farmer, a racialized term for backwards, lazy, and stupid in local prairie dialects. His position as the ‘good’ farmer judges the inner character of men rather than that of the larger politics of settlement geographies. Religion is also important as the rules of scientific farming become synonymous with scripture. Jones (2002) describes how the Experimental Farm scientists, “even talked in Biblical terms. It was if they had slipped into the craggy coulees, communed with God, and returned with a carving of commandments” (137).

Oblivious to the previous role of science in possibly creating or adding to the drought problem, Gray described the Experimental Farm’s job as to “do no less than reorganize the whole of the agricultural economy within the Palliser Triangle on a scientific basis” (Gray 1967: 31). This perspective gives the idea that male farmers were outside of science and that this was the reason for the blowing soils, instead of the norms of science themselves being blamed for the problem. The first waves of education of the farmer did not lead to the mastery of nature, as the droughts of the 1930s proved. Instead, the working of the soil through standardized homogenous scientific practice is often cited as being linked to the enormous amount of soil erosion which occurred during the 1930s (Jones 2002). However, through this research it is evident that science and the scientific farmer survived the droughts and were strengthened by them. Blind to the scientific discourses and training accomplished before the drought years, Gray argues that it is only in the 1930s that the Experimental Farm scientists began to teach “100 000 farmers how to farm” (Gray 1967, xi). Again, the male farmers were to blame for failure and were seen as ignorant to scientific methods.
The recurring narrative of the ‘good’ male scientific farmer emerges in the crisis, but this time ‘he’ is placed on a green island. Being exceptional and progressive, the ‘good’ male farmer is established as these individuals were said to have never needed government relief, while ‘bad’ farmers lived off and exploited the relief, and according to Gideon Matte, this happened most often in “foreign districts” (Gray 1966: R-25). This racialization of the problem population speaks volumes to how the good farmer was still being constructed through whiteness. Speaking to Gray on the farmers who survived the drought, and not only survived but had successful crops in the driest years called “green islands,” Taggart explains why this occurred.

Mainly it was good management… The ones who survived and farmed they were men of intelligence and ability and in my experience with farmers…I never dealt with a more capable group than those men. They had to be or they couldn’t survive there. They had to be intelligent and they had to be purposeful they had to be persistent, and they had to have business sense (Gray 1966: R-31).

Denike’s interview with Gray offers the same narrative of the good farmer and the green islands.

All this area where distress, where crop failure, and soil drifting, and all the ailments that you and we all saw in the 30s and prior to that were all there in evidence, but throughout all this there was a green island here and there. _All of this whole area proves that the quick learners, the good farmer, the man who could see, and learn from what he did, the quick learners, made a success of this country. They were making out all right. They were getting by, they weren’t taking relief, they didn’t need relief. No, if some could do it, why couldn’t others _ (Gray 1966: R-21, emphasis added).

And here again:
The depression resulted from the inability to put into practice what we already knew and what the leaders in the community already knew. And again, I reiterate, the fact that you could go during the 30s, during the lowest depths of the depression to every district and you would find one man who had a green spot, men who never took relief. Did they have better land? No. They just worked it better (Gray 1966: R-21).

Denike argues further that farmers fell into three groups: 10% innovators, 15% adaptors, and 75% followers. He believed that the Experimental Farms wasted their time on trying to educate the majority of farmers.

The top 25% of farmers say forget about bringing material to the 75%, they can’t understand it, they can read it, but they can’t understand it. They merely follow the example that has been set by this 25%. The top 10% say write for them and forget everybody else. If anybody can’t keep up with you, he’s dead anyway (ibid).

This indicates the importance of homogenizing the norm through those who were individualized as the most exceptional. Thus, even in the worst of years, the good farmer narrative is still employed. The same descriptions are used of the man of brains, the ‘good’ farmer. In the Gray interviews, the drought is often cited as weeding out the bad farmers and allowing good farmers to expand onto the abandoned land. Larger farm units with fewer ‘better’ farmers were viewed as essential to the success of maintaining agriculture in Palliser’s Triangle. This Darwinian mindset seems to justify the large outmigration and loss of lands.

