AT THE WATER’S EDGE:
AN INTEGRATION OF ETHNOGRAPHIC AND ARCHAEOLOGICAL
METHODS IN THE STUDY OF ROCK ART
IN NORTHERN CENTRAL BRITISH COLUMBIA, CANADA

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ABSTRACT

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Pictographs occur frequently in the landscapes of northern central British Columbia, but they have received modest academic attention. As a result, there is limited understanding of rock art as social practice and its significance within larger cultural landscapes. This research integrates First Nations traditional knowledge with archaeological data in order to investigate the waterscape context and iconography of pictographs across three First Nations traditional territories. The insights into the rock markings provided by First Nations elders offer important informed perspectives about the images and the landscape that, when combined with archaeological data and formal analytical processes, enable the study of the social understanding of rock art and its context within the expansive territories of this region.
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# TABLE OF CONTENTS

Abstract............................................................................................................................................ i  
Acknowledgements ........................................................................................................................ ii  
Table of Contents ............................................................................................................................ iii  
List of Tables ..................................................................................................................................... vii  
List of Figures .................................................................................................................................... ix  

**Chapter One. Encountering Rock Art ................................................................. 1**  
Understanding the Issue at Hand ................................................................................................. 4  
  Research Focus and Goals ......................................................................................................... 6  
The Study Area .............................................................................................................................. 8  
  Previous Research .................................................................................................................... 13  
Thesis Organization ...................................................................................................................... 15  

**Chapter Two. Rock Art Research Approaches in British Columbia ................... 17**  
Rock Art as Ethnography ............................................................................................................. 17  
Rock Art as Archaeology ............................................................................................................. 22  
Rock Art Research Emerging ...................................................................................................... 24  
  Moving Beyond the Image ........................................................................................................ 26  
  Re-visiting Rock Art as Archaeology ....................................................................................... 28  
  Site Contexts Implied ............................................................................................................... 30  
  Rock Art Research Continues .................................................................................................. 32  
  Combining Methods and Lines of Evidence ......................................................................... 34  
  Social Contexts Explored ........................................................................................................ 35  
Reflections .................................................................................................................................... 40  
  From Object to Meaning and Knowledge ............................................................................ 41  

**Chapter Three. Matters of Perspective ................................................................. 43**  
Stepping into the Margins ............................................................................................................. 43  
  Rock Art and British Columbia Archaeology ....................................................................... 45  
  Imagery and Location Together ............................................................................................. 46  
  The Other Way Around .......................................................................................................... 48  
  Traditional Knowledge and Western Ways of Knowing ......................................................... 49  
    Traditional Knowledge and Rock Art Studies .................................................................. 49  
  Geographical Marginalization ................................................................................................. 53  
Understanding Meanings ............................................................................................................. 60  
  Spatial and Temporal Scales .................................................................................................. 60  
  Presence – Audience .............................................................................................................. 63  
  Action – Movement ................................................................................................................ 65  
  Interaction – Communication ................................................................................................. 67  
Moving Forward ............................................................................................................................. 70  

**Chapter Four. Approaching Rock Art ................................................................. 72**  
Pre-Fieldwork Planning ................................................................................................................ 72  
  Obtaining First Nations Permission ...................................................................................... 73  
  Sampling Strategy – Archaeological Survey ......................................................................... 74  
  Sampling Strategy – Semi-Structured Interview Process ..................................................... 77  

TABLE OF CONTENTS
Chapter Five. Rock Art Sites and Insights .................................................................96
Archaeological Survey Results ...............................................................................99
  Negative Survey Results – Nadleh Whut’en Territory ......................................100
  Negative Survey Results – Tl’azt’en Territory ....................................................102
  Positive Survey Results – Nadleh Whut’en Territory ........................................104
    Fraser Lake ........................................................................................................105
      Rock Art Sites ....................................................................................................105
      Rock Art Panels ................................................................................................110
      Rock Art Motifs ................................................................................................114
    Positive Survey Results – Tl’azt’en Territory ....................................................118
      Trembleur Lake .................................................................................................118
        Rock Art Sites ................................................................................................119
        Rock Art Panels ...............................................................................................123
        Rock Art Motifs ...............................................................................................126
      Stuart Lake .........................................................................................................131
        Rock Art Sites ................................................................................................132
        Rock Art Panels ...............................................................................................135
        Rock Art Motifs ...............................................................................................142
      Positive Survey Results – Takla Lake, 1971 ....................................................150
    Takla Lake ............................................................................................................150
      Rock Art Sites ....................................................................................................151
      Rock Art Panels .................................................................................................152
      Rock Art Motifs .................................................................................................155
    Discussion ............................................................................................................158
    Rock Art Insights .................................................................................................158
      Takla Lake ..........................................................................................................159
      Fraser Lake ........................................................................................................165
      Stuart Lake ........................................................................................................175
    Discussion ............................................................................................................182

Chapter Six. Deconstructing and Learning to See ..................................................183
Contemporary Rock Art Landscapes ...................................................................183
Approaching Rock Art Landscapes Through Traditional Knowledge ..............187
Appendices ..............................................................................................................................317
Appendix A – Research Agreement and Band Council Resolution – Takla Lake First Nation ..................................................................................................................317
Appendix B – Research Agreement – Tl’azt’en First Nation .................................................323
Appendix C – Research Agreement and Memorandum of Understanding – Nadleh Whut’en First Nation .........................................................................................328
Appendix D – Ethics Approval from the University of Leicester .............................................333
Appendix E – Site and Panel Recording Form .........................................................................334
Appendix F – Stuart Lake Rock Art Recording Form ................................................................337
Appendix G – X-Ray Fluorescence Scanning Results ...............................................................338
Appendix H – Signed Interview Consent Forms .......................................................................340
Appendix I – Project Description ............................................................................................345
Appendix J – Interview Questions ...........................................................................................346
Appendix K – Semantic Thesaurus – Site and Panel Information .............................................347
Appendix L – Rock Art Site Photo Pages ..................................................................................349
Appendix M – Semantic Thesaurus – Motifs .........................................................................388
Appendix N – Typology and Motif Distribution .....................................................................391
Appendix O – Table of Co-Occurring Motifs .........................................................................392
Appendix P – Table of Distance of Other Archaeological Sites from Shoreline at Lakes Where Rock Art Occurs .........................................................................................394
Appendix Q – Table of Combinations of Motifs .....................................................................396
Appendix R – Chemical Analysis Inquiry – Beta Analytic Inc ..................................................397
Appendix S – Chemical Analysis Inquiry – Radiocarbon Laboratory .......................................398

References Cited ........................................................................................................................399
LIST OF TABLES

Table 1. Climate information for the Stuart Lake area. ................................................. 57
Table 2. Climate information for the Fraser Lake area. .................................................. 57
Table 3. Table of potential for exposed rock throughout the study area. ...................... 99
Table 4. Table of lakes surveyed within Nadle Whut’en territory. .............................. 101
Table 5. Table of lakes surveyed within Tl’azt’en territory. ........................................ 103
Table 6. Table of rock art site data from Fraser Lake. .................................................... 106
Table 7. Table of rock art panel data from Fraser Lake. ............................................... 111
Table 8. Table of rock art panel details from Fraser Lake. .......................................... 112
Table 9. Table of rock art motif data from Fraser Lake. .............................................. 115
Table 10. Table of rock art site data from Trembleur Lake. ......................................... 119
Table 11. Table of rock art panel data from Trembleur Lake. ..................................... 123
Table 12. Table of rock art panel details from Trembleur Lake. ................................... 125
Table 13. Table of rock art motif data from Trembleur Lake. ...................................... 126
Table 14. Table of rock art site data from Stuart Lake. .............................................. 132
Table 15. Table of rock art panel data from Stuart Lake. ............................................ 135
Table 16. Table of rock art panel details from Stuart Lake. ......................................... 140
Table 17. Table of rock art motif data from Stuart Lake. ............................................ 147
Table 18. Table of rock art site data from Takla Lake, 1971 survey. ............................ 152
Table 19. Table of rock art panel data from Takla Lake, 1971 survey. ......................... 153
Table 20. Table of rock art panel details from Takla Lake, 1971 survey. ....................... 155
Table 21. Table of rock art motif data from Takla Lake, 1971 survey. ......................... 156
Table 22. Rock art motifs previously located at Takla Lake, as interpreted by
Madeline French, 1971. .................................................................................................. 164
Table 23. Comparison of rock surface prominence. ..................................................... 193
Table 24. Elevation of painted panels. ......................................................................... 195
Table 25. Availability of ground surface associated with rock art panels. ................... 201
Table 26. Chronology of other archaeological sites on shorelines of lakes with
rock art. ..................................................................................................................... 206
Table 27. Frequency of motif categories and stylistic types across the study area. ....... 214
Table 28. Comparison and distribution of types across the study area. ....................... 215
Table 29. Comparison and distribution of zoomorph type motifs and panels. ............. 216
Table 30. Comparison and distribution of zoomorph forms and elements. .................. 217
Table 31. Comparison and distribution of anthropomorph type motifs and panels. ...... 225
Table 32. Comparison and distribution of anthropomorph elements. .......................... 226
Table 33. Comparison and distribution of short line types motifs and panels. .............. 229
Table 34. Comparison and distribution of short line elements. .................................... 230
Table 35. Comparison and distribution of straight line type motifs and panels. ............ 231
Table 36. Comparison and distribution of straight line elements. ............................... 232
Table 37. Comparison and distribution of arched line type motifs and panels. ............. 233
Table 38. Comparison and distribution of arched line elements. ............................... 234
Table 39. Comparison and distribution of round line type motifs and panels. ............. 235
Table 40. Comparison and distribution of round shape elements. ............................. 236
Table 41. Comparison and distribution of unknown type motifs and panels. ............... 236
Table 42. Comparison and distribution of unknown elements. .................................... 238
Table 43. Details regarding the overall distribution of elements across the study area. ................................................................. 241
Table 44. Comparison and distribution of all elements across the study area. ...............242
Table 45. Co-occurring elements in the study area. ......................................................... 244
Table 46. Comparison and distribution of co-occurring elements across the study area.................................................................................................................. 245
Table 47. Chronology of other archaeological sites in the study area. ......................... 277


**LIST OF FIGURES**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Map of Canada with the province of British Columbia indicated.</td>
<td>4</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Map of British Columbia indicating the approximate northern boundary of the province in red and the study area in blue.</td>
<td>5</td>
</tr>
<tr>
<td>Figure 3</td>
<td>The landscape of northern central British Columbia.</td>
<td>7</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Map of study area indicating the approximate locations of Tl’atz’en and Nadleh Whut’en traditional territories and communities.</td>
<td>10</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Map of study area indicating the location of Takla Lake, British Columbia.</td>
<td>11</td>
</tr>
<tr>
<td>Figure 6</td>
<td>On the way to Takla Lake, British Columbia.</td>
<td>12</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Shoreline rock art site at Trembleur Lake, British Columbia.</td>
<td>15</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Portrait of Chief Legaik – edited image.</td>
<td>23</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Stellat’en First Nation community logo.</td>
<td>55</td>
</tr>
<tr>
<td>Figure 10</td>
<td>The forested landscape of British Columbia’s northern interior.</td>
<td>55</td>
</tr>
<tr>
<td>Figure 11</td>
<td>Middle River, near Trembleur Lake, British Columbia.</td>
<td>56</td>
</tr>
<tr>
<td>Figure 12</td>
<td>Simon Fraser’s signature on the rocks at Stuart Lake, British Columbia – edited image.</td>
<td>59</td>
</tr>
<tr>
<td>Figure 13</td>
<td>Map of Study area showing approximate territorial boundaries and cross over of Tl’atz’en and Nadleh Whut’en traditional lands.</td>
<td>97</td>
</tr>
<tr>
<td>Figure 14</td>
<td>Map of Northern British Columbia, with Takla Lake and Tl’atz’en territory indicated.</td>
<td>98</td>
</tr>
<tr>
<td>Figure 15</td>
<td>Map of study area with negative and positive survey results indicated.</td>
<td>100</td>
</tr>
<tr>
<td>Figure 16</td>
<td>Map of lakes surveyed in Nadleh Whut’en territory, with potential for exposed rock surface indicated.</td>
<td>101</td>
</tr>
<tr>
<td>Figure 17</td>
<td>Shoreline of Ormond Lake indicating lack of shoreline rock surface.</td>
<td>102</td>
</tr>
<tr>
<td>Figure 18</td>
<td>Map of lakes surveyed in Tl’atz’en territory, with potential for exposed rock surface indicated.</td>
<td>103</td>
</tr>
<tr>
<td>Figure 19</td>
<td>Map of Fraser Lake with rock art site locations indicated.</td>
<td>106</td>
</tr>
<tr>
<td>Figure 20</td>
<td>Rock art site FRLK 03 on Fraser Lake.</td>
<td>107</td>
</tr>
<tr>
<td>Figure 21</td>
<td>Rock art site FRLK 04 on Fraser Lake.</td>
<td>108</td>
</tr>
<tr>
<td>Figure 22</td>
<td>Rock art site FRLK 01 on Fraser Lake.</td>
<td>109</td>
</tr>
<tr>
<td>Figure 23</td>
<td>Rock art site FRLK 05 on Fraser Lake.</td>
<td>109</td>
</tr>
<tr>
<td>Figure 24</td>
<td>Rock art site FRLK 07 on Fraser Lake, with flat terrain above the panels.</td>
<td>110</td>
</tr>
<tr>
<td>Figure 25</td>
<td>Rock art site FRLK 02 on Fraser Lake, with high elevation panel indicated.</td>
<td>111</td>
</tr>
<tr>
<td>Figure 26</td>
<td>Rock art site FRLK 08 on Fraser Lake, with panel location indicated and motif from this site – edited motif image.</td>
<td>113</td>
</tr>
<tr>
<td>Figure 27</td>
<td>Example of “outline” style (white arrow) and “silhouette” style (black arrow) – edited image.</td>
<td>114</td>
</tr>
<tr>
<td>Figure 28</td>
<td>Rock art motif from FRLK 01 on Fraser Lake before editing, with sketch of visible pigment – unedited image.</td>
<td>116</td>
</tr>
<tr>
<td>Figure 29</td>
<td>Rock art motif from FRLK 01 on Fraser Lake after editing, with sketch of visible pigment – edited image.</td>
<td>116</td>
</tr>
<tr>
<td>Figure 30</td>
<td>Rock art motif at FRLK 05 on Fraser Lake with calcium carbonate deposit – unedited image.</td>
<td>117</td>
</tr>
<tr>
<td>Figure 31</td>
<td>Rock art motif at FRLK 07 on Fraser Lake with calcium carbonate deposit – unedited image.</td>
<td>117</td>
</tr>
<tr>
<td>Figure 32</td>
<td>Map of Trembleur Lake with rock art site locations indicated.</td>
<td>119</td>
</tr>
</tbody>
</table>
Figure 33. Solitary rock art panel at TRLK 01 on Trembleur Lake – edited image. ..........120
Figure 34. Stone hearth with birch bark scroll indicated (red arrow) at rock art site TRLK 02 on Trembleur Lake. ................................................................. 121
Figure 35. Location of hearth (white arrow) relative to painted panel (black arrow) at site TRLK 02 on Trembleur Lake. ................................................................. 122
Figure 36. Rock art motif at site TRLK 02 on Trembleur Lake – edited image. ..........122
Figure 37. Rock art site TRLK 04 on Trembleur Lake. ................................................................. 123
Figure 38. Rock art motif at site TRLK 02 on Trembleur Lake, with calcium carbonate deposit – edited image. ................................................................. 127
Figure 39. Rock art motif at site TRLK 07 on Trembleur Lake, with calcium carbonate deposit – edited image................................................................. 127
Figure 40. Rock art motifs at site TRLK 03, Panel 1 on Trembleur Lake, with lichen growth and evidence of calcium carbonate deposit– edited image. ..........128
Figure 41. Rock art motifs at site TRLK 05 on Trembleur Lake – unedited image. ..........128
Figure 42. Rock art motif at site TRLK 06 on Trembleur Lake, human motif in “silhouette” style – edited image. ................................................................. 130
Figure 43. Rock art motif at site TRLK 03 on Trembleur Lake, motif with combination of “outline” and “silhouette” styles – edited image. ................................................................. 130
Figure 44. Map of Stuart Lake with rock art site locations indicated. .................131
Figure 45. Rock art site STLK 03 on Stuart Lake, with steep cliffs and considerable elevation gain at the shoreline. ................................................................. 133
Figure 46. Rock art site STLK 02 on Stuart Lake, with steep cliffs and no ground cover. ................................................................. 134
Figure 47. Rock art site STLK 01 on Stuart Lake, with accessible terrain nearby. ............134
Figure 48. Rock art site STLK 11 Panel 2 (black arrow) on Stuart Lake, oriented away from the water – edited image. ................................................................. 136
Figure 49. Rock art site STLK 02 on Stuart Lake, with rock shelter indicated (white arrow) and detail of motif – edited motif image. ................................................................. 137
Figure 50. Rock art site STLK 08 on Stuart Lake, inland site with motif indicated – edited motif image. ................................................................. 138
Figure 51. Rock art site STLK 09 on Stuart Lake, with seasonal water level variation indicated (red box). ................................................................. 138
Figure 52. Rock art motifs at site STLK 02 Panel and Panel 10 on Stuart – edited images. ................................................................. 142
Figure 53. Rock art motifs at site STLK 08 Panel 6 on Stuart Lake– edited image. ............142
Figure 54. Rock art motifs at sites STLK 01 Panel 3, STLK 02 Panel 4 and STLK 08 Panel 2 on Stuart Lake, indicating a presence of calcium carbonate deposit edited images. ................................................................. 143
Figure 55. Rock art motifs at site STLK 01 Panel 1 and Panel 2 on Stuart Lake, with evidence of extensive calcium carbonate deposit– edited images. ............143
Figure 56. Rock art motif at site STLK 11 Panel 4 on Stuart Lake, with evidence of extensive calcium carbonate – edited image. ................................................................. 144
Figure 57. Rock art motifs at site STLK 01 Panel 1 and STLK 11 Panel 3 on Stuart Lake, with evidence of extensive lichen intrusion– edited images. ..........144
Figure 58. Rock art motifs at site STLK 15 on Stuart Lake, with evidence of extensive lichen intrusion and erosion of the motifs – edited image. ..........145
Figure 59. Rock art motifs at site STLK 14 Panel 13 on Stuart Lake, with evidence of lichen growth and intrusion – edited image. ...................................................... 145
Figure 60. Rock art motifs at site STLK 03 on Stuart Lake, with evidence of extensive deterioration – edited images. ...................................................... 146
Figure 61. Rock art motifs at sites STLK 02 Panel 12 and STLK 05 Panel 3 on Stuart Lake, with evidence of extensive deterioration – edited images. .............. 146
Figure 62. Map of Takla Lake with rock art site locations indicated. ...................... 151
Figure 63. Rock art motifs at sites TKL 02 and TKLK 03 previously located on Takla lake, with evidence of ledge or land access. Photographs kindly provided by the Takla Lake First Nation – edited images 1971 survey. ........................................ 153
Figure 64. Rock art motifs at site TKLK 05 previously located on Takla Lake, with evidence of water orientation. Photograph kindly provided by the Takla Lake First Nation – edited image 1971 survey. .......................................................... 154
Figure 65. Rock art motifs at site TKLK 03 previously located on Takla Lake, with evidence of lichen intrusion. Photographs kindly provided by the Takla Lake First Nation – edited images 1971 survey. .......................................................... 155
Figure 66. Rock art motifs at site TKLK 04 previously located on Takla Lake, with evidence of erosion. Photographs kindly provided by the Takla Lake First Nation – edited images 1971 survey. .......................................................... 157
Figure 67. Rock art motif at site TKLK 06 previously located on Takla Lake, with evidence of unequal preservation. Photograph kindly provided by the Takla Lake First Nation – edited image 1971 survey. .......................................................... 157
Figure 68. Rock art motif at site TLKL 01 previously located at Takla Lake. Photograph kindly provided by the Takla Lake First Nation – edited image 1971 survey. .......................................................... 162
Figure 69. Rock art motif at site FRLK 03 on Fraser, exhibiting a long-tailed creature – edited image. .......................................................... 171
Figure 70. Illustration of rock painting on Fraser Lake. Originally produced by Dawson in 1876. Reproduced with permission from McGill University Archives. Carton 3, File 1: Diary and General Notebook 26th May to 20th October 1876. .......................................................... 174
Figure 71. Rock art panel at site STLK 09 on Stuart Lake – edited image. ...................... 180
Figure 72. Sana’aih Market sign at Nak’azdli. ............................................................. 184
Figure 73. Vertical cliff face on shore of Stuart Lake. .................................................. 192
Figure 74. Outcropping at Stuart Lake. .......................................................... 193
Figure 75. Cliff face at Trembleur Lake. ............................................................. 194
Figure 76. Outcropping at Trembleur Lake. ............................................................. 195
Figure 77. Map of water corridor through study area. .................................................. 198
Figure 78. Distribution of rock art sites and other archaeological sites in Tl’azt’en territory. ........................................................................................................ 203
Figure 79. Distribution of rock art sites and other archaeological sites in Nadleh Whut’en First Nations Territory. ............................................................. 204
Figure 80. Distribution of rock art sites and other archaeological sites in Takla Lake First Nations Territory. ............................................................. 205
Figure 81. Rock art images identified by First Nations people of the Stuart Lake area, circa 1890. Illustration by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ....208
Figure 82. Rock art images identified by First Nations people of the Stuart Lake area, circa 1890. Illustration by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ................................................................. 209

Figure 83. Rock art motifs at site STLK 09 Panel 4 on Stuart Lake – edited image. ........ 210

Figure 84. Detail from site STLK 09 Panel 04 on Stuart Lake, protruding “horns” and trail of paw prints indicated – edited image. ............................................. 211

Figure 85. Dakelh facial tattoos identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ................................................................. 211

Figure 86. Dakelh bodily tattoos identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ........................................................................... 212

Figure 87. Dakelh hunting communication symbols identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ........................................................................... 212

Figure 88. Examples of zoomorph elements – edited images. ................................ 216

Figure 89. Examples of land mammal elements – Trembleur Lake (1), Stuart Lake (2), and Fraser Lake (3) – edited images. ...................................................... 216

Figure 90. Examples of caribou/moose elements – Takla Lake (1), Stuart Lake (2, 3) – edited images. ..................................................................................... 218

Figure 91. Examples of semi-aquatic elements – Stuart Lake (1), Trembleur Lake (2) and Fraser Lake (3) – edited images. ...................................................... 218

Figure 92. Inverted beaver/otter motif – Stuart Lake (1) and Trembleur Lake (2) – edited images. .................................................................................. 219

Figure 93. Examples of amphibian elements – Stuart Lake (1, 3) and Takla Lake (2) – edited images. ..................................................................................... 220

Figure 94. Examples of aquatic elements – Stuart Lake (1, 3) and Fraser Lake (2) – edited images. ..................................................................................... 220

Figure 95. Rock art motif at TKLK 05 on Takla Lake, identified by Madeline French as an otter by the bank of a lake. Photograph kindly provided by the Takla Lake First Nation – edited image 1971 survey. ........................................ 221

Figure 96. Examples of ave elements – Fraser Lake (1), Takla Lake (2), Trembleur Lake (3) Stuart Lake (4-6) – edited images. ..................................................... 222

Figure 97. Examples of long tail elements – Fraser Lake (1) and Stuart Lake (2) – edited images. ..................................................................................... 223

Figure 98. Examples of chevron elements – Stuart Lake – edited images. ............ 224

Figure 99. Examples of forked elements – Stuart Lake – edited images. .............. 224

Figure 100. Examples of paw print elements – Fraser Lake (1), Takla Lake (2), and Stuart Lake (3) – edited images. ...................................................... 225

Figure 101. Examples of anthropomorph elements – edited images. .................... 226

Figure 103. Examples of human figure elements – Trembleur Lake (1) and Stuart Lake (2, 3) – edited images. ...................................................... 226
Figure 104. Horizontal human figure element with giant fish on Stuart Lake, with detail rotated 90 ° counter clockwise – edited image. .................................................. 227
Figure 105. Two human figures from sites STLK 08 and 04 respectively, showing common extended arm posture – edited images. .................................................. 228
Figure 106. Human hand elements – Trembleur Lake – edited images. .................. 228
Figure 107. Examples of short line elements – edited images. .............................. 229
Figure 108. Examples of straight line types – edited images. ............................... 231
Figure 109. Example of horizontal elements – Stuart Lake – edited image. .......... 232
Figure 110. Example of inverted stemmed triangle – edited image. ..................... 232
Figure 111. Examples of cross shape elements – edited image. ........................... 233
Figure 112. Examples of arched line elements – edited images. ........................... 234
Figure 113. Examples of round shape elements – edited images. ........................ 235
Figure 114. Frog motif with pigment patch – edited images. ............................. 237
Figure 115. Examples of pigment patches – edited images. ............................... 238
Figure 116. Possible “thumb print” – edited images. ........................................ 239
Figure 117. Examples of unidentified elements – Fraser Lake (1), Trembleur Lake (2) and Takla Lake (3) – edited images. .................................................. 240
Figure 118. Patterns of placement and two-variable elements on Stuart Lake (1, 5), Takla Lake (2, 3) and Fraser Lake (4)– edited images. .................... 246
Figure 119. Patterns of placement and three-variable elements on Stuart Lake – edited images. ................................................................. 246
Figure 120. Patterns of placement and three-variable elements on Stuart Lake – edited images. ................................................................. 247
Figure 121. Two First Nations Men Playing a Game Called “Lazy Stick,” 1912. Courtesy BC Archives Collections. .......................................................... 253
Figure 122. Canoe on Fraser Lake, 1908. Courtesy BC Archives Collections. ........ 255
Figure 123. Canoe at Takla Landing, Takla Lake, 1879. Courtesy Government of Canada Library and Archive. ................................................................. 256
Figure 124. Salmon Weir at Fraser Lake, 1909. Courtesy BC Archives Collections. ...... 258
Figure 125. Smoking Salmon Heads at Stuart Lake, 1909. Courtesy BC Archives Collections. ................................................................. 259
Figure 126. Cleaning Salmon at Stuart Lake, 1909 Courtesy BC Archives Collections. ...... 260
Figure 127. Cleaning Salmon, Stuart Lake, 1909. Courtesy BC Archives Collections. ...... 261
Figure 128. First Nations Fish Trap on Tache River, 1923. Courtesy BC Archives Collections. ................................................................. 262
Figure 129. Map of rock art locations and historic fishing villages at Stuart Lake and Trembleur Lake. ................................................................. 266
Figure 130. Map of rock art locations and fishing villages at Fraser Lake. .......... 267
Figure 131. Map of rock art locations and other archaeological sites at Takla Lake. ...... 268
Figure 132. Map of water corridors through the study area. ......................... 269
Figure 133. Cliff face with painted panel on Stuart Lake – edited image. .......... 271
Figure 134. Outcropping with painted panel at Stuart Lake, edited image. ....... 272
Figure 135. Rock outcropping at Fraser Lake with painted panel – edited image. ....... 273
Figure 136. Cliff face at Trembleur Lake with painted panels – edited image. ....... 274
Figure 137. Rock markings at STLK 09 Panel 4 – edited image. ...................... 280
Figure 138. Father Morice’s sketch of a painted panel at Stuart Lake circa 1890. Illustration by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ...........................................280

Figure 139. Photograph of rock art panel on Fraser Lake (right) – edited Image, with illustration of rock painting on Fraser Lake (left). Originally produced by Dawson n.d. 1876. Reproduced with permission from McGill University Archives. Carton 3, File 1: Diary and General Notebook 26th May to 20th October 1876. ..........................................................282

Figure 140. Illustration of message. Originally produced by Dawson in 1876. Reproduced with permission from McGill University Archives Carton 3, File 1: Diary and General Notebook 26th May to 20th October 1876. .................285

Figure 141. Dakelh hunting communication symbols identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ..........................................................286

Figure 142. Dakelh communication signs identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ..........................................................287

Figure 143. Nadleh Whut’en message tree at the University of Northern British Columbia – edited image. ..........................................................288

Figure 144. Photograph of fish symbol at Stuart Lake – edited image,(right) with illustration of fish tattoo symbol (left) produced by Morice (1893). Illustration reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ..........................................................290

Figure 145. An evolution of signs of a computer and monitor within a closed social network, originally produced by Garrod et al. 2007. .........................292

Figure 146. Dakelh hunting communication symbols identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ..........................................................303

Figure 147. Dakelh bodily tattoos identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ..........................................................304

Figure 148. Dakelh linear facial tattoos, circa 1890. Produced by Morice (1893) Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ..........................................................306

Figure 149. Dakelh facial tattoos identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679. ..........................................................307

All photographs are by the author, unless otherwise indicated.
Chapter One

ENCOUNTERING ROCK ART

To encounter rock art means to journey. Traveling to a rock art site is an opportunity to move through and experience a particular landscape and to metaphorically step back in time. Because of the often remote and isolated location of rock art sites, after arriving at the painted panels it is possible to feel just for a moment, that time has paused and it is still the past. This is the ability places have to affect experience. Whereas most artifacts made and used by past peoples are removed from view until they are excavated and retrieved, rock art often remains visible, in place and persistent through time; it is a vivid signpost of past human presence that lingers into the present day. By approaching a site and climbing up to the panels, the past journeys of the painters who came to this same location are recreated. By standing in front of the motifs, with the same footing as the painters, this past human presence at the site is temporarily revived.

It is this permanency of place that is the strength of rock art as a class of archaeological material (cf. Chippindale and Nash 2004b). Whereas the distribution of other material culture, such as stone tools or pottery fragments, may be the result of displacement processes over time, the location of rock art is the direct result of human choice and action – and this has profound implications for archaeology. This primary context provides an important element of rock art that can be investigated, in addition to painted and carved markings at a site.¹

Investigating the location of rock art provides opportunities to gain insight into: the relationship between places chosen for rock markings and quotidian activities in the past (Shock 2007; Quinlan 2007b); the nature of landscape perception by past peoples (Taçon and Ouzman 2004); the visual presence of the marking within society (Robinson 2010; Quinlan and Woody 2003); the relationship between people and places (Jones, A. 2006); the social contexts of rock art production and use (Robinson 2010); the decision making processes of rock art placement (Lenssen-Erz 2004); and

¹ The term “rock art” is used in this thesis to indicate painted (pictograph) and carved (petroglyph) images adorned in-situ onto rock surfaces; the term “rock markings” or simply “markings” are also used to indicate the same.
the audiences who may have viewed and used the markings (Bradley 2000; Cannon and Ricks 2007) – all of which indicate it is difficult to understand rock art in meaningful ways without considering its landscape context (cf. David 2002).

Just as the location of rock art is a direct reflection of choices made by people, the motifs are also intentional. But, what is to be made of this deliberateness of rock art? How best is it studied? The purposeful nature of rock art has been approached as being indicative of locations and concepts that were significant in past societies; where its production effectively shaped and marked the landscape, encoding it with information and meaning (cf. David 2002; David and Wilson 2002; Chippindale and Nash 2002b), as well as, “ordering the landscape and orientating the subject” (Jones, A. 2006:222). It has been argued that contained within this information are statements about ancient ways of doing and things experienced by past peoples (cf. Hays-Gilpin 2004; Loendorf et al. 2005). It is these considerations of rock art that affect and shape the path of this doctoral research that examines the rock art of northern central British Columbia, Canada through a combination of archaeological and anthropological methods.

For tens of thousands of years people have marked and encoded landscapes with painted and carved symbols (Clottes 2002:32, 2008:9; Fortea 1999:6-27; Pettit and Bahn 2003:136). This is one of the many techniques people use to socialize and shape the landscapes in which they live. Rock art is found throughout the world, occurring on almost every inhabited continent and in all types of terrain. Since its rediscovery by researchers and scholars, particularly in the Western world, rock art has played an important role in claims concerning the beginnings of human creativity, thereby captivating the imagination and attention of professionals, amateur enthusiasts and the general public alike (cf. Clottes 2002; Lewis-Williams 2002).

Many of the initial recorded observations of rock art were serendipitous, essentially accidental in nature. For example, the detection of the cave at Altamira, Spain by a dog and her / his owner in 1868; the Palaeolithic paintings of which went undetected for the next eleven years until a young girl spotted painted bison on the ceiling of the cave (Clottes 2002:2). Most of the earliest recorded sightings of rock markings were reported by missionaries, scholars and explorers, among others, as they
observed the world around them and went about their business that was not rock art focused or related.

It was not until the mid 19th and early 20th centuries that conscious and directed efforts to locate and record rock markings were exerted. For more than a century now, researchers throughout the world have endeavoured to systematically locate, record and comprehend rock art. This effort has resulted in a profusion of approaches, interpretations and theories concerning the imagery, origins and meanings of rock markings (Chippindale and Taçon 1998; Diaz-Granados and Duncan 2004; Lenssen-Erz and Linstadter 2009; Lewis-Williams 2002; Nash and Chippindale 2002). This abundance of available method and theory seemingly indicate that researchers have uncomplicated choices regarding research design when embarking on new rock art projects, but not all established approaches and theories are transferrable: research designs need to be carefully constructed and take into account relevant environmental, temporal and cultural particulars, as well as, the characteristics of the rock art itself.

A review of existing rock art studies, conducted in preparation for this research, indicates that there is as much variation in the approaches taken to the study of rock art, as there is in the markings themselves. This diversity is not limited to a few continents or a selection of particular countries: it is a world-wide reality. The article entitled, “Seven Ways of Seeing Rock Art” (Beaton 1994) provides a glimpse into a variety of approaches to rock art research that span North America, the South Pacific and Australia. This work also provides insight into the diversity of rock art motifs in these parts of the world. Similarly, the collection of innovative research approaches detailed in The Figured Landscapes of Rock-Art (Chippindale and Nash 2004b) and The Rock-Art of Eastern North America (Diaz-Granados and Duncan 2004) reveal the heterogeneous nature of rock art imagery, as well as, the multitude of research interests, motives and results associated with world-wide studies of rock art. All of which begs the question, what research methods are best suited to the investigation of rock art in the study area?
Understanding the Issue at Hand

Despite the popularity of rock art and its enduring presence over time and space, a significant difference exists throughout the world in the way that academic and professional attention is paid to rock art. In Europe, France in particular, rock art has occupied a key position within mainstream archaeology (Whitley and Clottes 2005: 162-165). The cave art of Upper Palaeolithic Europe for example, has played an important role in archaeological debates regarding human behaviour and cognition since the time of its modern re-discovery (Clottes 2001; Clottes and Lewis-Williams 1996; Lewis-Williams 2002); and yet rock art throughout North America has generally occupied a marginal position within the discipline of archaeology (Clelowl 1981:79; Keyser and Klassen 2001: ix; Schaafsma 1985:237-268; Ouzman and Wadley 1997:386; Quinlan 2007a: 1-8; Whitley and Dorn 1987:150; Whitley and Clottes 2007: 161-167; Whitley and Loendorf 1994:xi-xii).

Figure 1. Map of Canada with the province of British Columbia indicated.

Rock art research in British Columbia, Canada (Figure 1) demonstrates this typical North American characteristic by its continued loose tie to archaeology and its peripheral position within the discipline. The focus of mainstream archaeology in
British Columbia and elsewhere in North America has typically avoided incorporating rock art as a source of data into studies of the human past; essentially rendering it invisible. Consequently, the research of rock art in British Columbia typically occurs outside of mainstream archaeology.

The character of British Columbia rock art research demonstrates a propensity to approach and portray pictographs and petroglyphs as displaced artifacts, consequently isolating them from the surrounding topography, from other rock art sites, as well as, from additional sources of contextual or meaningful data (see Chapter Two). These tendencies fall short of recognizing the primary context and purposeful deposition of rock art that is its core strength as a class of archaeological material. Furthermore, these inclinations that fail to employ additional lines of relevant evidence miss opportunities to corroborate findings and to further the results of research. Ultimately, when rock art research is approached in this disarticulated manner, the human component of rock art is absent and therefore, so too is its meaning.

Figure 2. Map of British Columbia indicating the approximate northern boundary of the province in red and the study area in blue.


**Research Focus and Goals**

In this thesis, a methodological and theoretical approach to research that addresses these concerns regarding the marginality of British Columbia rock art is presented. Through a case study approach, a defined territorial area is surveyed for known and unknown rock art distributions. This case study area spans three First Nations traditional territories in northern central British Columbia, Canada (Figure 2). These case studies examine the waterscape context and iconography of pictographs occurring along the shores of four northern lakes. A range of research methods are employed that strive to combine and incorporate diverse types of data in order to gain insight into the markings in ways that are meaningful. The overarching goals of this research are to integrate rock art with landscape and with people, to gain an understanding of rock art as social practice, to comprehend its significance within the cultural landscape of the study area and to bring a synthesized scholarship of rock art to a previously understudied landscape (Figure 3).

The research interests in this thesis centre on the location and the imagery of the rock art, as well as, the methodological processes of rock art research. In particular, these interests involve examining the role location plays in the social context of the rock art, investigating how the rock art motifs may have been used in past First Nations societies and engaging in informed (primarily ethnographic) and formal (primarily archaeological) approaches to rock art research.

Like many other regions in British Columbia, the rock art sites previously recorded in the study area occur at or near water sources (cf. Corner 1968; Dawson 1876; Mitchell 2006; Morice 1892-93; Richards 1978). The overarching researching question in this thesis is directly related to this propensity for the use of water locales, *what is the social significance of the placement and imagery of waterscape rock markings?* More specifically, *how are the markings situated within the larger cultural and natural landscape? What is the role of the waterscape for the production and use of the markings? What is the relationship between the location of the rock art and the audience(s) that may have viewed and used the markings?*

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2 First Nations is a term referring to the Aboriginal peoples of Canada. Statistics Canada reports First Nations peoples account for 4.3% of the country’s population in 2011. Each Nation has its own distinct culture, language, history and pre-history.
Whereas a few rock art sites in the study area have been previously identified, conducting a systematic survey of these known sites and locating previously unidentified rock art is an important goal in this research. In addition to the locational context of the rock art, the collective morphology of the markings is of interest, as is a consideration of the variability and consistency within the iconography of the rock art. Research questions addressing the architecture of the markings include, could the markings have effectively carried information discernable to the audience(s)? More specifically, are similar markings found throughout the study region? How are the markings similar and how are they different across the study area?

Figure 3. The landscape of northern central British Columbia.

The integration of informed and formal approaches is an important aspect of this research. Informed approaches encompass interviews with First Nations community members residing within the study area and a comprehensive review of ethno-historical literature generated from First Nations knowledge during the late 19th century (discussed in Chapter Five and Chapter Six). The ethnographic component of the informed approaches represents the anthropological dimension of this research that is integrated with archaeology. The archaeological component in this research is represented by the field methods employed that generate data gleaned directly from the rock art sites, the surrounding landscape and the rock art motifs. Here a multi-
spatial framework that incorporates the various scales of rock art, including motif, panel, site, lake and territory is utilized.

It is through the integration of informed and formal methods and the combination of anthropology and archaeology that this research endeavours to reveal the insight into the human past that can be learned through an investigation of rock art, thereby investigating the role rock art could play in the discipline of archaeology in British Columbia.

The Study Area

This northern study area encompasses approximately 12,000 square kilometres in size and it is located within the geographic region of the Nechako Plateau; the northernmost region of the Interior Plateau in British Columbia, Canada. The study area encompasses the entirety of the traditional territories of the Tl’azt’en and Nadleh Whut’en First Nations (Figure 4) and a portion of the Takla Lake First Nations territory (Figure 5). Nadleh Whut’en territory is located directly south of Tl’azt’en land and each territory comprises several thousand square kilometres. In addition to these traditional territories, a series of six pictographs sites at Takla Lake, in the Takla Lake First Nations traditional territory are also included in this study (Figure 5). These sites on Takla Lake were destroyed in 1971 to make way for the construction of a northern route for the now defunct Pacific Great Eastern Railway (cf. McMurdo, J. 1972).

The Nechako Plateau is Carrier / Sekani territory. Today the Carrier peoples of this region refer to themselves as Dakelh: “we go on water” – a terms that signifies the cultural importance of water travel. Although there are important distinctions between Dakelh and Sekani time-honoured cultures, most notably differences in terms of social stratification and traditional landholding patterns (cf. Brown 2002; Duff 1951; Goldman 1953; Jenness 1937, 1943; Morice 1892-93); similarities also exist. In particular, the seasonal movement of small extended families for the harvesting of plant, animal and fish resources as the principal livelihood pattern that is archaeologically and historically known to have been integral to both Dakelh and Sekani cultures during the historic period and prior (cf. Jenness 1937, 1943; Morice 1892-93).
The Takla Lake First Nation is known in Dakelh as *Tatl’aht’een*, or “headwaters people.” There are four clans within the Nation - Bear/Wolf, Frog, Beaver and Caribou. Three languages are spoken by the Nation’s members – Dakelh, Sekani and Gitskan (Tobin et al. 2010: 51). The Takla Lake Nation is an amalgamation of the North Takla Band and the Fort Connelly Band that occurred in 1959. The primary community is Takla Landing at the north end of Takla Lake, where approximately 250 residents or one third of the overall population live (Takla Lake First Nation n.d.). Takla Landing was until the 1950s only accessible by boat or float plane, today vehicle access is possible via forestry roads. The Takla Lake Nation manages 17 reserves within the 27,250 square kilometres of their territory (Takla Lake First Nation n.d.).

The Nadleh Whut’en are “the people who live where the salmon return.” Nadleh Whut’en manages seven reserve lands inside their 5,000 square kilometre territory. The primary reserve, being the community of Nadleh on Fraser Lake, is home to many of the Nation’s 500 members (Nadleh Whut’en First Nation n.d.). There are five clans of the Nadleh Whut’en – Frog, Bear, Caribou, Owl/Grouse and Beaver. These clans, like those of the Takla Lake and Tl’azt’en Nations have ties and obligations that reach beyond the reserve lands and the overall traditional territory.