In terms of gender, the good men and green islands narrative erased the role of women in drought. Perhaps it was the work of women that helped those few farms survive rather than having a smart man at the helm. While Gray (1967) speaks about women picking wild berries and cooking things that were not normally part of the diet of settler families, he largely ignores the role of women in the survival or loss of the
homestead during drought. *Men Against the Desert*, as the title makes clear, furthers the idea that the male scientific farmers and the male scientific experts were the only actors in the unfolding crisis. It ignores the idea that discourses of male scientific farming perhaps created the crisis, while celebrating male scientific achievement in ‘solving’ it.

Finally, during the interview with Campbell, Gray praises the work of the agricultural scientist’s work stating, “in the experiments that you have done you have succeeded in demonstrating that science plus human ingenuity is worth five times as much as nature could provide” (Gray 1966: R-20) and during the interview with Taggart, Gray summarizes that the work of Experimental Farms “demonstrated beyond any possible shadow of doubt that if you cultivated your land in one way you would have blowing dust, if you cultivated it in another way you could grow a crop.” Taggart agrees adding, “No doubt about that, yes. What it did too, it gave these people hope and encouragement. They said to themselves, if the government is prepared to put money into this thing, prospects of this thing holding together would be pretty good” (Gray 1966: R-31). However, the argument that the government was creating political technologies to support the anti-politics machine (Ferguson 1990) of territorial settlement is not put forward. This final exchange is most informative as Gray’s ideas represent the view of science’s role in overcoming nature, but also in Taggart’s comment on its use in keeping people on the land and giving them hope through visible investment in the land. The role of scientific knowledge kept people from asking bigger questions. Those green islands and demonstration stations were the anti-politics machine (Ferguson 1990) of Palliser’s Triangle.
The Gray interviews offer support to the argument that the individual was seen at
the heart of the problem. Too many bad male farmers were on land that could only
support the very best. Good male farmers, aligned with the interests of state science,
could defy drought and adversity, and supposedly did during the worst drought years.
The larger political situation is downplayed as the view of man vs. nature through
innovation and strength of character creates the central narrative of the 1930s droughts.
Again the male farmer and his quarter section are made visible, while drought and the
larger political motivations to save important economic investments such as the railway
are made invisible. However, PFRA administrator George Spence accounts for the lack
of precipitation arguing that there is “No method of farming that guarantees a crop”
(Gray 1966: R-30). Even Taggart, in a later interview changes his narrative to include
rainfall as the main variable.

That country is a dry country, that with an average rain of 15 inches, if the
yearly rainfall falls to 10, we’re in trouble…We have better varieties of crop,
better adapted to the climate and the soil, rust resistant as so on, and we’ve
got a better informed group of farmers. Still won’t make a crop grow if the
rain goes down to 6 inches (1966 R-31).

Thus, while there is talk of green islands and good male farmers, rainfall is reluctantly
made a factor. However, throughout the interviews with Dominion scientists and
administrators, rainfall is almost never mentioned in comparison to cultivation methods
and male farmer character.

VI. Normalization or Being Otherwise

The droughts of the 1930s violently illustrate how the land resisted normalization.
Erosion and drought cut across quarter sections and blurred the neatly divided
Townships. Drought, disease, grasshoppers, and gophers found openings and opportunities in normalization to remove the topsoil and destroy crops. Since the first colonial settlers, the region had been brought into an agricultural timetable and had had its properties completely reworked with a different vegetation cover, sometimes removed of cover altogether. If there is a force applied, there is always a counterforce. Homogenized methods moved the land toward a created norm developed on controlled test plots. After such resistance of the norm, the land had to be renormalized.

Over the thirty years of precarious settlement, the government had gained the knowledge and tools to deal with the 1930s crisis. It had the weapon of knowledge in the Experimental Farm, which offered the answers that gave hope to farmers looking to retain their homesteads. In the township grid, it had the ability to locate precisely where the problems were and to spread expertise uniformly through inspectors, AIAs, and substations. Through this architecture and scientific knowledge, lands and male farmers were placed in a position of hierarchy, differentiation, comparison, homogenization, and exclusion. Scientists and the PFRA had the ability through established discourse to frame the problem in a way that male farmers would again look at their own character and practices rather than the process of settlement as a whole. In terms of force relations, the resistance to normalization required emergency measures and re-normalization. Just like human resistance to the norm, the land’s push did not release it from the norm; its resistance simply produced a new norm to be followed. The push against individualization required the norm to be altered and the male farmer to be re-educated in the new methods of strip farming, trash-cover summerfallow, and duck foot ploughing. However, this resistance opened opportunities for different futures, whether or not they
were the most sustainable or aligned more closely with the nonhuman forces. Those openings remain today as the devastation of the drought period is still remembered.
Conclusion

The original agreement was a relatively loose one, to do a study of man and the land in western Canada. Once the work began, problems of scope immediately arose. What span of time should be covered by the study? Should the emphasis be put on the traditional approach of environmental influence on man and man’s influence on environment? How far should one be concerned with philosophical questions? What is environment? How does it differ from land or landscape? Can we really think effectively about man as distinct from environment or landscape? Should we use another approach, perhaps an ecological, community, or systems approach of the kind recently stressed by various geographers?

G. H. Nelson (1967)

I. Individualizing the ‘Souls’ of the Soil

Settling Palliser’s Triangle went far beyond putting people on land “that should never have been broken” (Gray 1967: 7); it was an operation in producing normality through multiple overlapping political technologies. The normalizing micro-physics of Palliser’s Triangle settlement pitted the forces of individualization against myriad forces that resisted being individualized including various Aboriginal peoples, male farmers, women farmers, soils, climate, weather, flora, and fauna. Normalization was produced through a descending individualization of nature, a shift of the spotlight from a problem region to illuminate identifiable and locatable problem farms and individuals. The ‘soul’ of Palliser’s Triangle was diagnosed and then made productive through a series of comparable and differentiated pieces of land and a hierarchy of male farmer aptitudes, judged through their ability to reproduce dry-land farming norms. Thus, a larger problem ‘soul’ of Palliser’s Triangle was fractured into millions of visible individualized human and non-human, judged and judging ‘souls.’

The nature of Palliser’s Triangle was further normalized through processes that employed the circulation and embodiment of scientific knowledge. Race, gender, and
class were central to the construction the scientific farming norms, the norms upon which lands and male farmers were compared, differentiated, homogenized, hierarchized, and excluded. Through the production of scientific knowledge, norms were constructed, soils were individualized, and normality materialized on the land. Despite the various forms of resistance, normalization of nature was a process largely successful in erasing claims, in ensuring the survival of particular forms of farming, and in creating the legible limits of prairie nature. However, the cracks that exposed such resistance offer the chance to view and critique such forms of normalizing power, allowing us to imagine other possible paths for Palliser’s Triangle.

Throughout this dissertation I have argued that nature was normalized in Palliser’s Triangle by homogenization exercised through the individualization of lands and peoples, scientific knowledge production and circulation, and discourses of the norm embodied in the construction white male scientific farmer and the scientific farm. In colonial scientific exploration, the ‘soul’ of Palliser’s Triangle was diagnosed as defective yet capable of reform. The deviant geography was subsequently ‘corrected’ and ‘reformed’ through individualization of property replicated and blended into a larger homogenous Prairie region. Scientific knowledge later produced nature as a universal formula that could be known, learned, and applied by the best and brightest male scientific farmers. This land and scientific man approach directed male farmers to look inward, at their ‘souls’ and their quarter section of nature in relation to the norm, rather than outward toward the risky political economy of settlement. Consequently, as the land and man approach concentrated on the homogenization of field management practice, this diminished or erased the integral aspects of women’s labour and production. Both in
settlement and in drought, most attention was directed at the male farmer and his capacity to apply scientific knowledge. Little, if any, attention was placed on climate, the diminished role of women, the role of science, or the larger settlement politics. This “anti-politics machine” (Ferguson 1990) operated through the discourses of science and magnification of the individual self and the individual parcel of land. The norms of scientific farming, along with the panoptic homestead grid, allowed male farmers to be judged by others and themselves in their ability to normalize their individual piece of nature. While wheat and the male scientific farmer were made normal in the landscape, all others were made abnormal strangers upon it. However, this normality was inherently unstable both in terms of ecology and economy. Finally, I argued that these subjected natures and farmers resisted normalization, their forces pushing toward a different reality created by of the long droughts of the 1930s. However, despite this resistance, the “anti-politics machine” (ibid) of scientific agriculture was once again deployed to keep the ‘good’ male farmers on the land and ‘save’ the region from its social and economic abandonment. In the end, the triangulation of ‘souls,’ fields of comparison, and the norm produced normalization in Palliser’s Triangle.