The Tl’azt’en First Nation are “the people by the edge of the bay.” Of the approximate 1300 members, roughly 800 live in the main communities of Tache, Binche, Dzitl’aínli and K’uzche. There are four clans of the Tl’azt’en Nation – Caribou, Wolf, Beaver and Frog. The main administration offices are located at Tache, as are the elementary school, daycare, health office and police detachment (Tl’azt’en First Nation n.d.). Tl’azt’en traditional territory is approximately the same size as Nadleh Whut’en territory of 5,000 square kilometres.
Figure 4. Map of study area indicating approximate locations of Tl’azt’en and Nadleh Whut’en traditional territories and communities.
The Tl’azt’en Nation, like the Nadleh Whut’en Nation and the Takla Lake Nation is proactive in preserving their cultural heritage, attentive in developing diverse economic strategies and engaged in various ongoing negotiations with industry and the provincial and federal governments. Additionally, these Nations share an alliance with one another and several other First Nations of the province through membership in the Carrier – Sekani Tribal Council; which provides political and technical support to its member nations and advocates for First Nations interests in a variety of contemporary issues (Carrier-Sekani Tribal Council n.d.)

The topography and drainage channels of the Nechako Plateau initially formed in the Pleistocene and early Holocene epochs during the deglaciation of the Cordilleran ice sheet, approximately 14,000 years ago (Carlson and Dalla Bona 1996: 3; Holland
1964; Fladmark 1982, 1983). Today this region is dominated by the Sub-boreal Spruce biogeoclimatic zone, the Mountain Hemlock zone and the Englemann Spruce-Subalpine Fir zone (Cannings and Cannings 1996:86, 88). The climate of the study area is typified by long cold winters, with up to eight months of snow and ice, and short, relatively warm summers for the remaining four months of the year. Although much of the region today is un-developed and un-populated, an infrastructure of highways and gravel roads exists, enabling vehicle access through much of the area (Figure 6).

Figure 6. On the way to Takla Lake, British Columbia.

The diversity of the environment in this region with its dense forests, mountain ranges and abundance of rivers, lakes and streams supports a wealth of flora and fauna species. The region hosts a variety of shrubs, flowers, mosses, lichens, berries, mushrooms and trees including spruce and pine. Wildlife species include: large mammals such as, black bear, grizzly bear, deer and moose; smaller sized animals such as wolverine, otter, beaver, rabbit, porcupine and muskrat; a variety of fish species including rainbow trout, steelhead, salmon and sturgeon; and an extensive array of bird species, including birds of prey such as bald eagles, hawks and owls.
Previous Research

Archaeological interest in the region began in the late 1960s with a survey of Takla Lake by canoe (Elliot 1968 in King 2010:9) and the work of Corner (1968) who documented rock paintings in the interior of the province. In the following decade, several archaeological surveys were conducted in the region to assess the potential impact of forestry and railway development (King 2010:9). Archaeological efforts in the 1980s and early 1990s were sporadic and somewhat slow to progress (Canuel 2010:16; King 2010:9-10). By the end of the 1990s, cultural resource management interests resulted in an amalgamation of archaeological information throughout the region and beyond. It was during this time that known sites were catalogued (Brolly and Dewhurst 1995 in King 2010:10), summaries of previous archaeological investigations were produced (Carlson and Mitchell 1997 in King 2010:10) and predictive models for the Nechako Plateau and the larger surrounding Fort St. James Forest District were formulated (Canuel 1999 in King 2010:10).

The majority of the archaeological work conducted throughout the Nechako Plateau has been motivated primarily by forestry, hydro-electric, road and railway development. Through these efforts, a substantial number of archaeological sites have been located and recorded. These sites document 4,000 years of human presence in this northern landscape (King 2009:10). The material culture of these sites include stone tools, cache pits, house pits, hearths, culturally modified trees, historic cabins, historic fishing stations and human burials. Extensive trail systems are also known to network throughout the region (King 2010:16; British Columbia Archaeology Branch n.d.). This conventional terrestrial focus of archaeological inquiry is re-oriented in this doctoral research to a waterscape focus that includes an archaeological strategy more conducive to traditional ways of life in the study area, rather than an arbitrary approach created by historical (Western) infrastructural development.

Although an academic presence regarding the rock art of the study area is largely absent, there has been research and recording efforts conducted in this region (see Chapter Two for a detailed discussion). Two sites on Fraser Lake were recorded by George Dawson in 1876 (Cole and Lockner 1989: 264). Dawson’s work merely recorded the presence of the markings as his research interests were geologically focused; these sites are discussed in greater detail in the following chapter and in Chapter Seven. A
few years later, Father Morice (1892-93) published findings regarding a painted panel on Stuart Lake. Even though Morice was not a practicing anthropologist his research on the rock paintings and the many other aspects of Dakelh culture that he investigated during his tenure in northern British Columbia, are detailed and insightful (cf. Morice 1889, 1890, 1892-93, 1893, 1905, 1907). These early ethno-historic publications by Morice play an informative role in this research.

Several decades later, John Corner (1968) documented more than 100 rock art sites throughout the province of British Columbia, six of which are located in the study area. In addition to the sites recorded by Dawson and the panel at Stuart Lake investigated by Morice, Corner (1968:114-118) recognized an additional site at Fraser Lake and two additional sites at Stuart Lake (1968:5). Thomas Richards (1978) conducted a survey of known rock art sites on Stuart Lake toward the end of the 1970s, the majority of which had previously been recorded by Corner. Richards’ work draws from an extensive study of coastal rock art styles conducted a few years earlier by Lundy (1974).

In 2006, the author conducted an investigation into the pictographs at Stuart Lake as part of a Master of Arts degree program through the University of Northern British Columbia (UNBC) (Mitchell 2006a). The central challenge in this work was to understand the rock markings in terms of the social processes associated with its production; and it embraced the contemporary meanings that continue to be embedded in the landscape for the local First Nations people.

This doctoral research builds on the insights developed during this post-graduate study at UNBC and expands to include a more complex theoretical framework, a much larger study area, more in-depth research questions, a structured methodological approach incorporating informed and formal methods, and detailed analyses in an attempt to create an improved understanding and more complete interpretations of the rock art and of the landscape.

This post-graduate study at UNBC was the impetus for this doctoral research. The completion of this master’s degree research resulted in insights into the social context of the rock art that had not previously been identified in this particular landscape, but questions lingered. What about the rock art beyond Stuart Lake? How did it compare? Where was it located? How did it relate to the surrounding landscape?
and to other archaeology sites? Conducting further research and pursuing a doctoral degree was the opportunity to expand and build on this initial study and continue to contribute to the knowledge of rock art in northern central British Columbia.

Figure 7. Shoreline rock art site at Trembleur Lake, British Columbia.

Rock art research in northern British Columbia is an opportunity for a journey through a spectacular landscape of deep forests and lakeshore mountains (Figure 7). It is an occasion to be immersed in remote and difficult-to-reach places and to share those places with the bears, moose and eagles that live there. It is an opportunity to contemplate the past and to be reminded of the great time depth of human presence in the land. It is an opportunity to be in awe of how quiet and still the world can be, how cold and dark it is at night, how hot it is in the day. It is a chance for exploration and discovery, for wilderness and photography, and for the intellectual endeavour that ultimately is rock art archaeology.

Thesis Organization

This chapter outlines the framework of the primary research questions of this thesis arising from some of the most pertinent issues to rock art research in British Columbia. It acknowledges the key aims and objectives of this thesis, as well as, identifies and introduces the study area. In Chapter Two, the development of rock art research in British Columbia is reviewed and critiqued. This second chapter provides a detailed discussion of the issues concerning British Columbia rock art research that were identified at the beginning of this introductory chapter. Chapter Three is a
discussion of the theoretical and methodological frameworks that are instrumental to
this research. Included in this discussion are issues of marginality as it pertains to rock
art, First Nations traditional knowledge and northern landscapes; the idea of
alternative perspectives that arise from informed and formal approaches; and the
theoretical themes of imagery and location, audience, movement and communication
that inform the methods, analysis and interpretations in this research.

In Chapter Four the research methods are discussed and details of the
approaches used in the practice of this rock art study are provided. This fourth chapter
includes the particulars of pre-fieldwork planning and research design, including the
sampling strategies employed for the archaeological survey and formal interview
process. The stages of the fieldwork are explained, including the process used to
conduct semi-structured interviews and to locate and document the rock art sites. The
analysis process is also discussed in this chapter. In Chapter Five, the data generated
through the ethnographic interviews, the archival research and the archaeological
surveys are presented and discussed. This chapter is organized geographically where
themes emerging from within the data are highlighted throughout.

Chapter Six is the analysis of the ethnographic and archaeological data
generated during the fieldwork. In this sixth chapter, the significance of the rock art
imagery and its location are investigated within the themes of movement and
communication. In Chapter Seven these themes of movement and communication are
carried further and interpretations stemming from the analysis are provided. The final
chapter concludes the study and reflects on the process of research as it has been
presented in this thesis.
Chapter Two

ROCK ART APPROACHES IN BRITISH COLUMBIA

Research efforts into the host of pictograph and petroglyph sites in British Columbia have been exerted since the mid 19th century. It is the development of these research efforts that are reviewed and critiqued in this chapter. Various theories and methodological approaches to rock art research have developed globally. Whereas theoretical models such as hunting-magic, art-for-art’s-sake and shamanism (among others) have been employed in the study of rock markings elsewhere in the world, these models have not played significant roles in the development of British Columbia rock art research. Approaches to British Columbia rock art have largely been void of both analysis and theory. Additionally, insufficient attention has been paid to the social contexts of rock art in British Columbia studies.

A primarily chronological structure is employed in this review of approaches to rock art in British Columbia and where relevant, reference is made to works conducted elsewhere in Canada and the United States of America. It is necessary to review the background of rock art research in British Columbia before addressing the research questions in this thesis. This historical perspective of rock art research is used to underpin the theoretical considerations and methodological developments in this thesis.

Rock Art as Ethnography

Ethnography has played a significant role in the development of approaches to rock art research in various parts of the world (cf. David 2004; Keyser et al. 2006; Loendorf 2004). In British Columbia, it is within detailed 19th century ethnographies that rock art first appears. A prime example of this incorporation of rock art into ethnography is the Jesup North Pacific Expedition (the Expedition) that was conducted between 1897 and 1902. The Expedition was a major anthropological undertaking on the northwest coast of Canada, Alaska and Siberia. This project was one of the first formal inquiries into First Nations culture conducted in the province of British Columbia and it resulted in a substantial number of important ethnographic and archaeological publications (cf. Boas 1898a, 1898b, 1909; Boas and Hunt 1905; Farrand
1900, 1902; Smith 1900, 1903, 1907; Swanton 1905, 1908; Teit 1896, 1906, 1909, 1912, 1930). Within this project, rock art was positioned firmly on the ethnography side-of-the-house, rather than as part of the archaeological investigations that were conducted.

Harlan Smith, archaeologist for the Expedition, documented details of material culture from areas within the interior and along the coast of British Columbia. Smith’s work was primarily focused on locating and recording habitation sites (Smith, H. 1899), burials, (Smith, H. 1899), shell middens (Smith, H. 1903; 1909) and cairns (Smith and Fowke 1901), which allowed little room for rock art beyond mere mention (Smith 1899:155; 1900: 401, 405). This initial tie to ethnography and the corresponding disconnection to archaeology is one of the prime characteristics of rock art research in British Columbia and it is one of the central concerns in this doctoral research.

Although no extensive rock art surveys were conducted as part of the archaeological components of the Expedition, important information regarding rock markings was documented within its ethnographic literature (cf. Teit and Boas 1900). James Teit, ethnographer for the Expedition, investigated several First Nations cultures in British Columbia and it is within this work that he explored rock art. Teit (Teit and Boas 1900: 321, 339) reported a direct connection between seclusion practices of pubescent girls and boys and the social production and use of rock art within Thompson First Nation society in the southern part of the province. He reported a less frequent connection between rock art production and the work of spirits and the commemoration of important events (Teit and Boas 1900: 321, 339). The cultural studies associated with the Expedition, and others produced in later years by Teit (1906, 1909, 1912), were primarily descriptive accounts of culture, focused on recording “ancient ways of doing.”

Prior to the Expedition, Teit (1896) examined a painted boulder at Spences Bridge, in southern British Columbia. Here, Teit (1896:227) speaks with Waxtko, an elder in the local First Nations community, who speaks about her own experiences painting similar images and identifies a connection between girls’ purification ceremonies and the practice of painting. Despite the information and personal insight Waxtko provides, Teit disregards the social aspects of the rock associated with its production and use and focuses exclusively on describing and identifying the images
painted onto the boulder. Here, as in many other early studies, the First Nations traditional knowledge “collected” during rock art research is imparted essentially verbatim without any further consideration by the researcher.

These early works, and many others to come in the following decades, tended to be non-theoretical and non-analytical; often focused primarily on site and motif recording. Aside from the Expedition, other individuals documented a small number of rock art sites in British Columbia during this early period. For example, a petroglyph on Gabriola Island, on the southern coast of British Columbia, was recorded in 1792 by Jose Cardero (Cardero 1792). In 1876, George Dawson, geologist for the Geological Survey of Canada visited Fraser Lake, British Columbia and serendipitously recorded two pictograph sites on the northern shore (Cole and Lockner 1889: 264).

Based on First Nations information imparted to him, Dawson reports the sites as having been created in the distant past and to be of limited significance to the local peoples (Cole and Lockner 1989:264). This topic of the contemporary significance of rock art in British Columbia is debated throughout the literature. Dawson’s record of these painted panels at Fraser Lake is the earliest documentation of rock art in the study area of this doctoral research and it illustrates the way in which rock art was often recorded by individuals with interests other than rock art, who fortuitously encountered paintings and carvings.

Despite the casual recordings Dawson made, the documentation of his observations and spontaneous encounters with local people are anthropologically insightful regarding the cultures in this area. In particular, it is the information he collects about ways in which people, at that time, communicated with symbols drawn with charcoal, combined with materials such as bark and grass that were strategically placed in the landscape (Cole and Lockner 1989:264). Information such as this is potentially relevant to the investigation of rock art because it too contains hand-drawn symbols located at certain places in the landscape. Details regarding these forms of communication play an important role in this thesis and they are discussed in greater detail in Chapter Seven.

In addition to these sites on Fraser Lake, another rock art site in the study area was investigated during this early period by Father Adrian Morice, an oblate missionary posted for several years in northern British Columbia at Stuart Lake. Morice
was one of the first non-professional anthropologists who expressed a scholarly interest in First Nations culture, rock art included. Morice produced several detailed accounts of the Western Dene peoples of the interior of British Columbia (cf. Morice 1889, 1892-93, 1893, 1905). Morice relied on First Nations knowledge as his primary way of investigating rock paintings in this northern part of the province. These early anthropological writings authored by Morice bear similarity to the work conducted during the Expedition, where monumental amounts of cultural information are compiled, and Morice’s work is used as significant points of reference in this thesis. Morice’s contributions to the ethnography of Dakelh peoples is undeniable, and most subsequent studies in this northern region—ethnographic and archaeological—build on his work.

Morice (1893: 207-208) engages in an analytical process where he applies a pre-existing, evolutionary scheme to Dene graphic imagery. He hypothesizes that just prior to the turn of the 20th century, the Dene peoples were “already in the second [stage of graphic culture] while retaining lingering reminiscences of the first [stage]” (Morice 1893:206). The evolutionary scheme Morice used was based on an article published in Little’s Living Age, 1890. This analytical effort makes Morice’s work unique for this time period.

Based on the examination of primarily one site on Stuart Lake, Morice (1893:207) concludes that rock art imagery was a combination of “mere pictures,” associated with the first stage of development and conventionalized forms associated with the more “advanced” stages of graphic culture. Morice (1893:206) suggests that it was primarily in the graphic signs used by hunting parties out on the land and in tattoo images that the Dene peoples had retained the least amount of the first stage of this scheme. These tattoo images and hunting signs are important inroads to understanding the rock art imagery investigated in this thesis and they are discussed in greater detail in Chapter Seven.

Morice’s (1893: 206) conclusions endeavour to provide a chronological framework and imply that rock art imagery was perhaps an older tradition than these other forms of graphic symbols and that the practice of rock marking was already

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3 Dene refers to the Athapaskan speaking Native people of northwest Canada and parts of Alaska. By definition, Dakelh peoples are Dene.
coming to an end by this time. His analysis of graphic imagery used in the production of rock markings, tattoos and symbols used by hunters is one of the first attempts to generate an understanding of the development of rock art imagery and the use of symbols by First Nations peoples in British Columbia, through the examination of a variety of media. Morice’s work on Stuart Lake and Dawson’s recording efforts on nearby Fraser Lake mark two of the few rock art inquiries that have been conducted in the study area associated with this thesis.

In 1893, around the same time Morice was examining Dene graphic symbols at Stuart Lake, Garrick Mallery, ethnologist for the American Bureau of Ethnology, explored Native symbols en-mass (Mallery 1886, 1893). Mallery developed a classificatory approach to the study of Native graphic symbols expressed in a variety of media types, including markings on stone, for areas throughout North America – including both Canada and the United States. Although his attention to Canadian rock art is meagre (Mallery 1893: 37-45) and he does not develop a theory regarding rock art traditions beyond listing several possible purposes for rock markings (Mallery 1893: 770-776), he does however attempt to develop a methodological framework from which to study North American rock art.

According to Mallery, effective symbolic interpretation is dependant on insight into the nature of the motifs being studied. Rock art imagery cannot be understood by observation alone because meaning and interpretation are culturally specific and non-transferable across regions (Mallery 1893:768). Mallery identifies the need for contemporary Native knowledge and interpretation as being essential parts of rock art research, as well as, the critical use of such information (Mallery 1893:768). Mallery aptly identifies the importance of ethnography and ethnographic methods in the study of rock art and his work is important because he openly recognizes this significance. This idea that cultural knowledge is important and specific to certain regions plays a significant role in the development of the methods utilized in this thesis.

By the end of the 19th century, understanding of British Columbia rock art consisted of descriptions of a handful of sites, along with First Nations knowledge regarding the markings for some of those sites (Morice 1892-93, 1893; Mallery 1893; Teit 1896). Description of the rock art was largely in the form of illustrations contained within ethnographic works while the mention of rock art in archaeological reports was
scant at best (Smith 1899, 1900). The need for an understanding of the cultural meaning of the images was illustrated within the ethnographic literature (Morice 1892-93, 1893; Teit 1896) and at times this need was openly identified as a necessary part of rock art research methods (Mallery 1893). The ways in which ethnographic methods, such as the inclusion and critical use of oral testimony, inform the study of rock art is a primary epistemological concern in this thesis.

At this time, the most common focus of research was placed on describing the imagery of rock art, supplemented by First Nations accounts for the markings. This exclusivity resulted in a lack of significant understanding and even recognition of other important characteristics of the rock art, such as its primary context, its continued meaning through time and its relationship to the surrounding natural landscape. It is these aspects beyond the image, the ones that reside in the landscape immediate to the rock art that this research endeavours to identify and investigate.

At this time in North America, it was assumed that very little cultural evolution had occurred prior to the arrival of Europeans to the New World. The discipline of anthropology, which included archaeology and ethnology, was geared primarily toward preserving records of Indigenous cultures (the First Nations peoples of Canada included) that were believed to be in the process of vanishing (Hinsley 1981:20). Rock art was considered one of many facets of culture that were documented in detail during this time period.

The onset of a new century brought with it a continued interest in rock art. For the most part, researchers in the coming decades upheld the research interests and approaches developed in previous years. The greatest attention was directed, in many cases, toward descriptive accounts of rock art imagery, where analysis and theorizing continued to play limited roles.

**Rock Art as Archaeology**

Harlan Smith continued to be active within British Columbia archaeology into the 20th century. During this time he conducted several rock art surveys on the coast and in the interior of the province (Smith 1924, 1927a, 1927b, 1936). While not directly concerned with rock art as an area of study, Smith produced a number of rock art inventories, but conducted very little analysis, and at times was openly speculative
with regard to interpretation (cf. Smith 1909:599, 1924:533, 1927a:613, 1936:310). The purpose of archaeological work with regard to rock art, at this time, was not to explore aspects of function or production, but rather, the goal was to add to the ever growing inventory of known and speculated locations of rock art sites throughout the province (cf. Smith 1927a, 1927b).

Smith investigated a pictograph panel along the Lower Skeena River, near the west coast of the province, in a more in-depth manner in 1927 (Smith 1927b). This site, unfamiliar at the time, is the now well-known portrait of Chief Legaik painted in the 1880s by Lequate, a Tsimpshian artist (Lundy 1974:297) (Figure 8). Based on the depiction of coppers within the painting, Smith correctly postulates a wealth-based meaning for the pictograph (Smith 1927a:611) while simultaneously speculating that the image of “a face resembling a human being’s... may possibly be that of a mythical character” (Smith 1927a:612). Despite his efforts to consult local peoples regarding the painting, he produces a primarily descriptive account of the rock art and refrains from analysis. It is this descriptive tendency in rock art studies that pervades the literature for years to come and this methodological approach has potentially profound affects on the investigation and corresponding interpretations of rock art.

This disconnection between rock art and archaeology is made evident by Leechamn (1952: 267). In 1952, he explored a petroglyph site on Vancouver Island and
hypothesized that although it was commonly thought that such markings were the work of initiates or indicators of good fishing places, “most archaeologists are agreed that many of them are mere doodling, done for the fun of the thing in idle moments.” Leechman’s (1952:267) hypothesis hinges on a single personal encounter with a First Nations man who created a petroglyph in Leechman’s (1952:267) company while both men waited for the tide to change and it is a glimpse of the attitude toward rock art that has perhaps contributed to its marginalization as a class of archaeological material.

During this era, archaeological interest in rock art was primarily limited to recording sites and describing motifs, while some minor hypotheses regarding chronology were being advanced (cf. Smith 1924, 1927a, 1927b, 1936; Leechman 1952; Gjessing 1952). The tendency to focus on single sites was gradually giving way to include broader geographic studies and First Nations knowledge continued to play an important role in rock art studies, as it had since the days of Morice (1893) and Teit (Teit and Boas 1900). But none of these studies touched on location as a central concern in rock art research, nor did these studies incorporate a critical use of First Nations oral testimony.

**Rock Art Research Emerging**

By the 1960s, “pictograph fever,” as Selwyn Dewdney put it, was well on its way to becoming an epidemic (Dewdney 1979a:2). Texts from across Canada compounded and rock art, as an avenue of inquiry independent of larger more-encompassing culture studies, was beginning to transform into its own discipline. Rock art studies that emerged after the 1960s were typically focused on understanding the technologies associated with creating markings, establishing relative and direct dating chronologies, recognizing motif repetition between and among sites and developing rigorous scientific recording methods (cf. Bednarik 2001; Rowe 2001).

To a certain degree, approaches to rock art research in British Columbia had for some time exhibited processual qualities in that researchers focused on the quantitative aspects of rock art and refrained from delving into social aspects of meaning and human agency. Processual concerns for explaining patterns within rock art data were relatively slow to impact rock art studies in British Columbia.
Researchers at this time were essentially still amalgamating information about rock art sites and had only begun to think about patterns. The move away from site specific studies toward broader geographic areas that began in the 1940s and 1950s was a step toward detecting patterns within the province’s rock art assemblages, as were the stylistic studies of the 1970s.

Reports and articles from this era continued to provide details about rock art motifs in the form of illustrations, measurements and possible interpretations. Stylistic frequencies were developed for various parts of the country (cf. Grant 1967) and rock art was studied and organized according to geographic location and First Nations affiliation (cf. Meade 1971).

In 1968, John Corner engaged in a spatially ambitious account of rock paintings throughout the interior of British Columbia and included hand-drawn illustrations, detailed descriptions and minor attempts at interpretation for more than 100 pictograph sites – complete with explicit directions regarding location and site access. Within this publication, Corner (1968: 116-118) includes three sites on Stuart Lake and three sites on Fraser Lake, all of which are located within the study area of this thesis. Corner (1968:117) includes interpretations for one particular panel on Stuart Lake – the same one recorded by Morice in 1893 – that had been provided by Dakelh people in 1929. At that time, the local people identified the markings as the record of dreams. This is interesting because Morice’s (1893:207) account of this same panel decades earlier indicates the markings were images of personal totems that had a telepathic connection with the painter. Given the fact that totem images were acquired through dreams, the local people in 1929 were essentially upholding the same traditional knowledge imparted to Morice decades earlier.

In general, Corner (1968:5) hypothesizes the province’s rock markings as being associated with the location of travel routes and as part of seclusion practices. Corner observes very little European influence in the imagery of the markings, which perhaps supports the notion of a pre-contact time period of production. It is links such as this, between the rock art and social practices and in particular the connections between the placement of rock markings and travel routes that are of interest in this thesis. The adoption of an expansive study area and the consideration of multiple rock art sites is also a fundamentally important aspect in this doctoral research, because of the
identification of patterns and trends that are possible when rock art is approached in this manner.

In 1969, the Canadian Rock Art Research Associates (CRARA) was formed. At the founding conference, held at Lakehead University in Ontario, the organization identified its aims as the protection and preservation of rock art sites, the continuation of research and the need to inform the public of “the wealth of rock art expressions in Canada” (Dewdney 1979a:3). The original membership consisted of archaeologists, ethnologists, art historians, artists, natural scientists and researchers (Dewdney 1979a:3). The diverse spectrum of the membership illustrated the broad appeal and interest rock art held for many professionals, as it did for the amateur rock art enthusiasts that joined in later years.

Shortly after the inception of CRARA in 1969, an American (USA) counterpart was established. The American Rock Art Research Association (ARARA) founded its 1974 constitution in a manner similar to that of CRARA (Wellmann 1979:375). Organized out of a concern for inter-regional research cooperation, ARARA vowed to promote the advancement of rock art research in America in a manner that would enhance the protection and preservation of sites, while providing an opportunity for public education (Wellmann 1979:376). ARARA was committed to strengthening the tie between rock art and archaeology. As a result of its growing professionalism, ARARA quickly branched out into new territories and its inception saw the eventual disappearance of smaller regional-based organizations that had previously been established (Wellmann 1979:378). Unlike CRARA that no longer exists, the ARARA continues today and it is dedicated to the support of rock art research, conservation and education, while maintaining its diverse membership.

Moving Beyond the Image

While descriptive inventories continued to dominate the landscape of rock art publications in British Columbia, some strong efforts to move beyond this tendency were made in the form of stylistic analyses (cf. Nesbitt 1972; Bell 1982). For example, Doris Lundy investigated the rock art along the northwest coast of Alaska and British Columbia and suggested five separate styles (Lundy 1974: 256-289), as well as, some hypotheses regarding function (Lundy 1974:296-316).
Lundy’s work is unique at this point in time for several reasons. She conducts an in-depth analysis of both petroglyphs and pictographs. Her work is one of the first to attempt a comprehensive study of rock art sites occupying a vast coastal region and to develop a stylistic framework from which to categorize and understand rock art. Where Corner’s (1968) work was spatially expansive, it is primarily an inventory of sites and Lundy’s work is much more than that because she examines the sites collectively and Corner does not. Additionally, Lundy relies on both archaeology and ethnography to better understand the rock art in this area. This concept of integrating archaeology and ethnography is a substantial step forward from previous efforts that tended to opt for either ethnography or archaeology. The incorporation of ethnographic and archaeological approaches is an essential component of the theory and method in this thesis; both of which are discussed in greater detail in the following chapter.

Although the heart of Lundy’s research focuses on the painted and carved motifs, she does go beyond the image to consider the location and orientation of the rock art (Lundy 1974:252-255). Pictographs, she notes, often occur in places well above high water marks along lake shores, perhaps so as to ensure their longevity and visibility (Lundy 1974:252). Paintings, however, are located in less visible locations and she hypothesizes this indicates a different purpose, such as the marking of burial sites (Lundy 1974:252). Pictographs lack a locational connection to village sites, while petroglyphs and village sites are often located near to one another (Lundy 1974:254). This concern for location and the ways in which it informs interpretations of the rock art, takes a central position in this doctoral research.

The importance of ethnography as a source of insight for rock art studies continued to grow at this time and research started to incorporate aspects of rock art that extended beyond the description of the motifs. For example, Beth Hill argues for the need to have an understanding of past worldviews in order to understand rock art and she identifies ethnography as the route to this knowledge (Hill 1975:38). Interestingly, Hill does not indicate contemporary First Nations knowledge and viewpoints as ways of tapping into the worldview of the past or as a way to understanding the cultural significance of the rock art.

Another example of combined methods is made by John McMurdo and David Butlin who in 1971, investigated pictographs at Takla Lake, British Columbia in an
effort to gather information about six sites before they were destroyed in order to accommodate the expansion of the Pacific Great Eastern Railway (McMurdo, J. 1972:103). In this work, McMurdo and Butlin gather a substantial amount of important information from the granddaughter of the man reported to have created the paintings at Takla Lake and they adopt a critical use of that oral testimony (McMurdo, J. 1972:109, 115-116). Additionally, they combine ethnographic information compiled by Morice (1893) in an effort to develop sound interpretations regarding the rock art (McMurdo, J. 1972: 111-112, 119-120). The details and data generated by McMurdo and Butlin are significant in this doctoral research as they are the only record of the now destroyed sites on Takla Lake. The details of these six sites are discussed in greater detail in Chapter Five and Chapter Six. It is the critical use of oral testimony, like that of McMurdo and Butlin that is fundamentally incorporated into the methodological process in this thesis.

In 1978, Thomas Richards, conducted a survey of known pictograph sites along a portion of the northern shore of Stuart Lake, British Columbia. The majority of the sites considered by Richards had previously been recorded by Corner (1968). The greatest attention during this survey is directed toward generating descriptions and illustrations, as well as, motif interpretations for 21 pictograph panels. This somewhat selective survey records only a portion of the pictographs located on Stuart Lake (cf. Mitchell 2006a). Richards (1978) argues for a connection between interior and coastal pictographs with regard to style. Richards’s work is another one of the small handful of studies conducted in the study area prior to this thesis and it demonstrates an ongoing tendency to focus on rock art imagery that pervades much of the history of rock art research in British Columbia.

Re-Visiting Rock Art as Archaeology

Although the imagery of rock art remained an important focal point of studies into the 1970s, there was some diversity in terms of subject matter within the newly emerging discipline of rock art research at this time. Just as rock art was originally missing from archaeology, archaeology had essentially been missing from British Columbia rock art research up to this time period: missing in the sense of the use of archaeological materials and contexts to provide additional lines of evidence and
support for interpretations of rock art. This is a key point, given the fact that over 23,000 archaeological sites and objects have been recorded in the province (cf. Ministry of Forests, Lands and Natural Resources, n.d.). These recordings are the result of archaeological fieldwork conducted primarily by contract archaeologists.

The Archaeology Branch of the British Columbia Ministry of Tourism, Culture, and the Arts governs and provides permission for archaeological fieldwork throughout the province. The primary means of authorizing archaeological work is carried out through a permit system. Permit work in the form of archaeological impact assessments and inventories characterize the nature of professional contract archaeology in British Columbia. Permit work typically takes the form of field assessments relating to forestry, mining and industrial and urban development, where reports contain primarily descriptive accounts of artifacts and features along with recommendations for heritage resource planning and the minimizing of negative impacts to archaeological sites.

Permit work, originally initiated in the late 1960s and continuing through to the current era, is the primary source of archaeological information in the province. Because the professional archaeology industry in British Columbia is driven by economic expansion, there is very little room for in-depth research in contract archaeology. As a result, permit reports are rich in terms of archaeological data and resource management related recommendations, but lacking in terms of analysis and theorizing.

Within these permits, rock art is often treated as an isolated artifact where its imagery is described and its location officially recorded, but it is not examined in any depth, nor is its environmental context explored beyond mere mention (cf. McMurdo, J. 1989:183-234). Here, it is important to note that permit reports are not the intended forum for in-depth analyses to be conducted or documented. Equally so, it is essential to recognize that permits contain the raw data on which in-depth analyses can be carried out.

Unfortunately, rock art researchers have made little use of this important raw data. This lack of use can be attributed in part to the fact that non-professional anthropologists make a substantial contribution to the province’s rock art literature (cf. Corner 1968; Bentley and Bentley 1981; Williams 2001; Nankivell and Wyse 2003,
among others) and to the fact that after 1989 access to the raw data contained in permit reports became restricted. What was once a microfiche based data source available through selected libraries, is now a web-based application limited to authorized users (cf. McMurdo, J. 1989; Ministry of Forests, Lands and Natural Resources n.d.).

Much archaeological activity in the way of permit work has been carried out in British Columbia between 1966 and the present (cf. McMurdo, J. 1989; Ministry of Forests, Lands and Natural Resources n.d). While the majority of the permits were issued for projects concerning aspects of the archaeological record other than rock art, some permit work was specifically focused on pictographs and petroglyphs. The study conducted by John McMurdo (1972) and David Butlin at Takla Lake discussed in the previous section of this chapter is an example of permit-driven archaeology with a rock art focus (for other examples see Baravalle 1977, 1978, 1979, 1981a; McMurdo A. 1979; McMurdo A. and Lundy 1975).

By this time, some observations regarding the context of rock art and its relationship with other features in the landscape were made and some preliminary interpretations of this relationship had been suggested. For the most part, these contextual interpretations and understandings were sporadic and superficial, as well as, only occurring in a few specific areas in the province.

**Site Context Implied**

Even though the majority of the works reviewed in this chapter thus far demonstrate a paucity of studies concerned with the location and setting of rock art, it is possible to identify an *implied* connection between location, deposition and function although the intentions of these studies were not to directly investigate these associated contexts. For example, Morice’s (1893: 207) reported telepathic connection between paintings and painters for some of the markings at Stuart Lake, where location was imperative to the success of the clairvoyant function of the paintings. Morice does not focus on the role location played in the production of rock markings in his study of Dakelh graphic symbols, but important contextual information such as this is contained in his work.
Insights about the importance of location can also be gleaned from Teit’s work regarding rock paintings and adolescent rituals in Thompson First Nations territory in southern British Columbia (Teit 1896, 1900). Although the connection between the places chosen for painting and the activities of the initiates were not investigated by Teit, this connection is evident nonetheless.

Similarly, Joseph Harris reports a correlation between coming-of-age activities and the production of rock markings in south central British Columbia, where location played a key role in the process (Harris 1949:22-23). Harris (1949:22) indicates that places for initiates to paint were chosen by the “witch doctor” based on the difficulty associated with accessing such places. Initiates were tested for courage and their ability to reach these chosen places alone at night. Initiates were considered successful in the test if they painted an image on the rock and returned to the village before sunrise (Harris 1949:22-23). Harris uses the knowledge that rock art sites in this region were often located near “old [I]ndian trails” within walking distance of villages to locate additional rock art sites (Harris 1949:23). In this manner, he utilizes contextual information to find more sites (Harris 1949:23), but his work did not focus on context or purposeful deposition as an avenue of inquiry. Harris’ work also demonstrates the insights into rock art that are offered by First Nations traditional knowledge.

Others conducted studies that incorporated a direct concern for location and context into studies of rock art in British Columbia. Doris Lundy examines several carved and painted rock art sites in terms of the relationships between sites and archaeological features, such as villages. She also examines the relationship between sites and topographic features of the land, such as the nearness and orientation to the water (Lundy 1974:252, 254, 255). In doing so, she determines connections between function and location.

Lundy identifies a distinct association between the placement of pictographs and the intentions of the painters – “the motive behind their creation likely decided the type of location” (Lundy 1974:252). The physical context of petroglyphs is suggested to be directly connected to function and the orientation necessary to speak to the intended audience (Lundy 1974:254). In a later study, Lundy identifies further connections between the physical context of petroglyphs and potential functions of such sites (Lundy 1979: 57, 63-65).
Beth Hill similarly demonstrated the significance of location to the function of petroglyph sites on the Northwest Coast of British Columbia (Hill 1975: 27-30). Referring to several stories and beliefs gleaned from the ethnographic record she highlights the significance of salmon for many coastal peoples and draws connections between petroglyphs and ancient ways on ensuring the yearly return of salmon (Hill 1975:27-30). The relationship between the location of some carvings and the rising tide are reported as being key to the functionality of carved salmon motifs, whose job, once immersed by the high tide, was to call the salmon into the streams where the fishermen waited (Hill 1975:19). Petroglyphs, located elsewhere and believed to be associated with rainmaking are also said to be connected to the assurance of the salmon return (Hill 1975:29).

Hill’s work is not solely and overtly focused on the context of markings, but her findings are informative nonetheless with regard to the role placement played in the production and use of petroglyphs. This study covertly and perhaps unbeknownst to Hill demonstrates the significance of location and imagery – this concept is one of the primary aspects of the methodological approach in this thesis. Understanding how location and placement factor into the production and use of rock art is a central research interest in this thesis: as is the ways in which the study of rock art can enable insight into the relationship people have with the landscape.

**Rock Art Research Continues**

Studies of rock art continued to be conducted during the next decades and a variety of issues were investigated and a diversity of interests were explored. Rock art research was now becoming more than a descriptive venture. For example, Baravalle (1981b) examines issues of conservation through an experiment with photographic reconstructions of faded pictographs. Brian Molyneaux (1987) conducts a historiography of rock art research and examined the path rock art research had taken to date. Others conduct studies that demonstrate the growing diversity of research interests, such as, Peacock (1988) who investigates the pictographs of the Similkameen Valley in British Columbia through a spatial analysis and Richard McClure (1980), who identifies the frequency of rayed arc motifs and its association with human figures among rock art sites across the province.
It would be several years before formal methods and theory took a firm hold on rock art studies in British Columbia. In the coming years, researchers primarily maintained a commitment to investigating chronology, style, interpretation and internal structure. Nonetheless, advancements continued to be made as more sites were located and recorded and researchers experimented with different ways of understanding rock art and ethnographic methods continued to play an important role.

In 1993, Richard Daly and Chris Arnett, together with Annie York (York et al. 1993) investigated the rock art of the Stein River Valley, in south central British Columbia. York, an Nlaka’pamux elder, provided interpretations for a myriad of pictographs along the river bank. The rock markings are purported in general to be forms of communication rather than works of art and the markings along the Stein to be a “form of non-alphabetic literacy” (York et al. 1993:223). Understanding the communicative ability of rock art is an important component in the interpretations developed in this thesis.

This work by York et al. has been credited for embracing and respecting First Nations traditional knowledge, which it clearly demonstrates; however, it has also been noted as lacking in a critical use of oral testimony and for being speculative (cf. Harris 1997; Wickwire 1991-92). The use of a single informant raises issues concerning the need for multiple perspectives when utilizing information derived through informed methods (discussed in greater detail in Chapter Four).

Archaeological understanding of the human occupation of British Columbia was well established by the 1990s (cf. Ames and Maschner 1999; Canon 1991; Carlson and Dalla Bona 1996; Clark 1991; Fagan 1991), but the extent to which knowledge of rock art factored into that understanding was minimal. Researchers had focused almost exclusively on understanding the rock art itself and refrained from applying their knowledge of rock marking traditions to larger understandings of the human past. The gap between archaeology and rock art was lessened somewhat as archaeologists in North America expressed a growing interest in rock art and some scholars attempted to incorporate archaeological information into their studies. During this time, some archaeologists were resistant to change and refrained from adopting post-
processual approaches to their studies of the past. As a result of this reluctance the approaches and interests of processual studies lingered (Whitley 1998:2).

**Combining Methods and Lines of Evidence**

Following Lundy’s lead from 1974, more researchers eventually began combining archaeology and ethnography in their studies of rock art. For example, in 1998, Joy Inglis (1998) incorporates both methods in a locational analysis of petroglyphs on Quadra Island, British Columbia. She hypothesizes a connection between the orientation and imagery of incised boulders and nearby archaeological evidence in order to determine the function of the rock art and its connection to salmon fishing and the roles of shaman (Inglis 1998:69-85). Inglis examines not only the petroglyphs on the island, but the physical contexts and surrounding areas of the carvings and combined archaeology, ethnography and contemporary First Nations knowledge to understand the rock art. Inglis (1998:75) suggests the proximity of certain petroglyphs to village sites was indicative of a public rather than private purpose for the carvings.

Inglis (1998:76-78) examines the location of beach front canoe launch sites, evident in the archaeological record, and the proximity of salmon fishing grounds to understand and theorize the function of the rock art found in the same area. She notes a correlation between areas where the carvings, fishing grounds and evidence of canoe launches ended to support her hypothesis that petroglyphs functioned as part of salmon rituals and may have even worked to anchor the poles of canoe skids (Inglis 1998:76). Inglis’ work identifies the importance of context in rock art studies, and it is the relationships between rock art site locales and the natural and archaeological features in the landscape, like those identified here by Inglis and by Lundy (1974, 1975) and Hill (1975) two decades prior, that this research project endeavours to identify and investigate.

Archaeological and ethnographic information were not the only types of documentation that researchers started to use systematically in their studies of rock art. For example, Peter Johnson (1999) investigates images of European sailing vessels carved into the rock at Clo-oose, a cove on the outer coast of Vancouver Island, British Columbia. Through an historical approach and the systematic use of archival materials,
Johnson (1999:172-200) hypothesizes the function of the petroglyphs as being a record of events, in particular the sinking of a British sailing vessel, the *John Bright* and the injustices inflicted upon two local First Nations men.

Others incorporated historical documentation in informative ways to the study of rock art, such as, Judith Williams (2001) who investigates a set of historically significant 1927 pictographs at Kingcome Inlet, British Columbia. In a manner similar to Johnson’s work on Vancouver Island, Williams uses historical information to elucidate the meaning of the rock art and discuss the history of relations between First Nations people and Europeans. The incorporation of various lines of evidence, such as historical records, ethnography and oral testimony derived from within the study area and the ways in which they inform the interpretation of rock art are methodologically and theoretically important in this thesis.

Throughout the 1990s and 2000s researchers continued to explore new and innovative ways of understanding rock markings despite the fact that the “golden age” of rock art research in Canada had come to an end in the 1980s (Arsenault 2001). At this time, a decrease in both interest and resources for the archaeological investigation of Canadian rock art in general was noted (Arsenault 2001). Unfortunately, the enthusiasm for rock art research that was evident in the 1960s and 1970s had begun to diminish by this time. Fortunately, some members of the Canadian Archaeological Association, and others, continued to investigate rock art throughout the country. During this time period, approaches gradually began to take on new shapes and researchers contemplated more of the social aspects of rock art in Canada.