II. Chapter Summary

Chapter 1 detailed the theoretical foundations of the dissertation. Foucault’s analytics of power, biopolitics and governmentality were explained along with their links to normalization. The birth of the ‘soul,’ the spatial tactics of fields of comparison, homogenization through individualization, and the norm were explored as the key aspects of normalization. Normalization was described as complex and multi-faceted exercises of
power where homogenization is produced through individualization. This set of political technologies was explained as working in a descending model of power that places the greatest focus on the individual while moving attention away from the broader questions of political, economic, or ecological circumstances. I also discussed the importance of using a force relations approach based on Foucault’s description of “micro-physics.” I argued that a force relations approach is an important means to discuss the materiality of exercises of power. After the discussion of normalization I offered the theoretical foundations for studies of nature. Social nature, political ecology, and post-colonialism were described as forming the basis of my theorization of nature and emphasised how all three link the production of nature to discourses of race, gender, and class. Finally, I argued for the importance of making linkages between studies of nature and studies of normalization in Human Geography.

Chapter 2 explained how Palliser’s Triangle was first individualized from the larger prairie as a problem region. The birth of Palliser’s Triangle took place when the Palliser Expedition and the Hind Expedition confirmed, delineated, and mapped the ‘desert’ region. I argued that colonial scientific assessment and diagnosis produced the ‘soul’ of the arid region based on colonial constructions of it past, present, and future. The ‘abnormal’ ‘soul’ was assessed through the discursive individualization of the land that was delineated, contained, and separated from the ‘normal’ fertile belt. These observations led Palliser and Hind to call for isolation and containment of Palliser’s Triangle as an uncivilized and inhospitable space. I explained that identifying and locating the ‘abnormal’ triangle allowed for the ‘normal’ fertile belt to appear homogenously fertile and the problem space to appear contained in geometric certainty. I
then describe how the second move of individualization was to discursively separate Aboriginal peoples from their land. Separating the two and producing incompatibility through degradation, regeneration, and pristine past narratives allowed colonial officials to construct the region as possibly valuable and capable of reform. Dividing the land into visibly fragmented time periods, allowed for colonial imaginaries to sever Aboriginal peoples from the land. I explained how nature was portrayed to be in a state of crisis due to its ignorant land managers, and how separating the Aboriginal through constructions of the past and future allowed for a different, and economically productive, nature to be imagined. I linked this transformation to Foucault’s analysis of the ‘soul’ in the production and reform of the criminal. After discovering a problem nature, colonial explorers assessed and made known Palliser’s Triangle’s shortcomings, worth, and capabilities. Its present state indicated desert-like conditions, yet reconstructing a pristine pre-human past enabled the possibility of hope for a productive future. ‘Abnormal’ and ‘destructive’ Aboriginal land management was viewed as the root cause of the ‘abnormal’ nature, and the removal and/or eradication of such populations were argued as key to restoring normality. These insights allow us to see Palliser’s Triangle as a patient being assessed for future treatment. The future treatment was European culture in the form of the colonial settler. Employing the construction of ‘soul’ illustrated the exercise of power of human forces in classifying and constructing environmental essence with a view to reforming the land.

In Chapter 3, I argued that the land was individualized through the homogenous spatial reordering of Dominion Lands Survey which produced the Indian Reserve and Township systems. In persuading First Nations peoples onto peripheral parkland reserves
and individualizing land into property through the Dominion Lands Survey, these spatial organizations created both a larger homogenous region and individualized fields of comparison where the decentred micro-physics of settlement would play out. This individualization entailed dividing the prairie into quarter sections, within mile sections, within townships, within ranges, within rural municipalities. This spatial division of land partitioning made Palliser’s Triangle invisible, establishing a sea of squares with minor differences rather than two distinct geographical regions. It brought into focus both the small abstracted homestead section and the larger, but equally abstract, Prairie economic region. The spatial organization of the system would allow for the land to be visible both at a distance and by all those who surrounded it, which was integral to the operations of power that took place during the early years of settlement and the crises of the 1930s. I argued that it was not the control of human forces that was the largest concern of government, but the disciplining of the land’s forces through scientific knowledge, surveillance, and labour. What was being made visible and watched was the land and the male farmer’s later ability to ‘correctly’ shape its forces.

Chapter 4 further demonstrated how individualization worked through visual materials. Once again, I described how two fields of visibility work together to individualize and homogenize: the individualized homestead quarter section was multiplied to create the homogenized Prairie as an exporting economic region. I explained how the use of ‘before and after’ illustrations and photography allowed for the witnessing of a transformation of the ‘abnormal’ to the ‘normal.’ The larger economic Prairie region was constructed through repetition and multiplication of these homestead tableaus, which asserted the importance of the Dominion of Canada as an export
This simultaneously individualized and homogenous Prairie region fit well into the tapestry of exporting regions. However, these visualizations of the normal prairie farm erased the importance of women’s labour and sphere of production. The construction of the region through representations of industrial modernity also produced individualized whiteness as ‘normal’ and Aboriginal identities as ‘abnormal’ within its geography. Aboriginal figures only become visible for the purpose of seeing how ‘out of place’ they were in the landscape. In terms of normalizing environmental forces, a never-ending horizon of wheat is made to seem the ‘natural’ groundcover, replacing and erasing all ecological diversity and difference. The repetition and multiplication of individualized whiteness and wheat fields created notions of the ‘normal’ prairie. Palliser’s Triangle is fixed through these constructions of both homestead and regional ecological uniformity. This chapter argued that these first visualizations of the norm established what a prairie farm would resemble, who was out of place within it, and what was considered normal.

Chapter 5 argued that Palliser’s Triangle’s nature was further normalized through the development of scientific agriculture and the construction of the male scientific farmer. I explained that during this time, the norms of agriculture were established through agricultural institutions and circulated through bulletins and farmer periodicals. These norms allowed for the homogenization of the land in that it displayed and defined normal management practice. During this period, nature was represented as a universal scientific formula to be applied to the individualized plot of land. These scientific norms were the “value-giving measures” (Foucault 1977: 183) from which to compare, differentiate, hierarchize, homogenize and exclude soils and farmers. Those male farmers following such advice were deemed progressive, while those who did not were portrayed
as backward and ignorant. Discourses of race, gender, and class were employed to solidify the ‘good’ and ‘bad’ categories and to mobilize change toward homogenous scientific agriculture. Scientific discourses widely expressed how systematic agricultural knowledge was making the environmental circumstances of farming largely irrelevant. Instead, the male farmer was individualized and placed at the centre of concern, his ‘soul’ made visible through materialized land management practice. The category of the male scientific farmer was constructed as the embodiment of scientific farming knowledge. In the many formats within the farming periodicals, this category was contrasted with the racialized backward farming Other, who was ignorant or sceptical of ‘book farming.’ Again homogenization was achieved through individualization of the male farmer and the land. If a crop failed, the male farmer was told that ‘he’ had done something wrong, silencing larger political questions. In terms of force relations and the “micro-physics” of dry-land settlement, such discursive formations pushed the land to be homogenized through a heterogeneous population and over a large geographic area. Introducing these norms allowed each farm family to judge themselves against the norm, to compare themselves to their neighbours, and to compare neighbours to other neighbours. With farm families situated within fields of comparison, the norm, I argue, could be exercised quite efficiently in producing homogenization through individualization. The triangulation of the norm, fields of comparison, and the ‘soul’ produced the normalized prairie.