*Social Contexts Explored*

Michael Klassen (1995, 1998) investigates the rock markings at Writing-On-Stone Provincial Park, Alberta and hypothesizes continuity in terms of manufacture technique and subject matter, despite existing hypotheses to the contrary. He identifies a duality of worldviews as being evident in the markings: one of which was cosmic, the other was historic (Klassen 1995:i). Klassen (1998:68) argues that despite the noted duality both forms of markings were part of a single larger tradition of pictorial expression.
Others investigated rock art in terms of the larger physical landscape and internal landscapes of meaning for past and contemporary First Nations peoples. For example, Erica Ball (2004) examines a Gitxsan petroglyph on the Babine River, British Columbia. Through a combination of archaeological data, ethnographic information and First Nations oral testimony she concludes that for the Gitxsan people, village residency is superseded in importance by the relationship the people have to the entire territory (Ball 2004: 51-55). With regard to the petroglyph, the implications of this finding indicate that its meaning was continuous for the Gitxsan people, despite their abandonment of the nearby village (Ball 2004:51-55). Although this work is more about the connection the Gitxsan people have to the landscape than it is a direct study of the rock art, it subtly demonstrates the role rock art plays in connections to place. It is these more recent studies, the ones that seek out the social side of rock art and those that mix methods that produce meaningful results; thereby going beyond the limitations of earlier motif-centric and primarily descriptive works.

In 2004, Joan Vastokas (2004) tackles what was then an ongoing issue regarding the creation of the Peterborough petroglyphs in Ontario, Canada; specifically if they are Native or Norse in origin. Vastokas (2004:280) makes a convincing argument for a Native origin based on: the recovery of hammerstones believed to have been employed in the production of the carvings; the iconography of the carvings and its relationship to Algonquian pictorial material; and the differences between Norse and Native depictions of the sun (2004:284-289). Vastokas (2004:283, 289) overtly highlights the need for scientific rigor, reported as being missing from the written accounts that proposed a Norse origin for the carvings, to be embedded in rock art studies. The incorporation of archaeology into rock art research is an essential methodological component of her work that directly informs her interpretations.

Although Vastokas is concerned primarily with the carved images at the Peterborough site, her inclusion of the surrounding site, particularly other archaeological materials and the use of additional pictorial materials to develop interpretations and understandings of the rock art are compelling and as a methodological approach, they are of interest in this thesis. Additionally, Vastokas (2004:279) sets this argument about the origins of the Peterborough petroglyphs inside her larger hypothesis that “a distinctive and coherent system of Algonquian
graphic communication prevailed in North America.” The proposition of a well developed system of pictorial communication is also of direct relevance to this thesis and the related research interests in the communicative ability of the rock art in the study area.

In 2004, Daniel Arsenault (2004a) identifies the shortcomings of processual archaeological approaches to the study of Canadian rock art as being unable to capture the world as First Nations peoples perceive it. As a result, representations of the past, he says, are based on “hypothetical people whose experiences are driven by controlling ecological pressures and whose response is a hyper-rational one of calculated economic efficiency” (2004a:69). As a solution, he suggests new conceptual and analytical tools with which to consider more of the symbolic aspects of First Nations cultures that are evident in the archaeology record (Arsenault 2004a:69). This new approach, according to Arsenault, needs to consider not just the rock art sites, but also the natural and socio-economic environments in which rock art is situated (2004a:73). As the first of two chapters written by him in this publication, this first one lays out a theoretical approach for the archaeology of rock art and the second one puts these ideas into practice (2004b).

Arsenault’s second chapter explores the graphic content, rock support and physical setting of nine pictograph sites in Quebec, Canada. His aim in this chapter is to identify significant similarities and differences between sites, as well as, whether or not these sites are part of a sacred landscape. Based on the many ways in which cliff faces and other rock formations are reported to possess spiritual significance for Algonkian First Nations peoples, along with ethno-historical and ethnographic information relating to ritualistic and spiritual activities known to occur at rock art sites, Arsenault posits the rock art firmly within an Algonkian sacred landscape. This works demonstrates similar goals that are embedded in this research: the usefulness of combining traditional knowledge with archaeological field data in attempts to generate meaningful understandings of the past.

Michael Klassen (2003) identifies a similar situation in his study of several sites in Alberta, Canada where the location of rock art corresponds with rock formations imbued with spiritual significance. In addition to environmental context, Klassen (2003: 180) also considers the experiential setting of the rock art and concludes that “most
rock art sites in Alberta are found at places where phenomenological experience may have influenced its production” (2003:178-182). While some sites are reported as containing motifs that record spirit dreams born of vision quests, others are said to be the direct product of ritual. This second type of ritual site is unique in that entire rock walls are smeared with red ochre; “the physical action required for painting a wall with ochre – the rhythmic movement of the hand across the rock face – suggests a ritualized production like that associated with trance or the chanting of prayers” (Klassen 2003: 180). First Nations oral tradition plays a key role in the identification of spirit places in the landscape and brings credibility to Klassen’s arguments.

Klassen (2005) went on to investigate several rock art sites in the Similkameen Valley of southern British Columbia and identifies both the benefits and challenges of critically incorporating First Nations knowledge into rock art studies (Klaasen 2005). Klaasen (2005) suggests that iconographic analysis can identify the underlying cultural meanings of rock art, as well as, bridge traditional First Nations and anthropological perspectives on rock art images and the landscapes to which they are connected. Reimer (2005) engages in a similar landscape approach to the study of rock art in the Squamish First Nation territory, where she identifies a connection between First Nations place names and events mentioned in several Squamish First Nation stories that corresponded to the locations of rock art.

The author’s work in 2006 at Stuart Lake, British Columbia marks the first academic investigation of rock art in the research area (Mitchell 2006a). This research includes a systematic survey of the entire lake, resulting in the location and documentation of sites not previously recorded. With an interest in the social processes of rock art production as its primary focus this research relies on First Nations insight into the functionality of the markings. Ethno-historical information is combined, in this work, with data gathered through interviews with First Nations community members and with archaeological survey data to purport a communicative utilitarian purpose for the rock art. This research concludes with a preliminary recognition of the importance of both the location and the imagery of the pictographs at Stuart Lake, as well as, an acknowledgement of the ongoing importance the landscape holds for the local First Nations people. This concept of location, together with imagery as an important aspect of rock art production and use is a significant
foundational concept in this thesis. This study at Stuart Lake along with a photographic survey conducted in 2009 by Cumberland, mark the final of six bodies of research conducted in the study area prior to this doctoral research.

In the past 10 years, two articles featuring rock art have been published in the Canadian Journal of Archaeology (Brink 2011; Keyser et al. 2014). In 2011, Brink considers photographs taken in 1965 to identify a rapid deterioration of pictographs at the Zephyr Creek rock art site in Alberta, Canada. Brink (2011:194) deals with four specific issues: the age of the rock art; the weathering processed affecting the pictographs; the interpretation of the markings; and who created the paintings. Through taphonomic-oriented observations, Brink argues for rock art production by the local Stoney First Nations peoples rather than the Columbia Plateau groups previously suggested by Keyser (cf. Keyser 1978: 102-103). He attributes the accelerated deterioration of the paintings to the composition of the pigment that was reported to be made of only red coloured clay with no additional binding ingredients (2011:228). Brink posits a post-contact age for the markings and suggests the rock art tradition at Zephyr Creek extended into the 20th century (2011:229). Throughout the article, Brink focuses solely on the rock paintings and does not consider the surrounding landscape or attempt to understand the broader geographical context of the rock art or the social contexts of production and use. This work is reminiscent of much earlier studies that were confined to a focus on the image of rock art and the exclusion of its landscape setting and social context.

The second article, published in 2014 focuses on the polychrome rock art at Rattlesnake Cave, Alberta, Canada. This assemblage of pictographs is rendered almost entirely in black, but a few paintings exhibit traces of red pigment (Keyser et al. 2014). The red pigment is interpreted to represent traces of blood from human and animal wounds. The authors use several narrative compositions regarding combat and horse stealing to account for the action depicted in the pictographs and they posit a post-contact Blackfoot origin for the markings (2014:27). This research suggests red pigment was used, in this region, to represent blood in rock paintings. Keyser et al. posit this assemblage of pictographs as the impetus for the creation of a “Biographic” rock art style. Even though this work brushes on the motives for producing rock art it, like, Brink’s (2011) work discussed above, still maintains a motif-based interest and
focus that has been prevalent in British Columbia rock art research since its early period, more than a century ago.

Reflections

This current decade has brought about significant changes to British Columbia rock art research, where the less tangible aspects associated with the social processes of rock art have come forward. Rock art knowledge is no longer limited to the form and style of motifs alone: researchers are beginning to understand rock art in British Columbia and elsewhere in Canada in terms of human action and agency. Recently, researchers have been more inclined to bring together different types of data in order to further their interpretations of rock art. The use of additional lines of evidence means the development of more in-depth understandings of rock art and a heightened level of credibility for research results. It is also during these last few decades that a significant decrease in the number of rock art investigations conducted in British Columbia have occurred.

Prior to the advancement of post-processual archaeology in recent years, rock art studies in British Columbia were theoretically limited and provided descriptive accounts of rock markings and explanations of rock art in terms of generalities – where both culture history and processual approaches were employed. As a result, rock art sites were defined primarily by motifs and were devoid of any sense of human presence. The adoption of a humanistic post-processual perspective enabled researchers for the first time to venture beyond description and generate discussions of meaning. Post-processual approaches meant that rock art researchers needed to go further than the image and ask new research questions; specifically recording rock art was no longer enough. Perhaps this meant less room for generalized vocational researchers and it may explain, in part, the decrease in the number of rock art studies conducted in the past few decades. The humanistic-based inquires associated with post-processual archaeology enabled and required researchers to move beyond the descriptions, measurements and comparisons of the motifs that had consumed previous studies.

For all the information gained and the advancements in British Columbia rock art studies that have been made, significant gaps in knowledge still remain. Specifically,
the primary context and purposeful deposition of rock art in the province has yet to be 
fully investigated. Additionally, First Nations traditional knowledge of rock markings has yet to be wholly appreciated and critically incorporated into rock art research efforts. As a result, little is known about the importance of location for the production and use of rock markings and the significance of these marked places in terms of the broader uses of the landscape by past peoples. The occurrence of just two rock art focused articles in the Canadian Journal of Archaeology in the past 10 years demonstrates the continued peripheral position rock art occupies within the discipline of archaeology in this province.

**From Object to Meaning and Knowledge**

This chapter illustrates several salient points that are important for the theoretical and methodological development in this thesis. When studies focus exclusively on painted and carved images they do so at the expense of site context(s); producing a one dimensional account of rock art (cf. Woody 2000). Tapping into the primary context of rock art is a productive way to go beyond the image and develop meaningful interpretations of rock art. The fact that rock art is in-situ makes this consideration of its landscape setting not only possible but logical – it makes sense to investigate where rock art occurs because it is located exactly where it was created and intended to be used / viewed. An investigation of rock art through various lines of evidence, such as First Nations traditional knowledge and historical information, and a combination of methods, such as archaeological and ethnographic is demonstrated in this historical review as providing more meaningful results.

What arises from this historical overview of rock art research in British Columbia is the need for theoretically informed approaches that capitalize on global disciplinary developments while simultaneously being rooted in local specifics of the landscape and cultural context of the rock art: an approach that enables the social aspects of rock art to emerge, one that integrates multiple lines of relevant evidence and critically incorporates that evidence. Because meaning is not derived by image alone, but rather through its social contexts of production and use it is important to go beyond the image and pose questions that guide research in the direction of context and meaning.
The following chapter discusses the theoretical and related methodological frameworks that have emerged from this historical review of rock art research, where the importance of integrating First Nations traditional knowledge, as a primary source of information, with archaeological data and other sources of information in order to allow new perspectives and understandings of the past to emerge, are discussed.
Chapter Three

MATTERS OF PERSPECTIVE

In this chapter, the theoretical frameworks that have influenced the development of this research are examined. This discussion begins with the concept of marginalization, as identified in the previous chapter, and the ways in which it relates to this research with regard to rock art, traditional knowledge and the landscapes of northern central British Columbia. In doing so, some of the issues this study seeks to address are identified and the idea of alternative perspectives that is investigated during this research is examined. From there, the theoretical themes of imagery and location, audience, movement and communication are examined; these themes inform the methods, analysis and interpretation developed in this research. This chapter argues that a balance of informed and formal methods to the study of rock art is best suited for the implementation of the framework within this theoretical discussion. Additionally, it is maintained that methods aimed at revealing diverse and disparate ways of understanding and perceiving provide opportunities for enhanced interpretations to emerge.

Stepping into the Margins

Marginalization is a process of becoming peripheral (Trudeal and McMorran 2011:438). It is about relegation to the sidelines or the outer limits of what is perceived as mainstream. These places at the edges are typically viewed as limited or disadvantaged, whereas abundance and privilege characterize the centre (cf. Jenson 2000). Marginalization plays an important role in this thesis because it permeates the research at several junctures, specifically: rock art and its association with British Columbia archaeology; First Nations traditional knowledge and its relationship with Western ways of knowing; and northern rural landscapes and their perceived peripheral character.

In this thesis, margins are approached as places of possibility (hooks 1990:341), as in-roads into recognizing the significance of difference – different perspectives, different ways of knowing, different meanings. Things are different at the margins because these outer edges are not mainstream. Things are interesting at the margins
because they are the margins. Stepping into these outer limits is an opportunity for something new, something different.

Standpoint theory is a useful entry point to further examine this concept of marginality and how it relates to this research. Standpoint theory recognizes the hierarchal nature of society that creates dominant positions for certain groups and marginalizes others (cf. Harding 1993). The social differentiation that is inherent in society produces different viewpoints and different knowledge(s), where “one’s social situation enables and sets limits on what one can know…” (Harding 1993: 55-56). It follows then that knowledge is socially situated and therefore partial because society, and by extension science and social science research, typically privileges the viewpoints of the dominant group; leaving the experiences and knowledge(s) of the marginalized, untapped and devalued (cf. Haraway 1988; Ramirez-Sanchez 2008).

A central tenet of standpoint theory is the belief that those groups who are marginalized have knowledge(s) and experiences that may prove to be “epistemically privileged in some crucial respects” (Wylie 2003:26). Feminists have successfully argued that gender is one aspect of social differentiation that may be so privileged. Standpoint theory recommends researchers “study up” – begin with the exploited, start with what is marginal (Adler and Jermier 2005: 943). The benefit of working within a standpoint epistemology is that “it provokes thinking about sometimes hidden and otherwise unexamined assumptions that can guide scholarly inquiry and because it makes a reasoned case for working with alternative assumptions and exploited referents” (Adler and Jermier 2005: 943).

This theoretical approach highlights the marginal which is most often associated with research concerning social issues and making important changes that positively impact the lives of marginalized people; but it also speaks to epistemological concerns regarding theory and method that have broader applications. Situated knowledge that systematically shapes and limits what is known does not just occur socially, it also transpires within science and social science disciplines. This is evident in archaeology for example, where the aspects of the archaeological record that are most often retrieved and studied, shape and limit what is inferred about human behaviour: thereby producing a partial (yet important) picture of the human past.
It is along these disciplinary lines that standpoint theory and marginalization is relevant to this research. Recognizing areas of untapped information and developing alternative ways of approaching and thinking about research has the potential to positively affect its results. By starting research at the margins and taking seriously “the understandings of insiders” (Wylie 2003: 31) and alternative ways of knowing, new angles of vision are enabled and new questions are raised. Because marginality is a matter of point of view it follows that things look different from the perspective(s) of the margins (cf. Dery et al. 2012; Flores 2013). It is these potential alternative perspectives that this research seeks to reveal.

**Rock Art and British Columbia Archaeology**

*No other kind of archaeological material is more direct and thrilling on first encounter than rock art, the actual images made by prehistoric people.* [Loendorf et al. 2005:3]

The term marginalization is used in the context of rock art in this thesis to identify a lack of inclusion within the discipline of archaeology in British Columbia. This use of the term parallels Young’s (in Jenson 2000:1) definition of political marginalization where, “marginals are people the system of labor cannot or will not use.” In this framework, rock art is an important category of material culture which has the potential to provide insights into the human past that British Columbia archaeology has yet to fully acknowledge.

A distinct difference exists in the manner in which rock art is approached within British Columbia archaeology, compared to other forms of material culture. Rock art does not receive the same professional attention afforded other parts of the archaeological record and it is rarely discussed in Canadian academic publications. Many of the professional archaeological inquiries into areas of British Columbia where rock art occurs are the result of impact assessments and salvage operations with priorities unrelated to rock art (British Columbia Archaeology Branch, n.d.; McMurdo, J. 1989).

The focus of mainstream archaeology has posed research questions about the past that rock art has been perceived as unable to answer; thereby furthering the marginalization and apparent lack of utility of rock art datasets. These research
questions have typically focused on subsistence, settlement, population and migration etc. The study of rock art however, not only provides a new and relatively unstudied dataset from which to investigate the past in this province, but also the opportunity, as well as, the need to ask new research questions.

Within the British Columbia Archaeology Branch database virtually all of the 34 rock art sites previously recorded in the 12,000 km study area are identified as Ceremonial / Religious Features in the same manner that cultural depressions are automatically identified as Subsistence Features, trails are typically identified as Transportation Features and bark-stripped trees are normally identified as Culturally Modified Trees. Here, the ceremonial and religious aspects of rock art are assumed rather than demonstrated. This blanket approach to categorizing rock art works to limit the perception of the role rock art played in past societies and denies its equally plausible multipurpose nature – further marginalizing it as a class of archaeological material.

**Imagery and Location Together**

The previous chapter illustrates that when rock art is the subject of research in British Columbia it is often studied in isolation from its environmental context, typically as abstracted and static two dimensional representations (cf. Jones, A. 2006: 212). Although this is not so for all studies conducted in the province it is by far the most common approach (cf. Barrows 1942; Corner 1968; Gjessing 1952; Meade 1971; and Nankivell and Wyse 2003). The tendency to focus on rock art imagery works to isolate the rock art from its immediate landscape setting, from the broader surrounding terrain and cultural context, as well as, the rest of the archaeological record.

This limited focus denies the full potential offered by the primary context of rock art and relegates it to a position similar to displaced portable artifacts (cf. Bradley et al. 1994:374). Without a consideration of the broader context of rock art and its relationship with the surrounding landscape we are prevented from fully understanding or even contemplating the social context of the rock art. This way, rock art sites are void of people and consequently, void of meaning. This narrow focus and lack of social understanding contribute to the marginal position of rock art. The tendency for rock art to occupy a marginal position in archaeology has been noted to
exist elsewhere in North America (Diaz-Granados 2004 xxi-xxii; Keyser and Klassen 2001: vii; Loendorf et al. 2005: 6; Quinlan 2007:1-3) as has this propensity for studies to focus primarily on motifs (Bradley 1991; Bradley et al. 1994; Chippindale and Nash 2004a; Nash and Chippindale 2004b; Quinlan 2007a; Whitley 2005).

Rock art occurs frequently throughout the landscapes of northern British Columbia and the study area of this research, but as discussed in Chapter Two, it has received modest academic attention. Although some of the rock art sites investigated in this research have been previously located and recorded (British Columbia Archaeology Branch n.d.; Corner 1968; Cumberland 2009; McMurdo, J. 1972; Mitchell 2006a; Morice 1892-93; Richards 1978), there is a lack of pre-existing documented evidence for many of the rock art sites located during the archaeological survey in this research.

Whereas, the bulk of previous work in the study area emphasizes motif description (British Columbia Archaeology Branch n.d.; Corner 1968; Cumberland 2009) some of these studies, as discussed in the previous chapter, have achieved more (Mitchell 2006a; Richards 1978). For example, Morice (1892-93) provides important 19th century First Nations interpretations and functionality of some of the Stuart Lake pictographs and McMurdo, J. (1972) provides contemporary First Nations interpretations of the now destroyed pictographs at Takla Lake, as well as, some insight into the historical understandings regarding the placement of the markings in the landscape. Academic efforts however, to fully explore larger theoretical concepts and to look at the relationship between rock art and broader uses of the landscape have not previously been exerted in this northern rock art landscape.

This marginalization of rock art in British Columbia is unfortunate and unnecessary because of the potential insight into the past that can come from studies of materials found in primary context. Much of the archaeological record is populated by portable artifacts and from these we develop interpretations and understandings of the past. The distribution of these artifacts, however, is often the product of disruptive processes, including displacement and taphonomy that do not always reflect purposeful human action (cf. Bednarik 2001; Whitley 2005). However, both the location and content of rock art are the result of direct human action and purposeful
deposition – this is what makes rock art a unique and important class of material culture.

Provenience and context are of primary concern in archaeology and rock art almost always comes with primary context, but ironically it continues to remain at the margins of British Columbia archaeology. The in-situ nature of rock art means its placement in the landscape has remained throughout time and when taphonomy has allowed preservation, the images have also remained – essentially giving us today the “where” and “what” that was significant to the makers of the rock art. It is these elements of rock art together – imagery and location – that inform the methodological development of this research.

The Other Way Around

It is useful to approach the under-studied nature of British Columbia rock art and its marginal position from “the other way around” where it becomes an opportunity to apply a different approach to archaeology in this geographic setting. It is an opportunity to understand the human past in this landscape from a different perspective – the perspective of rock art. The many highly successful rock art studies that exist around the world aptly demonstrate the utility and insight rock art brings to archaeology (cf. Chippindale and Nash 2004a; David and Wilson 2002; Diaz-Granados et al. 2004; Lorendorf et al. 2005; Robinson 2010; Quinlan 2007a; Quinlan and Woody 2007).

The methods used in these world wide studies have been developed, shaped and re-shaped over time. The majority of these developments have originated in areas strikingly different to British Columbia – different in terms of temporality, spatiality, terrain and culture, etc. Research designs need to be carefully constructed so as to be best suited for the environmental and cultural context of the research – a one size fits all approach does not work. This methodological framework is part of the process of crafting an approach to the study of rock art in this particular northern Dakelh / Sekani landscape. It is here at the margins of archaeology in the space of rock art that an opportunity exists for alternative perspectives “from which to see and create, to imagine alternatives, new worlds” (hooks 1990:341).
Traditional Knowledge and Western Ways of Knowing

All humans adapt to their world by remembering and learning. Indigenous peoples have the advantage of a much longer collective memory and a longer time frame for learning. [Martinez 2000:6]

Traditional knowledge and Western ways of knowing, particularly Western science, are two systems of knowledge that reflect different perspectives and altogether different understandings of the world (Martinez 2000:3). Where traditional knowledge has long-term “local” experience, Western science is more “continental” in its orientation (Alessa 2009:4). With European contact traditional knowledge was not perceived by Westerners as being equal to their own ways of knowing or even valid (Crowshoe 2005; Simonds and Christopher 2013); consequently traditional knowledge has been pushed to the margins to make way for Western ideologies. This is the second way in which marginalization relates to this research.

Traditional knowledge is “cumulative, contextual knowledge maintained over time through generations of oral communication” (Martinez 2000:4). In particular, it is through this human processing, rather than scientific procedures, that traditional knowledge has been devalued by Western ideologies (Alessa 2009:2). Ironically, it is this human component and the lived experience embedded in traditional knowledge that is its strength and resiliency (Crowshoe 2005:6). This lived experience embedded within locally nuanced cultural landscapes created over time is also the primary reason traditional knowledge is relevant to this study and its endeavour to re-connect rock art with landscape and with people.

Similar to empirical methods of Western scientific constructs, traditional knowledge is created through a process where information is acquired, evaluated, accepted or rejected and integrated with previous knowledge (Alessa 2009:4; Martin 2003:211) – it is “a knowledge system that needs no external validation. It stands on its own, just like Western science” (Cajeta in Martinez 2000:7).

Traditional Knowledge and Rock Art Studies. The study of rock art has been categorized by Taçon and Chippindale (1998) into two principal approaches – informed and formal. Informed methods are those that draw from a source of insight, such as, ethnography, ethno-history or the historical record. Insight can also come from modern understanding “known with good cause to perpetuate ancient knowledge”
(Taçon and Chippindale 1998:6). Whereas, formal methods do not draw from inside knowledge, they rely on information discerned from the images and sites themselves. Formal methods are seemingly objective because they are directly rooted to the material culture under study, but this objectivity is deceptive. Like informed methods, formal approaches still rely on insight in terms of decision making processes that affect data acquisition and the corresponding results of research; all phases and methods of research are “conditioned to some extent by the researcher’s standpoint” (Adler and Jermier 2005: 942).

The contemporary traditions of bark, ground and rock painting in Arnhem Land, Australia are prime examples of modern understanding that is relevant and insightful to the study of ancient rock paintings (David 2002; Haas 1989; Taçon and Ouzman 2004). Equally so, the rich ethno-historical literature pertaining to the Coso Range in Nevada, USA has provided invaluable insight into the interpretation of engravings and paintings in that region (Garfinkel 2006; Whitley 1998). In both of these examples, informed methods play a particularly important role in the ways rock art researchers have approached their work and the interpretive results they have produced.

The use of informed methods has the potential to provide rich insight into the interpretation of rock art images and the social roles of markings (cf. Keyser et al. 2006) however, its use is often limited. This limited use is due to incomplete ethnographic records and a lack of contemporary rock art traditions from which to draw insight (Taçon and Chippindale 1998:7). Additionally, the incorporation of ethnographic methods and information stemming from oral traditions into archaeology has been subject to a long-term and ongoing debate (Ayon et al. 1995; Echo-Hawk 2000; Mason 2006; Martelle-Hayter 1994; Nichols and Andrew 1997).

Scepticism regarding the use of oral tradition in archaeology has been based on its perceived lack of epistemological common ground that prevents oral testimony from being on par with the formal scientific processes of archaeology, such as radiometric dating or site distribution maps, among others (Mason 2000:263-264). Also, oral traditions have been identified as being “foreign to and independent of” the host of axioms and commitments to testing that unite the hard sciences (Mason 2000:263). Additionally, broad applications of ethnographic analogy are thought to be problematic because the cultures under comparison are perhaps not truly analogous
(Sundstrom 2006: 49-53) and there is also the simple fact that over time, peoples’ knowledge and view points change.

This is not to say that ethnography and knowledge derived via oral traditions should be discounted from archaeological inquiry (cf. Ogundele 2006), but rather when alternative ways of knowing are incorporated into research designs they, like all other methods and sources of data, need to be appropriately used; not just blindly incorporated and accepted verbatim – “oral tradition data if not methodologically gathered and analysed cannot be a valid source of history” (Ogundele 2006: 3). The issues with using ethnography in archaeology are not as one sided as they may appear, because “writers who believe they can avoid the problems by eschewing ethnography altogether find themselves in an even worse, but to them invisible, dilemma: though they do not realise it, they too are dependent on ethnography, the ‘ethnography’ of Western thought” (Lewis-Williams 2006-30).

In British Columbia however, archaeologists are not only blessed with a rich body of ethno-historical literature, but they also have the extraordinary opportunity to work with and learn from First Nations peoples. The First Nations peoples of British Columbia have a lengthy history of innovative resource harvesting methods that have enabled them to live successfully in a diverse land for thousands of years (Cannon 1991: 63-69; Carlson and Dalla Bona 1996:3-10; Ecofor Natural and Cultural Resource Consultants 2005 27-28). First Nations peoples in the past not only utilized the land for their physical survival in terms of food and other life sustaining necessities; they also used the land in ways that enabled their cultural, social and spiritual survival (Duff 1983: 47-66; Furniss 1993: 69-75; Nicholas and Andrews 1997; Stryd 1983: 167-181).

The connections to the land that people had in the past are still evident in contemporary First Nations communities around the province of British Columbia (Daly 2005; Furniss 1993; Hall 1992; Hanna and Henry 1995; Sam 2001). With regard to the Tl’azt’en, Nadleh Whut’en and Takla Lake First Nations, the people of these communities continue to regularly practice traditional resource harvesting activities and maintain other important aspects of their culture, such as language, the clan system, seasonal movement, hunting / gathering / fishing, traditional names, the laws of the balhats and performance including singing and dancing. Although the First Nations communities of Nadleh Whut’en, Tl’azt’en and Takla Lake who are
participating in this research have not maintained a rock art tradition; the ongoing connections they have to the land, the knowledge they have of their territories and the persistence of their culture ensures their traditional knowledge remains a primary source of information and interpretation of past social phenomena in this region (cf. Whiteley 2002).

These ongoing connections to culture and the land that contemporary First Nations peoples possess not only enable but require research efforts to be as informed as much as possible. Insights provided through traditional knowledge however, are best used when reflectively compared, correlated and contrasted with formal methods. Core archaeology methods such as photography, mapping, survey and formal analyses are still required, but these approaches must be developed hand-in-hand with informed methods.

In this thesis, informed and formal approaches are considered to be complementary and both research practices are employed. First Nations traditional knowledge is viewed as a primary source of information integral to the archaeological study of rock art, where it is recorded and analysed alongside other forms of evidence, such as topographic and spatial information relating to the rock art sites and details stemming directly from the rock art motifs. Informed methods, such as the interviews with contemporary First Nations people conducted in this research, enable the inclusion of intergenerational information borne from personal experience and cultural tradition; and the inclusion of information derived from ethno-historical literature, such as the historical documents consulted in this research, enable insight from traditional knowledge developed in a previous time period. These insights bring diversity and further the opportunity to generate alternative ways of contemplating the rock art (cf. Keyser et al. 2006).

Stepping into the margins and the space of traditional knowledge means an opportunity to take a different path. This path offers a wealth of information that is unobtainable by other means. This different path means different outcomes (Zolner 2003:100) and that means opportunities to see things differently (hooks 1990:343). Approaching research from the standpoint of traditional knowledge and the insiders’ perspectives that it reveals, must not presuppose an essentialist definition of that knowledge; nor should it be aligned with an “automatic epistemic privilege” (Wylie
We need to continue to look for corroboration and to critically evaluate the knowledge gained through oral traditions, as well as, the way that knowledge is produced. Like other methodological avenues, traditional knowledge is not a stand-alone wonder-tool; the “difference it makes epistemically” (Wylie 2003: 31) needs to be identified. Investigating how these concepts of difference and alternative perspectives can be empowered by the deconstruction of the marginalized are at the heart of this thesis.

**Geographical Marginalization**

*By understanding the landscape in only one way, we simplify the world, running the risk of closing ourselves off to other interpretations of the land and thus becoming unable to hear a complete story of landscape...* [Guernsey 2008:2]

Geographical marginalization is often discussed in terms of economic, political or social differences (Pelc 2012:211). In this thesis, it is used along with the concepts of centre and periphery to address ideas and notions that are typically applied to northern landscapes. This spatial metaphor for the relationship between the so-called “advanced” centre and the “less developed” periphery is aptly suited to this discussion given the spatial interests and the prominence of landscape in this research (Simon 2011:147). This idea of the critique of the centre and the periphery within imperial archaeology has been shown to be effective at changing perspectives; in this thesis the centre and periphery are inverted to focus on the study area, where what was peripheral is now a central research focus. Centre and periphery, like marginalization, are useful concepts to begin thinking about multiple and alternative perspectives, such as those embedded in landscapes.

Landscapes are everywhere; we are immersed in them on a daily and lifelong basis. It is literally impossible for us to be without landscapes. On one hand, landscapes are the topography of the world, the physical tangible spaces we stand on and move through as we experience life; and they are simultaneously a way for us to interpret ourselves, each other and the world around us (Ashmore 2007: 263-265; Bender 2002:103-104). Everything we do, know and experience is grounded in landscape, we cannot be separated from it – where we are determines what we do, how we act /
interact and that continually shapes / reshapes our experiences and defines / redefines our knowledge (Casey 2008: 44; van de Noort and O’Sullivan 2007:81-84). In reality, landscapes are our lives – physically, socially, culturally, cognitively and perceptually.

Our actions and interactions with one another are entwined in temporal, spatial and social contexts (cf. Mullins 2011; Palmer 2005). It is through these contexts that societal norms or habitus is defined and redefined (Bourdieu 1990:55). Habitus is the result of patterns of behaviour and thought in society, that over time become normal parts of daily life – so normal in fact they seem “second nature” to the individuals within that society (Gosden 1994:119). Habitus is the lens through which our perspectives of landscape and our understandings of being-in-the-world are shaped and justified. It is through habitus that certain places ideologically become centres and others become peripheries – the landscapes with which we are most familiar are usually centres and the ones with which we have less or no experience are characteristically peripheries.

Habitus, as discussed here in terms of landscape and the perspectives that ensue, is reminiscent of situated knowledge(s), where knowledge and experience is shaped by hierarchical social relations (Wylie 2003:31). Habitus indicates that in addition to our social location, our place in the landscape also shapes and limits our knowledge. This “footing” we have in the landscape that develops into habitus contributes significantly to our sense of personal and cultural identity. This connection between habitus and identity was made evident to me a few years ago during an oral history project in the community of Stellako on Fraser Lake. There, Chief Patrick Michell explained the importance and integration of salmon in society by saying “Stellat’en (people of Stellako) are salmon people.” A point made visual by the Stellat’en First Nation community logo of a stylized salmon (Figure 9).
The perception of northern landscapes as peripheral places is the third and final way that marginalization relating to this research is discussed. The study area in this research with its northern location, distinct seasons, vast geographic expanse and rural characteristic is a quintessential peripheral landscape (Zarycki 2007; Bernt and Colini 2013). From an etic perspective of the centre, the study area appears remote, isolated and extreme. Ideas of remoteness and isolation stem from the proximity and distance of the study area from the urban centres located in the southern part of the province, such as the city of Vancouver that is approximately 1140 KM or 18 hours away by car from Takla Lake.
Notions of isolation are furthered by the rugged and spectacular topography of the study area and the overall lack of urban development beyond small towns and villages, where people from the “centre” typically rarely venture (Figure 10 and Figure 11). Ideas of extremeness are perpetuated by the climate of the study area, in particular its long, cold and snow laden winters and the wide ranging annual temperatures that span approximately +30°C to -40°C (Table 1 and Table 2) where the landscape itself changes with the season from rippling lakes and rivers teeming with fish in the summer time to frozen silent icescapes in the winter months.

Figure 11. Middle River, near Trembleur Lake, British Columbia.
### Stuart Lake – Climate Information

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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</thead>
<tbody>
<tr>
<td>Record high °C (°F)</td>
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<td>12.6 (54.7)</td>
<td>12.9 (55.2)</td>
<td>21.7 (71.1)</td>
<td>34.9 (94.8)</td>
<td>31.2 (88.2)</td>
<td>31.9 (89.4)</td>
<td>33.4 (91.1)</td>
<td>30.3 (86.5)</td>
<td>25.9 (78.6)</td>
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<td>-1.6 (29.1)</td>
<td>4.3 (39.7)</td>
<td>10.0 (50)</td>
<td>15.5 (59.9)</td>
<td>18.7 (65.7)</td>
<td>21.4 (70.5)</td>
<td>21.1 (70)</td>
<td>16.2 (61.2)</td>
<td>9.2 (46.8)</td>
<td>-0.3 (31.5)</td>
<td>-5.2 (22.6)</td>
<td>8.7 (47.7)</td>
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<td>-11.3 (11.7)</td>
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<td>-2.5 (27.5)</td>
<td>2.3 (36.1)</td>
<td>5.6 (42.1)</td>
<td>7.7 (45.9)</td>
<td>6.9 (44.4)</td>
<td>2.8 (37)</td>
<td>-0.8 (30.6)</td>
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<td>-1.6 (29.1)</td>
<td>-1.4 (29.5)</td>
<td>-7.3 (18.9)</td>
<td>-23.0 (–9.4)</td>
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<td>-34.6 (–46.5)</td>
<td>-44.0 (–47.2)</td>
</tr>
<tr>
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<td>3.9 (0.154)</td>
<td>3.0 (0.118)</td>
<td>18.5 (0.728)</td>
<td>38.3 (1.508)</td>
<td>54.2 (2.134)</td>
<td>47.4 (1.866)</td>
<td>43.9 (1.728)</td>
<td>40.4 (1.591)</td>
<td>35.6 (1.402)</td>
<td>11.0 (0.433)</td>
<td>3.6 (0.142)</td>
<td>302.8 (11.921)</td>
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<tr>
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<td>28.5 (11.22)</td>
<td>23.1 (9.09)</td>
<td>8.7 (3.43)</td>
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<td>0.0 (0)</td>
<td>0.0 (0)</td>
<td>0.0 (0)</td>
<td>9.0 (0.354)</td>
<td>40.2 (1.583)</td>
<td>39.1 (15.39)</td>
<td>195.2 (76.85)</td>
</tr>
</tbody>
</table>

Table 1. Climate information for the Stuart Lake area. Data provided by Environment Canada, July 9, 2013.

### Fraser Lake – Climate Information

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
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<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record high °C (°F)</td>
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<td>11.0 (51.8)</td>
<td>17.0 (62.6)</td>
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<td>32.5 (90.5)</td>
<td>34.0 (93.2)</td>
<td>35.0 (95)</td>
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<td>12.0 (53.6)</td>
<td>35.0 (95)</td>
</tr>
<tr>
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<td>4.2 (39.6)</td>
<td>10.5 (50.9)</td>
<td>16.1 (61)</td>
<td>19.7 (67.5)</td>
<td>22.2 (72)</td>
<td>21.9 (72)</td>
<td>16.8 (62.2)</td>
<td>9.4 (48.9)</td>
<td>0.8 (33.4)</td>
<td>-4.0 (24.8)</td>
<td>9.3 (48.7)</td>
</tr>
<tr>
<td>Average low °C (°F)</td>
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<td>-7.4 (18.7)</td>
<td>-2.3 (27.9)</td>
<td>2.6 (36.7)</td>
<td>6.5 (43.7)</td>
<td>8.5 (47.3)</td>
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<tr>
<td>Record low °C (°F)</td>
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<td>-7.2 (19)</td>
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<td>-47.5 (–53.5)</td>
</tr>
<tr>
<td>Rainfall mm (inches)</td>
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<td>4.3 (0.169)</td>
<td>5.4 (0.213)</td>
<td>16.6 (0.654)</td>
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<td>57.0 (2.244)</td>
<td>57.4 (2.26)</td>
<td>46.5 (1.831)</td>
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<td>350.7 (13.807)</td>
</tr>
<tr>
<td>Snowfall cm (inches)</td>
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<td>25.2 (9.92)</td>
<td>20.3 (7.99)</td>
<td>6.5 (2.56)</td>
<td>1.1 (0.43)</td>
<td>0.0 (0)</td>
<td>0.0 (0)</td>
<td>0.0 (0)</td>
<td>8.7 (3.43)</td>
<td>29.5 (11.61)</td>
<td>41.3 (16.26)</td>
<td>175.1 (68.94)</td>
<td>175.1 (68.94)</td>
</tr>
</tbody>
</table>

Table 2. Climate information for the Fraser Lake area. Data provided by Environment Canada, July 9, 2013.
The continuity of human presence in the study area for thousands of years counters the idea that this is a peripheral, extreme and inhospitable landscape (Anaya-Hernandez et al. 2011: 8-12; King 2010: 4-7; Craig and Jackman 2009:24). The archaeological sites in the study area are dominated by pre-contact components, many of which demonstrate repeated use through time (see Chapter Six for a full discussion). Historically and prior, the First Nations peoples throughout the study area relied on extensive knowledge of the terrain and its resources as part of their livelihood. Travel and trade routes through the landscape enabled people to move with the seasons and access important life sustaining resources, as well as, maintain important social ties with one another. Fish resources were essential for First Nations peoples prior to and following the arrival of Europeans in the early 19th century. The fundamental importance of fish in this landscape, up to and including the present day, cannot be overstated (cf. Woody and Hardy 2007; Province of British Columbia n.d-1.). Today, the study area continues to be a vibrant and lived-in landscape.

The periphery as seen by the centre in the description of the study area provided above is different to the way the periphery views itself – and vice versa (cf. Zarycki 2007:124-129). This is in part because perceptions of landscape are rooted in both space and time, where differential experiences produce different perspectives – even of the same landscape (Bender 2002:103; van de Noort and O’Sullivan 2007:82). Without lived experience in a particular landscape it is difficult to fully understand the complexities and social realities of that landscape (Zarycki 2007:126, 129). This difficulty stems from habitus and our standpoints; the ways we gauge and classify new experiences and develop understandings of the world. Given the fact that habitus is grounded in landscape it stands to reason that a local and a foreign habitus will differ significantly from one another. “Different people, differently placed, engage with the world [and one another] in different ways” (Bender 2002:106), thereby making it entirely possible for “the same piece of ground [to hold] different attachments and contrasting meanings for different people and groups, at any one time and through time as well” (Ashmore 2007:259).

Alternative perspectives of the same landscape are nicely illustrated in a recent discussion regarding the legitimacy of fur trader and explorer, Simon Fraser’s 19th
century signature on the rocks at Stuart Lake (Figure 12). Buried in the footnotes of this article, the authors Francis and Porter (2010:103) made the following comments:

*The same anonymous reviewer suggested that if the inscription is an early to mid nineteenth century “forgery,” the signature was likely seen frequently in the immediate years thereafter. The reviewer writes: “Traders often travelled along the shoreline, and the signature, presumably, was bright and noticeable for several years. It was drawn where there were other pictographs that were presumably seen frequently. The location now remote and isolated was really less remote and isolated for much of the nineteenth century. If the author of the pictograph was a forger, he may well have enjoyed the satisfaction of his forgery in his own lifetime.” We accept this suggestion as a valid alternative interpretation of the evidence. Current use of [Stuart] lake, however, which includes fishing, boating, kayaking, canoeing and snowmobiling by both Aboriginal and non-Aboriginal local residents and many seasonal tourists, removes any notion that either the lake or the inscription site are more isolated and remote [today] when compared to human activity on the lake during the nineteenth century.*

![Simon Fraser's signature at Stuart Lake, British Columbia – edited image.](image)

It is alternative perspectives that this theoretical framework seeks to facilitate. By choosing a typically “peripheral” landscape as the “centre” of study, a shift in perspective has already happened. This new perspective incorporates the character of this region, with its distinct seasonality and riverine / lacustrine waterscapes as the centre of study. The waterscape focus of this research is not only decidedly different to the terrestrial roads and pathways of more traditional archaeological studies of landscape and movement, it is reflective of the central position the waterways of the study area played in past First Nations societies. The waterscape focus in this research is essentially putting the idea of habitus, as discussed earlier, into action. For Dakelh
peoples in the past, waterscapes were central to society and an integral component of landscape use. This centrality and importance of water travel is most aptly demonstrated through the English translation of the name Dakelh, which means “we go on water.”