However, the individualization of the male scientific farmer encountered some resistance as women struggled to have their voices heard and counted, their economies valued and maintained, and their homestead and dower rights established. Male farmers’
voices also showed limited signs of resistance through the questioning of their continual education as the answer to every problem, but these views were largely absent or silenced. Nevertheless, as the repercussions of this precarious settlement began to be experienced, individualization continued to be an effective strategy.

Finally, Chapter 6 explained how the force relations of a normalized prairie came to a head in the 1930s when droughts, disease, and pests found opportunities in the uniformly transformed environment. Non-human forces resisted normalization in multiple unexpected ways. Previously individualized farms grew and blew together covering, crossing, and blurring property lines. Private individualized property was pushed back into the commons of community pastures. One farmer’s erosion problem often spread to adjacent homesteads. Drought, gophers, crop disease, and grasshoppers spread erratically across property boundaries, assisted by established normalization. The ‘soul’ of Palliser’s Triangle re-emerged as a problem region leading to Palliser and Hind’s seventy-year-old insights being re-circulated among the public and government officials. Despite opening the possibility for a complete reworking of the region’s economy, mortgage companies, the CPR, and banks had an investment in keeping families on the land and re-establishing a dry-land wheat economy.

In the thick of the crisis of eroding soils and displaced human populations, the region was stabilized through the heightened redeployment of normalization tactics it had used to first settle the region: scientific knowledge creation and distribution (the norm), individualization (the soul), and the micro-physics of male farmer surveillance (space). The worst lands were located and individualized, taken over by PFRA officials, seeded to grass, and transformed into community pastures and scientific rehabilitation stations.
Progressive farm leaders were individualized and placed as heads of Agricultural Improvement Associations. These ‘good’ male scientific farmers were individualized for their green island oases within a community of desolation. New norms of scientific farming and soil erosion control were made into law where municipalities and farming families could report residents and neighbours to authorities for noncompliance. Demonstration farms were established to make rehabilitation visible and exercises of power were further de-centralized by giving farmers the authority to watch their neighbours. Homogenization through individualization is most visible during this period of crisis, though its operations had been working for the previous seventy years. These political technologies, even during such a crisis, were effective at individualizing the problem and casting eyes away from the larger political economy.

III. Moving beyond the blame game in Palliser’s Triangle Research

While some have explained the settlement of Palliser’s Triangle as simply erroneous (Marchildon 2006), I have described how the narrative of ‘mistakes made’ is far too simplified. Several researchers of the region’s history have blamed one policy or key individuals including Macoun’s expansionist-backed optimism (Owram 1992), Dominion scientists’ advice (Jones 2002, Voisey 1988), and the 1908 policy to further open land on Palliser’s Triangle (Anderson 2008; McManus 2011). This is problematic as it again individualizes the politics of dry-land agriculture to some direct cause or source rather than a series of complex power relations or micro-physics. These explanations do not offer enough in terms of explaining the political economy or political ecology of dry-land agriculture in Palliser’s Triangle. In this settlement project, exercised through a
culture of scientific knowledge production and consumption, identities were constructed, blame was individualized, and politics was hidden. This dissertation directly identifies a process, rather than a person or policy, as key to understanding dry-land prairie settlement. This process individualized in order to hide the larger political questions, and so individualizing blame furthers this inherently modern project by leaving key questions unanswered.


i) Seeing like a state and/or being normalized as an individual?

In terms of the larger contribution of this dissertation, normalization of nature, or the homogenization of nature through its individualization, could be extended beyond this case study both geographically and temporally. If Scott’s *Seeing Like a State* (1998) is used as an example, homogenization is a widespread phenomenon; though until this research, normalization of nature lacked the theoretical framework to make its systematic operations visible. “High-modernism” (Scott 1998: 95) is limited in its explanatory power as it concentrates on the unidirectional power of homogenization by the state. Normalization, on the other hand, offers the multidirectional operations of power through the five key components of homogenization through individualization: comparison, differentiation, homogenization, hierarchy, and exclusion. Unlike Scott, I have argued that race, gender, and class are all central in these five operations by setting the limits and margins of the norm as a “value-giving measure” (Foucault 1977: 183). While Scott was clearly influenced by Foucault in the way the state sees its natures and populations,
Scott’s hidden theoretical foundations, state-centred lens, and blindness to political subject making, leaves much room for a more holistic analysis when it comes to nature’s homogenization through individualization.