This shift in perspective is analogous to looking within for understanding, because it is from within the periphery that a different vantage point can be gained. This is not the same as transforming the periphery into the centre, or “mainstreaming” the margins; it is about choosing to stay at the margins and to see things from this perspective. This shift is about seeing the margins, such as this understudied northern rock art landscape, as spaces of possibility, places to develop “counter hegemonic discourse” (hooks 1990:341) of landscape and of rock art.

**Understanding Meanings**

In order to understand the meanings in landscapes the different spatial and temporal scales at which meanings occur need to be considered. Human presence, action and interaction are essential to the making of meaningful landscapes. The theoretical themes of audience (presence), movement (action) and communication (interaction) are utilized in this research as a pathway to understanding that meaning. Consequently, in order to examine the rock art itself in meaningful ways and to understand landscape meanings through the rock art, it is necessary to consider the different spatial and temporal scales at which these theoretical themes occur within the context of the rock art.

**Spatial and Temporal Scales**

Whereas most landscape approaches to the study of rock art deal with various spatial scales, these scales are not standardized for all rock art sites (Chippindale 2004:102). Chippindale (2004:109) has identified this variation of spatial scale as an inherent characteristic of rock art and therefore, we should be warned against “some standard approach to defining spatial units in rock art.” As a method of best practice he suggests dealing with the diversity of “spatial patterns simultaneously at a variety of physical scales” (Chippindale 2004:110). With this in mind, it is necessary to identify the spatial scales that are best suited for this assemblage of rock art in this landscape.
In this particular physical and cultural setting, it is necessary to consider a nested spatial framework; one that reaches beyond the spatial scale of motif. It is essential to look beyond the rock markings themselves in order to understand meanings because the rock art exists at more than the scale of motif. Similarly, it is important to recognize that the rock art exists at various temporal scales. This recognition is important because the presence of the rock art has persisted through time and its meanings and significance are ongoing and continually being renegotiated.

The nested spatial framework used in this research is comprised of three scales. The first is the larger regional scale that is the study area (see Chapter One). At this scale, the rock art is examined in terms of its general pattern of distribution and its relationship with the natural environment. At this scale, it is important to identify whether various localized patterns of placement exist or if an overall regional distribution pattern occurs. It is through the identification of common distribution patterns and shared practices of rock art placement that are the beginning to understanding rock art as a system rather than a succession of disengaged sites (Bradley 1997:89).

At its broadest spatial scale, the rock art occupies the entire landscape of the study area, spanning two First Nations traditional territories, as well as, including the destroyed markings on Takla Lake. Within this cultural network of interaction is the waterscape scale of the rock art. These bodies of water provide important places for action and interaction, as well as, connections between places across the territories. These bodies of water not only provide important routes and links to places in the landscape, they are themselves places. This is the landscape scale of territory and it operates at the timescale of cultural development that spans hundreds of years. In this landscape, cultures have developed over a long period of time, where trends and changes in traditions have resulted in a variety of meanings for the landscape, as well as, for the rock art (cf. Canuel 2010; Cole and Lockner 1989; D.L.S. 1930; King 2009; Morice 1892-93). These meanings last a long time, they are ongoing and this landscape and the rock art are still meaningful (cf. Mitchell 2006a).

The second spatial level is the scale of site. At this scale, the physical characteristics of the places chosen for pictographs are investigated. The goals here
are to identify the types of natural places that were considered appropriate for the placement and use of paintings and to determine if those places are prominent in the landscape. Location and visibility play significant roles in the assessment of public and private places, as well as, the accessibility of those places by past peoples and the presence within society such places could have afforded the rock art. Together, these elements are important for understanding the relationship between the locations of the rock art and how people in the past may have experienced the markings as part of their daily lives.

In addition to prominence, the physical features of the sites are investigated in terms of their capacity to support activities other than rock art. It is here that the spatial relationship between the rock art and other archaeological sites is considered, in order to assess human activity at the site and in the immediate surrounding area. These considerations at the site scale have the potential to lend insight into how the activities of rock art production and use might be spatially related to other activities and additional ways in which people used and perceived of the landscape.

The process used to investigate the spatial relationship between the rock art and other uses of the landscape are discussed in detail in Chapter Five, and this includes considering how the markings relate to local and regional systems of movement. In addition to using a GIS platform and basic spatial analysis techniques and mapping for this assessment, characteristics of the rock art panels, such as location, orientation, direction and accessibility and how these relate to waterways and footpaths are considered. It is these characteristics of the rock art sites that enable identification of the extent of exposure the markings could have had in society and if the markings were commonly known to past peoples.

Here ideas of private and public space play important roles in determining the potential audience(s) and the circumstances in which people would have experienced the markings. This landscape scale of site operates at the timescale of experience that spans tens of years. This timescale represents the generations that have lived and worked in this landscape and experienced the rock art throughout their lives.

The scale of motif is the third level of this spatial framework. At this spatial scale, the markings themselves are considered, where patterns of repetition are sought and identified. At this scale, the markings are assessed for their communicative
potential. Multiple occasions of repeated symbol use and re-occurring combinations of symbols are what imply underlying shared understandings (Dibble 1989:330) and it is these shared understandings that make communication possible.

This final landscape scale of motif operates at the intra-annual timescale. This scale represents different people engaged in different activities and communicating in different ways in this landscape. This scale is represented by the daily and seasonal activity in the landscape where the rock art may have only been experienced in a seasonal manner during a few months of the year.

The political implications of archaeology cannot be ignored and the fact that archaeological data have significant public value emphasizes the importance of peopling the past (Spector 1993:33). When rock art is approached with these spatial and temporal scales in mind, and it is re-united with the landscape, the human presence and agency embedded, over time, in the production and use of the markings can be acknowledged. When rock art is understood in terms of human presence, action and interaction, sites become peopled, dynamic and meaningful.

**Presence – Audience**

The idea of an audience is critical to the interpretation and meaning of rock art (Bradley 2009:44-45). For rock art and for landscapes, significance and meaning come from human presence. If there is no one present in a landscape to experience the markings, then the rock art is unknown and has no meaning; just as an unknown landscape is meaningless. It is through the experience of the rock art by the audience that meaning is created; “social interactions involving people and objects create meaning” (Gosden and Marshall 1999:169). Therefore, it is important to consider the audience in order to begin understanding the meaning of rock art. It is through this consideration of the audience that the intention of the rock art may be learned.

Rock art may have multiple levels of intention and significance, depending on its physical location, the images used in its creation and the make up of the audience. Significance is greatly affected by the knowledge of the audience and their skill at interpreting the markings (Bradley 2009:44). It is not necessarily enough for people to simply see rock art for it to be meaningful; audiences need to engage with the rock art, they need to be knowledgeable in order to interpret the markings and understand the
meanings and messages communicated by the symbols and their placement in the landscape. Meanings can change with the passage of time according to the composition of the audience (Bradley 2009:44-45). Depending on the purpose and function of rock art, the audience may very well include the maker of the markings; perhaps enabling an ego-based dialogue-of sorts through the rock art.

Audiences essentially come in a variety of spatial and temporal scales, because an audience may be an individual who experiences and engages with a single motif once in their lifetime, or an audience may be a community of people repeatedly engaging with rock art across a landscape throughout the entirety of their lives and an audience may experience something in between a single and a lifelong encounter with rock art. Considering the persistence of rock art through time, there are essentially innumerable possible audiences. More aptly, there is a spatial and temporal continuum of possible audiences to be considered, including intended and unintended, short and long term, and large and small audiences.

With any assemblage of rock art, participation and engagement on behalf of a knowledgeable audience(s) would have been necessary for the markings to have purpose and meaning in past societies. The knowledge of the audience(s) is particularly important when motifs are stylized in form, because abstract markings require more interpretation than naturalistic images (Bradley 2000:70). The importance of the audience is another reason for re-connecting the rock art to its landscape setting because, “the configuration of the places where artworks were deposited or displayed can provide clues to the character of the audiences to whom such practices were addressed” (Bradley 2009:45).

The location of the rock art, its meaning(s), and the audience are so entwined that the audience is part of the context of the rock art; socially shaping and re-shaping its use and significance over time. As a result, the rock art – like other material objects – accumulate histories (Gosden and Marshall 1999:170). Whereas other forms of material culture that are portable, like stone tools, pottery and ornaments typically obtain their histories through mobility and exchange etc., rock art is stationary and unable to move; but, “the world has changed around [it], and it is this alteration in context which has contributed to the accumulation of biographical detail” (Gillings and Pollard 1999:180) and the accretion of history. Despite the seemingly static
characteristic of rock art, it is dynamic and constantly changing because the audience, who moves past it, alters its social context and that brings about new significance and different meanings.

The concept of the audience as a route to understanding the meanings and significance of the rock art is a central interest in this research. The ideas about the audience(s) discussed here have informed the methods used in this study; in particular, the need to connect ethnography with archaeology. The oral tradition of First Nations peoples enables knowledge to be protected and shared across the generations. The First Nations peoples living in the study area and their ancestors have lengthy histories of occupying this region and therefore they may possess relevant and insightful knowledge of the rock art that is otherwise unobtainable. Therefore, to understand the potential audience(s) of the rock art in the study area it is not only pragmatic but potentially extremely productive to combine ethnographic methods with archaeological approaches.

**Action – Movement**

*People are always in some relationship to the landscape they move through – they are never nowhere.* [Bender 2001:78]

Movement is integral to the making of meaningful landscapes because it is through movement that we encounter landscape and experience the world around us; “meaning is immanent in the relational contexts of people’s practical engagement with their lived-in environments” (Ingold 2000:168). Therefore, to understand the landscapes of the past and the rock art that is in those landscapes, in ways that are meaningful, it is necessary to understand people’s movement and how the fixed points of the rock art combine with the dynamics of that movement in the making of landscape through time.

It is also pragmatic to identify the modes of mobility utilized within a given landscape, because people respond to the opportunities and constraints of the environment in unique ways and this directly impacts modes of mobility and technologies of transportation that are developed and utilized within cultures, through time (cf. Gibson 2005). These choices and the practical differences in modes of transportation change over time; and these modes influence the meanings of places
(Mullins 2011: 78-80). It is not just the act of moving through a landscape that shapes its significance for people, but how we move through it also contributes to that meaning. Mullins’ (2011) canoe tripping through Canada’s north demonstrates this connection between sense(s) of place and movement as he and six others paddle canoes from the foothills of the Canadian Rocky Mountains to the Arctic Ocean. For Mullins (2011:77), landscapes and social interactions are “co-influential and woven together through the practice of skilled activities.” Palmer (2005: 169) observes the influence of mobility in terms of speed of movement while traveling with local community members from the Alkali Lake Reserve, British Columbia, where the leisurely pace of her vehicle enabled passengers “time to notice the places, and to tell the stories.”

In the study area historically and prior, mobility played a key role in the ways in which people used the land and the water. As a landscape of hunter / gatherer / fisher peoples, seasonal movements were an essential part of life – on foot and via the water. Robinson (2010) has demonstrated that a consideration of patterns of movement in the study of rock art is an effective way to better understand the social contexts of that rock art and for identifying potential audiences; particularly in hunter / gatherer societies where mobility and movement were very much a part of landscape use.

Movement in this landscape occurs at the regional or territorial spatial scale and it operates at a seasonal timescale. Movement is represented by the activity and action of the painters in their creation of the pictographs, by the audience’s engagement with the motifs and by the travel of both painters and audiences along the water routes of the study area. This movement would have been affected by the seasons and was likely at its peak during the summer months when the waterways were free of ice and canoe travel was possible. Therefore, there is potential for insight in considering seasonality in this research. Movement represents the action, mentioned earlier, that is needed, together with human presence and interaction in order for landscapes to be meaningful.

It is this relational context of people’s engagement with landscape through the activity of movement and its relationship with the location of the rock art that this study seeks to understand. In this research, rock art is approached as both a cause for
and a product of human movement; where its creation and utility are achieved through and by repeated human action and experience. The water routes of the study area are considered as integral parts of a larger whole, rather than as elements acting to segment places throughout the landscape (Ingold 2000:192). Just as the water bodies in the study area are considered places in their own right, so too are these routes.

When approached in this manner, the acts of producing and using the rock art and the movements of people through the waterways are realized to be socially meaningful gestures that transformed the topography into landscape, where meanings were derived from the many personal, social and culture acts of mobility, experience and interaction that occurred along the path of the rock art. This approach also recognizes the important role these water routes through the landscape played in rooting people to place; “being on-the-move...nevertheless always involves a degree of being in place” (Bender 2001:85).

**Interaction – Communication**

How people communicate varies over time in response to their history of relating. [Wood 2011:18]

Alongside movement, communication is also essential for making landscapes meaningful. It is through communication that people engage with one another and generate social relationships. Without these relationships we are essentially Bowling Alone (Putnam 2000) and disconnected from one another and community-less. (Watzlawick et al. 2011:3). It is these social relationships and our experiences with others, in place, that bring meaning to our lives and connect us in significant ways to each other and to the landscape. In addition to comprehending movement, as discussed in the previous section, in order to understand the landscape and the rock art of the study area in meaningful ways, it is also necessary to consider how past peoples in this landscape communicated and the ways in which the rock art was part of the social practice of that communication.

People use a variety of forms of communication to interact with one another and we are always communicating, but not necessarily with spoken words (Watzlawick et al. 2011: 31, 54-56). Non-verbal forms of communication permeate daily life, past
and present, and these include: kinesics (face and body language); haptics (touch); olfactics (smell); proxemics (personal space); paralanguage (vocal sounds); silence; and artifacts (Wood 2011: 100). Through these non-verbal actions and our spoken words, we communicate a host of messages that are interpreted by others around us – “we rely first and foremost on our audience’s ability to infer our meanings” (Sperber 1995: 194). Sometimes the messages we intend to communicate are strikingly different to the messages perceived by others. These differences in perception occur because meaning is contextual and people utilize a plethora of complex ways to produce, codify and communicate meaning (cf. Preucel 2010; Tomasello 2008).

Historically and prior, the First Nations peoples throughout the study area relied extensively on the oral transmission of knowledge, stories and histories as a record keeping system, an education system and a way to maintain their cultural identities (cf. Harmon 1911; Lamb 2007; Morice 1889; MacKenzie 2001). In addition to the many traditional languages spoken throughout the study area in the historical and pre-contact eras, people also utilized a variety of non-verbal communication platforms to interact with one another, including the creation of material culture such as rock art (Morice 1892-93). Rock art it is one of the few non-verbal forms of communication, along with other preserved artifacts, that is archaeologically visible.

Because First Nations peoples in the study area did not have a traditional written language, rock art had a crucial role to play in communication, over time and space, at physical places punctuated throughout the landscape. How people communicate and the mechanisms used for communication affect how people relate to one another (Watzlawick et al. 2011: 32; Wood 2011:38). Although we cannot know the details of the social circumstances surrounding the initial appearance of rock art in the study area – in particular whether or not it was a technology already culturally known to the people who migrated to this place or if it developed later – and it has more than likely changed over time as a result of its use in this landscape; it is for certain that its inception and modification over time brought about new and different ways for people to relate to one another and to the landscape.

Human communication is a process involving the production and exchange of meaning and it is a fundamentally cooperative endeavour that is reliant on shared understandings and intentionality between communicators (Fiske 2010:2; Tomasello
2008:6-7). “While it is perfectly possible to transmit strings of symbols with syntactical accuracy, they would remain meaningless unless sender and receiver had agreed beforehand on their significance” (Watzlawick et al. 2011:3). Without shared understandings, communication cannot occur and its pedagogical potential is lost.

In order to start to understand rock art as a form of communication it is necessary to consider a series of sites, rather than a few isolated panels of motifs (Bradley 1997:89). Examining a series of sites provides opportunities to recognize repetition and identify commonalities within the rock art; whereas such commonalities would not necessarily be evident in a consideration of only one or two sites. It is through the identification of commonalities within an assemblage of rock art that shared meanings and common underlying conventions can be realized (Whitley 2005:80). It is repeated symbol use and repeated combinations of symbols that this research strives to identify across a series of waterscape rock art sites, because it is through evidence of repetition that it is possible to recognize an agreed upon meaning embedded within a system of rock art.

Communication through the rock art in the study area occurs at the spatial scale of motif and it operates at a generational timescale. Communication is reliant on the presence of the painters and the production of the markings, as well as, the engagement of the audience and their interpretation of the painted panels. But most importantly, communication is reliant on Peirce’s (1878:286) “clear idea” that is defined as “one which is so apprehended that it will be recognized wherever it is met with, and so that no other will be mistaken for it. If it fails of this clearness, it is said to be obscure.” This communication through the rock art would have been affected by trends and changes within society as generations wax and wane with the passage of time. Communication represents the interaction that is necessary, together with human presence and action in the making of meaningful landscapes.

When viewed as a form of communication, the rock markings become more than mere pictures. Considering the rock art as part of a system of communication offers an opportunity to contemplate the social interactions involved in the production and use of the paintings; and to consider the markings themselves in terms of form, potential subject matter, structure and repetition across the study area. Nash (2002:176) has aptly noted that symbols, rock art included, “create or establish a
narrative; [they act as] a story or language.” When seen as places of communication, rock art sites offer opportunities to identify instances of human presence, action and unique social interactions embedded in the landscape that enable a story of the past to emerge.

**Moving Forward**

To address the research questions of this thesis and investigate the multiplicity of meanings embedded in both the landscape and the rock art of the study area and to seek the alternative perspectives discussed at the beginning of this chapter, this landscape needs to be interpreted on its own merits, from within. To reach beyond the image of the rock art and move toward meaning and social understanding – thereby changing the role of rock art in British Columbia archaeology – pictographs need to be investigated from within their landscape and cultural settings. To address the unbalanced weighting of traditional knowledge against Western ways of knowing, First Nations voices from within this landscape, about this landscape and about this rock art need to be heard. A more intimate scale of knowledge is needed; one that resides at the First Nations community level within this landscape, rather than seeking a broader more continental scale of knowledge that ultimately resides outside this landscape. As with other data forms, this oral information needs to be methodologically collected and critically considered.

Archaeology offers the means through which to understand the complexities of rock art in significant and meaningful ways: by enabling the interpretation of the material culture of the rock art and going beyond to developing an understanding of the social and cultural implications of that material culture. The primary research question posed in this study aims to understand just that, the *social significance* of the imagery of the rock art and its waterscape placement throughout the study area. Connecting the rock art to its landscape setting is essential to understanding meaning, because it is through perceptions of and presence in the landscape that meaning is derived (Bender 2002: 103; David and Thomas 2008:36; Taçon and Ouzman 2004:39). Not only is it important to re-unite the rock art with its landscape setting, it is entirely *possible* to do so, because of its primary context and the fact that today rock art is
found exactly where it originated and was intended to be used – there is no doubt as to its original physical location.

The primary context of the rock art can be used to bridge the individually marginalized components discussed at the beginning of this chapter, into a creative whole. By connecting these marginal areas, seeking alternative perspectives and balancing informed and formal approaches it is possible to develop the methods best suited for this theoretical framework and to address the research questions in this study (identified in Chapter One). Once the compound temporal and spatial ways there are for looking at the landscape of the study area are realized, when the diversity of audiences that may have experienced the rock art are acknowledged and when the multitude of possible intentions the painters may have had for creating the rock markings are considered, the complexities associated with interpreting and understanding meaning become evident.

By utilizing informed and formal approaches simultaneously and developing a perspective informed by social and spatial approaches to human action in the landscape it is possible to effectively deal with these complexities, and bring to light the entwined nature of human presence, action and interaction that occurs in the conversion of topography to landscape as a result of the attachment of meaning to places.

The theoretical discussions outlined in this chapter have clear methodological implications that inform this research. In particular, the concept of marginalization has been developed and identified as an avenue with potential to turn the epistemological table a notch-or-two and to seek alternative perspectives of rock art and of landscape. The concepts of human presence / audience, action / movement and interaction / communication have been developed and identified as significant components in the construction of landscape. The aim of this chapter has been to set the framework from which the field methods, analysis and interpretation are enacted in the remainder of this thesis. In the following chapter, the informed and formal methods implemented in the process of putting these frameworks into practice are presented and discussed.
Chapter Four
APPROACHING ROCK ART

In order to investigate the social significance of the placement and imagery of waterscape rock markings in the study area, a combination of methods designed to acquire, analyse and interpret the necessary data are employed in this research. These methods include: First Nations dialogue and project co-design; archaeological field surveys; semi-structured ethnographic interviews; archival research; spatial analyses using a GIS platform and quantitative and qualitative analyses. It is the discussion and development of these data acquisition components and the intricacies associated with this stage of the research that is presented in this chapter. Details of the actual data gathered and the analyses performed as part of this research are featured in Chapter Five and Chapter Six and are not discussed here.

This chapter begins with a discussion of pre-fieldwork research design and dialogue with First Nations communities not only to gain permission to conduct research in the study area, but also to discuss the best framework for the research methods. The sampling strategies for both the archaeological survey and the formal interview process are elaborated, as is the process for research ethics approval from the University of Leicester Ethics Review Board. Secondly, the stages of fieldwork are explained, which are divided into two components: archaeological, where the process used to locate and document the rock art is described; and ethnographic, where aspects pertaining to the interview process are presented. A description of the analysis process follows.

Pre-fieldwork Planning

Consulting with First Nations communities was the first step of this research project (cf. Association of Canadian Universities for Northern Studies 1998; Tuhiwai Smith 1999). Before research could begin, permission from the First Nations peoples in the area was required in order to locate and document the paintings and to interview community members about the markings. This process started with contacting the chief and council of the Takla Lake First Nation.
Obtaining First Nations Permission

In June of 2009, a meeting was held with Chief Dolly Abraham at her Prince George office to discuss this research and to ask permission to focus on the traditional territory of the Takla Lake First Nation in this study. At the close of the meeting, Ms. Abraham expressed her support for the project and a few weeks later a written research agreement and a band council resolution that granted permission for the project, was received (Appendix A). At this time, the Takla Lake First Nation traditional territory was intended to be the entirety of the study area. A few weeks later monetary support from the Takla Lake First Nation was received. These funds, along with the author’s were used to provide the honorariums paid to the informants participating in this research.

The initial agreement included specification for an archaeological survey of one of the northern-most lakes in the territory. As this leg of the fieldwork was being planned, it became apparent that after additional discussion with Ms. Abraham, there was reluctance on her part to have the results of the archaeological survey of this northern lake published in a doctoral thesis if pictograph sites were located. She was however, completely comfortable with the publication of information regarding the pictographs on Takla Lake that had been destroyed in 1971. As a result of these discussions, only these destroyed pictographs from the Takla Lake First Nation traditional territory are included in this study. While the assemblage of destroyed rock markings was important and relevant to this study, on their own they were not enough for the research project. As a result, other First Nations communities were contacted and a dialogue opened to conduct this collaborative research in their respective traditional territories.

In April of 2010, Gregg Drury, Executive Director for Tl’azt’en First Nation was contacted and details of the study were discussed. At the direction of Mr. Drury, a copy of the research done by the author in previous years in Tl’azt’en territory, along with a description of this doctoral research and a formal written request were forwarded to Chief Ralph Pierre and council, asking for their permission and collaboration in this study. By early August of 2010, a signed research agreement from the Tl’azt’en chief and council granting permission for this research was received.
(Appendix B). Direct discussions with Mr. Pierre did not occur as it had done at Takla Lake with Ms. Abraham.

At the same time communication was occurring with the Tl’azt’en First Nation, contact was made with Beverly Ketlo, Lands Manager of the Nadleh Whut’en First Nation regarding this study. Through Ms. Ketlo, a formal written request to Chief Larry Nooski and council was made, asking permission to conduct this research in Nadleh Whut’en traditional territory and to inquire about collaboration with community members. In May of 2010, written permission from Nadleh Whut’en First Nation in the form of a signed research agreement was received. In order to work in Nadleh Whut’en territory, a memorandum of understanding outlining the protocols expected of researchers operating within the territory was also required (Appendix C).

Through previous research and experience in Tl’azt’en and Nadleh Whut’en territories, the location of many rock art sites in the area were already known to the author. Those sites coupled with the destroyed paintings at Takla Lake and the possibility of locating additional sites through survey work, indicated that an appropriate study area, as described in Chapter One, had been established. This realization along with formal written First Nations permission meant that the research was able to move on in terms of its overall design, including planning the archaeological survey.

Sampling Strategy – Archaeological Survey

For the archaeological survey portion of the fieldwork, the study area was divided into sample units based on environmental zones, and as discussed in Chapter One, focus was directed at waterscape locations, predominately lakes. As with other archaeological projects where the study area covers a substantial amount of land, it was practical to survey only a portion of the study area (Hester et al. 1997:25-40). This sampling method also incorporated conditional properties, where previous research and experience working in areas within the proposed study area that contain rock markings, provided insight (Mitchell 2006a; 2006b; 2007).

This sampling strategy is best described as a nested strategy, where several sampling levels are involved. The overall study area includes two expansive traditional First Nations territories that form the top level. The environmental units – the lakes –
within this larger level form the second layer. The third layer is comprised of those lakes with a ranked potential for shoreline and near-shoreline exposed rock. And the fourth layer includes the lakes that were sampled. With regard to the third First Nations community – Takla Lake First Nation – only the assemblage of markings destroyed in 1971 were included in the sample population. The remainder of the lakes within Takla Lake territory are not included in this project.

This project is concerned with the “collection” of one particular type of archaeological material, rock markings. In any given landscape the most basic requirement for rock markings is the presence of exposed rock. Throughout the study area, there are many lakes, of which some do and some do not possess this essential characteristic. For this project, it was necessary to identify which sample units, or lakes, have exposed rock at or near the shoreline.

In order to identify sample units with the most potential for exposed rock, a combination of 1:250,000 and 1:50,000 topographic maps were examined. These sample units were ranked from low potential to high potential. This ranking system was based on the physical features of the terrain evident in the topographic maps – primarily the elevation gain at the edge of the lakeshores, the accessibility of the lake and the comparison between the physical features of these potential sample units and the features of lakes known to contain rock markings. Lakes that displayed a significant elevation gain at the shoreline were ranked as having a high potential. Lakes with evidence of some elevated terrain at or near the shoreline were ranked as having medium potential and finally those lakes with marsh or swamp land and flat terrain at the shoreline were ranked as having low potential. The lakes in the Takla Lake First Nations traditional territory were not ranked, because only the destroyed paintings on Takla Lake were investigated in this study.

Of the 151 sample units considered in this ranking scheme, a total of 141 (93.37%) indicated a low potential for exposed rock surface. A total of four (2.64%) indicated a medium potential and finally, a total of six (3.97%) indicated a high potential for exposed rock. Of the six sample units rated as high potential, four had already tested positive for rock markings – these tests had been conducted as part of previous research projects and as reconnaissance efforts in anticipation of this project – the remaining two units had yet to be tested (Mitchell 2006a, 2006b, 2007).
In this archaeological survey, a total of 13 sample units are investigated. Three of the six lakes with high potential, Stuart Lake, Trembleur Lake and Fraser Lake are considered. Francois Lake and the Stellako River are not included in this research even though both were rated as having high potential. Even though rock markings are located along the shores of Babine Lake it is not included in this research. Babine Lake and Francois Lake were not included in this study because the majority of these lakes exist outside the traditional territories of Tl’atz’en and Nadleh Whut’en First Nation communities.

In order to include these additional lakes it would have been necessary to establish research agreements and begin dialogue with the First Nations communities associated with these lakes. Research agreements with these neighbouring First Nations were not pursued because the overall size of the sample population without these additional territories was sufficient for this project, as was the number of sites already known to occur in the area. More sites and more territory to survey would have been unmanageable for this project. The Stellako River was not included in this research because of the nature of the river itself, and the specific need for a much smaller and more easily manoeuvred boat than the one used in this research.

In this archaeological survey, three of the four lakes with medium potential are included; Pinchi Lake, Cunningham Lake and Taltapin Lake. Whitefish Lake was not included because of the time constraints associated with the completion of this research project and the time consuming nature of the archaeological survey work. As with the high potential lakes, these medium potential lakes were surveyed from a boat on the water and pedestrian survey on the shorelines where required.

Seven lakes with low potential are included in this study. These surveys were conducted from the shoreline of the lake – not from the water as with the medium and high potential lakes. The small size of these low potential lakes enabled the completion of a survey from the shore, with the use of binoculars, to determine the extent of exposed rock outcroppings. These shoreline-based surveys could be conducted in a timely fashion, unlike the watercraft-based surveys conducted at the lakes with medium and high potential that required a substantial amount of time.

Two methods were used to select which of the lakes with low potential would be surveyed. Ormond Lake and Oona Lake were selected because of the cultural
significance these lakes hold for the peoples of Nadleh Whut’en First Nation and for the neighbouring peoples of Stellat’en First Nation. Top Lake, Peta Lake, Dry William Lake, Grassham Lake and Camsell Lake were chosen because of the ease of access and the fact that a quick survey, while enroute to some of the lakes with high potential, was possible. These quicker surveys meant that more lakes could be considered as part of this research, without over-extending the fieldwork timeframe. The climate and seasonality of the study area, permits only a few months of fieldwork each year. Typically, this window opens when the lake ice melts usually in May and closes again in October or November. It was important to include surveys of some of the lakes ranked as having low potential so the extent of exposed rock surface could be determined through direct observation, rather than relying completely on the topographic maps and the pre-fieldwork ranking scheme.

**Sampling Strategy – Semi-structured Interview Process**

Consulting with First Nations community members was an important part of the fieldwork conducted for this research. As with the archaeological survey, effort was spent ensuring the interview process was as systematic as possible. This concern for a systematic approach was to ensure consistency between interviews and to ensure procedures able to be replicated by other researchers were used (cf. LeCompt and Schensul 1999).

The sampling process began by communicating with the gatekeepers in each community and seeking their guidance regarding whom to interview. This approach is a reputational or network sampling method. The primary gatekeepers in each community provided the initial list of cultural experts and suitable informants to interview. Once in the interview, those experts and informants were asked to suggest other people to interview.

A minimum or maximum number of interviews was not predetermined, but rather the suitable number of interviews was gauged by the amount and type of information received. It was more important to gather enough information than it was to achieve a particular sample fraction. This decision was based on the fact that it is extremely difficult to gauge the appropriate number of interviews prior to going into the field because each community is different in terms of the knowledge possessed by
its members and the amount of information people are comfortable sharing. The
information was monitored as it was gathered, which enabled the continuation and
eventually the termination of the interview process to be determined. As discussed in
Chapter Three the ways in which landscapes are understood based on experience,
made it necessary and advantageous to obtain a range of interviewees with diverse life
experiences in the landscape of the study area so they could give their own
perspectives of the rock art, their own situated knowledge and understanding.

Research Ethics Approval

Once formal First Nations permission was established, application for research
ethics approval from the University of Leicester was made. All students and faculty at
the University of Leicester conducting research involving human participants engage in
a formal process of research ethics review. As part of this review process, the author
attended a Research Ethics in Practice training session with Dr. Meera Warrier on May
10, 2011 on campus in Leicester. The formal application for ethics review was
submitted on May 11, 2011. Due to a misunderstanding on behalf of the author
regarding the proper submission process, the same application was re-submitted on
October 5, 2011 and formal ethics approval from the University of Leicester was
received on February 22, 2012 (Appendix D).

Fieldwork

The fieldwork began with locating and documenting the rock markings, before
conducting the semi-structured interviews. It was important to have a full
understanding of the types and locations of the rock markings before people were
interviewed. Recording the rock markings before conducting the interviews enabled
photographs of the paintings and sketch maps to be available for people to see and
talk about during the interviews. In this section the process involved in locating and
recording the rock markings is discussed.

Archaeological Survey

Locating and recording the rock art began several years ago as part of a
master’s degree and successive professional work contracts held by the author.
Consequently, by the time the official surveys for this project were conducted, the author was already familiar with many rock art sites and had photographed and documented a considerable amount of rock markings throughout the study area. Even though some data suitable for this project were already generated, it was important to re-visit the previously documented sites in order to verify the existing data and to collect additional data where possible. In addition to re-visited these known sites, a number of lakes were surveyed for the first time as part of the fieldwork for this project. The data gathered during the archaeological survey is presented and discussed in the following chapter.

A systematic survey of the shorelines of six lakes throughout the study area was conducted. This survey was comprised of Stuart Lake, Trembleur Lake, Fraser Lake, Pinchi Lake, Cunningham Lake and Taltapin Lake. The survey entailed a visual inspection, from a watercraft, of exposed rock surfaces at or near the shoreline. The entirety of the shorelines of these lakes was surveyed, including the perimeters of all islands.

This work involved scrutinizing the shorelines of the lakes, using binoculars where necessary, slowly traveling the perimeter in a 14 foot Mercury inflatable boat searching rock outcroppings and cliff faces for pictographs. The surfaces of rock outcroppings that lay near the shoreline were also examined; these near-shoreline outcroppings were investigated on foot. For this portion of the fieldwork, Robert Ksyniuk accompanied the author and aided in the operation of the boat and the locating of rock markings.

The recording technique was comprised of a variety of data gathering processes. These processes were oriented around “the site” and “the panel.” In this project, a site is defined as an area where culturally produced rock markings occur. The boundaries of these sites were determined according to the cessation of markings that extended over a distance of 150 feet – markings found within 150 feet of one another were considered as belonging to the same site. The definition of “panel” articulated by Loendorf was adopted in this research, where the panel is “any rock surface containing art and oriented, for the most part, in one direction” (Loendorf 1994:61). A single panel can comprise a site, as can several panels. The boundaries of the panels in this
project were determined by significant changes in the direction or plane of the rock surface.

While it has been noted that the panel is the primary data collection unit in rock art research (Whitley 2005), this project treats the panel and the site as the data collection unit. At each site and each panel a number of observations were made, which were recorded onto a Rock Art Site and Panel Recording Form (Appendix E). These recording cards were used at Fraser Lake and Trembleur Lake. With regard to the rock markings at Takla Lake that were destroyed in 1970, the information contained within “A Report on Archaeological Investigations in the Takla Lake Region, B.C.” (McMurdo, J. 1972) was transcribed onto these recording cards.

The recording cards used at Stuart Lake (Appendix F) vary slightly from those utilized at Trembleur Lake and Fraser Lake because these were the cards developed and utilized several years ago during the initial survey of Stuart Lake. These recording cards of the Stuart Lake rock markings were not re-written because the data necessary for this project is contained in these original recording cards and it was possible to include additional data on these same cards that was generated during the survey for this research.

**Site Recording.** The location of each site was recorded with a Garmin Etrex Vista global positioning system (GPS) as a waypoint. GPS units vary in precision according to the satellite signal received by the unit. Location, proximity to large cliff faces and cloud cover for example can disrupt the satellite signal received by the unit. In order to acknowledge this fluctuation in precision, the level of accuracy for each waypoint in distances of feet was recorded. These waypoints were used to keep track of the locations of the rock marking sites found and to plot these sites within the GIS platform during the analysis stage of research.

In addition to generating these waypoints, a number of observations about the natural environment of the sites were made. These observations were recorded as textual notes and as sketch maps. Textual notes included the location of the site within the context of the lake, such as it being located on a peninsula, a bay, or an island, a description of the natural terrain of the site and nearby features of the land, and the type of site, such as a cliff face at the water’s edge with no available shoreline or a terraced rock outcropping.
A sketch map of each site was created. This map provides a frontal view of the site which indicates the features of the surrounding terrain and the general location of the rock markings within that terrain. These maps have a broad field of view and provide details of the natural features in the land and the general placement of the markings at the site.

**Panel Recording.** A variety of data for each of the panels of rock markings located during the archaeological survey were recorded. As with the site recording process, the panel recording process also involved making observations and generating sketch maps. Observations included textual documentation of the physical orientation of the panel, such as, whether it was water or inland oriented, the cardinal direction of the panel and the overall condition of the panels. In addition to this textual documentation, numeric details were also recorded. The numeric data generated at each panel included the number of motifs, the number of panels, the inclination of the panel in degree values and the measurements of each motif and the overall panel size.

Two sketch maps of each panel were created. The first of these maps depicts a frontal view that details each marking, including the measurements of each motif, and the details of the panel itself, such as cracks and fissures and how these features of the rock surface related to the placement of the markings. The second panel sketch map is a profile view that indicates the location of the motifs according to the features of the panel and the surrounding terrain, such as the proximity of the markings to the water’s edge and large overhangs in the rock surface.

**Photographic Documentation.** Graphic documentation has historically been an essential part of rock art recording. Initial studies focused on generating hand drawn illustrations as a way of capturing the details and imagery of rock markings. Although illustrations are still an important part of recording rock markings, photography has proved to be an invaluable recording method. In addition to the site-based and panel-based spatial data described above, photography was used as the primary way of capturing additional important spatial data, as well as, generating rich detailed images of the sites and the markings.

Because rock markings cannot be brought back to the lab for further analysis, details must be gathered in the field. Photography is a powerful tool in this regard because it is a form of documentation that can capture the details of rock markings
and provide opportunities for further analysis after the completion of fieldwork. In this project, a series of photographs that capture the various physical scales at which sites, panels and motifs exist were generated.

These photographs were generated at the scale of the site so that the physical setting or natural context of the rock markings was captured. This process was continued at the scale of the panel where photographs where taken of the rock markings as an assemblage of motifs and photographs of individual motifs were also captured. A Leica V-Lux 1 digital camera was used to record the rock markings located during the survey.

In preparation for this research, an experimental photographic process was conducted that enables minute details of the rock surface and the rock markings to be captured. This process involved taking several close-up photographs of each panel and then stitching them together in a computer program, such as Adobe Photoshop, to create a “macro-panorama” of the panel. This close-up process has the ability to capture details of the subject being photographed in ways that a “regular” photograph cannot capture. The initial intention was to apply this process as the primary way of photographing the rock markings in this research, however due to the time consuming nature of this process it is not included in the fieldwork practice.

**Sampling.** Rock markings are secure in terms of their physical context and permanency of place, they are however, insecure in terms of chronology. Rock markings are rarely easy to date yet the need to do so is imperative (Whitley 2005). Establishing a sense of chronology for cultural remains is the hallmark of archaeological practice and as such, it is an essential component of rock art research. Despite this difficulty, substantial progress has been made in this regard in the past few decades.

Even though there is still much to be learned about chronometric techniques and their application to the study of rock markings, “there is every reason to be optimistic that rock art dating will be increasingly common and accurate” (Whitley 2005:53). Even though advances to chronometric dating methods have been made in recent decades, it is still necessary to develop relative, as well as, chronometric dating techniques in archaeological projects.
During the archaeological survey, several samples of calcium carbonate were collected for the purpose of having those samples dated and analysed. The prevalence of calcium carbonate at many of the sites within the study area made this process a highly suitable technique to include in this project. At Stuart Lake, two samples of calcium carbonate were collected. These samples were taken from sites where calcium carbonate had intruded over the rock markings. These samples were taken from areas adjacent to the rock marking motifs.

In order for the analysis of these calcium carbonate samples to be relevant to the age of the adjacent rock markings it was necessary for the samples to be from the same layer of calcium carbonate that had intruded over the rock marking motifs. It was extremely difficult to identify whether or not a build up of calcium carbonate and pigment were located on the same layer. Because of this difficulty, rock markings where the pigment itself was encased in calcium carbonate and about to exfoliate from the rock surface were sought; such a sample was located and collected from Stuart Lake. These areas on the rock panel were photographed both before and after the sample of calcium carbonate and pigment was collected.

At Tembleur Lake, two samples of calcium carbonate that had formed adjacent to rock marking motifs were collected. These samples were clearly from the same layer as the pigment in the motifs. As was done at Stuart Lake, two samples of pigment that were encased in calcium carbonate and about to exfoliate from the surface of the rock panel were also collected. These areas were photographed before and after samples were collected. In addition to these photographs, site information was recorded on each of the specimen bags used to store the calcium carbonate and pigment samples.

In addition to these samples of calcium carbonate, two samples of pigment that did not have calcium carbonate present were collected. The purpose of this collection was to conduct analysis into the composition of the pigment. As with the calcium carbonate samples it was important to identify motifs where the pigment was in the process of flaking away from the rock surface, and to collect samples in these conditions rather than to take a sample of pigment from an intact motif. One of these samples was collected from Stuart Lake and one from Trembleur Lake.

Sampling efforts at Fraser Lake were unsuccessful; due to the fact that the calcium carbonate was virtually impossible to scrape off of the rock surface. Samples
of pigment from Fraser Lake were also not collected because motifs with exfoliating sections were not identified. The rock markings at Fraser Lake were far more firmly adhered to the surface of the rock than many of the motifs at Stuart Lake and Trembleur Lake. This condition is likely due to the difference in rock types.

Two pigment samples from Trembleur Lake and one pigment sample from Stuart Lake were submitted to the University of Washington for X-ray Fluorescence scanning on November 6, 2012. This chemical analysis was kindly conducted by Erik Gjesfeld in the Department of Anthropology. The results of the X-ray Fluorescence scanning appear in Appendix G and they are discussed in Chapter Six. Aspects pertaining to the chronology of the rock art are also discussed in Chapter Six.

**Interview Process and Evaluating Oral Testimony**

Once the archaeological survey was completed, the communities of Takla Lake and Nadleh Whut’en were contacted in order to arrange interviews. At Nadleh Whut’en First Nation, Beverly Ketlo was contacted and she suggested people to be interviewed. Not only did Ms. Ketlo identify people for interviews, she made the necessary arrangements with the informants, and she kindly made her office available for the interviews. The author travelled to the community of Nadleh to conduct interviews with Mr. Roy Nooski and another community member, who wished to remain anonymous. Both participants were provided with an honorarium based on the research protocols already established within the community.

Similarly, Michelle Lochhead at the Takla Lake First Nation was contacted and asked to suggest people to be interviewed. Ms. Lochhead identified Lilly French as a potential informant. Arrangements were discussed with Ms. French on the phone and she attended the author’s home in Prince George, British Columbia for an interview. Lilly French was provided with an honorarium that was in accordance with Takla Lake research protocols.

Janine Luggi, a member of the Stellat’en First Nation at Fraser Lake was contacted by phone and an interview was arranged. Ms. Luggi was interviewed in the home of the author in Prince George, British Columbia. It was important to include Stellat’en First Nation community members in the interview process because much of Stellat’en and Nadleh traditional territories overlap one another and because Fraser
Lake is important to both communities. Ms. Luggi provided the names of Ken Luggi at Stellako and George George Sr. at Nadelh as potential informants. Ms. Luggi was provided with an honorarium as was done with the other participants.

Beverly Ketlo at Nadleh was contacted once again at the beginning of June 2012, and she provided the contact information for additional informants. That same month, the author returned to Nadleh territory to conduct an interview with George George Sr., who had been contacted by telephone a few weeks prior. At the completion of the interview, Mr. George was provided with the same honorarium as had been done with the previous informants from Nadleh.

Several First Nations elders from the Stuart Lake area were interviewed by the author a few years ago as part of the master’s degree research that was mentioned in earlier this chapter and the preceding two chapters. During that research project, elders from the communities of Tache, Nak’azdli and Yekooche participated in interviews. Because those interviews were specific to that previous research project and permission to use the entirety of the interviews for subsequent research had not been obtained, only the information stemming from the interviews that was published within the completed master’s degree work is used in this doctoral thesis.

At each of the interviews, the informants were provided with a consent form and a written description of the research project (Appendix H and Appendix I). The project was explained to each person and the consent form was reviewed in detail before the interview began. In case informants needed to be reassured that the chief and council in their respective communities had approved the project, copies of the signed research agreements were brought to the interviews. Once the consent form was signed, the interview began. Each interview was digitally recorded and written notes were made throughout the conversations.

The participants were made aware that they could choose to be anonymous at any time during the research process. One informant chose anonymity, while the others preferred to have their names associated with the information they provided. Careful attention was paid in order to maintain anonymity where necessary and equal care was taken to be sure a connection between information and informant was maintained, for those who wished to be identified.
The primary qualitative data gathering technique, for this portion of the fieldwork, was semi-structured interviews. This style of interview is inclusive, rather than exclusive such as with survey styles of research, and it enables open and direct interaction between the researcher and the respondent. This direct interaction is what facilitates discovery, discussion and clarification regarding the research topic. This direct interaction also enables a connectedness to develop between the researcher and the respondents – a key component to a successful interview is the avoidance of alienation between the researcher and the informant (Ritchie 2003:63). Throughout the interview attention was paid to the “comfort” of the participants and to respectfully express a personal gratitude for their words, knowledge and time. Each of the participants expressed a positive reaction to the interview and the time spent speaking about the rock art.

Although a list of interview questions was prepared (Appendix J), the preferred method was to listen to what people had to say about the rock markings in the manner they wanted to say it. So rather than start with the list of questions, the informants were asked, “how would you like to begin?” It was explained that they could start by speaking about the rock art or if they preferred, the interview could start with specific questions. In most cases, people were happy to start the conversation. In this process, the primary role of the interviewer was to encourage people to talk about their knowledge of the rock art and to be a good listener (cf. Ritchie 2003:84). This was a productive way of ensuring the relevant information was obtained throughout the interview without leading the informants in a particular direction and for avoiding receiving simple “yes” or “no” answers.

This interview process worked well because each informant had an opportunity to begin the conversation in a manner they found comfortable. By listening to each participant speak and following their paths of knowledge, the interviews led to unexpected and interesting places that the prepared questions alone might not have reached. Typically the informants’ discussions in the interviews included information about the aspects of the rock art that were of interest to the research and that had been addressed in the interview questions.
Evaluating information is an integral component of research. Oral testimony needs to be treated as cautiously and critically as other forms of information. Such evaluations need to consider the information in terms of its significance and relevance to the research; whether or not it is convincing and verifiable; and the suitability and credibility of its sources (cf. Barber 1994; Blaxter et al. 2006; Le Compte and Schensul 1999; Ritchie 2003). Additionally, identifying what is said and by whom is also an important part of using oral evidence in research, as is recognizing what aspects of the topic under study remain unaddressed. In this thesis, the details of what was said and by whom are presented in Chapter Five. It is these other aspects of evaluating oral testimony, as discussed above, which are addressed in this section.

The elders participating in the interviews utilized in this research were identified from within their own communities as being cultural experts. These elders were chosen by community gatekeepers for their knowledge, experience and standing within the community, making them well-suited and qualified informants. Each participant provided important and insightful information about the rock art that profoundly impacted this research.

The oral information generated through the interviews was directly relevant to the research topic, where people shared their knowledge of the rock art and its cultural importance to past peoples. Informants provided details about the circumstances through which the paintings were created and the ways the markings were used in the past. These aspects of production and use are directly relevant to the aims of this research and its endeavour to understand and articulate the social significance of the pictographs in the study area.

These interviews and the corresponding oral testimonies are significant in that they constitute the informed methods employed cooperatively and equally with the formal methods utilized in this research. This oral evidence demonstrated an ability to provide intriguing and useful ways of understanding and investigating the rock art and its landscape setting (see Chapter Six and Chapter Seven). Without this oral evidence, the outcomes of this research would have been considerably different.

The responses from the semi-structured interviews exhibited an internal consistency in that virtually all respondents spoke about the rock art in terms of its communicative functionality and its relationship with peoples’ travels through the
territories. Each participant drew from their own knowledge and life experiences to explain the rock art and this included knowledge received from parents and grandparents. Information and insight, transferred across the generations, such as that demonstrated in the interviews, is integral to developing and maintaining traditional knowledge. The participants discussed the rock art in terms of intricate details and it was through the analysis process that the broader concepts of communication and mobility were recognized. At the time of the interviews, these themes of interest (communication and mobility) were not yet identified – they arose after and as a direct result of the interview process. This consistency within the oral evidence speaks to its convincing and credible nature.

Comparison of oral information with other types of data can be a useful method of verification. The oral information in this thesis was evaluated against other lines of evidence through the analysis conducted in Chapter Six. The oral testimonies implied certain characteristics within the rock art and its landscape setting should be evident. The way people spoke about the functionality and use of the markings implied that the paintings should be located and constructed in certain ways. These implied characteristics are identified, discussed and examined in Chapter Six, and considered in terms of the physical features of the rock art sites and the surrounding landscape; archaeological evidence at the sites; and the morphology of the overall assemblage of markings. Chapter Six essentially supports and verifies the oral information provided during the interviews.

The oral information derived through this research provides significant insight into the circumstances and reasons for producing and using the rock markings. All of the informants spoke about the pictographs in practical, utilitarian ways; no mention was made of spiritual circumstances involving the rock markings. Also, aspects pertaining to the methodological process involved in producing the images, such as, paint preparation and application were not revealed during the interviews; nor was the learning process involved in becoming fluent at reading and writing the symbols, or the ways in which the purpose of the markings may have changed over time. Consideration of these absences in information is important for a critical look at evidence; it is however, important to note that the information that was provided
during the interviews was directly relevant to this study and it greatly informed this research.

**Analysis Process**

The analysis process was not limited to the final stages of this research, but rather it encompassed all stages of the fieldwork and archival research, from the time the author entered the communities and conducted interviews; located the first through to the final rock art site during the survey; and reviewed the ethno-historical records left by explorers, traders and missionaries. This process was a continual endeavour of categorizing and classifying the disparate types of information encountered through listening, reading and observing (cf. LeCompte and Schensul 1999: 149-151). In addition to this ongoing “unofficial” analysis, a diversity of formal qualitative and quantitative analysis techniques were conducted. It is these formal analysis methods that are discussed in this final section.

**Qualitative Data**

The formal analysis process began with transcribing the interviews. The transcription process was engaged soon after each interview. Themes contained within the interview information were identified and compiled into a written list (cf. Rudestam and Newton 2001:156-158). With regard to the interviews with Stuart Lake participants, the interview information was reviewed and themes were identified and added to the written list. The interview process used in this doctoral research and the research conducted at Stuart Lake a few years ago, were aimed at gathering information specific to the rock art; however, most informants spoke about topics that reached beyond the rock art. This additional information was organized into key concepts and included on the written list of themes.

A similar approach was used with regard to the ethno-historical sources reviewed, where themes and key concepts embedded in the literature were identified. Although there is an overall lack of ethno-historical information pertaining directly to the rock art in the study area, there are a few documented accounts, as discussed in Chapter Two, of some of the sites at Fraser Lake and at Stuart Lake (cf. Cole and Lockner 1989; Morice 1892-93) and the destroyed paintings at Takla Lake (cf.
McMurdo, J. 1972). Like the interview data, these ethno-historical sources also contained information beyond the rock art itself that was useful for this study. Written notes of this additional information were made and themes within the text that were relevant to the overall thesis topic were identified. These themes were added to the same theme-list discussed above. The thematic analysis of the interviews and ethno-historical materials revealed 13 themes. Both the interview data and the ethno-historical literature were entered into an electronic spreadsheet organized according to these themes.

In this spreadsheet, the origin of the information (informant or author) was identified down the length of the page in a single column on the left hand side; the themes were entered across the top header row; and the body of the spreadsheet was populated with the content of the information in each cell, according to informant or author, as it corresponded to the themes in the header row. Once completed, this spreadsheet could be read “across the page” to see what information each source provided and it could be read “down the page” to see how each source spoke or did not speak about the themes. This spreadsheet was useful for organizing an immense amount of information and once it was printed, it was kept visible for reference throughout the analysis process. Keeping the electronic version fully visible on the computer monitor was not possible given its sheer size.

Rather than begin with a formulated hypothesis, the preferred method was to start with the data collection process and the systematic identification of themes in order to categorize key concepts and develop a working hypothesis. This grounded theory approach to research has been noted as being useful for an inductive development of theory and understanding of social phenomena (Locke 2002:17). Inductive reasoning was well suited to this research because specific information from the informants and the historical sources had been collected and interest lay in developing a more expansive way of understanding the rock art and connecting it to broader concepts (cf. Rudestam and Newton 2001:158-159).

This grounded approach enabled the identification of themes and patterns within the qualitative information and to ensure the analysis was rooted firmly in the data. These themes and the contemporary and historical First Nations traditional knowledge were used to inform the overall research and understanding of the rock art;
to develop the research questions used in the remainder of the analysis (Chapter Six) and to contribute to the establishment of the theoretical framework and interpretations in this research (Chapter Three).

The fact that the interview and ethno-historical material was analysed first undoubtedly affected the progression and outcomes of this research; but so too did the presence and analysis of the quantitative information – neither types of data were neutral (cf. Crabtree and Miller 1999:302-308). Diligence was paid to evaluating both types of data, first on their own merit and then to determine the extent of corroboration that was evident between informants and between sites. Even though First Nations traditional knowledge is given primacy in this research it was still necessary to collate, compare and contrast it with the more traditional forms of data, such as the information regarding the painted panels and the surrounding topography that was collected during the archaeological survey.

**Quantitative Data**

*Location and Site Characteristic Information.* Once the qualitative data were organized and thematically analysed, the location and site characteristic information was amalgamated into an electronic spreadsheet. This spreadsheet enabled a tremendous amount of data to be organized and worked through efficiently and effectively. In order to maintain consistency within the data entered into the spreadsheet, a semantic thesaurus for the terms used to describe the various characteristics of the rock art sites was developed (Appendix K). Within the spreadsheet, each site number was entered in the left hand column of the page, as a primary key, and the header row was populated with the site characteristics. The cells within the body of the spreadsheet were populated with the survey data.

This layout meant that all of the characteristics for each site were visible across the spreadsheet making it possible to see which characteristics were present or absent at each of the sites by looking down the spreadsheet. Basic sort functions were used according to the different characteristics of the sites in order to conduct the mathematical calculations discussed in Chapter Six, such as values of distribution and frequency – among others; and to identify patterns within the data. A printed copy of this spreadsheet was maintained throughout the analysis process, for ease of
reference. As with the spreadsheet of qualitative information, it was more useful to print the spreadsheet of site information rather than try to view it electronically because of its size; once printed these spreadsheets were approximately 24 inches by 36 inches.

In addition to these tabulated data and mathematical calculations, a GIS platform was used to display and analyse spatial information. Two streams of spatial data were used: the waypoints generated for the rock art sites located during the archaeological survey and a similar type of point data from the British Columbia Archaeology Branch regarding the body of archaeological sites (in addition to these rock art sites) previously recorded throughout the study area. In order to import this information into ArcGIS the point data were converted into decimal form and a standard import was performed. Prior to importing the data, the base features for the entire study area were downloaded from http://www.geobase.ca and WGS 1984 was the used projection system.

Spatial analyses using GIS to investigate material culture and environmental data is an important part of the practice of archaeology (Chapman 2006) and in particular the visualizations of past landscapes (Fyfe et al. 2010). Such analyses are used to observe general spatial patterns, as well as, specifically model aspects of the past including mobility, exchange, interaction and the visual affordance offered by megaliths and other prominent elements in the landscape (Cooper 2010a, 2010b; Gillings 2009; Wheatley and Gillings 2002). In this study, the use of ArcGIS was focused for effective mapping, visualization of spatial relationships and correlation of fieldwork data with extant archaeological data across the study area.

The fundamental ambitions of the GIS component in this study were to enable the identification of patterns within the placement of the rock art throughout the study area, in terms of site concentration and distribution; to identify the spatial relationship between rock art sites and other types of archaeological sites, such as cache pits and areas used for stone tool manufacture; to recognize relationships between the rock art and the surrounding natural environment; and to determine the measured distance of the non-rock art archaeological sites to the shoreline. These spatial aspects of the rock art and the other archaeological sites are discussed in detail in Chapter Six.
**Motif Information.** In addition to gathering and analysing extensive site characteristics and spatial information, all of the pictographs located during the archaeological survey were photographed. These digital files were printed, organized into sequential order according to each of the lakes where the pictographs were located and pasted onto a large sheet of core plastic. This process essentially produced an “analog” version of the electronic spreadsheets created with the site characteristics data and the qualitative information discussed above. This board, like the electronic spreadsheets enabled the organization and access of a vast amount of information in an easy and effective manner, and to keep the rock art motifs visible throughout the analysis process.

The decision to create this poster board rather than an electronic database of images was based on the large number of rock art photographs. Once completed, this poster board measured approximately 48 inches by 72 inches. The poster board made viewing the entire collection of rock art images so much easier than trying to view them as an assemblage on a computer screen. Photo pages for each of the rock art sites that included photographs of the site and the markings located at each site were also created and printed (Appendix L). The poster board of photographs and the photo pages were used to develop a typology based on a semantic thesaurus (Appendix M) of the rock art motifs. The typology is discussed in detail in Chapter Six.

In order to create the typology, each photograph of the rock art motifs was examined and the images were classified; beginning with broad categories of Figurative and Non-Figurative; followed by increasingly more specific classifications based on the construction of the motifs within the these broad categories. This process resulted in the classification of 32 entities. As the typology developed, the entities were tabulated according to the lakes where they occurred and this tabulated data were used to identify patterns of repetition with the rock art motifs and to specifically identify which symbols were repeatedly used across the study area and where that repetition occurred (Appendix N).

Throughout the creation of the typology, it was recognized that the categories developed for the rock art motifs in this study were essentially arbitrary and very much a product of the author’s interpretation and perception of the markings, as well as, academic and cultural background. Scott (2006: 628) notes that the categories created
through the analysis of material culture have more to do with the modern state and development of the discipline rather than “the contexts in which [those materials] were created and viewed.” With this realization in mind, care was taken to use a systematic and explicit process for classifying the motifs, so as to ensure consistency within the typology and to deal with the potential bias in the categories developed.

In addition to identifying repeated symbols, the identification of repeated combinations of symbols was also important. In order to recognize combinations, an electronic spreadsheet of the typology information was created. In this spreadsheet, each of the 121 site numbers were entered as primary keys in a single column on the far left and each of the 32 entities from the typology were entered across the top header row. In the body of the spreadsheet the presence or absence of the entities at each of the sites were indicated. Each of the entities occurred with variation at each site; some sites had only one entity, others had none, and some had two or more entities.

This spreadsheet was imported into Analyst’s Notebook and the social network analysis function was used. The link chart that was produced through this process readily enabled the identification of the most common/popular entities, but it was difficult to identify the combinations of symbols that were of interest. The information regarding the combinations of the symbols was obviously contained within this link chart, but it was not easily visible – due to the abundance of nodes contained within it and its overall dense and convoluted structure.

As a solution, the spreadsheet was re-organized so the typology categories in the header row were in alphabetical order. Multiple “custom sorts” were performed where the sort was specified to start first at Column B, then Column C and so on through all of the 32 columns; eventually producing a spreadsheet with an overall semi-alphabetical structure throughout. Because this spreadsheet was sorted alphabetically, it was possible to work through each row and identify the repeated combinations of symbols (Appendix O). The results of this analysis were compared to the photographs of the rock art on the poster board to ensure accuracy.

The methods developed in this research and described herein stem from the theoretical aspirations and research questions discussed in the introductory and theory chapters. These methods were crafted in order to enable a reach beyond the
images of the pictographs and to facilitate a move toward meaning and social understanding of rock art. These methods were developed so as to enable First Nations voices about the rock art to be heard, thereby endeavouring to achieve the more intimate scale of knowledge and the desired alternative perspectives of rock art, as discussed in Chapter Three. The data generated through these methods are presented and discussed in detail in the following chapter.
Engaging with varying research methods, specifically informed (ethnographic) and formal (archaeological) approaches is one of the specific interests in this study. As the previous chapter indicates, a diversity of information was produced through the employment of these methods. It is this information that is presented in detail in this chapter, specifically the data generated during the archaeological surveys, the ethnographic interviews and the archival research. These data are organized according to data type and geographic zone within the study area; beginning with the archaeological survey, where the information is presented in terms of access, activity, orientation and visibility. Each section is structured according to the various spatial scales of the rock art, from the broadest scale of the study area, followed by increasingly smaller scales of site, panel and finally motif. A complete catalogue of rock art images is provided in Appendix L.

The ethnographic information provided by First Nations community members and information gleaned from historical documents follows. This information provides insight into the social context of the rock art landscape as it is understood by contemporary and 19th century First Nations peoples. In addition, data from historical primary sources that are relevant to this project are included. The data presented here have been produced by implementing the fieldwork methods discussed and outlined in the previous chapter. These data provide the foundation for the analysis that follows in the next chapter.
Figure 13. Map of the study area showing approximate territorial boundaries and cross over of Tl’azt’en and Nadleh Whut’en traditional lands.
The study area, as discussed in the introductory chapter of this thesis, comprises the traditional territories of the Tl’azt’en and Nadleh Whut’en First Nations, together with six previously existing pictograph sites on Takla Lake. Tl’azt’en and Nadleh Whut’en territories are located in the northern central interior of British Columbia (Figure 13); Takla Lake is located in this same region and lies to the north of Tl’azt’en territory (Figure 14). This entire terrain is heavily forested and punctuated with mountain ranges and a host of lakes, rivers and streams. The First Nations peoples who occupy these territories continue to regularly practice traditional resource harvesting activities and maintain other aspects of their rich cultures, such as the clan system and traditional governance amidst their modern day lifestyles.

Figure 14. Map of Northern British Columbia, with Takla Lake and Tl’azt’en territory indicated.
Archaeological Survey Results

Through the archaeological survey in this research, a total of 13 sample units were tested for the presence of rock markings. These sample units are the lakes that occur throughout the study area. These lakes had been ranked ahead of time from low to high potential for exposed rock at or near the shoreline. Details regarding the methods associated with this ranking scheme are discussed in Chapter Four. These surveys were conducted from a boat on the water and where necessary, shoreline pedestrian surveys were also carried out. Surveys conducted in this research include three of six high potential lakes, three of four medium potential lakes, and seven of 141 low potential lakes (Table 3). Of the lakes surveyed, all of the medium and low potential lakes tested negative for rock markings and all of the high potential lakes tested positive (Figure 15).

<table>
<thead>
<tr>
<th>Potential for Exposed Rock</th>
<th>Surveyed</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Potential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stuart Lake</td>
<td>Yes</td>
<td>Positive</td>
</tr>
<tr>
<td>Trembleur Lake</td>
<td>Yes</td>
<td>Positive</td>
</tr>
<tr>
<td>Fraser Lake</td>
<td>Yes</td>
<td>Positive</td>
</tr>
<tr>
<td>Stellako River</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td><strong>Medium Potential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whitefish Lake</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Taltapin Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Cunningham Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Pinchi Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td><strong>Low Potential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>141 Lakes Total (Approx)</td>
<td>Not all</td>
<td>-</td>
</tr>
<tr>
<td>Ormond Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Oona Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Top Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Peta Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Dry William Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Grassham Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
<tr>
<td>Camsell Lake</td>
<td>Yes</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Table 3. Table of potential for exposed rock throughout the study area.
**Negative Survey Results – Nadleh Whut’en Territory**

Within Nadleh Whut’en traditional territory seven lakes were surveyed, of which one was ranked as high potential, one as medium potential and the remaining five as low potential (Table 4). Surveys of the five low potential lakes were conducted in June of 2011 and 2012 (Figure 16). Because of the relatively small size of each of these lakes it was possible for these surveys to be conducted from the shore, rather than the water. In all cases, these lakes lacked exposed rock surface at or near the shoreline, thereby rendering them negative in terms of rock markings (Figure 17).
<table>
<thead>
<tr>
<th>Name of Lake</th>
<th>Potential</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraser Lake</td>
<td>High</td>
<td>Positive</td>
</tr>
<tr>
<td>Taltapin Lake</td>
<td>Medium</td>
<td>Negative</td>
</tr>
<tr>
<td>Ormond Lake</td>
<td>Low</td>
<td>Negative</td>
</tr>
<tr>
<td>Oona Lake</td>
<td>Low</td>
<td>Negative</td>
</tr>
<tr>
<td>Top Lake</td>
<td>Low</td>
<td>Negative</td>
</tr>
<tr>
<td>Peta Lake</td>
<td>Low</td>
<td>Negative</td>
</tr>
<tr>
<td><strong>Dry William Lake</strong></td>
<td><strong>Low</strong></td>
<td><strong>Negative</strong></td>
</tr>
</tbody>
</table>

Table 4. Table of lakes surveyed within Nadleh Whut'en territory.

Figure 16. Map of lakes surveyed in Nadleh Whut’en territory, with potential for exposed rock surface indicated.
In June of 2011, Taltapin Lake was surveyed over a two day period. The terrain surrounding the lake is heavily forested and the amount of exposed rock surface is minimal. The condition and nature of the rock surfaces that are exposed at Taltapin Lake are primarily unsuitable for the placement of paintings due to the extent of rock surface exfoliation, there are however a few flat, smooth rock panels that are suitable for the placement of paintings, but no evidence of pigment at these locations was detected during the survey.

The majority of the rock outcroppings that do exist at Taltapin Lake are located high up on the hillside rather than at the water’s edge. One of these high elevation rock outcroppings was examined closely and noted to be unsuitable for the placement and preservation of paintings due to the fragmented nature of the rock surface. The terrain surrounding the lake has a substantial amount of elevation gain but in many places the land is flat at the water’s edge and the heavily forested hillsides rise up several hundred yards from the shoreline. Much of this area is impassable, making close examinations of other high elevation outcroppings not possible.

**Negative Survey Results - Ti’atz’en Territory**

Within Ti’atz’en territory, a total of six lakes were surveyed, where two were ranked as high potential, two as medium potential and the remaining two were considered to have low potential (Table 5). The low potential lakes were surveyed from...
the shoreline while all of the medium and high potential lakes were surveyed from the water (Figure 18).

<table>
<thead>
<tr>
<th>Name of Lake</th>
<th>Potential</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stuart Lake</td>
<td>High</td>
<td>Positive</td>
</tr>
<tr>
<td>Trembleur Lake</td>
<td>High</td>
<td>Positive</td>
</tr>
<tr>
<td>Cunningham Lake</td>
<td>Medium</td>
<td>Negative</td>
</tr>
<tr>
<td>Pinchi Lake</td>
<td>Medium</td>
<td>Negative</td>
</tr>
<tr>
<td>Grassham Lake</td>
<td>Low</td>
<td>Negative</td>
</tr>
<tr>
<td>Camsell Lake</td>
<td>Low</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Table 5. Table of lakes surveyed within Tl’atz’en territory.

In September of 2010, Cunningham Lake was surveyed over a two-day period. The amount of exposed rock surface along the shoreline of the lake is minimal and limited to the west end where several exposed outcroppings occur. The current condition of most of these exposed rock surfaces is unsuitable for the placement and
preservation of paintings due to the unstable nature of the rock itself and the
tendency for surficial exfoliation to occur.

In June of 2011, Pinchi Lake was surveyed over a one day period. Pinchi Lake is
surrounded by forested hillsides and mountainous areas. Although several suitable
rock surfaces are located along the shoreline, none contained markings. Several high
elevation exposed rock outcroppings were observed during the survey; these surfaces
were not closely examined due to the impassable nature of the hillsides.

The negative results of the archaeological survey in both Nadleh Whut’en and
Tl’azt’en territories are primarily attributed to both a lack of exposed rock surface at or
near the shoreline and the presence of unsuitable rock surfaces. A lack of rock surface
is essentially self explanatory: without exposed rock there is no opportunity to for the
placement of paintings onto rock. The unsuitable nature of the rock surfaces observed
at the lakes tested in this research is due to the ongoing deterioration of the rock itself,
which is essentially crumbling and fragmenting. If paintings had been placed on these
surfaces in the past, the evidence of pigment has been lost through the process of
exfoliation and spalling.

The presence of some, albeit minimal, suitable rock surfaces, such as the
smooth panels observed at Taltapin Lake and Pinchi Lake suggest that the placement
of rock markings was possible at these locations. The lack of pigment in these cases
may be due to weathering and other taphanomic processes that have successfully
eroded the markings, just as it is possible that people chose not to paint at these
locations. It is important to note that the presence of suitable rock surfaces is not the
only element necessary for the placement of paintings, there are a variety of other
criteria and choices people in the past used when creating and placing pictographs.
These concepts of choice and criteria are raised in the following two chapters.

**Positive Survey Results - Nadleh Whut’en Territory**

Of the seven lakes surveyed in Nadleh Whut’e’n territory, only Fraser Lake
tested positive for rock markings. Fraser Lake is the largest lake to be fully contained
within Nadleh Whut’en territory; most other lakes in the territory are fairly small and
most exhibit a low potential for exposed rock surface. Although, Francois Lake is larger
than Fraser Lake, only a portion of it is located within Nadleh Whut’en territory.
Francois Lake was ranked as having high potential for exposed rock at or near the shoreline, but it was not surveyed as part of this research because the majority of it is located outside Nadleh Whut’en territory.

**Fraser Lake**

Fraser Lake is approximately seven miles long and the terrain surrounding the lake is typified by forested areas and punctuated with numerous rock outcroppings and exposed cliff faces. The Nautley River drains Fraser Lake at its east end into the Nechako River, which ultimately leads to the Pacific Ocean via the Fraser River. The lake itself is easily accessible by vehicle and the surrounding area is moderately populated with modern homes and contemporary amenities. Two First Nations communities are located on the lake: Stellako to the west and Nadleh to the east. Population estimates for each of these First Nations communities are 424 and 500 respectively (Stellat’en First Nation n.d. and Nadleh Whut’en First Nation n.d.). A small non-First Nations community also exists along the shores of the lake. This small town bears the same name as the lake and is estimated at a population of 1354 (Village of Fraser Lake n.d.).

**Rock Art Sites.** In June of 2011, a full survey of Fraser Lake was conducted over a three-day period. This survey resulted in the identification of eight rock art sites, all of which are pictographs. While exposed rock surfaces, suitable for the placement of paintings, occur around the perimeter of the lake, all of the rock art sites identified in this research are located at the east end of the lake, near the present day community of Nadleh (Figure 19). During the archaeological survey, an abundance of near shoreline exposed rock surfaces was located at various places around the lake. These outcroppings were fully surveyed, but no evidence of pigment was detected at these locations, consequently all of the rock art sites identified at Fraser Lake occur at the water’s edge.
All of the sites identified during the archaeological survey at Fraser Lake occur at open-air locations and are visible and accessible from the water, therefore they have been classified as shoreline sites (Table 6). These sites are comprised solely of pictographs – no petroglyphs were identified during the survey – of which all are red in colour. Most of the pictographs occurring in the province of British Columbia are of this same hue, which is typically attributed to the presence of iron oxide (cf. Corner 1968).

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Site Location</th>
<th>Site Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRLK 01</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
<tr>
<td>FRLK 02</td>
<td>Shoreline</td>
<td>Solitary</td>
</tr>
<tr>
<td>FRLK 03</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
<tr>
<td>FRLK 04</td>
<td>Shoreline</td>
<td>Solitary</td>
</tr>
<tr>
<td>FRLK 05</td>
<td>Shoreline</td>
<td>Solitary</td>
</tr>
<tr>
<td>FRLK 06</td>
<td>Shoreline</td>
<td>Solitary</td>
</tr>
<tr>
<td>FRLK 07</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
<tr>
<td>FRLK 08</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
</tbody>
</table>

Table 6. Table of rock art site data from Fraser Lake.
The motifs at Fraser Lake have been organized into eight sites, which are comprised of a number of panels, which in turn consist of a number of motifs. 50% of the sites are categorized as composite, where more than one panel occurs at each site and the remaining 50% are of the solitary type where only one panel comprises a site. All of these sites are located at the water’s edge and occur primarily on prominent cliff faces that flank the water, as well as, a few smaller less robust rock outcroppings.

Figure 20. Rock art site FRLK 03 on Fraser Lake.
Figure 21. Rock art site FRLK 04 on Fraser Lake.

The landscape associated with most of the sites at Fraser Lake is unsuitable for people to have been at these locations for purposes other than to paint the rock. Some sites are so located so close to the water that no ground cover is present, such as at FRLK 03 (Figure 20) and FRLK 04 (Figure 21), while other sites are composed of large jagged rocks that would have restricted other activities in the area directly associated with the markings, such as at FRLK 01 (Figure 22) and FRLK 05 (Figure 23). The amount of elevation gain at FRLK 02 leaves little or no shoreline to accommodate activity, other than painting the rock panels above. The surrounding hilly and rocky terrain associated with FRLK 01 considerably lessens opportunities for other activities in the vicinity of this site. Consequently, it is not possible and not feasible to excavate at these sites.
In some cases the opportunity for people to have conducted activities in areas near to the rock art sites does exist, such as the areas adjacent to FRLK 03, FRLK 04,
FRLK 05, FRLK 06, FRLK 07 (Figure 24) and FRLK 08. At these locations the terrain above the rock art sites would have provided the space needed for other activities, while this available space is not directly associated to the rock markings; its close proximity to the sites could yield important information about human activity in the area in addition / relation to the practice of rock painting. Excavations were not conducted at Fraser Lake.

Figure 24. Rock art site FRLK 07 on Fraser Lake, with flat terrain above the panels.

**Rock Art Panels.** The rock art at Fraser Lake occurs as both mural-panels and as single-panels – murals are constructed from multiple motifs whereas a lone motif comprises a single-panel (Table 7). The panels at Fraser Lake are predominantly murals at 63%, while 37% of all panels are singles. All of the panels are accessible via water travel. While some panels are only accessible via water craft, such as the five panels at FRLK 03 and the one panel at FRLK 04, others also have inland routes that would have enabled the painters and/or the audience(s) to arrive via land travel.
<table>
<thead>
<tr>
<th>Site Number</th>
<th>Number of Panels</th>
<th>Panel Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FRLK 01</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FRLK 02</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>FRLK 03</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>FRLK 04</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>FRLK 05</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>FRLK 06</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>FRLK 07</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>FRLK 08</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 7. Table of rock art panel data from Fraser Lake.

In most cases, the painters chose panels that were easy to reach by water and required minimal effort to access (Table 8). This condition includes the panels that are also accessible via land routes. The exception to this condition is the single pictograph located on a high elevation panel at FRLK 02 (Figure 25). The painter(s) at this particular site would have climbed the rock wall to place the painting on the panel.

Figure 25. Rock art site FRLK 02 on Fraser Lake, with high elevation panel indicated.
The panels at FRLK 07 and FRLK 08 are accessible from the shoreline, but only at the time of low water. High water conditions submerge virtually all of the narrow shore that skirts the edges of these two sites; consequently at certain times of the year these sites are only accessible via water travel. Several panels at Fraser Lake are accessible via naturally formed ledges in the rock surface, such as FRLK 03 and FRLK 04; even at times of high water the painters likely would still have needed to step onto the ledges in order to reach the panels above.

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Panel Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Site Number</td>
</tr>
<tr>
<td>FRLK 01</td>
<td>1 of 3</td>
</tr>
<tr>
<td></td>
<td>2 of 3</td>
</tr>
<tr>
<td></td>
<td>3 of 3</td>
</tr>
<tr>
<td>FRLK 02</td>
<td>1 of 1</td>
</tr>
<tr>
<td>FRLK 03</td>
<td>1 of 5</td>
</tr>
<tr>
<td></td>
<td>2 of 5</td>
</tr>
<tr>
<td></td>
<td>3 of 5</td>
</tr>
<tr>
<td></td>
<td>4 of 5</td>
</tr>
<tr>
<td></td>
<td>5 of 5</td>
</tr>
<tr>
<td>FRLK 04</td>
<td>1 of 1</td>
</tr>
<tr>
<td>FRLK 05</td>
<td>1 of 1</td>
</tr>
<tr>
<td>FRLK 06</td>
<td>1 of 1</td>
</tr>
<tr>
<td>FRLK 07</td>
<td>1 of 2</td>
</tr>
<tr>
<td></td>
<td>2 of 2</td>
</tr>
<tr>
<td>FRLK 08</td>
<td>1 of 2</td>
</tr>
<tr>
<td></td>
<td>2 of 2</td>
</tr>
</tbody>
</table>

Table 8. Table of rock art panel details from Fraser Lake.

In all cases, the pictographs at Fraser Lake are visible from the water; included is the high-elevation panel at FRLK 02, where its orientation and distance from the ground ensures its visibility from the water. The panels at FRLK 05, FRLK 06, FRLK 07 and FRLK 08 are visible from the shoreline directly in front of the sites, but not from the surrounding forest (Figure 26). The natural physical characteristics of the terrain at these sites required both the painter and the audience to be on the “water side” of the cliff faces in order to produce and use the markings.
At Fraser Lake, 14 (88%) of the 16 panels located during the archaeological survey can be seen when approaching the sites from any direction on the water; the exception to this condition is site FRLK 01, Panel 1 which is visible when approached from the west and site FRLK 07, Panel 2 which is most visible when approached from the east. In general, the paintings are located directly along the shoreline and are typically oriented toward the lake.

![Figure 26. Rock art site FRLK 08 at Fraser Lake, with panel location indicated and motif from this site – edited motif image.](image)

Some of the sites at Fraser Lake have exposed rock surfaces suitable for the placement of markings that are *not* oriented toward the water. At FRLK 01 the full perimeter of the rock outcropping is exposed, but only the waterside contains paintings. The areas above FRLK 03, FRLK 04 and FRLK 05 also possess exposed rock surface oriented away from the water. These surfaces were surveyed during the fieldwork, but no evidence of pigment was detected. A small gorge exists at FRLK 08, the rock surface of which is oriented away from the water in several places. These surfaces were also surveyed with negative results.
**Rock Art Motifs.** The motifs that comprise the rock art assemblage at Fraser Lake are characterized as outline-type and silhouette-type (Table 9). This terminology is for descriptive purposes only in this chapter, rather than a formal analytical category. This typing is based on the lines that construct the motifs. Outline-types are based on a single line that comprises the body of the subject matter depicted in the motif, whereas images that have been filled in with pigment are categorized as silhouette-types. This body of rock art imagery is dominated by outline-types; where silhouette-types are present they occur in conjunction with outline-types (Figure 27).

![Figure 27. Example of “outline” style (white arrow) and “silhouette” style (black arrow) – edited image.](image-url)
### Table 9. Table of rock art motif data from Fraser Lake.

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Panel No.</th>
<th>Line Type</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRLK 01</td>
<td>1 OF 3</td>
<td>Outline</td>
<td>POOR - EXTREMELY FADED; LICHEN INTRUSION; CALCIUM CARBONATE DEPOSIT</td>
</tr>
<tr>
<td></td>
<td>2 OF 3</td>
<td>Outline</td>
<td>POOR - FADED; LICHEN GROWTH; CALCIUM CARBONATE DEPOSIT</td>
</tr>
<tr>
<td></td>
<td>3 OF 3</td>
<td>Outline</td>
<td>POOR - FADED; LICHEN INTRUSION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>POOR – FADED; CALCIUM CARBONATE DEPOSIT EVIDENT ON ROCK SURFACE NEARBY</td>
</tr>
<tr>
<td>FRLK 02</td>
<td>1 OF 1</td>
<td>Outline</td>
<td>GOOD – MINIMAL FADING</td>
</tr>
<tr>
<td></td>
<td>2 OF 5</td>
<td>Outline</td>
<td>POOR - FADED</td>
</tr>
<tr>
<td></td>
<td>3 OF 5</td>
<td>Outline; Silhouette</td>
<td>POOR - FADED</td>
</tr>
<tr>
<td></td>
<td>4 OF 5</td>
<td>Outline</td>
<td>POOR - FADED</td>
</tr>
<tr>
<td></td>
<td>5 OF 5</td>
<td>Outline</td>
<td>POOR/GOOD - FADED; CALCIUM CARBONATE DEPOSIT; EXFOLIATION</td>
</tr>
<tr>
<td>FRLK 04</td>
<td>1 OF 1</td>
<td>Outline; Silhouette</td>
<td>POOR/GOOD - FADED; CALCIUM CARBONATE DEPOSIT</td>
</tr>
<tr>
<td>FRLK 05</td>
<td>1 OF 1</td>
<td>Outline</td>
<td>POOR - FADED; EXTENSIVE CALCIUM CARBONATE DEPOSIT</td>
</tr>
<tr>
<td>FRLK 06</td>
<td>1 OF 1</td>
<td>Outline</td>
<td>POOR - FADED</td>
</tr>
<tr>
<td>FRLK 07</td>
<td>1 OF 2</td>
<td>Outline</td>
<td>POOR - FADED; CALCIUM CARBONATE DEPOSIT</td>
</tr>
<tr>
<td></td>
<td>2 OF 2</td>
<td>Outline; Silhouette</td>
<td>VERY POOR - EXTREMELY FADED</td>
</tr>
<tr>
<td>FRLK 08</td>
<td>1 OF 2</td>
<td>Outline</td>
<td>POOR - FADED AND ONLY PARTIALLY VISIBLE</td>
</tr>
<tr>
<td></td>
<td>2 OF 2</td>
<td>Outline</td>
<td>FAIR – INITIAL FADING</td>
</tr>
</tbody>
</table>

Most of the pictographs at Fraser Lake are in poor condition where fading, lichen growth and calcium carbonate deposits are noted. Lichen growth is one of the predominant threats to rock art throughout the province, as is the development of calcium carbonate (cf. Corner 1968). During the archaeological survey, samples of calcium carbonate and pigment were sought from the Fraser Lake assemblage, but both were unable to be collected due to the hardness of the rock itself, as well as, the density of the calcium carbonate deposit.

Fading is prevalent at most of the sites on Fraser Lake. In several cases, the motifs are difficult to identify due to the extent of fading. The imagery at FRLK 01 is
particularly faded, so much so, that in the field the motifs are almost undetectable beyond a slight presence of pigment (Figure 28). The photographs taken during the survey were later enhanced in order to bring out the details of the motifs that were simply not visible while viewing the panels directly (Figure 29).

Figure 28. Rock art motif from FRLK 01 on Fraser Lake before editing, with sketch of visible pigment – unedited image.

Figure 29. Rock art motif from FRLK 01 on Fraser Lake after editing, with sketch of visible pigment – edited image.
Similar conditions exist at FRLK 07, particularly with Panel 2. The presence of this second panel at FRLK 07 was not detected immediately despite a careful visual inspection of the rock surface. During the time that Panel 1 was being photographed and recorded, the natural lighting changed causing Panel 2 to become visible. Photographs of Panel 2 also required substantial editing and enhancing in Adobe Photoshop in order to bring out details of the motif.

Evidence of calcium carbonate was noted for several of the panels, particularly at FRLK 05 where extreme deposits have direct contact with the motif (Figure 30). Panel 5 at FRLK 03 and Panel 1 at FRLK 04 also exhibit considerable evidence of intrusive deposits. Calcium carbonate deposits present on the rock surface but not in direct contact with motifs were noted for several of the sites, such as on Panel 1 and Panel 2 at FRLK 01, as well as, Panel 3 and Panel 4 at FRLK 03. The imagery on Panel 1 at FRLK 07 is essentially being surrounding by calcium carbonate deposits (Figure 31).

At Fraser Lake, the painters demonstrated a preference for locations that were directly accessible via water travel and they seemed to have consciously chosen rock panels that were easy to access from the water – perhaps indicating that they had
arrived by boat to the site. The fact that all of the rock markings are essentially only visible from the water may indicate that water travelers were the anticipated audience for the markings. Movement through the landscape via the water was likely a key component to the production and use of the markings at Fraser Lake.

Positive Survey Results - Tl’azt’en Territory
 Within Tl’azt’en territory two lakes tested positive for rock markings, Trembleur Lake and Stuart Lake. Both lakes are located in the northern part of the territory and are connected to one another via the Tachie River. The Tachie River flows from the south east corner of Trembleur Lake into Stuart Lake at the point of the present day First Nations community of Tache. Trembleur Lake is connected on its opposite shoreline to Takla Lake to the north. This system of lakes from Takla Lake to Trembleur Lake to Stuart Lake consists of nearly 200 miles of connected waterway.