ii) Expanding the scope of Social Nature Research

While the foundations of social nature are now clearly established (Braun 2002; Braun and Castree 1998; Castree and Braun 2001), social nature scholarship has moved toward producing more nuanced understandings and forms of social nature. Social nature literature has largely shifted toward studies of the neoliberalization of nature (Bakker 2005; Castree 2008; Mackenzie 2013). Neoliberalization involves the privatization, deregulation, and free-marketization of nature. Normalization of nature has the possibility to add to research on neoliberal natures as Mackenzie (2013) has shown. Investigating neoliberalization further with the framework of homogenization through individualization provided in this dissertation would be a means of researching how neoliberal norms may work through fields of comparison, differentiation, homogenization, hierarchy, and exclusion. Pushing social nature research to include “one of the greatest instruments of power” (1977: 184), normalization of nature has the potential to deepen our understanding of the processes of social nature in modernity and post-modernity. It also holds the potential to re-politicize ‘settled’ post-colonial natures such as Palliser’s Triangle.
iii) Nature’s Agency or Force Relations through micro-physics?

Another contribution this dissertation makes to the scholarly literature is in the use of micro-physics to address the agency of nature discussions. In the agency of nature debates of Geography, Science and Technology Studies, and Environmental History (FitzSimmons and Goodman 1998; Haraway 1991; Latour 1993; Nash 2005; Piper 2013; Steinberg 2002; Whatmore 2002; Worster 1979) nature has been ‘brought back’ from being something which is shaped only by human activity to an actor influencing social politics or attached to networks that intersect the human and non-human worlds. When theorists attempt to bridge the natural into the social, one is often given a position of privilege. Using Foucault’s conception of a micro-physics brings dispersed and non-localized forces, human and non-human, into the same political and material arena. This is not a human vs. nature battle of forces, but an interaction of dispersed and multifarious forms of human and non-human forces where norms are resisted and transformed. If more focus is given to force relations, rather than on things or networks of things, there is even less possibility for the division of human and natural worlds. In micro-physics, all forces are interacting: pushing, pulling, merging, and colliding. Researching how the discourses, human labour power, and mechanical forces of a particular industry are interacting with forces of the climate, hydrological cycles, animal migration patterns, mortality rates, political debates, and cultural behaviours seems more useful and straightforward than placing a rhizome within an individualized network. In fact, the Anthropocene, or the current geological era largely being shaped by human forces, embodies the idea of force relations at its core. However, it has not been conceptualized in such a manner. In environmental geography, we can employ a Foucauldian analytics of
micro-physics to unpack the politics and challenges of our fate as humans as we enter more uncertain times.

IV. Future Openings and Directions for Prairie Research

While this project was only able to deal with a specific time period during which normalization was first institutionalized on the Prairie, there is a need to discuss the literature that has been promoting the re-wilding or what one might call the de-normalization of Palliser’s Triangle. This literature, inspired by Stegner’s literary classic *Wolf Willow* (1962) and the ideas of the buffalo commons (Popper and Popper 1987), includes the novels and memoirs of Butala (1994; 2000), the field guides and political writing of Herriot (2002; 2013; 2014), and the writing of Savage (2011; 2012). These authors, influenced by conservation and environmental movements, promote a re-wilding of the prairie in hopes of preserving its former grassland ecology. These authors push against individualization and argue for a more complex, dynamic, and collective land use. They tend to view agriculture and farmers as an invasive species that has destroyed much of the native grasslands. Butala (1994; 2000) constructs nature as sacred, spiritual, and wild. She brings gender and nature to the forefront, though often in essentialized ways. Herriot (2013) has recently written against the devolution the PFRA community pastures and constructs them as wild places of refuge for endangered species. This fight for the public pastures has inspired public figures such as Margaret Atwood to take up this political cause. Again, while disturbing the normalized prairie, there continues to be a construction of Palliser’s Triangle as a pure pre-human ‘soul.’ Linking
these authors to the discourses of colonial explorers would also be an interesting research
endeavour.