Trembleur Lake
 Trembleur Lake is surrounded by mountains and forested hillsides and an abundance of exposed rock surface occurs along its shoreline. There is minimal access to Trembleur Lake via vehicle, the primary route being the logging road that leads to the First Nations community of Middle River. The terrain surrounding Trembleur Lake is undeveloped and unpopulated beyond this small Native community that is comprised of a few modest houses. Trembleur Lake is approximately 30 miles long and it exhibits an irregular shoreline and possesses several sheltered bays and coves. The waters of nearby Takla Lake pour into Trembleur Lake via Middle River at the point of the present day First Nations community that bears the river’s name.
**Rock Art Sites.** A full survey of Trembleur Lake was conducted in June of 2011 over a three day period. At this time, a total of seven sites were identified. These sites occur at various points around the circumference of the lake (Figure 32). All of the sites identified during the archaeological survey are located on shoreline exposed rock outcroppings and all are red-coloured pictographs. There are several near shoreline exposed outcroppings at Trembleur Lake, the rock surfaces of which are oriented away from the water. These surfaces were examined on foot, but no evidence of pigment was identified at these locations.

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Site Location</th>
<th>Site Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRLK 01</td>
<td>Shoreline</td>
<td>Solitary</td>
</tr>
<tr>
<td>TRLK 02</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
<tr>
<td>TRLK 03</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
<tr>
<td>TRLK 04</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
<tr>
<td>TRLK 05</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
<tr>
<td>TRLK 06</td>
<td>Shoreline</td>
<td>Composite</td>
</tr>
</tbody>
</table>

Table 10. Table of rock art site data from Trembleur Lake.

All of the seven sites at Trembleur Lake are categorized as shoreline sites and as such, they are all accessible and visible from the water (Table 10). All of the sites
identified during the archaeological survey are classified as open-air sites. With the exception of TRLK 01, the majority of the sites at Trembleur Lake are of the composite type where multiple panels comprise the site. TRLK 01 is the only solitary site and it is constructed from a single painted panel (Figure 33).

Figure 33. Solitary rock art panel at TRLK 01 on Trembleur Lake – edited image.

Site TRLK 05, is located adjacent to the lake and across from the present day railroad track. Despite the fact that this site is not located at the water’s edge, it is still classified here as a shoreline site because it is both visible and accessible from the water. This is the only site on Trembleur Lake where high-elevation panels occur. Sites TRLK 05 and TRLK 06 are physically located close to one another and could have easily been classified as the same site. They are organized here as two sites because of the difference in association to the water, TRLK 05 is set back from the water’s edge by approximately 50 yards and TRLK 06 is located at the water’s edge.

The terrain in the areas surrounding some of the rock art sites on Trembleur Lake would have permitted people to engage in other activities, within close proximity to the rock art. This opportunity for additional activity typically occurs in areas adjacent to the rock art rather than directly at the site itself. For example, the terrain west of TRLK 03 has minimal elevation gain at the water’s edge. This low-lying flat land could possibly have sustained a small sized fishing camp or supported other seasonal activities in the past. TRLK 01 also possesses minimal elevation gain at the water’s
edge, as do TRLK 05 and TRLK 06. The heavily forested terrain and rocky hillsides immediately surrounding TRLK 07 limits the opportunity for other activities at this site. The terrain and space available at TRLK 02 would have permitted people to engage in other activities at the site in the area directly associated with the rock art. This site is located on a raised terrace at the water’s edge and the surrounding terrain is easily accessed on foot. The ground cover at this site is comprised of a mixture of grassy and rocky terrain, of which excavation would be possible. During the archaeological survey, evidence of contemporary use of this site was noted (Figure 34). A birch bark scroll was located inside a rock hearth a few yards in front of the painted panel (Figure 35 and Figure 36). Excavations were not conducted at Trembleur Lake.

Figure 34. Stone hearth with birch bark scroll indicated (red arrow) at rock art site TRLK 02 on Trembleur Lake.
Figure 35. Location of hearth (white arrow) relative to painted panel (black arrow) at site TRLK 02 on Trembleur Lake.

Figure 36. Rock art motif at site TRLK 02 on Trembleur Lake – edited image.
Conversely, Site TRLK 04 offers virtually no opportunity for additional activities to be performed in areas nearby. This site is located on a massive cliff face that rises directly up out of the water for several hundred feet (Figure 37). No immediate land access is available at this site. Here, painting seems to have been the primary activity and certainly the only one that produced material remains.

Figure 37. Rock art site TRLK 04 on Trembleur Lake.

**Rock Art Panels.** The panels that comprise the sites at Trembleur Lake are predominantly of the mural type, where multiple motifs occur on a single panel (Table 11). The exceptions to this condition are TRLK 06 and TRLK 07 where the panels are populated by a single motif. All of the rock art panels at Trembleur Lake are visible from the water. Even the high-elevation panels at TRLK 05 that are set back from the shore are visible from the water. The low lying characteristic of the terrain surrounding TRLK 05 and its distance from the water make the panels at this site visible to not just water travellers, but land trekkers too.

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Number of Panels</th>
<th>Panel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRLK 01</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TRLK 02</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TRLK 03</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TRLK 04</td>
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<tr>
<td>TRLK 05</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TRLK 06</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>TRLK 07</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 11. Table of rock art panel data from Trembleur Lake.
The majority of the painted panels at Trembleur Lake are oriented toward the water in general, meaning that the paintings are visible to travelers arriving from any direction on the water (Table 12). The exceptions are TRLK 04 and TRLK 06 which have panels that are more easily seen when approached from a specific direction. Panel 2 at TRLK 04 faces the northern shore and is most easily located when approached from the east. A water traveller moving east would have to look back in order to see the markings, where as a west bound paddler following the shoreline would be hard pressed to miss the markings.

The natural rock features at TRLK 06 are irregular and disjointed; here the painters took advantage of the availability of several small smooth flat surfaces to place their markings. While the bulk of this outcropping is oriented parallel to the water, the section of it utilized by the painters results in a western exposure for the pictographs, making them most easily seen when approached from the west. The small low lying area adjacent to this site is a natural place to come ashore or launch a boat. Even though the high-elevation panels at TRLK 05 are at opposite angles to each other and are not parallel to the water, the fact that this site is set back from the water’s edge makes the paintings on either side of the panels easily seen from the water regardless of the direction of travel.
<table>
<thead>
<tr>
<th>Site Number</th>
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<th>Orientation</th>
<th>Access</th>
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Table 12. Table of rock art panel details from Trembleur Lake.

The panels with water only access are easily reached from a boat while still on the water. The location of these sites along the shoreline and placement of the markings on the rock surface indicate that the painters could have created these markings without stepping onto land. A ledge exists at TRLK 02 from which the painter(s) stood to place the series of round markings that comprise Panel 2. TRLK 04, Panel 1 is similar in that a ledge provides a natural standing point that the painter(s) likely utilized in the creation of this pictograph. The panels with land access are equally easy to access, except for TRLK 05 where the painter(s) would have climbed the steep, rocky draw in order to reach the panels and place their markings.
Several of the pictographs at Trembleur Lake are in excellent condition where the effects of lichen growth and calcium carbonate deposits have had minimal impact, such as those at TRLK 03 and Panel 1 at TRLK 04 (Table 13). Lichen growth plagues rock art sites across the province, but in terms of the Trembleur Lake assemblage, lichen growth appears to have minimal effect in comparison to calcium carbonate deposits which are evident at most of the sites. TRLK 02, Panel 2 for example exhibits considerable calcium carbonate build up that has acted to erode the pigment on this panel (Figure 38). The single motif at TRLK 07 exhibits a similar condition where calcium carbonate has intruded over the pigment, essentially obliterating it from the rock surface (Figure 39).

**Rock Art Motifs.** Several of the pictographs at Trembleur Lake are in excellent condition where the effects of lichen growth and calcium carbonate deposits have had minimal impact, such as those at TRLK 03 and Panel 1 at TRLK 04 (Table 13). Lichen growth plagues rock art sites across the province, but in terms of the Trembleur Lake assemblage, lichen growth appears to have minimal effect in comparison to calcium carbonate deposits which are evident at most of the sites. TRLK 02, Panel 2 for example exhibits considerable calcium carbonate build up that has acted to erode the pigment on this panel (Figure 38). The single motif at TRLK 07 exhibits a similar condition where calcium carbonate has intruded over the pigment, essentially obliterating it from the rock surface (Figure 39).
Some sections of TRLK 03, Panel 1 show evidence of lichen intrusion, but the majority of the motifs on the panel are yet to be affected, despite the presence of lichen and evidence of calcium carbonate deposit throughout the rock surface (Figure 40). It is likely only a matter of time before this panel is consumed. TRLK 01 and TRLK
Panel 2, both show evidence of lichen intrusion, but the majority of the pictographs at these sites are still visible. The pictographs at TRLK 05 are considerably more vibrant than most others in the assemblage, perhaps an indication of a relative younger age of these paintings (Figure 41).

Figure 40. Rock art motifs at site TRLK 03, Panel 1 on Trembleur Lake, with lichen growth and evidence of calcium carbonate deposit – edited image.

Figure 41. Rock art motifs at site TRLK 05 on Trembleur Lake – unedited image.
At TRLK 06, the pictograph on Panel 3 shows evidence of damage, where a section of the rock face appears to have eroded from the outcropping, taking with it part of the painting. No evidence of this broken section of the panel was located on the ground below. Additional evidence of damage was noted at this site, where a partial section of painted rock was found displaced on the ground below. This piece of broken rock bears pigment and appears to be a section of another panel that has been displaced from the outcropping. Because this piece of rock, clearly part of a painted panel that is no longer intact and its original location on the outcropping cannot be determined it has not been included in the count of panels at this site.

The rock art assemblage is dominated by outline-type motifs. As with most sites in the province, silhouette-types occur alongside outline-types at Trembleur Lake (Figure 43). This outline-type is based on a series of simple efficient lines where only the predominant features of the subject are depicted. For example, the human form depicted at TRLK 06, Panel 1 has been reduced to a few simple straight lines (Figure 42). The subject matter depicted at TRLK 01, although not easily identified has also been constructed by simple efficient lines that seem to repeat throughout the motif, topped by smaller tally mark images (Figure 33).

At Trembleur Lake the painters appear to have regularly chosen easy to reach, prominent rock outcroppings to place their markings. The fact that in all cases the markings are highly visible from the water likely indicates that water travelers were the intended audience; this notion is further affirmed by the water access and orientation of the markings that is prevalent at all of the sites on Trembleur Lake. Because the panels chosen for painting are only visible from the water and in some cases from the shoreline, this may indicate that perhaps the painters traveled by water to select the appropriate panel to paint. This high visibility and overt placement of the markings within the landscape likely indicates the markings were intended to be seen by those individuals and groups passing by.
Figure 42. Rock art motif at site TRLK 06 on Trembleur Lake, human motif in “silhouette” style – edited image.

Figure 43. Rock art motif at site TRLK 03 on Trembleur Lake, motif with combination of “outline” and “silhouette” styles – edited image.
Stuart Lake

Stuart Lake is approximately 50 miles long and six miles across at its widest point. The northern shoreline of Stuart Lake is comprised of mountainous areas, thick forests, and exposed rock outcroppings and cliff faces, while its southern shores consist primarily of low lying forested lands. The waters of Stuart Lake are drained via the Stuart River, at the southeast end of the lake, which eventually arrive at the Pacific Ocean via the Nechako and Fraser Rivers.

Stuart Lake is home to several First Nations communities, including Nak’azdli, Pinchi, Binchi, Tache and Yekooche. Stuart Lake is accessible via main and subsidiary roads that lead to its shores at several points. The area surrounding the southeast end of the lake is moderately populated with modern-day homes and contemporary amenities. The population of the municipality of Fort St James – the small town located at the east end of the lake - along with the surrounding rural areas and First Nations communities on the lake is estimated to be 4,500 (Fort St. James District n.d.). The North Arm of the lake is unpopulated passed the point of Yekooche and this area retains more of a wilderness feel than other areas of the lake.

Figure 44. Map of Stuart Lake with rock art site locations indicated.
Rock Art Sites. Stuart Lake was surveyed in June of 2012 over a seven day period, where a total of 15 pictograph sites were identified (Figure 44). The greatest concentration of markings occurs toward the southeast end of the lake, on the northern shoreline. A few sites are also located at the northern end of the lake, near the present-day First Nations community of Yekooche. Stuart Lake contains roughly 30 islands, many of which exhibit exposed rock surfaces suitable for the placement of paintings, of which only one tested positive for markings.

<table>
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<th>Site Type</th>
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<td>Composite</td>
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<td>STLK 02</td>
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<td>Composite</td>
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<td>Composite</td>
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<td>STLK 14</td>
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<tr>
<td>STLK 15</td>
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<td>Solitary</td>
</tr>
</tbody>
</table>

Table 14. Table of rock art site data from Stuart Lake.

The natural features of the landscape at Stuart Lake were utilized in the organization of the rock art sites. The outcroppings and cliff faces of the northern shore occur at length, some of which measure several hundred feet. It is the extent of these outcroppings that were used to determine the boundaries of the sites. Almost all of the sites at Stuart Lake are composite in nature, where multiple panels are present, whereas only three of the sites are comprised by single panels and therefore categorized as solitary sites.
All of the sites at Stuart Lake are classified as shoreline sites, and as such they are all accessible and visible from the water (Table 14). Some of the sites have panels that are not visible from the water, such as at STLK 02 and STLK 08, but these sites are still categorized here as shoreline sites because the majority of the panels are visible from the water; in both cases all of the panels at these sites are accessible from the water. The panel at STLK 02 that is not visible from the water occurs in a rock shelter, making it the only non-fully-open-air component of the rock art assemblage, the remainder of the sites on Stuart Lake are of the open-air type.

In several areas, the extent of elevation gain along the shoreline of the lake would have prevented the occurrence of other activities in the areas directly associated with the rock art sites, the ground in these areas is extremely steep (Figure 45). The same is true for other sites where the cliff faces rise directly up out of the water – there is simply no ground available at these sites for activities to be performed in areas directly associated with the paintings (Figure 46). It is important to note however, that activities could have been performed from inside a watercraft at these sites, but these activities would not have produced material remains, consequently excavations at these sites would either be not feasible or not possible.

Figure 45. Rock art site STLK 03 on Stuart Lake, with steep cliffs and considerable elevation gain at the shoreline.
Several sites however, do possess the space needed for other activities to have occurred in areas adjacent to the rock art and therefore present the opportunity for excavation. The terrain above STLK 01 for example is flat and accessible via land. This area could have sustained a small campsite or fishing station (Figure 47). Similar conditions exist at STLK 05, STLK 08, STLK 09, STLK 10 and STLK 11 where the areas directly above the painted panels are relatively flat and would have provided space for people to engage in other activities.
Even though these areas are not directly associated to the rock markings, excavations conducted here could yield important information about human activity in correspondence to the processes of painting. To a lesser degree, the areas adjacent to STLK 06, STLK 09, STLK 10 and STLK 14 could also have sustained other activities. The natural inclination of the land at these sites would have limited the usefulness of these areas in terms of temporary occupation or seasonal activities. Excavations were not conducted at Stuart Lake.

**Rock Art Panels.** The panels that comprise the Stuart Lake rock art assemblage are almost equally balanced between mural types at 57%, where multiple motifs comprise a panel and single types at 43%, where a lone motif constructs a panel (Table 15). With a few exceptions, the bulk of the panels at Stuart Lake are only visible from the water.

<table>
<thead>
<tr>
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<th>Number of Panels</th>
<th>Panel Type Mural</th>
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<tr>
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<tr>
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<td>4</td>
<td>1</td>
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<tr>
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<td>2</td>
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<tr>
<td>STLK 15</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 15. Table of rock art panel data from Stuart Lake.

While most of the rock markings are oriented toward water travelers, some pictographs are purposely directed away from the water and positioned on the rock to be most visible to travelers moving along an overland route. Panel 2 and Panel 5 at
STLK 11, for example are oriented in this manner (Figure 48). Although Panel 2 is still visible from the water, Panel 5 is essentially not and it faces the forest where evidence of a trail exists. This trail was explored in part, but no additional exposed rock surfaces were located.

![Figure 48. Rock art site STLK 11 Panel 2 (black arrow) on Stuart Lake, oriented away from the water – edited image.](image)

Other sites oriented toward land travelers were identified during the archaeological survey. Panel 8 at STLK 02 is located in a rock shelter at the top of a steep slope that begins at the water’s edge (Figure 49). The single pictograph at this location is not visible from the water. No other paintings beyond this one were located in this rock shelter, despite the abundance of available rock surface. Its placement and orientation within the rock shelter makes it most visible to land travelers moving up towards the mountain or down to the lake shore. At the top of this rocky rise a trail skirts the edge of the rock shelter and continues up the mountain. The trail at this site is clearly in use today, whether by animal or by human. The trail at this site was surveyed for a few hundred feet, but no additional paintings were located.
Similarly, at STLK 08 Panel 3 and Panel 4 are located near a trail that continues past the markings and carries on up the mountain side (Figure 50). There is abundance of available rock surface at this site, but no additional paintings were located beyond these two panels. This trail is easily detected and bears signs of contemporary use. The trail was surveyed for several hundred feet along the mountainside, but no additional sites were located. Even though Panel 3 was located from the water during the archaeological survey, its placement and orientation in the landscape indicates that it was intended for land trekkers rather than water travelers. The same can be said of Panel 4 that clearly was intended for land travelers moving up the mountain; individuals descending the mountainside and moving toward the lake shore on foot would not necessarily see these markings. Panel 5 is located on the shore at this location and is only visible to those approaching on foot.
Some of the paintings at Stuart Lake are located so high on the rock faces that reaching them from the water is impossible. No footholds or ledges are available for these high-elevation paintings. A substantial fluctuation in the water level at Stuart Lake would have provided the necessary elevation gain needed by the painters to reach some of the higher rock surfaces in order to leave their marks. These sites are indicated in Table 16 as having “High Water” access only.

Water levels at Stuart Lake fluctuate throughout the year, with June and July historically having the highest levels. Data produced by the Water Survey of Canada (Government of Canada n.d.) for the period 1955 to 1995 specifies that the water level typically increases by up to four meters during these summer months; indicating the time of year most likely to correspond with the production and placement of these markings. Significant changes in water level and a corresponding increase in access to these high-elevation paintings was observed over the span of several fieldwork seasons at Stuart Lake, including the time of the archaeological survey for this research (Figure 51).

Figure 50. Rock art site STLK 08 on Stuart Lake, inland site with motif indicated – edited motif image.

Figure 51. Rock art site STLK 09 on Stuart Lake, with seasonal water level variation indicated (red box).
Some of the paintings at Stuart Lake are more easily located when traveling the lake from the east toward North Arm. These paintings are not so much obstructed from view when traveling in the opposite direction as they seem to have been consciously placed with travelers from the east in mind. When traveling from the west toward Nak’azdli, away from North Arm, one must often look back in order to see these markings. These sites are identified in Table 16 as having “Water Specific” access.
<table>
<thead>
<tr>
<th>Site</th>
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<th>Orientation</th>
<th>Access</th>
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Table 16. Table of rock art panel details from Stuart Lake.
**Rock Art Motifs.** Several of the rock art motifs at Stuart Lake are in excellent condition where the year round exposure to the elements of the environment has had minimal impact, such as Panel 1 and Panel 10 at STLK 2 (Figure 52) and Panel 6 at STLK 08 (Figure 53). These motifs are bright and easily detected along the shoreline. Other motifs in excellent condition are identified in Table 17.

![Figure 52. Rock art motifs at site STLK 02 Panel and Panel 10 on Stuart – edited images.](image)

![Figure 53. Rock art motifs at site STLK 08 Panel 6 on Stuart Lake – edited image.](image)
Unfortunately, evidence of calcium carbonate deposits was noted at several panels. The extent of calcium carbonate deposits varies significantly within the assemblage. For example, the extent of deposit on Panel 3 at STLK 01, Panel 4 at STLK 02 and Panel 2 at STLK 08 is minimal in terms of the affects to the visibility of the motifs (Figure 54). It is only a matter of time however, before these panels will be further compromised by deposits. More extensive deterioration due to the presence of calcium carbonate is evident at other sites, such as on Panel 1 and Panel 2 at STLK 01 (Figure 55); Panel 11 at STLK 02 and Panel 4 at STLK 11 (Figure 56). In these examples the motifs are at various stages of “disappearing” from the rock surface.

Figure 54. Rock art motifs at sites STLK 01 Panel 3, STLK 02 Panel 4 and 2 STLK 08 Panel 2 on Stuart Lake, indicating a presence of calcium carbonate deposit – edited images.

Figure 55. Rock art motifs at site STLK 01 Panel 1 and Panel 2 on Stuart Lake, with evidence of extensive calcium carbonate deposit – edited images.
Lichen growth presents another issue in terms of preservation at some sites.
Panel 2 at STLK 01 is an example of severe lichen intrusion, as is Panel 3 at STLK 11. In addition to the calcium carbonate deposits noted on Panel 2 at STLK 08, some of the motifs have succumbed to the presence of lichen and are barely visible (Figure 57). The most severe case of deterioration and lichen intrusion is at STLK 15. This panel, barely visible today is comprised of eight motifs (Figure 58). Panel 13 at STLK 14 is spectacular in its size and content, over 40 separate motifs occur on this panel, many of which are severely compromised by the spread of lichen (Figure 59).

Figure 56. Rock art motif at site STLK 11 Panel 4 on Stuart Lake, with evidence of extensive calcium carbonate – edited image.

Figure 57. Rock art motifs at site STLK 01 Panel 1 and STLK 11 Panel 3 on Stuart Lake, with evidence of extensive lichen intrusion – edited images.
Fading, due to weathering and the passage of time, is the third primary taphonomic process acting on the motifs at Stuart Lake. The panels at STLK 03 in Figure 60 are prime examples of this condition, where almost all traces of pigment have vanished from the rock wall. Panel 12 at STLK 02 and Panel 3 at STLK 05 are additional examples of extensive fading that has occurred within the rock art assemblage (Figure 61).
The painters at Stuart Lake seemed to choose prominent rock outcroppings for the placement of their markings. In most cases, these paintings were placed on rock surfaces occurring at the water’s edge. The fact that these paintings are highly visible and accessible from the water might indicate that water travelers were the anticipated audience and that the painter had used the same mode of transport. The few paintings that are oriented away from the water appear to face inland areas. The fact that these sites typically coincide with trails may indicate that land travel was the painter’s mode of transport and that the intended audience was also traveling on foot. Movement through the land and the water was likely an important part of the production and use of the markings at Stuart Lake.
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Figure 17. Table of rock art motif data from Stuart Lake.
Positive Survey Results – Takla Lake, 1971

In 1971, the Pacific Great Eastern Railway had begun construction on a new rail line that would link the town of Fort St. James in the central interior of British Columbia with Dease Lake to the north. The Archaeology Department at Simon Fraser University in the Greater Vancouver area initiated an archaeological survey of the proposed railway route in an effort to catalogue and salvage any archaeological information that might be destroyed as result of the construction (McMurdo, J. 1972).

The planned railway expansion involved the permanent and complete destruction of several sections of the cliff faces along the eastern shore of Takla Lake. In June of the same year, archaeologists John McMurdo and David Butlin surveyed the shoreline of Takla Lake and identified several pictograph sites along this shoreline (Figure 62). Later that same year, the cliff faces were demolished as planned, along with the pictographs.

Takla Lake

Takla Lake is located north of Trembleur Lake and it lies within the traditional territory of the Takla Lake First Nation. Takla Lake has two primary First Nations communities along it shores, Takla Landing and Bulkley House, whose combined population is approximately 750 (Takla Lake First Nation n.d.). The Sakeniche River flows into Takla Lake at the lower western shore and the Driftwood River flows in at the northern tip of the lake. Takla Lake is approximately 50 miles long and it is connected to Trembleur Lake, to the south, via the Middle River. Logging roads provide access to Takla Lake via vehicle at several points along the eastern shore. These roads are typically only seasonally maintained and are subject to periodic washouts that make the gravel roads virtually impassable from time to time. With the exception of the two First Nations communities and the minimal amenities available at Leo Creek, the area surrounding Takla Lake is primarily undeveloped and unpopulated.
Figure 62. Map of Takla Lake with rock art site locations indicated.

**Rock Art Sites.** The Takla Lake First Nation expressed a significant interest in having the destroyed paintings highlighted as part of this research, rather than to have the lake or the rest of the territory surveyed for additional markings. As a result, Takla Lake was not directly surveyed as part of this research. The survey however, conducted by McMurdo and Butlin in 1971 resulted in the identification of six pictograph sites (McMurdo, J. 1972). It is the data, including photographs, generated through their fieldwork that is the foundation of this section.

McMurdo and Butlin surveyed only the eastern shore of the lake and consequently all of the sites discussed in this section are located along this shoreline (McMurdo, J. 1972:105). Their survey was conducted from the water and involved
scrutinizing the shoreline for evidence of archaeological sites. McMurdo and Butlin were interested in locating any type of archaeological site, not just rock art sites, but due to the extreme high water conditions at that time the only sites they identified were the six rock art sites (McMurdo, J. 1972: 107).

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Site Location</th>
<th>Site Type</th>
<th>Site Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKLK 01</td>
<td>Shoreline</td>
<td>Solitary</td>
<td>Open-Air</td>
</tr>
<tr>
<td>TKLK 02</td>
<td>Shoreline</td>
<td>Solitary</td>
<td>Open-Air</td>
</tr>
<tr>
<td>TKLK 03</td>
<td>Shoreline</td>
<td>Solitary</td>
<td>Open-Air</td>
</tr>
<tr>
<td>TKLK 04</td>
<td>Shoreline</td>
<td>Solitary</td>
<td>Open-Air</td>
</tr>
<tr>
<td>TKLK 05</td>
<td>Shoreline</td>
<td>Composite</td>
<td>Open-Air</td>
</tr>
<tr>
<td>TKLK 06</td>
<td>Shoreline</td>
<td>Composite</td>
<td>Open-Air</td>
</tr>
</tbody>
</table>

Table 18. Table of rock art site data from Takla Lake, 1971 survey.

All of the sites located by McMurdo and Butlin have been categorized here as shoreline sites because they were visible and accessible to these archaeologists from the water (McMurdo, J. 1972: 106). The photographs generated at the time of the survey indicate that the pictographs were located at open-air sites (Table 18). Four of the six sites at Takla Lake were of the solitary type, where one panel comprised the site. The remaining two sites were composite in nature, where more than one panel was identified. Because McMurdo and Butlin did not record information regarding the terrain surrounding the sites, it is not possible to directly assess the potential for the occurrence of additional activities at or near the rock art sites.

**Rock Art Panels.** All of the panels that comprise the sites at Takla Lake were mural types, where more than one motif occurred on a panel (Table 19). All of the panels were both visible and accessible from the water. At least one of the sites, TKLK 05 was only accessible from the water. Perhaps at times of lower water levels, this site too would have had some land access. In addition to being accessible from the water, two of the six sites appear to have also been accessible from land or at the very least from a ledge; included here are TKLK 02 and TKLK 03 (Figure 63).
Takla Lake Rock Art Sites: Panel Data

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Number of Panels</th>
<th>Panel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mural</td>
</tr>
<tr>
<td>TKLK 01</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TKLK 02</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TKLK 03</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TKLK 04</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TKLK 05</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TKLK 06</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 19. Table of rock art panel data from Takla Lake, 1971 survey.

Figure 63. Rock art motifs at sites TKL 02 and TKLK 03 previously located on Takla lake, with evidence of ledge or land access. Photographs kindly provided by the Takla Lake First Nation – edited images 1971 survey.

Because the archaeologists were able to identify all of the sites from the water, it is plausible that the panels were primarily oriented toward the water. Unfortunately, the directionality and orientation of the painted panels were not recorded at all sites (Table 20). At TKLK 05 however, Panel 1 was recorded as being oriented to the northwest and Panel 2 to the southeast (McMurdo, J. 1972: 111-112). The photograph of this site indicates that both panels were visible from the water when approached from either direction (Figure 64).
Figure 64. Rock art motifs at site TRLK 05 previously located on Takla Lake, with evidence of water orientation. Photograph kindly provided by the Takla Lake First Nation – edited image 1971 survey.

The natural curvature of the rock face at this site does not appear to accommodate both a northwest and a southeast exposure for the pictographs. If Panel 1 is correctly identified as being oriented to the northwest, then Panel 2 appears to be oriented to the southwest. For Panel 2 to be oriented southeast the curvature of this rock face would have to be considerably more dramatic so that Panel 2 virtually ended up behind Panel 1, facing southeast.
### Takla Lake: Rock Art Panel Details

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Panel Details</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKLK 01</td>
<td>1 of 1</td>
<td>Mural</td>
</tr>
<tr>
<td>TKLK 02</td>
<td>1 of 1</td>
<td>Mural</td>
</tr>
<tr>
<td>TKLK 03</td>
<td>1 of 1</td>
<td>Mural</td>
</tr>
<tr>
<td>TKLK 04</td>
<td>1 of 1</td>
<td>Mural</td>
</tr>
<tr>
<td>TKLK 05</td>
<td>1 of 2</td>
<td>Mural</td>
</tr>
<tr>
<td></td>
<td>2 of 2</td>
<td>Mural</td>
</tr>
<tr>
<td>TLKL 06</td>
<td>1 of 2</td>
<td>Mural</td>
</tr>
<tr>
<td></td>
<td>2 of 2</td>
<td>Mural</td>
</tr>
</tbody>
</table>

Table 20. Table of rock art panel details from Trembleur Lake, 1971 survey.

**Rock Art Motifs.** Based on the photographs taken during the 1971 survey, most of the pictographs at Takla Lake were in good condition and exhibited minimal signs of fading and corruption by natural forces (Table 21). Lichen growth was evident at some of the sites, but had yet to completely compromise the motifs. The two images at TKLK 03 however were beginning to be compromised by the spread of lichen (Figure 65).

![Figure 65. Rock art motifs at site TKLK 03 previously located on Takla Lake, with evidence of lichen intrusion. Photographs kindly provided by the Takla Lake First Nation – edited images 1971 survey.](image)
<table>
<thead>
<tr>
<th>Site Number</th>
<th>Panel No.</th>
<th>Line Type</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKLK 01</td>
<td>1 of 1</td>
<td>Outline</td>
<td>GOOD - MINIMAL FADING</td>
</tr>
<tr>
<td>TKLK 02</td>
<td>1 of 1</td>
<td>Outline; Silhouette</td>
<td>GOOD – LICHEN GROWTH; MINERAL DEPOSIT</td>
</tr>
<tr>
<td>TKLK 03</td>
<td>1 of 1</td>
<td>Outline</td>
<td>FAIR - LICHEN INTRUSION</td>
</tr>
<tr>
<td>TKLK 04</td>
<td>1 of 1</td>
<td>Outline</td>
<td>FAIR - FADING</td>
</tr>
<tr>
<td>TKLK 05</td>
<td>1 of 2</td>
<td>Outline</td>
<td>GOOD</td>
</tr>
<tr>
<td></td>
<td>2 of 2</td>
<td>Outline</td>
<td>GOOD - PARTIAL FADING</td>
</tr>
<tr>
<td></td>
<td>2 of 2</td>
<td>Outline</td>
<td>GOOD - PARTIAL FADING</td>
</tr>
<tr>
<td>TKLK 06</td>
<td>1 of 2</td>
<td>Outline</td>
<td>GOOD - PARTIAL FADING</td>
</tr>
<tr>
<td></td>
<td>2 of 2</td>
<td>Outline</td>
<td>GOOD - PARTIAL FADING</td>
</tr>
</tbody>
</table>

Table 21. Table of rock art motif data from Trembleur Lake, 1971 survey.

The motifs at TKLK 04 were recorded as being “the most faded and poorly preserved of all those recorded” (McMurdo, J. 1972: 111). The condition of the rock surface itself at this panel has perhaps contributed to the lack of preservation noted (Figure 66). Unequal preservation in terms of visibility is evident at some of the Takla Lake panels. Here it seems some motifs have faded more extensively than others, perhaps indicating a difference in relative age. The motifs at TKLK 06 are a prime example of this unequal preservation (Figure 67). McMurdo and Bultin make note of this difference for some of the motifs on Panel 2 at TKLK 05 and TKLK 06 (McMurdo, J. 1972: 112, 116).
Figure 66. Rock art motifs at site TKLK 04 previously located on Takla Lake, with evidence of erosion. Photographs kindly provided by the Takla Lake First Nation – edited images 1971 survey.

Figure 67. Rock art motif at site TKLK 06 previously located on Takla Lake, with evidence of unequal preservation. Photograph kindly provided by the Takla Lake First Nation – edited image 1971 survey.

Based on the data gathered by McMurdo and Butlin in 1971 it appears that the painters of the rock art at Takla Lake chose prominent rock outcroppings located at the water’s edge to place their markings. The fact that all of the paintings are both
accessible and visible from the water possibly indicates that water travel was an important part of the placement of the images within the landscape and the use of the markings within society.

**Discussion**

The shoreline locations of the rock markings described in this chapter imply that exposure to the water was important in terms of the production, placement and use of the pictographs. Does this prominent shoreline visibility of the paintings imply the markings were intended to be seen by those traveling through the landscape via the water? The overt orientation toward the water however, also indicates that a certain amount of selection in terms of the audience may have been performed: the paintings were not available for the entire public to view, but specifically those individuals and groups who moved through the landscape via the waterways and to a lesser extent, at Stuart Lake, those traveling over foot trails near the shoreline.

Perhaps the positioning of the paintings along these water routes did not necessarily function to channel the flow of traffic, but rather the position and presence of the paintings may reflect a path of movement commonly taken by painter and audience alike. It follows that placing paintings according to common routes of travel would have enabled the painters to take advantage of concentrated traffic and to communicate to those passing through. But was it important for the paintings to be located in a high traffic area? And was visibility important? In order to explore these questions, the ethnographic fieldwork and the results of the interviews conducted with First Nations community members in the Nadleh Whut’en, Tl’azt’en and Takla Lake traditional territories are presented and discussed in the following section.

**Rock Art Insights**

During the ethnographic portion of this research, five First Nations people from the communities of Nadleh, Stellako and Takla Landing were interviewed. These individuals were primarily elders who had been recommended to by the gatekeepers in each community. These people were interviewed about the rock art within their own territories. As part of the ethnographic component of this research, seven interviews conducted a few years ago with members of the Tl’azt’en First Nation are
included. These community members were interviewed specifically about the rock markings at Stuart Lake. The tone of this following section is decidedly different to that of the rest of this thesis, including the previous section regarding the data generated during the archaeological survey. The decision to present the information generated during the interviews in this alternative manner was based on wanting to acknowledge the inter-personal nature that is at the heart of interviews and to respect and recognize each of the individuals who shared their knowledge and participated in this process.

_Takla Lake_

Michelle Lochhead, my contact at Takla Landing, suggested I interview Lilly French and provided me with her telephone number. Lilly and I spoke on the phone a few days later and made arrangements to meet for the interview. Lilly came to my home on August 17, 2011 and we sat in my upstairs office, sipped earl grey tea and talked about many things before settling down to the semi-structured interview framework described in Chapter Four. Lilly is from the Takla Lake First Nation and she is of the Bear clan. Lilly’s traditional name is Bukh’gil’bul and she explained to me that it refers to a mother bear with two cubs. Her traditional name was chosen for her when she was very young and along with her name came responsibility, duty and a sense of pride. When I asked her if she would like to remain anonymous in the interview she explained that I should be sure to include her traditional name in addition to her “English” name. I was surprise to learn she considered “Lilly” to be her alias.

Lilly described some of the areas where she had encountered rock markings in the past. Referring to markings in the Omineca Mountains she said, “it’s on the grease trail. ⁴ The grease trail connects Prince Rupert, Hazelton, through the Babines, [and] Takla. [The trail] goes up to Manson Creek, Germansen Landing and back to Fort St. James. That was the mail route. My grandfather was a mailman. He transported mail by horse, pack horses. He did it for many years.” She explained further, “it’s a very old

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⁴ Grease trails are overland travel and trade routes that span the interior and coast of the Pacific Northwest in North America. The term was originally coined because of the trail of grease that resulted from the transportation of eulachon fish oil across the landscape.
trail, especially the one up in the mountains through the Spatsizi Plateau.” Lilly commented that the grease trails were the old traditional travel and trade routes.

At this point in time, I had not yet begun to articulate the placement of rock markings in terms of human movement through the landscape. But looking back, the connection to movement was evident right from the beginning by the way Lilly talked about her knowledge of rock markings within landscapes familiar to her. The connection to movement, human action and agency continued as we carried on our discussion of rock markings and Lilly explained, [the paintings] symbolized the many battles that went on between the different tribes. You see, Takla is in a really unique situation because we are at the headwaters, our water flows in three directions. So we were accessible from [a variety of directions].

And it’s a crossing point to get from the northern part of British Columbia to the west coast and the north coast. And people being curious, [and asking] what’s up the Fraser [River]? Where do you end up if you go all the way up the Fraser River? Well, you end up, up here [at Takla].

One of the other areas with rock art that Lilly mentioned was along the Sustut River. I asked her what people would have been doing on the river and she replied, “they would be commuting back from the seasonal camps.” Lilly explained that the ways in which people in the past moved about the landscape depended on the time of year and environmental conditions. “For example,” she said, “in the early fall, late spring, travel would be done inland, it won’t be done by water, [because] the ice wouldn’t be any good [for travel].”

We moved on to discuss the ways in which people in the past made a living off the land. Lilly described this process by referring to how it is done today. The task at hand is specific, you go at a certain of the year for ground hog and then there’s a time to go for sheep and mountain goat. If you are going for hogs, you go in the fall – September or October – if you go earlier in the year, it’s for mountain goat and caribou.

Throughout our conversation we slipped back and forth between the present and the past. Lilly continued to talk about traditions of using resources from the land today and in the past by saying,
Different people have specific areas that they go to make specific medicines and the rock art or the paintings could be [indicating] the direction they are going, perhaps an incident that happened. There’s one [painting] that is of a stickman and it’s got a broken leg. I was told that it was a painting the person… left… to let the family know he had broken his leg on that trip and the direction the arm [in the painting] was pointing, was an indication of which way he travelled, so that he could be found.

I asked Lilly about the rules and conventions of land use and she replied,

We all had specific areas, our own traditional hunting grounds. We had our own berry picking areas or fishing spots, specific areas we went for medicinal trips, we never just hunt where ever. If you are on route to your traditional territory and you come across an animal in someone else’s territory, you have to leave it. You stayed in your specific area and if you married … and you chose to go and live in your husband’s or wife’s territory you had to get permission. If you were going to go berry picking or go hunting in another person’s territory, you had to ask. They had symbols to let the traditional territory holders know someone was there and maybe they had gotten something [while fishing or hunting] and they would leave a message that they had come and gone, through their artwork.

Reflecting on the past and the destruction of the paintings at Takla Lake in 1971, Lilly said “I remember it happening, I was 11 years old when it all transpired. I remember my grandfather, he [typically] never got sad, he didn’t cry and [when this happened] he was really sad. Lilly told me the significance of the markings for her grandfather was the fact that the symbols contained information about wars, deaths, births and marriages – important events in the lives of people. Lilly explained the deep personal connection that some people have to the markings by saying, “if a person drowned, there’s no closure if you haven’t found the body. There would be a tribute through artwork on the rocks in the area in which [that person] drowned.” So it’s like a headstone to some people.” Lilly provided another example, “there’s one that describes a woman who died. It’s a story about a woman who died giving birth and her husband buried her right there.

Throughout the interview, Lilly and I paged through photographs of the rock paintings and talked about the images and what they might represent. One of the more predominant symbols in the assemblage is the circle motif. With this symbol in mind Lilly said,

There’s so much about my people that goes back to the circle. Everything we do is in a circle. [The rock markings] tells the story, there are many of them that told stories of the different intertribal battles. Battles won, battles lost, deaths, births, marriages.
Certain symbols [have certain meanings], there’s a symbol for marriage. I believe it’s a circle with a dash across.

Referring to the motif in Figure 68, Lilly explained “this person is from the Bear clan. This person who did this [painting] was probably from the family, that’s the crest. He is from the Bear clan and going in this direction.” Referring to the directionality within the painting Lilly said, “that’s what my grandma speaks about.” Here, Lilly was referring to the audio recordings, made by her grandmother that contains information about the rock markings on Takla Lake. Unfortunately, these recordings had not been translated into English in time to be included in this research. I was, however, able to locate a documented account of the Takla Lake rock markings that did include Lilly’s grandmother’s knowledge.

Lilly’s grandmother, Madeline French met with archaeologists in 1971 at Takla Lake during the survey of the six pictographs before they were destroyed as part of the railway expansion (McMurdo, J. 1972). During this meeting, Mrs. French provided
information about the interpretation of the images and insight into the approximate age of the markings (McMurdo, J. 1972:107).

Madeline French was approximately 70 years old at the time she met with the archaeologists. She identified her grandfather as the artist of the Takla Lake paintings (J. McMurdo 1972: 107) – indicating that the paintings may have been created in the mid to late 1800s. Mrs. French indicated that her grandfather had come to the Takla Lake area from the vicinity of Fort Grahame, approximately one hundred miles to the northeast.

Madeline French remembered her father teaching her about the paintings and what the images represented and why they were created. She learned about the markings while she and her father traveled to trap and fish (McMurdo, J. 1972:109). He told her the paintings functioned to indicate the location of game trails or hunting territories (McMurdo, J. 1972:119). Unfortunately, the archaeologists did not gather more details regarding the production and use of the rock markings beyond this one fact, but they did ask Madeline French to interpret many of the painted symbols (McMurdo, J. 1972: 109-118). These interpretations appear in Table 22.
Table 22. Rock art motifs previously located at Takla Lake, as interpreted by Madeline French, 1971. Photographs kindly provided by the Takla Lake First Nation – edited images 1971 survey.

My interview with Lilly French and the information provided in 1971 by her grandmother, Madeline French indicated that the rock art was very much a part of a vernacular landscape, one focused on the practice of everyday life that included economic and subsistence pursuits. The paintings clearly had a communicative purpose whether it be to identify hunting territories and game trails or to commemorate noteworthy events in the lives of people. The success of this communication would have been reliant on both location and imagery, where both the
painters and their audiences would have needed a shared understanding of the symbols and to have frequented the locations of the markings.