These authors often employ discourses of ‘virgin’ prairie and pristine nature, but
also make arguments for a people and environment approach to conservation through
sustainable ranching. The reintroduction of bison to the Butala Ranch and Grasslands
National Park has been rooted in the re-wilding movement. However, it remains to be
seen if this is a progressive environmental politics or simply an attempt to recreate a lost
past. In both cases, First Nations involvement seems only symbolic and superficial. It is
through ranching that conservation is most championed and discourses of normalization
are disturbed. Re-wilding the prairie could also be investigated by looking at coulees, or
prairie ravines, as places in-between where normalization was not possible and other
modes of prairie nature have been preserved and performed from chokecherry and
Saskatoon berry cultivation. With the theoretical stepping-stone of normalization, re-
wilding and de-normalization could offer a pathway to research these authors’ discourses
of nature.

While there has been a re-wilding movement, there has also been increasing oil
and gas activity in Palliser’s Triangle. The normalization of Palliser’s Triangle, its
geographical location, and its historical positioning as an industrial nature has made it a
convenient route for oil and gas pipelines. There also continues to be oil and gas
extraction in the region. While there have been many protests to date on the US side of
the border for Keystone XL pipeline route, especially in relation to the Nebraska Sand
Hills and the Ogallala Aquifer, there has been little opposition on the Canadian side.
Perhaps with the normalization of Palliser’s Triangle, there has been a clear ordering of
where prairie environments stand in the taxonomy of Canada’s natures. The comparative politics of nature and pipelines on both the US and Canadian sides of the border would be a worthwhile extension of this dissertation. The question of whether the normalization of nature has allowed petro-politics to operate effectively in this region would offer another important aspect the story of the normalization of Palliser’s Triangle.

V. Concluding Thoughts

This research made visible the individualizing forces of normalization on nature. Homogenization and individualization, while seemingly different operations, produce and reinforce one another when triangulated through spatial organization and productions of the norm. While it is easy to focus on homogenization alone, I argued that individualization and productions of the norm need further attention in studies of nature. This case study also illustrated the importance of interrogating environmental norms and their spatial fields of comparison, differentiation, homogenization, hierarchy, and exclusion. While Palliser’s Triangle was the focus of this research, underlying the project is the larger goal of illuminating the forces of normalization, shining the spotlight back on itself. The lesson to be learned from this research is that when environmental crises arise, it is important to question who and what is made most visible and who and what remains in the shadows. Most often, those who are most vulnerable are targeted, individualized, and directed toward ‘progress,’ while highly influential political actors direct the spotlight away from themselves, their actions, and their motivations. As those of us in the 99% (those who do not control the majority of the global economy’s wealth) continue to be directed to look inward at our ‘souls,’ to partition ourselves from the
struggles of our neighbours and our environments, and to individualize our talents and shortcomings, perhaps we should reflect the beam of light back toward the direction from which it came.

Anderson, C. 2008. "'This land must be good for some kind of farming..." Dominion Lands Policy, Drought and Agricultural Rehabilitation in Southwestern Saskatchewan, 1908-1935." Masters, University of Regina.


Butler, W. F. 1872. Great Lone Land; a Narrative of Travel and Adventure in the North-West of America. London: Low.


Canada. 1881. "Dominion Lands Regulations," Library and Archives Canada

https://www.collectionscanada.gc.ca/canadian-west/052920/05292073_e.html.

———. 1884. *Extracts from Surveyors' Reports of Township Surveys in Manitoba and the North-West Territories*. Ottawa: Department of the Interior.

———. 1903. *Canada, the Granary of the World*. Ottawa: Dominion of Canada.


http://esask.uregina.ca/entry/palliser_triangle.html


Grant, G. M. 1873. *Ocean to Ocean; Sandford Fleming's Expedition through Canada in 1872*. Toronto: Campbell.


Hime, H. L. 1858a. *Prairie, on the banks of the Red River, Looking South*. Library and Archives Canada. C-018694
Hime, H. L. 1858b. *Prairie, on the banks of the Red River, Looking West*, Library and Archives Canada, C-018694