**Fraser Lake**

My next interview was with Janine Luggi on August 18, 2011 at my home in Prince George, British Columbia. Janine is from the community of Stellako, on the west end of Fraser Lake, and she belongs to the Frog clan. Janine and I have been friends for many years and have worked together on a variety of research projects in her community. Even though Janine is far too young to be an elder, I chose to interview her because I knew she would contribute to my research in thought-provoking ways.

I asked Janine if Fraser Lake was significant to her and she replied by telling me about travels on the water with her aunt and uncle, when she was a young girl, to check the fishing nets in the fall. She said she thought the paintings were attached to the practice of fishing and I asked her to elaborate.

*There’s a significance between the rock art and the fish because I know there’s actual pictures of the fish in the rock art. I know at Lejac it’s a real significant area, like a lot of people, not only people from Stellako and Nadleh would go to Lejac. It was people from other communities that would come and they would camp there and go fishing in the fall time.*

As we talked, we looked at photographs of the rock markings and a map of Fraser Lake that indicated the locations of the sites. I asked Janine about the shoreline of the lake where the markings are located and how people use the land in that area.

*I think of my granny, my mom’s mom, she was raised for the most part in Nadleh and they would always use the Nadleh River. There’s a point there and they would always set their [fishing] net there. I’ve been told by people in Nadleh [they] went to Stellako to get their fish too, because it was a better place at one time. People would camp there, like people from other communities would camp there for sockeye to dry.*

*There’s a mountain literally behind Nadleh. Behind my uncle’s house and it’s where men go to find whatever gifts they have from the creator. I don’t know if that has a significance to the rock art. Makes me wonder if there were men that actually drew*

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5 Lejac is located across the water from the largest concentration of rock markings on Fraser Lake. Nadleh is the First Nations community located on the east end of Fraser Lake, on the same end of the lake where the rock markings are located.
[the markings], because on the west side [of the lake] there’s a mountain for women [but no rock art on that side of the lake].

I’m thinking they were harvesting their fish and preserving it [in the area of the rock markings]. I wonder if there were dwellings there. Is there archaeological evidence of house pits or cache pits there? I’m thinking that it is an access point to the mountain. Once you cross over that mountain you are really into the thick of the territory. There’s so [many] vast resources all throughout here. I know there are major huckleberry patches in there. Ormond Lake is just east of there and that’s very significant to me and our family.

We looked at the map and discussed the extent of Nadleh territory and how the resources of the land were managed. Janine explained the territory “was shared, ultimately it was a shared area.”

I think it’s really about relationships. It’s the relationships that are built between the communities. I think of me and my relationship with Richard and how my family wouldn’t go to Richard if they didn’t know him and say, “oh, we want some salmon, can you give us some salmon?” if [he and I] weren’t common-law. That opportunity wouldn’t be there for my family to get salmon from Hazelton.

I always hear the Carrier people have those connections and just how it’s all about sharing. 6 When you go to Ormond Lake, it’s not really only Nadleh people who can go there... it’s people from Saik’uz, it’s people from Stellako, it’s even people from Yekooche that go there. I’m pretty sure it’s to get char in the fall.

Carrier people are more about sharing and working together...I think of the story of Simon Fraser and all the non-Native people that came and the Carrier people were so willing to take them in and you know there weren’t any wars about white people coming into their area. It was about sharing and helping people.

Our discussion returned to the rock art and Janine remembered what her dad, Ken Luggi said about the paintings, “I know my dad says that it’s hidden. A lot of the [paintings] he has found [are] more hidden from [view] than [what you would expect] if you just took your boat out and were going for a leisurely jaunt on the lake.” She

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6 Dakelh peoples are commonly referred to as Carrier – a name coined by the first Europeans to arrive in the area during the early 19th century. Although the name Carrier is still used today by both First Nations and non-First Nations peoples, many First Nations have replaced Carrier with Dakelh. The term Dakelh is used throughout this thesis.
continued her discussion by saying, “it’s not really even art. You know, it had a purpose. It was connected to some kind of practice.”

Over the years that I have known Janine, she has often spoken of her maternal grandmother, whom she affectionately refers to as her “granny.” In fact, her grandmother’s words are usually a regular part of our conversations. Janine’s grandmother, Evelyn Louie was interviewed in the early 1950s regarding a variety of topics, including the ways in which people used the land and water. In her interview, she also provided insight into rock markings on Fraser Lake,

Thirty years ago I started fishing by myself. We used to stay at Lejac with Seymour Thomas to go fishing. There’s a place to fish for your trout, for your whitefish, char and salmon. Around September we start [fishing] to falltime. We fish, then in November we hunt and trap. We have a place to get everything. We get char by the lake, we don’t just go to any-old place. [My grandparents], they speared it (the fish) on this side of the lake, you can see a drawing – a sun and then there’s an animal, a deer on a rock – that’s where they speared fish. The old people spend all day spearing salmon.

Evelyn Louie and her granddaughter, Janine both spoke of the rock markings in the same practical manner as Madeline French had discussed subsistence activity and the logistics of being on the land and water. The location of the markings was reflective of the human action occurring on the landscape within the social network of activity that comprised daily life. This network of routine activity would have enabled a variety of people to be exposed to the markings and potentially would have prompted a variety of people to paint.

My next interview was in the treaty office at the community of Nadleh on August 21, 2011. Beverly Ketlo, the Lands Manager at Nadleh, had made arrangements for me to interview two Elders. Ms. Ketlo also kindly provided office space for me to use. My first informant preferred to remain anonymous. We sat across from one another at Ms. Ketlo’s and he shared stories of personal experiences, struggles and triumphs in his life. I learned he was four years old in 1938 and he had attended residential school, as had his parents, but that his grandfather never attended school. He recounted times when he was a child in the smokehouse listening to his parents and grandparents tell stories and he tried, with honesty, to remember their words.
When I asked him about the paintings on Fraser Lake he said, “this rock writing, [as] we call it, [some of] the old people really didn’t know what these rock writings were. Some will say it’s somebody [who] put it there for the future people. Some [of the markings] were just the names they had.” I pressed him to tell me more about the paintings and why they were created. He replied by saying,

*Oh, it’s a long story. I’ll try and make it short. Long time ago our ancestors were killing each other off by war, Indian war. That was their way of life. There were some Elders...[and] they noticed that people are no more. They were killing each other too much and there were no more Indians there. Yup, they noticed that.*

It was at this point in our conversation that he said to me, “if I talk ‘Indian way’ it would be better,” meaning he would tell a better story if he were speaking his own language, rather than English. We both laughed and I expressed my gratitude that he was speaking English, we laughed again. He continued with his story.

*They noticed, so they talked in a circle, “we have to save ourselves. We’ve got to stop killing each other. How shall we do it?” They get together [and] a few Elders said they will go from camp to camp or village to village and we’ll put up a system that will save our people. What we call the Balhats now.*

*Well these guys get together and they start walking, it must have lasted 20 to 30 years that they go from village to village. That’s how we get our clan system. There’s grouse, beaver, bear and caribou. That’s what we use around here now. Where they walk, [you can see] some of their rock writings. It’s those people who were walking, making our system what we live by now, that’s what the rock writings were about. All those rock writings is where they stop. Where you find these rock writings... is a place where they stay and make the laws and the system.*

As we continued to look through the photographs of the rock markings, I learned that it was his grandfather who taught him about the origin of the markings and that they chose rock as the medium for their messages because, *rock is forever.” “This rock writing,” he told me, “it’s a symbol. These things, nobody knows what they mean [now]. It’s long time ago. They left their mark on the rocks so that what happened in the past were true. It’s a symbol of truth, I guess.*

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7 Balhats refers to the potlatch system that was organized around matrilineal exogamous clans, which formed the core of Dakelh life. Clans were guided by ‘Uza’hne or noble people.
By saying people no longer knew the meanings of the markings my informant was acknowledging that in the distant past, people could understand the messages contained in the symbols and in terms of my research these were encouraging words. Aspects of human movement, expressed throughout my interview with this participant, were indicated to form the foundation for the production of the markings. Communication in terms of recording and essentially legitimizing events were indicated as the primary purpose or use of the markings.

My next interview was with Roy Nooski. Roy is from the community of Nadleh and he is a member of the Littleman clan. I had met Roy a few years earlier during another rock art project that I conducted on behalf of Nadleh. I was pleased that he remembered me. During that previous project he taught me the proper way to show respect at a rock art site by leaving an offering of tobacco along with an expression of thanks. Since then, his words along with my tin of ceremonial tobacco are a permanent part of my rock art research toolkit.

During our conversation, Roy shared memories from his past and the time he spent with his grandfather. He told stories with great emphasis and shared personal experiences of visiting the rock markings and what that was like for him as a small child. Roy knows about the rock art on Fraser Lake from first-hand experience, he has visited all of the sites. Our conversation began by him remembering a place on the lake where his grandfather showed him some paintings in a cave,

One place, only way you can get there is by canoe [and then] you have to walk in. When you get in there, as soon as you walk in there, this side is flat and you see [symbols of] fish. That’s where I ask Grandpa, “what’s that fish for?” and he says, “that’s where they catch char.” The deer [symbol] was under the fish. I ask him about that one and he says – well, we talk Indian eh - “just above there that’s where everybody go for deer hunting.”

I ask about that [symbol of a] horse – first time I see long horse like that. I said, “how come they got that horse there?” He says, “in the back there, they come from Cheslatta and they camp, they hang there. They camp and they talk about what they are going [to] do in Fort or what they are going to do while they’re in there.” There’s where they have their meeting and then they talk about what’s going to happen and what they decide.
In one of the paintings, Roy remembered a human figure holding a long stick-like object, drawing on what he remembered he said, “I ask him about that, he says, “that’s where they catch fish.” They use spears. That’s where they catch fish. That’s what they do, that’s their livelihood. That’s their weapon.” We move onto to discuss the circle motif and Roy explained,

[Circles are] everywhere you go. Like when they go to the sweat lodge. If somebody is going to go speak somewhere they get rid of their negative feeling, their anger. So they have a circle, you know. They talk and they ask, they tell them what to do, what not to do. That’s why there’s always a circle, doesn’t matter what they do, there’s always a circle. They deal with things that are important to them.

Here, Roy was referring to the circle in his culture and the circle images in the rock art and that it represents this type of activity at meeting places along the shoreline. We continued looking at the photographs of the rock markings. Referring to the motif in Figure 69, Roy said,

Oh yeah! I see that one there, it used to be visible, but now that one too is a little bit getting faded. [It’s] something to do with the sun, the sun going down and raining or something coming down. It’s hard. I can’t say it in English. We used to have a name for that (referring to the long-tailed image in the motif).
Roy Nooski spoke of the rock markings from the knowledge his grandfather passed onto him. This knowledge indicated the markings were directly associated with practical activities on the land and water, such as fishing and travel. Here again, human movement and activity play a key role in the production of the paintings as meeting places and stopover points were chosen for marking as peopled moved through the landscape. The process of painting was, when necessary, part of the routine of movement. Not only were the painters mobile in the landscape, but so too were the audiences – exposure to the images was equally dependent on being-in-the-land and being-on-the-move.

In addition to arranging these two interviews at Nadleh, Bev Ketlo provided me with telephone numbers for other elders. From this list, I contacted George George Sr. the following summer and we met at his home in Lejac on June 18, 2012. Throughout our conversation George shared with me his thoughts and ideas on topics much larger and more far reaching than the rock markings. His sense of humour and storytelling ability was delightful. One of the first things I learned in our interview was that he is from the Frog clan and that English is his second language. This issue of language was a common thread throughout out almost all of the interviews I had conducted so far and
I could not help but wonder at the effect English was having on the research and how much more I could learn if I spoke Dakelh.

George started the interview with a prayer that he said in his traditional language. When he finished he asked me what I would like to talk about. I started by reminding him of the comment he made to me on the telephone when I called to arrange the interview. At that time he said, “our people used the waterways quite a bit. The paintings are part of the waterways.” I asked him to elaborate and he replied by saying, “waterways was a big part of our travels. And a big part of food gathering, whether right out of the water or else getting to and from the food gathering areas. The rock paintings...were on a frequently traveled route of our people.”

George carried the conversation from that point and began telling me about his memories of visiting a rock art site when he was a child, he said, “I was brought to an area where there was rock paintings – sort of writings on the rock. And I never was told what it meant. We were out there in a canoe.” The paintings he referred to were on Fraser Lake. Later on in the interview I asked him why he, and many of the other informants I had spoken with, had never been told about the meanings of the paintings. George explained,

Our people were so close to nature...they done things that [were] out of the ordinary. There are some people who are respected they do something only certain people can have the power or the knowledge to [do]. This is what it is about. This is taboo to talk about. Like our people were able to communicate with each other at a great distance. Just by mental powers and there’s some people that had the powers that they can control people from a great distance. So if they done something, if they wrote these things (meaning the paintings) there are some people that might say that’s not for us to know. It’s best for us to just leave it, but I sure wouldn’t mind knowing!

George continued to tell me about the past, things he remembered from his childhood that he thought might be linked to the rock markings.

I’m speaking from my childhood. There were certain people that [it] seems like our people were afraid of. You know, we’d be out on the land doing what we have to do for food and our parents and our Elders would always tell us “be quiet, be quiet” – now I am talking in English, which is foreign to me. I don’t want to insult other people, but [this is] what I was told when I was a child. What they were saying is that, “Beaver Indians might hear you.” So in that way, our people didn’t trust the Beaver Indians.
These people send raiding parties into other territories or jurisdictions and I was told [this] when I was a child, when we were out on the land. [Or they might say,] “be quiet the Chilcotins might hear you.” They were the two tribes our people were afraid of because of them sending the raiding parties into our territory, that’s what I remember.

Something to verify what I am saying is the massacre at Chunlac. This was a massacre done by the Chilcotins. That’s what I was told, so this verifies what I’m [saying and] why our people were afraid of these people that send out raiding parties. 8

George proceeded to tell me a story of a Dakelh woman who saw a man, whom she did not know, waving a dagger at her while she was in the forest. He was from another Nation. The woman, thinking the man liked her, smiled and looked away. He waved the dagger a few more times and each time she smiled and looked away. The woman did not say anything to her people about seeing the man in the forest or the dagger he was waving. It turned out that he was trying to warn her about a raiding party that was about to attack, but the woman did not understand the warning and the party attacked. George linked this story to the rock markings by saying, “it could have been maybe these people from the outside were trying to pass a message onto our people or it could been our people putting up warning signs for any intruders.”

Throughout our interview George drew from his own past in order to explain the rock markings to me. This was a common thread throughout the research, many of my informants did this as a way of getting closer to the time when people were producing and using these images. Consequently, most people spoke about their grandparents’ and parents’ teachings. The direct link George made between the rock markings and the travel route of his people speaks to what others said about activities on the land and water, whether it be fishing, hunting, sharing resources or meeting with others they were all traveling and moving through the land. This movement would have been governed by social protocols based on the clan system, social networks and territorial understandings.

I was fortunate to find an historic account of the some of the rock markings at Fraser Lake documented in 1876 (Figure 70). George Mercer Dawson, geologist for the

8 Chunlac is located in Dakelh territory and is the site of a massacre that has been widely documented and reported on.
Geological Survey of Canada, arrived to Fraser Lake on September 19th that same year and he wrote (Cole and Lockner 1989:263),

*Indians point out several places along the shore of the lake to which Indian names attach. Two localities where designs have been made on the rocks by the Aukulty Siwashes. Neither of them at all clear, nor apparently of any Significance, but Cultus Mamook merely. One faintly shows as opposite, red pigment on a whitish stain on the rock.*

*Another place shows two very distinct Cracks in the cliff – parallel Joints – which receives a jawbreaking name, meaning something; I really could not exactly find out what.*

![Figure 70. Illustration of rock painting on Fraser Lake. Originally produced by Dawson in 1876. Reproduced with permission from McGill University Archives. Carton 3, File 1: Diary and General Notebook 26th May to 20th October 1876.]

As a translation for Dawson’s term, *Cultus Mamook*, Cole and Lockner indicate it is a Chinook Jargon expression meaning, “to make bad or no good” (Cole and Lockner 1989:264). This idea of “making bad or no good” reminded me of how George George Sr. spoke about his people being able to mentally communicate over great distances and to do extraordinary things like control people from afar. Perhaps the
reason why George Mercer Dawson perceived the rock markings to have little significance for his Native guides was due to the taboo nature of such markings, that George George Sr. spoke about in his interview with me.

**Stuart Lake**

In the community of Tache on Stuart Lake, Beverly Bird and Mona Anatole identified elders within the community for me to interview. I was privileged to interview Philip and Josie Felix, as well as, Celestine Thomas. My interviews with these people took place at their homes in the community. Philip and Josie Felix were the first elders to teach me about the rock paintings. I met with Philip and Josie on October 25, 2004. Philip explained the paintings in terms of people’s activities on the land, “*my dad used to tell me, wherever they travel, they pen these, or any rock where people pass by.*” Philip discussed the diversity of animal life throughout the province and the extensive knowledge people in the past had about the habits and behaviours of animals within their territories. It is this knowledge and the importance of animals that is reflected in the rock markings. He explained this by saying,

> We just hunt what we know best around here – like moose, deer, and bear and things like that, and beaver. All that we know we’ve got here, that’s our design – all that animals around here. And then, they got caribou and elk further down south, and out west they might have something else, they’ve got all kinds of designs. That’s how these [paintings] got on the rock.

Throughout the conversation, Josie offered insightful information that brought clarity to our discussion of the rock markings. Josie commented that the paintings indicated things like the location of meeting places for hunters to draw together and the recurring tally-mark images indicated a system of counting – perhaps relating to the number of days spent in the forest, or the expected duration of a trip.

Philip continued to explain the paintings in ways that were clearly connected to the movement of people through the landscape as part of the practice of everyday life. “*Whatever they had been doing, they put their design on the rock. Clans all over the place, they got their own design... and they put it on the rock...when they go traveling around looking for animals, when they see one, they put their mark on the rock.*” The
link Philip made between the rock markings and the presence of animals, as well as, the importance of knowing where animals could be found echoed the words of Madeline French at Takla Lake, who several decades earlier, also stated the rock markings functioned to indicate the presence of animals.

The extent to which people traveled the landscape was a recurring theme in many of the interviews. In this regard, Philip explained,

*If Manson Creek man pass through down here, he’ll put his design like the caribou – them they got caribou – so these people around here, they don’t know where this animal like that kind is [but] then after that (the painting) they know where to go, where to get caribou. Anywhere they travel… them people, they used to travel all over, they were hunters, they hunt all over, no little small area.*

Just as others had done in the interviews, Philip and Josie Felix explained the rock markings to me in terms of the past and how things were different then. They openly acknowledged the changes that had occurred in their own personal lives, as well as, the lives of their people in general. And, just as others had done, they too explained the rock markings as being associated to a vernacular landscape of the past that was related to the painters’ and the audiences’ everyday activities of economic and subsistence pursuits. Embedded in the markings were messages intended for communication to the audience, where both location and imagery were key components to the “success” of the markings.

At Tache, I also interviewed Celestine Thomas. My interview with her was coordinated by Morris Joseph and Nathan Seymour from the Treaty Office at Tache; both Morris and Nathan accompanied me to Celestine’s house for the interview on November 9, 2005. At times during the interview, Celestine and Morris spoke in Dakelh to one another. As with the other interviews I had conducted with elders, language was something I was acutely aware of in my conversation with Celestine. Virtually all of my informants, with the exception of Janine Luggi spoke English as a second language. All of the informants spoke English well, there were no problems with their fluency or understanding; the problem however, rested with the limitations of English itself when compared to Dakelh, and of course my reliance on it for this research.
My conversation with Celestine began with a discussion of people traveling and moving about the landscape. It was here that I learned leaving messages on the rock was an important part of life in the past because, “people used to go from place to place depending on the game and what time the fish is ready. Especially when the salmon run, that’s when they come here. They move from place to place, they never stayed in one place, they were all over.” The rock markings enabled people to continue to communicate with one another while out on the land, essentially maintaining social relationships at a distance.

During the interview, Celestine talked about the process of making the paint for the pictographs. She explained that “a special type of rock” was needed and that “not any type of rock will do.” Once the proper rock was found, it was ground into a fine powder and boiled. Our conversation turned to the durability of the paint and both Celestine and Morris commented how the paintings on the lake had just simply always been there.

Sometime in 2004, the Tache research office conducted interviews with community members about a variety of topics. These interviews were made available to me as part of my research. One of those anonymous informants briefly spoke about the preparation of paint used in the pictographs by saying that the red ochre was taken from the hillside at Stuart Lake, across from Honeymoon Island. The people long ago would “make it just like powder. They pound, they pound until it get just like powder and they put grease on it and that’s what they paint it with.”

The Tache research staff had also interviewed Robert Hanson. During that interview, Mr. Hanson briefly discussed the durability of the paint as being of personal significance to himself and his people,

You know, that’s why they say Indian people they have more power than anyone else. By the looks of this, you know, the paint it don’t rub off. Ordinary paint, you know, it rub off right now, about a couple of years, that’s all it lasts. But this, look how many years that water has been slashing in there, it never change, and the sun. That really means something...

At the community of Nak’azdli I coordinated my interview efforts with Sharon Bird at the Treaty Office. Sharon put me in touch with Mildred Martin and on October
27, 2004 I met with Mildred at her home in Nak’azdli. Mildred explained to me that the paintings were “messages that they leave for each other,” so that people could tell one another what they were doing. The paintings, she said, contained information about what people were doing out on the land as they went about their business. Painting the rock was like “leaving a message for the person to know what he is doing, when he will be back.”

The familiarity people had with one another regarding hunting, fishing and trapping activities and territories made it possible for the paintings to be understood. It was this awareness, Mildred said, that ensured the people reading the messages “knew where and what it means.” Mildred explained this familiarity people had with one another by saying,

Everybody knows where [each other] set their traps. They know their lands. Just about everybody knows each other’s lines, where their lines are, where they’re trapping. Where this person is trapping, and that person, where he is trapping. They all know each other’s lines.

Mildred identified the painters as mostly likely to have been men “because they are the ones that travel around.” She also noted that, “there was always a woman with them. The woman traveled with the men on the trapline, long time ago. Sometimes, the whole family would go together on traplines.” Mildred and I talked of men and women and how they would likely have been depicted in the rock art imagery. Mildred explained that women would have been represented wearing a long tunic-like skirt. Identifying either gender within the rock art assemblage at Stuart Lake and in the other parts of the study area is somewhat difficult, some of the human figures appear to be wearing pants rather than a skirt, but are they? Others are only head and shoulder depictions where neither gender is revealed.

At the community of Yekooche I coordinated my interview activities with Dean Joseph from the Treaty Office. Dean brought me to the home of Johnny, Bessie and Agnes Joseph on March 16, 2005. Johnny began our discussion by explaining that, “the paintings are stories of what they have been doing, all those things, what they been doing when they go out trapping, fishing. They set rabbit snares, they set wolf snares, all that.” Bessie indicated that the details encoded in these stories could aid in the
recovery of lost hunters and trappers, by revealing information related to the whereabouts of the missing people.

Agnes Joseph soon joined our discussion and explained the paintings by saying, *Long time ago, they write this – where they are going, what they are doing – that’s what they do... When they were in the bush there, that’s what they do. They write on the rock, where the path is and they tell them where they’re going... the Indian ways, they write... so they don’t get lost. If they get lost, they have to look for it [the painting]... they write things the Indian way, our language.*

Agnes further explained the concept of how the paintings would have been used by the audience, with respect to lost trappers,

*When our husbands they going to go to their trapline or some other place they tell us where they are going, and then if they don’t come back, somebody has to go and look for them if they got lost... he writes where he is going to go and if he don’t come back, they have to look for [the painting].*

Throughout the interview, the Josephs consciously endeavoured to explain the rock markings to me in terms of the past and how things used to be. They commented about how the passage of time has brought about so many changes to their people, the land, and life in general. These changes, they aptly noted, made it difficult for a complete understanding of the rock markings today. Bessie identified this problem and eloquently stated that it was so because, *“the people who knew about the rock art are gone now.”*

At Stuart Lake the majority of the informants spoke about the rock art in terms of the communicative ability of the markings and the intentions of the painters to leave messages for the audiences. Travel throughout the territory on behalf on the painters was what prompted the need for these message-paintings.  

The knowledge that people shared of one another’s patterns of movement across the landscape made the messages detectable by the audience and a shared understanding of the symbols made the messages legible. This shared knowledge of routes of movement and of symbol meanings afforded the painters a high degree of confidence in the delivery of their messages.

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9 The term message-painting is used to identify this type of pictograph, as discussed by the informants participating in the interviews.
Late 19th century ethno-historical literature indicates that for at least one of the more predominant pictograph panels on Stuart Lake, the motifs functioned as personal totems and that the panel had been painted over time by inhabitants of the area (Morice 1893:207) (Figure 71). Personal totems were usually an animal revealed during a dream, after which the dreamer was bound to “look upon it as sacred and to be especially revered and protected” (Morice 1893:203). The totem, then considered a relative, was believed to have provided powerful protection in return (Morice 1893:203). Father Morice describes this site in the following manner (Morice 1893:207),

*It is to be seen about half way between this place, Stuart’s Lake or Na’kraztli (Nak’azdli) and Pintce (Pinche), the nearest village by water. By painting in such a conspicuous place the totem which had been the object of his dream, the Pintce Indian meant to protect himself against any inhabitant of Na’kraztli, as the intimate connection between himself and his totem could not fail, he believed, to reveal by an infallible presentment the coming of any person who had passed along the rock adorned with the image of his totem.*

![Figure 71. Rock art panel at site STLK 09 on Stuart Lake – edited image.](image)

The opportunity to obtain a guardian spirit or personal totem has been reported as being available to all members of Dakelh society, however “only a few favored individuals, through dreams of a special character, apparently, acquired definite medicine power and ranked as medicine men” (Jenness 1943:543). Even
though not all members of society were able to progress to the role of medicine man/woman, most would likely have been aware of the dreaming process involved and the power invested in a medicine man/woman’s personal totem. Perhaps it is this type of painting that George George Sr. from Fraser Lake described as “taboo.”

A collective understanding of the symbols used in rock paintings was more essential for message-paintings than it was for these personal totem-paintings. The “success” of these types of pictographs was not dependant on an accurate reading by the audience as it was with the message-paintings, but rather on the relationship the painter had with the motif and the faith she/he had in their personal totem. A totem-painting would have been functional to the painter regardless of it interpretation by others, as long as it was a representation of the painter’s personal totem.

What is particularly interesting here is that the subject matter and location of the motifs on the landscape were important components to these totem-paintings, just as the subject matter and placement were also essential to the message-paintings discussed by contemporary First Nations peoples. Despite the different functions in these types of pictographs a shared reliance on form and placement existed. The variance between 19th century and contemporary First Nations knowledge regarding the purpose of the paintings speaks to the polyvalent nature of rock art in Dakelh territory and perhaps a change over time in terms of its functionality.

Traditional First Nations knowledge indicates that the markings in the study area functioned as a form of communication, through which information regarding a variety of topics was shared between the painters and the audiences. This knowledge indicates that high traffic areas would have been ideal locations for the placement of markings and that visibility would have been an important factor in the selection of sites. These conditions would have been viable for both the message-paintings and the totem-paintings.

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10 The term totem-painting is used to distinguish this type of pictograph with its telepathic capability, as discussed by Morice, from pictographs discussed by the First Nations community members participating in the interviews that are termed message-paintings.
Discussion

In this chapter, the data gathered during both the archaeological and ethnographic fieldwork associated with this research have been introduced and discussed. Information generated from 19th century traditional knowledge regarding some of the paintings at Stuart Lake has also been presented. These diverse research approaches not only involved the varying methods discussed in the previous chapter, but both techniques produced entirely different information about the rock art. While this difference is substantial, it is however, directly complementary.

Based on the fieldwork, both the subject matter and location of the pictographs throughout the study area appear to be of significance in terms of the production and use of the markings. The orientation, access and visibility of the markings along the lakeshores indicate that water travelers were not just the anticipated audience for the markings, but that the painters also moved through the landscape via the water. Traditional knowledge, shared by First Nations community members indicates the paintings functioned primarily as a form of communication – in some instances the paintings communicated to the audience and in others, the markings communicated back to the painter. In both cases strategic location within the landscape was essential as was having the appropriate motif(s).

In the following chapter these concepts are investigated in detail by examining the spatial distribution of the rock art sites across the landscape in order to more fully understand the significance of the waterscape environment for the production and use of the markings. Additionally, the iconography of the rock art is investigated in terms of its potential effectiveness for communication. This investigation of the location and the imagery of the rock art is guided by the research questions introduced in the first chapter.
Chapter Six

DECONSTRUCTING LANDSCAPES and LEARNING TO SEE

The real voyage of discovery consists not in seeking new landscapes but in having new eyes.  [Proust 2006]

In this chapter, the ethnographic and archaeological survey data described in Chapter Five are analysed. Specifically, the significance of the rock art imagery and its location are investigated from within the themes of movement and communication, beginning with an introduction to the presence of the rock art within its modern context and a consideration of its visual impact and social role through time; followed by a thematic analysis of the information about the rock art provided by First Nations elders. The results of the thematic analysis establish a footing for further investigation of the rock art. From here, the landscape context of the markings is examined in terms of prominence and visibility. The relationship between the location of the markings and patterns of movement and settlement is identified, and the relationship between the rock art sites and other types of archaeological sites within the study area are explored. Finally, patterns within the rock art imagery are identified, in terms of content and placement in order to evaluate the markings as a system of communication. This analysis provides the foundation for the interpretations that follow in the next chapter.

Contemporary Rock Art Landscapes

Monumental limestone cliff faces, adorned with pictographs dominate the northern shoreline of Stuart Lake. Even though the paintings are far less noticeable than the enormous cliffs, it is the paintings that have an evident social impact within the contemporary landscape. These paintings have a physical presence in the landscape along the shoreline of the lake and a symbolic presence that is embodied beyond the water’s edge.

In the small town of Fort St. James, located at the east end of Stuart Lake, the community grocery store, San’a’aih Market is marked by a sign with a pictograph image (Figure 72). Inside the grocery store, giant photographs of Stuart Lake pictographs are prominently displayed on the walls of the store. What is particularly interesting about the placement of the rock art photographs inside the grocery store is
the connection these photographs have with the “modern” hunting, gathering and fishing associated with grocery shopping done inside the store, just as the original pictographs are connected to the “traditional” sphere of hunting, gathering and fishing done outside in the forests, mountains, lakes and rivers.

The Tl’azt’en and Nak’azdli First Nations websites are adorned with digital images of the Stuart Lake rock art. Here, the pictographs are clearly a conceptual symbol of identity and connection to the landscape for the Tl’azt’en and Nak’azdli people. This concept continues at the local First Nations school in the community of Tache where a large bright red replica rock art image greets students, teachers and visitors as they arrive to the school. Over the years, various vacation guides, tourist pamphlets, and the Nu Yiz Boat Tours leaflet have incorporated photographs of the Stuart Lake rock art as part of their marketing schemes. Each of these uses of the rock art imagery embodies a sense of community and identity that connects people to the landscape and their culture through the rock art.

This visual indication of social impact is not as evident for the other rock art assemblages in the study area, as it is at Stuart Lake. However, the roll of birch bark (discussed in the previous chapter) on Trembleur Lake, located at Site TRLK 02 a few yards in front of the painted panel, perhaps represents modern day activities specifically conducted in the presence of the pictograph – thereby demonstrating a
physical social impact. Undoubtedly, the pictographs elsewhere in the study area exert social importance and this is evident through the interest expressed by chief and council at each of the communities in the study area regarding this research. It was the conceived importance of the paintings, as discussed in Chapter Four, that resulted in the various councils providing permission for this research to be conducted and it was the importance of the paintings that the First Nations participants spoke about in the interviews.

The examples discussed here demonstrate the modern social role and significance of the markings; while they are not directly analogous to how the people in the distant past conceived of the pictographs, they are instrumental in introducing the rock art in the study area as being part of a contemporary landscape. These examples also serve to identify the rock art as an important part of the ongoing meanings that are embedded in these landscapes. Today, pictographs and petroglyphs are studied as a way of understanding more about the past and what it means to be human, but there was a time however, when the practice of rock marking was a contemporary phenomenon – when this was so, how did people conceive of the markings? Did the rock art play an important social role in the archaeological past? Were the markings well known in the past?

The rock art site data presented in the previous chapter indicate the locations of rock markings throughout the study area readily coincide with lakeshore cliffs and shoreline outcroppings. As discussed in Chapter Five, the tendency for markings to be located in these waterscape environments may be due in part to a bias in the data itself stemming from a lack of full territorial surveys. However, the survey conducted for this research indicates these waterscape locations were repeatedly chosen for the placement of rock markings and, therefore it is important to analyse why they were favoured locations. What was the significance of placing markings at the water’s edge? What role did location play in the visual presence of the markings in society? What was the relationship between location and audience?

Like so many other rock art assemblages, the paintings in the study area at first appear enigmatic in terms of their specific purpose and at times the subject matter of the markings can be equally elusive; they are at once simplistic in terms of style and at times content, just as they are complex and seemingly indecipherable. Although some
of the motifs are easily recognized today as animals or humans, others are more
difficult to identify. Rock art indicates “something” is being communicated and
presumably the painters and their audiences understood these symbols, but did they?
Did the markings function as a system of communication? Could people have
communicated effectively with these symbols?

In order to address these research questions raised during the data chapter,
the remainder of this chapter is organized into four primary sections, beginning with
First Nations traditional knowledge. Here, the information provided by the community
members who participated in the interview process and the information provided to
Father Morice by 19th century First Nations informants are examined in order to
identify themes and insights into rock art production and use. Next, the physical
characteristics of the rock art locations are examined in terms of the natural features
of the landscape. This section is followed by an investigation of past land use patterns
and how the rock art fits in with broader uses of the landscape, and finally the rock art
imagery is examined and its potential for effective communication is evaluated.

This chapter highlights the importance of social, historical, topographic and
landscape context, as well as imagery, to the investigation and interpretation of rock
art. This chapter also demonstrates the complementary nature of informed and formal
research methods to the study of rock art: particularly the significance of First Nations
traditional knowledge to archaeological investigations. Whereas the history of rock art
research in British Columbia, as discussed in Chapter Two, demonstrates a tendency
for studies to focus almost exclusively on rock art imagery, it is maintained throughout
this thesis that in addition to the images, the natural locations at which markings are
located are themselves material culture, worthy of their own study. It is also
maintained that through an analysis of the communicative nature of the markings and
the relationships between the rock art and its topographic setting and the broader
understanding of the cultural landscape it is possible to develop an improved social
understanding of rock art (cf. Bradley 1997; Chippindale 2004; Nash and Chippindale
2002; Quinlan 2007; Robinson 2010).
Approaching Rock Art Landscapes Through Traditional Knowledge

*Objective archaeological explanation can gain a great deal, without any loss of analytical rigor, by treating oral traditions not as scientifically unassimilable myths but as a primary source of evidence and interpretation of past social formations.* [Whiteley 2002]

During the interview process, most First Nations elders spoke about the rock paintings in terms of messages purposefully placed in the landscape and that the audience would have been able to both find *and* understand the markings. This ability was indicated by Mildred Martin to be a result of the familiarity people had with the landscape and with one another. Similar sentiments were expressed directly by Agnes Joseph, Johnny Joseph and Celestine Thomas; but generally, all of the informants indicated that people in the past were fluent in understanding and finding the markings. Many informants stated the locations chosen for the placement of the paintings occurred along travel routes. For example, Madeline French identified a connection between rock art placement and trails used for hunting and George George Sr. identified the importance of the waterways for travel and how the rock art was a part of that system of movement.

During the interviews, elders often spoke about the past and how people used to travel extensively throughout the territories and how often people were out on the land hunting, fishing and trapping. The rock art was identified as an important part of that travel process. Celestine Thomas identified the importance of the rock markings as stemming directly from the fact that people were always on the move. The spots where markings were placed often corresponded with the location of the painter’s activity and presence as they moved through the landscape. Informant AN 001 for example, indicated that the markings may correspond with the movements of people through the landscape at the time the balhats system was created and Roy Nooski indicated that the location of the rock art was associated to the location of the activities depicted in the motifs.

The locations indicated by the paintings could be both “here and now” and “there and then.” For example, some paintings, as reported by Agnes Joseph, served to mark the places used by the painter for hunting and fishing. Other motifs were said by Roy Nooski to indicate areas occupied as stop over points during a journey and Josie
Felix indicated rock art locations identified places utilized by hunters to gather and strategize and to record important animal sightings. Other markings were said to refer to places elsewhere in the landscape, such as the intended whereabouts of the painter and her/his party while on hunting trips. Johnny Joseph for example, indicated that the paintings represented the painter’s hunting activities and their journey through the landscape. These types of paintings functioned to inform and guide the audience through the landscape so they could reach either the painter or the animals they sought.

Additionally, elders indicated that paintings also functioned as markers in the landscape signifying the location of game trails and hunting territories, as well as, the occurrence of important events. For example, Philip Felix explained how the paintings indicated the location of animals and informant AN 001 referred to the pictographs as a symbol of truth, as a sign of commemoration. Similarly in 1929, Chief Louis Billy Prince and other Dakelh individuals reported that, in addition to being dream images, the motifs on Stuart Lake also served to record events (Corner 1968:117). These types of markings functioned to legitimize those events, as well as, provide the audience with information about what had occurred. Bukh’gil’bul (Lilly French), spoke about the paintings in this same commemorative manner and indicated that information regarding deaths, births and details stemming from battles were encoded in the rock markings.

The content of the message-paintings also reflected the activity and location of the painters. Many elders reported that the rock art imagery contained detailed information pertaining to the painter, their intended journey and at times important events that occurred along the way and even the direction they traveled. Agnes Joseph and Bessie Joseph emphasized this information was paramount in finding lost or injured parties out on the landscape. Elders indicated that other messages might record the acquisition of resources so as to inform territory holders of changes in fish or animal stocks. Both Bukh’gil’bul (Lilly French) and Janine Luggi spoke about the rock markings in terms of a connection to fishing and the importance of this food resource; while, Josie Felix indicated that some markings functioned as a system of tally marks that served to count certain quantities.
Placement in the landscape played a key role along side a shared understanding of the symbols. Paintings needed to be not only appropriately located in the landscape they also had to be appropriately constructed. Specifically, the locations chosen for markings needed to occur at places in the landscape where the audience would be sure to encounter the paintings and where the locational-context of certain messages could be indicated. The composition of painted panels needed to effectively express the painter’s intended messages via the motifs – just as location needed to be specific, so too did the individual markings, not any motif or any location would do.

The interview data and ethno-historical information presented and discussed in Chapter Five show that the primary purpose of the rock markings throughout the study area was for communication. The message-paintings discussed by contemporary First Nations community members were intended to impart information to the audience, whereas the totem-paintings investigated in the 19th century by Father Morice were intended to communicate back to the painter. In both cases, imagery and location were equally important. Regular human movement through the landscape made this system of communication both effective, as well as, necessary.

The utilization of high traffic areas would have afforded the visibility to a wide audience that was required for the success of both the message-paintings and the totem-paintings. Relatively speaking, even though the totem-paintings likely targeted specific and presumably more limited audiences, the likelihood of exposure to that audience would have been greatly enhanced by the employment of high traffic zones. Both location and movement were entwined in the production and use of the markings.

The insights gained through this informed approach provide a rich foundation from which to further investigate the rock art. From the First Nations traditional knowledge presented here certain aspects of the rock art become evident. These aspects, specifically a link between rock art placement and frequently traveled routes; the implied accessibility of the markings within society; the required visibility of the markings; and the communicative nature of the painted images imply that certain characteristics should be evident in the placement and imagery of the rock art. It is these specific characteristics that are investigated in the remainder of this chapter.
Although most of the traditional knowledge presented here pertains to the message-paintings discussed by contemporary First Nations elders, the totem-paintings investigated in the 19th century by Father Morice would also likely share a connection to high traffic areas. Where we can expect to see repetition in the symbols used for message-paintings, variation is more likely in the imagery of the totem-paintings. To investigate these characteristics of the rock art, formal methods are employed in the analysis of other lines of evidence, including the natural topography, past landscape use patterns, and the painted images. It is these other lines of evidence that are pursued in the following sections of this chapter.

Landscape Context

Rock art sites have an obvious connection to the physical landscape and natural topography. While this notion is arguably true for much of the archaeological record, rock art has a unique connection in that it is associated with unaltered features of the natural topography (Bradley 2000:38). The natural places chosen for paintings and carvings were no less meaningful to people in the past than built environments replete with monuments and other structures. The natural environment is undeniably influential to human activity in any given physical landscape, but individual preference, personal experience and human agency in general play roles in how people deal with topographical constraints and opportunities (cf. Gibson 2005, 2007).

The rugged topography and extreme seasons of the study area impacted how the land and water were used and how people interacted with one another in the landscape and ultimately this affected the production and use of the rock markings. In order to approach a social understanding of rock art it is essential to examine the physical and cultural dynamics of the rock art sites. This examination necessarily includes investigating the physical setting of the rock art, studying the human activity within the landscape and how that spatially relates to the rock art sites, and scrutinizing the markings individually and collectively. These lines of investigation are also essential for examining the characteristics of the rock art identified through the First Nations traditional knowledge discussed here.

Although it can be difficult to identify why certain places were chosen for markings, it is important to consider the relationship between rock art and its natural
setting. The landscape context of archaeological materials is an important aspect of the significance of the individual materials, as well as, the archaeological sites themselves (Bradley 2000; Tilley 1994). Understanding this physical context is essential to relating human interactions to the environment and for achieving the goals of landscape archaeology. Understanding where rock art occurs within the physical landscape also makes it possible to identify the relationship between these locations and daily life in the past (Boreson 2007; Bradley 2000; Shock 2007). Although it is clear from the archaeological survey that vertical lakeshore outcroppings and cliff faces were preferred natural locations for the placement of markings, it is important to examine and scrutinize this relationship.

The archaeological survey, discussed in detail in Chapter Five, sampled 13 lakes that were tested for the presence of markings. The survey resulted in the identification of 113 painted panels across the study area. With the exception of three panels located at inland sites near the shoreline, the remaining 110 panels are located at the shore. Similar results exist for the 1971 survey at Takla Lake, where all six rock art sites were reported as being located along the lakeshore.

Because the archaeological survey conducted in this research and the Takla Lake survey focused on waterscape environments as sample areas, it stands to reason that waterscape locales dominate the results of these surveys. However, it is important to note that other investigational efforts conducted by practicing archaeologists, including more than 800 cultural resource management projects, throughout the study area that have not had this same waterscape focus, have produced corroborative results in that all identified rock art sites in the 12,000 square kilometre study area occur along lakeshores – rock art sites located in non-waterscape environments in the study area are yet to be documented. The repeated occurrence of lakeshore rock markings across the study area indicates the practice of utilizing waterscape locations for the placement of markings was not a localized phenomenon, but one that exceeded the boundaries of two First Nations territories and the handful of destroyed sites on Takla Lake, covering a vast area.

Archaeology site data obtained from the British Columbia Archaeology Branch for the period of 1954 to the spring of 2012 include a total of 890 archaeology sites located within the study area. The provincial archaeology data encompasses all types
of archaeology sites in addition to rock art sites – such as subsistence and habitation features, buildings, earthworks and human remains. The provincial archaeology data recognizes 34 rock art sites throughout the study area, all of which occur along lakeshores. With the exception of two rock art sites on Babine Lake, all of the rock art sites identified in the provincial data are included in, as well as exceeded by, the results of the archaeological survey in this research. 11

During the interviews, First Nations people indicated that the painters left the rock markings for the audience to find and use. If the paintings were intentionally placed so as to be seen by the audience it can be expected that they would be positioned at visually significant places in the landscape. The first question regarding the placement of the rock markings in the landscape is does the rock art occur at prominent places in the landscape or less noticeable areas? To investigate this characteristic of the rock art, the physical features of the rock surfaces and the locales chosen for the placement of paintings are examined.

Unfortunately, much of the contextual information from the Takla Lake rock art sites was not collected at the time of the 1971 survey. Because of this lack of spatial information, portions of the next few sections regarding the natural topography of the landscape do not include the Takla Lake panels. There is however, substantial data available regarding the motifs at Takla Lake enabling their inclusion further on in this chapter in the section entitled Rock Markings.

Figure 73. Vertical cliff face on shore of Stuart Lake.

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11 The rock art sites on Babine Lake are not included as part of this study because the majority of Babine Lake falls outside the study area.
The archaeological survey data indicate that rock art sites occur on both substantial vertical cliff faces and on lesser rock outcroppings. Cliff faces (Figure 73 and Figure 75) and outcroppings (Figure 74 and Figure 76) are differentiated from one another in terms of relative size, where cliff faces are the larger of the two. The information in Table 23 distinguishes the number of panels located on larger cliff faces and the number of panels on smaller outcroppings. At both Stuart Lake and Trembleur Lake the majority of markings are located on outcroppings rather than cliff faces. At Fraser Lake prominence is the reverse, where 75% of the marking can be found on larger cliff faces.

<table>
<thead>
<tr>
<th>Prominence of Rock Surface</th>
<th>Prominence</th>
<th>Stuart Lake</th>
<th>Fraser Lake</th>
<th>Trembleur Lake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Sites</td>
<td>Number of Sites</td>
<td>Number of Sites</td>
<td>Number of Sites</td>
</tr>
<tr>
<td></td>
<td>(Percentage)</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
</tr>
<tr>
<td>Outcroppings</td>
<td>58 (69)</td>
<td>4 (25)</td>
<td>11 (85)</td>
<td></td>
</tr>
<tr>
<td>Cliff Faces</td>
<td>26 (31)</td>
<td>12 (75)</td>
<td>2 (15)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84 (100)</td>
<td>16 (100)</td>
<td>13 (100)</td>
<td></td>
</tr>
</tbody>
</table>

Table 23. Comparison of rock surface prominence.

Here it is important to recognize that rock surfaces with varying size and distinction together comprise the rock art sites. What each of the rock art sites in the study area have in common, regardless of the difference in relative size of the rock surfaces, is a sense of visual presence within the landscape and a close proximity to the
water’s edge. Exposed rock surfaces throughout the study area that are seemingly insignificant in terms of their visibility and size within the landscape are not adorned with markings, even when those rock surfaces occur along the lakeshore. Several of these less significant shoreline outcroppings were identified and examined during the archaeological survey, all of which demonstrated negative results for the presence of markings.

Figure 75. Cliff face at Trembleur Lake.

Proximity to the water’s edge and visual significance together appear to have been deciding factors in the placement of markings within the landscape. Each of the locations chosen for rock markings is easily identified from a distance, despite the fact that the paintings cannot be detected from vast distances away. Even though the fieldwork included surveying the entirety of each lake’s shoreline, an increased potential for paintings was evident when these prominent outcroppings and cliff faces came into view. Perhaps this visual presence similarly served to alert past audiences to the potential locations of paintings.
Visual significance also plays out in more tenuous ways at some of the rock art sites in terms of elevation. The cliff faces and rock outcroppings in the study area are typically adorned with images that occur with relative consistency in terms of elevation on the rock surface (Table 24). The most common elevation on the rock surface that was utilized by the painters is termed Standard in Table 24. This term refers to the location on the rock surface that essentially occurs at “eye-level” relative to the available footing at the panel either on the shore or the water. This “eye-level” elevation fluctuates throughout the landscape as the natural topography rises and falls.

Table 24. Elevation of painted panels.

<table>
<thead>
<tr>
<th>Panel Elevation</th>
<th>Stuart Lake</th>
<th>Fraser Lake</th>
<th>Trembleur Lake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2 (2)</td>
<td>1 (6)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Standard</td>
<td>76 (91)</td>
<td>14 (88)</td>
<td>11 (85)</td>
</tr>
<tr>
<td>High</td>
<td>6 (7)</td>
<td>1 (6)</td>
<td>2 (15)</td>
</tr>
<tr>
<td>Total</td>
<td>84 (100)</td>
<td>16 (100)</td>
<td>13 (100)</td>
</tr>
</tbody>
</table>

In addition to being the most common, these Standard elevation panels are arguably the easiest to reach; however there are exceptions where higher and lower elevations on the rock surfaces were utilized for paintings. There are nine panels.
across the study area where the painters specifically utilized the availability of high elevation rock surfaces. At these sites, the panels are more prominent in the landscape because of their elevated location. At Trembleur Lake the two panels at TRLK 05 are set back several yards from the shore, but the high elevation of the rock surface and large size of the motifs ensure their visibility from the water’s edge. Similarly, the four high elevation panels at STLK 01 on Stuart Lake are adorned with large motifs that in the past would have been easily seen from an approaching water craft, as would the high elevation panel at STLK 08 – today these motifs are likely less visible than they would have been in the past. At Fraser Lake panel FRLK 02 is located high up on the cliff face. The physical characteristics of this cliff, specifically the light colour of this panel in relation to surrounding dark rock of the cliff face, add to its prominence in the landscape.

There are just three panels that occur at Low elevations, one on Fraser Lake and two at Stuart Lake. In these instances the markings are located no higher than two feet above the soil. These low elevation panels at Stuart Lake (STLK 08) are in direct association with a mountain trail. Despite their relative low elevation they are easily seen from the trail. These markings clearly signal to those people moving over the land rather than the water. This site would be an excellent location for future excavation work. The low elevation painting on Fraser Lake seemingly exhibits characteristics that counter the visibility evident in the remainder of the rock art assemblage. Today this painting is located low to the ground and behind a tree, but years ago before the growth of the tree, this site would have been more easily seen from both the water and the shore.

The rock markings placed at Standard elevations in the landscape are easily visible from the water when the audience is within close proximity of the shoreline. Markings placed at High elevations are somewhat more visible, but close proximity to the shore is still necessary to detect the motifs. In the past when the images were new and bright it may have been possible to view them from further out on the water than it is today, but regardless, the paintings would have still had a certain range in which they were visually detectable. Even though the spatial characteristics of the destroyed rock markings on Takla Lake are not available, these paintings would also have had a limited visible range.
The outcroppings and cliff faces chosen for the placement of rock markings in the study area demonstrate a significant visual presence in the landscape. The vast majority of the rock markings occur on prominent, highly visible rock surfaces at the shoreline; while very few sites occur at inland locations associated with foot trails. This landscape context, in particular the prominence and visibility of the outcroppings and cliff faces, as well as, the association of sites with routes of movement implies that the paintings were intended to be seen; thereby identifying a public rather than private intent for the markings. It follows then to continue a consideration of the landscape context of the rock art and to ask how does the location of the rock art further relate to the broader natural setting?

The archaeological survey in this research and the provincial archaeology data (British Columbia Archaeology Branch: n.d.) both indicate that rock art sites in the study area are found on the shorelines of lakes that are connected to major river systems that play important roles in salmon migration. While there are many rivers and streams throughout the study area that connect to an equal abundance of lakes, it is at the lakes within the salmon migratory routes that rock art sites tend to occur.

Takla Lake, Trembleur Lake, and Stuart Lake together form a corridor that comprises nearly 190 miles of connected waterways (Figure 77). These three lakes and their river tributaries form the Stuart Lake watershed. This watershed is utilized by two major salmon runs. These runs, termed Early Stuart and Late Stuart, migrate approximately one month apart from each other (Levy et al. 2007:2).
The Fraser River is one of the most important salmon producing systems in North America and it plays a crucial role in the Stuart Lake watershed salmon migration. An estimated 25% of the annual salmon production via the Fraser River originates in the Stuart Lake watershed (Province of British Columbia n.d-1.). While Fraser Lake is not part of this watershed it is part of the Chinook and Sockeye salmon migratory route and it is connected to the Fraser River via two other equally important rivers, the Nautley and the Nechako.
Fish in general, and salmon in particular, were essential for the survival of First Nations people both prior to and following the arrival of Europeans in the early 19th century (cf. Morice 1889, 1905). First Nations modes of subsistence production in place prior to extensive European influence throughout the region centered on fish and to a lesser extent other bush resources (cf. MacKenzie 2001; Harmon 1911; Lamb 2007; Hall 1992; Hudson 1983). Salmon was a principal food source in the early days preceding European contact and it continues to be essential and relied upon into the present day (cf. Levy et al. 2007; Province of British Columbia n.d.-1).

The relative regularity of salmon returns and its importance as a food resource promoted the development of semi-permanent village sites that were established at salmon fishing stations throughout the study area. Movement to and from these villages would have enabled seasonal exposure of the rock markings to a variety of people. Access to these fishing stations was provided by the series of overland trails and water routes that networked throughout the territories. Mobility in general played an important part of First Nations society in terms of accessing resources throughout the year and maintaining social ties and obligations. Water travel in particular was an essential part of that pattern of mobility (Harmon 1911; MacKenzie 2001; Morice 1892-93). The prevalence and important of water travel and salmon are discussed in greater detail as part of the interpretation that follows in the next chapter, as is the spatial relationship of the rock art to the fishing villages.

The landscape context of the rock art indicates that the markings are spatially linked to both mobility and settlement systems, but understanding the spatial relationship between rock art and other activities in the landscape potentially further illuminates the social role of rock art (Bradley 2000:6; Shock 2007:69). The significance of places is determined by people who use those places, therefore it is likely that “the activities associated with rock art production were not separate from the routines that took place nearby or in direct association” (Shock 2007:72). The activity that most obviously occurred nearby and within visual range of the markings was water travel, but how else is the rock art linked to human activity? What activities co-occur at rock art sites?
Rock Markings and Other Activities

The natural topography of the landscape and the close proximity of the paintings to the water’s edge result in a variance of available ground surface at each site. The availability or paucity of ground surface at each site is indicative of the potential for other activities that could have occurred in association with the painted panels. This potential for additional human activity at the location of the panel is very low throughout the study area. Most sites do not possess enough space available for people to have engaged in activities other than painting the rock. While it is entirely possible that people engaged in activity on the water in boats at the painted panels, this type of activity is not archaeologically visible.

A certain amount of space is required for a group of people to engage in social activities regardless of the type of location. That location itself also needs to be suitable not only in size but also in terms of other characteristics. Areas that lack flat open spaces and possess extreme inclines for example, substantially reduce the potential for group activity at that area. There are five rock art sites in the study area that possess enough natural space to provide room for a group of people to gather and perform social activities at the panel. These sites are identified in Table 25 as Suitable.

Included amongst the sites with available space is TRLK 02 on Trembleur Lake (Figure 35). At this site, the presence of relatively flat ground cover permits activity and movement in the area of the painted panel. The natural terrace at this site provides enough ground space for a group of people to be present together in front of the painted panel. This area could function as a short term occupation site such as a temporary camp or food processing location. The birch bark roll (Figure 34) located adjacent to the panel at this site indicates that activity has occurred at some point in the recent past in the presence of the rock art, possibly ritualistic in nature depending on the use of the bark roll. Unfortunately, there was no one during the interview process that could provide insight into the relationship between the birch bark roll and the painting or the activities that occurred there. This would be an ideal site for future excavation.

There are a total of 45 panels in the study area that are recognized as having some space available for social activity; these sites are identified in Table 25 as Limited Suitability. Limitations in these instances are caused by the nature of the terrain at the
site – such as jagged rocks, reduced shore space, and seasonal flooding. At these sites there may be ground surface available, but activity at these locations is awkward at best. The presence of large uneven rocks for example makes movement and activity on the shore tricky.

At more than 50% of the Stuart Lake and Trembleur Lake panels the natural terrain is simply non-existent, thereby denying any opportunity for additional social activities outside of watercrafts to have occurred at the panel. It is important to reiterate that social activities could have been performed while on the water at the rock art sites, but this information is not visible archaeologically nor has it been described or mentioned during the ethnographic research in this study. The general paucity of available and suitable space at the rock art sites indicates that painting the rock was the primary activity that occurred at these places and that the painters had chosen these locations specifically for the purpose of painting. These particular places were selected because these areas met the criteria of the painters and the intended purpose(s) of their markings, whether they were message-paintings or totem-paintings.

### Availability of Ground Surface

<table>
<thead>
<tr>
<th>Type of Ground Surface</th>
<th>Stuart Lake</th>
<th>Fraser Lake</th>
<th>Trembleur Lake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Panels (Percentage)</td>
<td>Number of Panels (Percentage)</td>
<td>Number of Panels (Percentage)</td>
</tr>
<tr>
<td>Suitable</td>
<td>4 (5)</td>
<td>0 (0)</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Limited Suitability</td>
<td>30 (35)</td>
<td>10 (63)</td>
<td>5 (38)</td>
</tr>
<tr>
<td>Unsuitable</td>
<td>50 (60)</td>
<td>6 (37)</td>
<td>7 (54)</td>
</tr>
<tr>
<td>Total</td>
<td>84 (100)</td>
<td>16 (100)</td>
<td>13 (100)</td>
</tr>
</tbody>
</table>

Table 25. Availability of ground surface associated with rock art panels.

The current provincial archaeology data for the study area supports the argument that painting was the primary activity at these rock art sites. The provincial data demonstrate a lack of correlation between other archaeology site types and rock art sites (Figure 78, Figure 79 and Figure 80). Whereas many of the non-rock art archaeology sites exhibit a variety of material culture that demonstrate various human activities co-occurring at the site; no such evidence of these other activities is reported
at rock art sites – just as no rock art is reported at the 856 other archaeology sites in the study area. The lack of other archaeological materials and a paucity of space at most of the sites indicate other activities likely did not co-occur with rock art.

On this point, it is important to recognize that the scarcity of other cultural materials is also due to a lack of excavations carried out at the rock art sites in the study area. Additionally, the 856 known archaeological sites are essentially only a small sample of the potential sites located within the study area. Although it is not possible to conduct excavations or even shovel tests at most of the sites, there are, however some sites that possess ground cover that could be excavated. Although the number of sites with potential for excavation is minimal, effort in this regard would be well spent. Negative or positive results could prove beneficial in terms of better understanding human behaviour at these rock art sites.

Whereas the rock art in the study area does not co-occur with other archaeological materials it does however, exhibit a similar regional distribution pattern as other archaeological sites. The concentration of rock art sites is high along lakeshores and similarly the concentration of other archaeological sites is also high near lakeshores (Figure 78, Figure 79 and Figure 80). Although this pattern of distribution is seen throughout the study area it is important to note that the potential for other archaeological sites with alternative distribution patterns is entirely possible, given the expanse of the study area and the overall lack of archaeological research in the region (Craig and Jackman 2009:23). Despite this potential for other distribution patterns, lakeshores were favoured locations not only for rock art production, but also for a variety of other human activity.
Figure 78. Distribution of rock art sites and other archaeological sites in Ti’azt’en territory.
Figure 79. Distribution of rock art sites and other archaeological sites in Nadleh Whut’en First Nations Territory.
Figure 80. Distribution of rock art sites and other archaeological sites in Takla Lake First Nations Territory.
### Chronology of Other Archaeological Sites on Lakeshores with Rock Art

<table>
<thead>
<tr>
<th>Number of Sites (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-contact</td>
</tr>
<tr>
<td>Pre-contact</td>
</tr>
<tr>
<td>Pre-contact</td>
</tr>
<tr>
<td>Pre-contact</td>
</tr>
<tr>
<td>Historic</td>
</tr>
<tr>
<td>Historic</td>
</tr>
<tr>
<td>Traditional Use</td>
</tr>
<tr>
<td>Unknown Chronology</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Table 26. Chronology of other archaeological sites on shorelines of lakes with rock art.

Other activities archaeologically known to have taken place along the shores of the four lakes where rock art occurs are reported to include stone tool manufacture and repair, food storage and procurement, fishing, cambium harvesting and blazing, short term and repeated occupation, movement via overland trails, and human burials (British Columbia Archaeology Branch n.d.). With few exceptions, these sites occur within 500 yards of the water’s edge (Appendix P). The chronology of these other archaeological sites ranges from the pre-contact era through the historic period and also includes more modern traditional use sites. Some of these lakeshore sites demonstrate repeated use over time (Table 26).

It has been shown thus far in this analysis that the location and terrain of the rock markings within the study area suggest that painting was the primary and perhaps the only activity that occurred on land at these places – the sheer lack of available and/or suitable ground surface at most of the sites being the primary reason for this homogenous characteristic. No negative excavations or empty shovel tests exist, just as no positive evidence of other archaeological materials, beyond the birch bark roll at TRLK 02, exist to support or refute this claim.

The small spatial scale and lack of additional archaeological materials classifies the rock art sites as special purpose sites. Shock (2007:76) indicates that whereas such sites could exhibit a variety of characteristics, “it would be expected, however, that their features would differ from those of residential sites.” Clearly, the rock art sites do
differ from residential and other site types because paintings are not found in association with other cultural materials and they occur in specific places within the landscape where the terrain is unsuitable for the array of other human activities that comprised daily life in the past.

First Nations traditional knowledge, gathered at the onset of this research, indicated that the audience could not only find the markings, but they could understand the messages contained within the paintings. The utilization of locations likely to have been high traffic areas has been demonstrated. These locations, embedded in the local systems of movement and settlement would have enabled communication to a wide audience. These locations would have also made the markings relatively easy for the audience to find as they traveled the waterways of the study area. It follows then to ask could the markings have been effectively used for communication?

Rock Markings

*If shared meanings, conventions, and norms did not exist, then each rock art site should be unique and unlike all others in the same region.*  [Whitley 2005:80]

The physical characteristics of the rock markings are examined, individually and collectively, in this section. Additionally, other forms of graphic communication known to have been historically utilized by First Nations peoples in the study area are also examined. The goals in this section are to identify and categorize the subject matter depicted in the markings in order to identify whether or not repeated patterns of use of the images occurs across the study area. It is the identification of repeated symbol use and repeated combinations of symbols that are of primary interest, as such reoccurrences are essential for an effective system of communication (Whitely 2005:80).

Toward the end of the 19th century, Father Morice investigated graphic symbols commonly in use at that time by Dakelh peoples and others that were still remembered by community members (Morice 1893: 206-211). In addition to his interest in motifs used for rock marking, Morice also recorded information about the symbols used for facial and bodily tattoos, as well as, the symbols used by hunters for
communication in the forest. First Nations peoples from the Stuart Lake area provided Morice with interpretations of these symbols.

Although the subject matter depicted in this system of symbols that Morice examined represented real world elements, the manner in which these images were designed was more stylized than naturalistic. Additionally, a strong tendency to reduce the images to simple efficient straight and curved lines is evident. For example, the beavers in Figure 81 have been reduced to a few straight lines that indicate the body, legs, and tail of the animals. Although the construction of this image is relatively simple, it is still possible to distinguish the different directions in which the beavers face and presumably move through the landscape.

Similarly, the caribou in this same figure has been reduced to a combination of straight and curved lines that represent its body, legs, head and antlers. Relatively speaking, the caribou image is more easily identified, without the aid of an informed interpretation, than the beaver image because it has maintained the key element of antlers which readily implies a large ungulate. The illustrations in Figure 81 represent rock markings on Stuart Lake at STLK 09 Panel 2; STLK 03 Panel 1; and STLK 02 Panel 10 respectively.

Figure 81. Rock art images identified by First Nations people of the Stuart Lake area, circa 1890. Illustration by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.

Further indication of a range of stylized motifs occurs in Figure 6. This illustration represents the rock markings at site STLK 09 Panel 04. Images A, F and G are slightly more “naturalistic” than the other identified images in this illustration and like the caribou in Figure 81, they are more easily identified, unaided by the
interpretations, because of key anatomical features such as the paws on the bear, and the wings and feathers on the birds. The identification of “Yihta, the Great Bear” as image D in Figure 82 is the first and only reference identified in this research to legendary or mythical creatures as having representation in the rock art in the study area. None of the elders interviewed mentioned a mythical component to the rock art and nor has this type of interpretation been encountered in the literature for the area.

![Rock art image](image-url)

**Figure 82.** Rock art images identified by First Nations people of the Stuart Lake area, circa 1890. Illustration by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.

A few decades after Morice reported on the paintings at STLK 09 Panel 04, Chief Louis Billy Prince and “other [Dakelh] Indians” provided slightly different interpretations for the painted images (Corner 1968:117). Whereas in the 1890s the central image in Figure 82 was interpreted as a grizzly bear with tracks, in 1929 it was identified as a caribou with grizzly bear tracks (Corner 1968:117). Today, there is evidence of what appears to be two “horns” protruding from the head of this central
image (Figure 83 and Figure 84) that were not indicated in Morice’s illustration: perhaps this is the cause of the discrepancy in interpretations.

Additionally, Chief Louis Billy Prince and his companions indicated that the context in which the paintings originated were dreams and life events (Corner 1968:117). This context echoes Morice’s account of the role dreams played in the production of some of the paintings in Figure 83 (see Chapter Five) and it resonates with the connection between motif production and life events discussed by the First Nations people participating in the interviews conducted in this research. Whereas some of the finer details have differed over time in terms of interpretations of this panel, the First Nations people in the Stuart Lake area have identified the same contexts and influences for the production of rock markings for more than one hundred years.

Figure 83. Rock art motifs at site STLK 09 Panel 4 on Stuart Lake – edited image.
The facial and bodily tattoos recorded by Morice exhibit the same simplified line style as was used in the production of rock art motifs (Figure 85 and Figure 86). Not only is this design style similar, but the subject matter of the facial and bodily tattoos are also strikingly similar to much of the rock art imagery being studied here. The symbols identified by Morice as fish, otter and bear paw tattoos for example, occur with virtually identical form within the rock art assemblage. Similarly, the snake, man and beaver images in Figure 87 identified by Morice as hunter’s symbols also occur with frequency and the same form and overall design within the rock art assemblage.

Figure 84. Detail from site STLK 09 Panel 04 on Stuart Lake, protruding “horns” and trail of paw prints indicated – edited image.

Figure 85. Dakelh facial tattoos identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.
Despite the subtle differences in form between the various symbols investigated by Morice, there is a distinct correlation of line, design and subject matter between these symbols and the rock art imagery associated with this research. Because of this correlation, these 19th century interpretations provide an important basis and unique insight for categorizing the rock markings within the study area. Although Morice recorded only a selection of symbols rather than an entire system of graphic communication, it is still possible to utilize this information to begin categorizing and organizing the rock art imagery. These interpretations have been employed to guide and inform the development of the rock art typology within this research (Appendix N).
Typology and Stylistic Attributes

In the development of this typology, the motifs were organized into classifications based on shared design characteristics and then that classification was named accordingly. For many of the markings, the intended subject matter is identifiable and that identification is part of the classification scheme. It is important to recognize that the ability to interpret a symbol plays a role in how that symbol is categorized within a typology. A primary example is the fish symbol in Figure 85. With the aid of the interpretation it is easy to identify the body of a fish in profile with its gills, fins and tail present, but it is far more difficult if not impossible to identify this symbol as a fish prior to the interpretation. For the purpose of this analysis the interpretations from Morice (1893) have been used to augment the organization of the rock markings. In particular, these interpretations enabled the development of categories within the typology that would have been much harder to identify otherwise. These interpretations also enabled the recognition of the design elements in some motifs and correspondingly this lead to better groupings. The photographs of the Takla Lake rock markings that appear in this chapter and the data chapter previously were originally taken during the 1971 archaeological survey conducted by John McMurdo and David Butlin. They have been provided courtesy of the Takla Lake First Nation.

It is recognized that the typology developed here is subjective in that all of the classifications and names used are based on the author’s perspectives of the markings, influenced by 19th century Dakelh interpretations. However, it is equally important to recognize that the manner in which the markings have been classified is consistent for the entire assemblage of motifs. Equally important is the recognition that the classification of the subject matter depicted in some of the markings is an identification of its “outer meaning” at best and this is not the same as identifying its actual meaning for the people who produced and used these markings (Bradley 2000:70).

This typology consists of four groupings or levels that range from broad to specific classifications. The broadest of these levels is category. This stage of classification reflects the overall manner in which the markings were rendered. The second level of classification is type. This level represents the general types in which
the markings are organized, such as zoomorph, anthropomorph, round line and straight line etc. There are six overall types within the typology. The third level of classification is form. Whereas this level is more specific that the previous level of type, it is still somewhat general and only occurs within the classifications of zoomorph and anthropomorph. The final level of classification within the typology is element. This level represents the most specific classifications of motifs, such as beaver, fish, human body or circle etc.

Both figurative and non-figurative motifs comprise the rock art assemblage in the study area. The term “figurative” indicates motifs that have real-life equivalents, such as animals or humans; whereas the term “non-figurative” refers to markings that do not have real-life counterparts, such as lines or circles. Although it is entirely possible and expected that non-figurative motifs represent something from the real world, the way in which that subject matter is depicted in the rock art is what is being classified with these terms.

There are two primary line types within the assemblage of motifs, outline-type and silhouette-type. This typing is based on the lines that construct the motifs. Outline-types are based on a single line that comprises the overall shape of the subject matter depicted in the motif, whereas images that have a more robust shape and been filled in with pigment are categorized as silhouette-types. These terms are used in order to describe the similarities and variations in the construction of the motifs; these terms are not intended to stand for analytical classifications, but rather descriptive categories.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (Percentage)</th>
<th>Stylistic Type</th>
<th>Number (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figurative</td>
<td>216 (27)</td>
<td>Zoomorph</td>
<td>203 (26)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anthropomorph</td>
<td>13 (2)</td>
</tr>
<tr>
<td>Non-Figurative</td>
<td>536 (68)</td>
<td>Short Line</td>
<td>361 (46)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Straight Line</td>
<td>44 (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arched Line</td>
<td>66 (8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Round Line</td>
<td>65 (7)</td>
</tr>
<tr>
<td>Unknown</td>
<td>38 (5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 27. Frequency of motif categories and stylistic types across the study area.
The rock art motifs are grouped into two major categories, with six broad stylistic types (Table 27). Both of these major categories, figurative and non-figurative, are represented at each of the three lakes that tested positive for markings during the archaeological survey, as well as, the Takla Lake rock art assemblage that was destroyed in 1971. The non-figurative motifs are the most abundant across the study area with a total of 536 individual markings, while the figurative images total 216. Pictographs with short line types are the most plentiful, followed by zoomorphs, arched lines, round lines, straight lines and anthropomorphs respectively (Table 28).

![Frequency of Stylistic Elements: Numbers of Motifs and Panels](image)

Table 28. Comparison and distribution of types across the study area.

Stuart Lake has the largest quantity of overall images (506), followed by Trembleur Lake (144), Fraser Lake (110) and Takla Lake (30). The category of “unknown” is populated by 38 motifs that do not exhibit shared characteristics that enable them to be classified with other motifs. A number of panels (30) throughout the study area exhibit signs of eroded pigment, indicating the loss of discernable markings, these traces of pigment are not considered in this analysis.
**Zoomorph Type (N=203)**

**Table 29.** Comparison and distribution of zoomorph type motifs and panels.

Zoomorph type motifs are organized into eight forms that take many shapes possibly depicting a variety of terrestrial and semi-aquatic animals, as well as, amphibians, reptiles, aquatics, aves and several unidentified animal forms (Figure 88). Zoomorph types are present across the study area, occurring at all four lakes over a total of 112 panels (Table 29). Whereas zoomorphs are represented across the study area, not all forms and elements that comprise this type share the same wide distribution. All elements within this type however are represented at Stuart Lake (Table 30).

![Figure 88. Examples of zoomorph elements – edited images.](image-url)
### Distribution and Frequency of Zoomorph Forms and Elements

<table>
<thead>
<tr>
<th>Zoomorph Forms and Elements</th>
<th>Stuart Lake Motif Count (Panel Count)</th>
<th>Fraser Lake Motif Count (Panel Count)</th>
<th>Lake Motif Count (Panel Count)</th>
<th>Takla Lake Motif Count (Panel Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Terrestrial Mammal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caribou/Moose</td>
<td>2 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Land Mammal</td>
<td>7 (7)</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td><strong>Semi-Aquatic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beaver/Otter</td>
<td>31 (15)</td>
<td>2 (2)</td>
<td>8 (4)</td>
<td>2 (2)</td>
</tr>
<tr>
<td><strong>Amphibian</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frog</td>
<td>8 (6)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td><strong>Reptile</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snake</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>35 (13)</td>
<td>10 (4)</td>
<td>5 (1)</td>
<td>3 (2)</td>
</tr>
<tr>
<td><strong>Aves</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bird</td>
<td>14 (10)</td>
<td>2 (1)</td>
<td>1 (1)</td>
<td>2 (1)</td>
</tr>
<tr>
<td><strong>Unidentified Animal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Tailed</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Chevron</td>
<td>7 (5)</td>
<td>3 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Forked</td>
<td>11 (6)</td>
<td>6 (3)</td>
<td>5 (1)</td>
<td>1 (1)</td>
</tr>
<tr>
<td><strong>Animal Related</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paw Print</td>
<td>25 (10)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>1 (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>143 (77)</td>
<td>27 (16)</td>
<td>20 (8)</td>
<td>13 (11)</td>
</tr>
</tbody>
</table>

Table 30. Comparison and distribution of zoomorph forms and elements.

**Terrestrial Mammal Forms.** Terrestrial mammal forms are found across the study area, occurring with the greatest frequency at Stuart Lake (Table 29). The individual elements within this classification include caribou-like or moose-like shapes and other images that appear to depict a variety of land mammals. Terrestrial mammal motifs are depicted in profile, where the image is comprised of a body, head and two or four legs with feet or hooves (Figure 89). Terrestrial mammal forms appear in both outline and silhouette line types.
Although there are variations in the designs of terrestrial mammals, the distinguishing characteristic between caribou/moose and land mammal elements is the presence and absence of antlers or horns – where caribou/moose typically have antlers/horns the land mammals are often depicted with ears and tails. However, the element numbered 2 in Figure 89 appears to have what are possibly antlers or horns and ears. The caribou motif numbered 3 in Figure 90 exhibits fine detail in the tips of the antlers that is not seen to the same degree in other caribou/moose motifs and this is the only occurrence where the caribou/moose appears encased in an outer circle. The caribou/moose motifs do not occur as groups of ungulates, nor do the land mammals occur in packs or herds, both however often occur on the rock panels alongside other zoomorph motifs and other elements.

Figure 90. Examples of caribou/moose elements – Takla Lake (1), Stuart Lake (2, 3) – edited images.

_Semi-Aquatic Forms._ Semi-aquatic forms are represented at all four lakes and appear with both outline and silhouette line types. The most common shape of this element is the outline type where the body, head and legs of the animals are constructed from two joined “upward arrow” shapes, with a tail often indicated (Figure 91). This general shape is identified by Morice (1893:209) as an otter or a beaver image (Figure 85). There are a total of 43 recognizable beaver/otter motifs
within the assemblage of rock art images, making it one of the more frequently employed symbols.

![Fig. 91. Examples of semi-aquatic elements – Stuart Lake (1), Trembleur Lake (2) and Fraser Lake (3) – edited images.](image)

Despite the tendency for otter and beaver images to be rendered with these simple straight lines, there are also beaver-like and otter-like motifs that are constructed with a slightly more naturalistic appearance with rounded bodies and elongated tails (Fig. 91: #2). This style occurs at Stuart Lake, with three motifs, and at Trembleur Lake, with one motif. These elements are often depicted in groups of beavers or otters and as lone animals. The beaver/otter elements in Figure 92 share the same inverted posture and overall “thick-line” appearance.

![Fig. 92. Inverted beaver/otter motif – Stuart Lake (1) and Trembleur Lake (2) – edited images.](image)

**Amphibian Forms.** Amphibian forms are represented at both Stuart Lake and Takla Lake and generally appear as frog-like elements (Fig. 93). These elements are characterized by rounded bodies and extended front and/or rear legs, with no
protruding head and are depicted in dorsal view from above. There are many variations within the design of this element where motifs occur as simple outline types (Figure 93: #2), silhouette types (Figure 93: #3) and with what appears as decorative or distinguishing inner markings (Figure 93: #1). Whereas most frog motifs occur as the only amphibian on the rock surface, there are two sites where more than one of this element is depicted on the panel – STLK 09 Panel 04 and STLK 14 Panel 13.

Figure 93. Examples of amphibian elements – Stuart Lake (1, 3) and Takla Lake (2) – edited images.

Reptile Forms. There is one reptile form within the rock art assemblage at Stuart Lake and it appears as a snake element and it is constructed primarily by a wavy line (Figure 88). Although this snake element is similar in form to the vertical wave classifications that are discussed further on in this section, the snake element possess a defined head, whereas the vertical wave elements do not. This snake element occurs alongside a land mammal image and is depicted in dorsal view from above. The snake element appears exaggerated in its overall size compared to the land mammal. This is the first of a total of five elements that occur only at Stuart Lake.

Figure 94. Examples of aquatic elements – Stuart Lake (1, 3) and Fraser Lake (2) – edited images.
Aquatic Forms. Aquatic forms occur across the study area and appear primarily as outline type designs with a few silhouette types occurring at Stuart Lake. The outline type design is constructed from a few simple straight lines and is identified by Morice as a fish symbol (Morice 1893:209). The silhouette type designs are slightly more naturalistic than the outline type designs (Figure 94). Fish symbols are positioned both vertically and horizontally throughout the assemblage. Some vertical fish elements are depicted inverted, where the “barb” thought to represent the gills of the fish is at the bottom, rather than the top of the motif. The overall design of fish symbols is very similar to that of the beaver/otter symbols discussed above. Whereas the symbol in Figure 95 was identified to archaeologists in 1971 by Madeline French as an otter, it has been classified here as a fish symbol based on the presence of the “barb” and the forked tail.

Fish elements occur with the greatest abundance of all the zoomorph classifications and with the exception of the clusters of finger marks and finger dots discussed below, this element is also the most frequently occurring symbol within the overall typology. Fish symbols are portrayed as single fish and in groups, and they occur in conjunction with a variety of other elements.
**Ave Forms.** Ave forms are comprised of a variety of bird-like images (Figure 96). These shapes are identified by Morice (1893:00) as tattoo images and rock art motifs (Figure 85 and Figure 87). This element demonstrates the widest variation in design style throughout the assemblage of motifs and it is constructed in both the outline type and silhouette type designs. These elements are represented at all four lakes and occur with the greatest number at Stuart Lake. Bird elements are portrayed in groups and as single birds on the panel. Despite the variation in design, these elements exhibit shared characteristics, including extended necks and wings, and feathers and feet are implied in some of the designs.

![Figure 96. Examples of ave elements – Fraser Lake (1), Takla Lake (2), Trembleur Lake (3) Stuart Lake (4-6) – edited images.](image)

**Unidentified Animal Forms.** Several elements within the rock art assemblage exhibit design components that are evident in the above discussed zoomorph images, but they do not appear with the same complete shape or they possess other design features that are unique. Because of the similarities in construction to the zoomorphs, these elements have been classified as unidentified animal forms rather than merely unidentified motifs. There are two unique images within this classification that are identified as long tail elements and as the name suggests their primary characteristic is an elongated “tail” (Figure 97). These elements are found at Stuart Lake and Fraser Lake and are depicted in what seems like a frontal or dorsal view. Both long tail
elements possess a body of sorts that appears atop the long “tail.” Here it is important to note that the “tail” characteristic in this motif is used to describe a shared design characteristic, it does not imply a real animal tail.

Chevron and forked elements occur within the assemblage and are classified as zoomorph forms because of an evident similarity to the semi-aquatic and aquatic forms discussed above. Chevron elements are similar to the “upward arrow” component indicated in the beaver and otter images, but here the element has only one upward or downward arrow shape, as though it is a derivative of a beaver or otter image (Figure 98). Similarly, the forked elements exhibit characteristics evident in the fish symbols, but here the element lacks the “barb” associated with the fish gills. Forked elements display a “forked tail” whereas, chevron elements exhibit an “extended tail” represented by a straight line. Forked elements (Figure 99) occur at all four lakes, while chevron elements are only found at Stuart Lake and Fraser Lake. Both of these elements are represented in groups and as single chevrons and forks.
Animal Related Forms. The final element grouping within the zoomorph forms is the paw print (Figure 100). This element was identified by Morice (1893:00) as a grizzly bear paw print (Figure 86) and it is represented at Stuart Lake, Fraser Lake and Takla Lake. Paw print motifs are typically depicted with the outline type design, but there are two examples of silhouette type designs on Stuart Lake (Figure 100: #3). Paw prints occur in pairs, groups and as single images. Paw print pairs occur both horizontally and vertically aligned. These elements typically do not occur with the animal that presumably made the print; the only exception to this condition within the assemblage is STLK 09 Panel 4 in Figure 7 where the central bear figure exhibits the paw print motif as its paws and it is accompanied by a track of paw prints (Figure 84).
**Anthropomorph Type *(N= 13)*

![Image of paw print elements](image)

Table 31. Comparison and distribution of anthropomorph type motifs and panels.

Anthropomorph types are characterised by human figures and human hands (Figure 101). Human figures occur as full body images and with few exceptions are found complete with head, arms, torso and legs with feet. Human figures are most plentiful at Stuart Lake with 10 motifs occurring over seven panels, whereas neither Fraser Lake nor Takla Lake assemblages contain any anthropomorph types (Table 31). A single human figure is located at Trembleur Lake, as are the only two human hand elements in the entire assemblage (Table 32).
Figure 101. Examples of anthropomorph elements – edited images.

### Distribution and Frequency of Anthropomorph Elements

<table>
<thead>
<tr>
<th>Anthropomorph Elements</th>
<th>Stuart Lake Motif Count (Panel Count)</th>
<th>Fraser Lake Motif Count (Panel Count)</th>
<th>Trembleur Lake Motif Count (Panel Count)</th>
<th>Takla Lake Motif Count (Panel Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Figure</td>
<td>10 (7)</td>
<td>0 (0)</td>
<td>1 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Human Hand</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>10 (7)</td>
<td>0 (0)</td>
<td>3 (2)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

Table 32. Comparison and distribution of anthropomorph elements.

**Human Forms.** Human figure elements occur at Stuart Lake and Trembleur Lake (Table 32). This element typically exhibits a body with a head, arms, legs and feet. Human figures are often depicted in profile with a sense of movement indicated by the position of the feet (Figure 103: #2), others are depicted in frontal or dorsal views (Figure 103: #1). The arms of the figures are typically extended and the hand(s) is often exaggerated (Figure 103: #1; #3 and Figure 104 and Figure 108).

Figure 103. Examples of human figure elements – Trembleur Lake (1) and Stuart Lake (2, 3) – edited images.
While most human figures are rendered upright, there is one image where the figure is positioned horizontally and appears as though she/he is about to be consumed by a giant fish (Figure 104). What is particularly interesting about this horizontal human figure is the posture of the arm which is identical to two other human figure elements within the assemblage (Figure 105). Human figures are typically portrayed as single individuals, however there is a group of two human figure elements at STLK 09 Panel 04. Trembleur Lake is the only location where human hands are represented as motifs (Figure 106). At this site – TRLK 02 Panel 01 – two hand elements occur at opposite ends of the panel where the rock surface has a raised edge. The fingers on the hand elements seem to reach for and touch this edge. An unidentified motif is positioned on the same panel.

Figure 104. Horizontal human figure element with giant fish on Stuart Lake, with detail rotated 90° counter clockwise – edited image.
Figure 105. Two human figures from sites STLK 08 and 04 respectively, showing common extended arm posture – edited image.

Figure 106. Human hand elements – Trembleur Lake – edited images.
**Short Line Type (N=361)**

![Graph showing distribution and frequency of short line type motifs.]

Table 33. Comparison and distribution of short line type motifs and panels.

Short line types are present at 29 panels across the study area, spanning three lakes (Table 33). The greatest representation of this type is found at Stuart Lake with a total of 218 motifs over 22 panels (Table 34). Short line types take the shape of finger marks and finger dots (Figure 107). Finger marks are finger-print shaped markings that often appear slightly elongated, forming what look like short tally-mark images. Finger dots are smaller than finger marks and tend to be more rounded in their overall shape.

![Examples of short line elements – edited images.]

Figure 107. Examples of short line elements – edited images.
Distribution and Frequency of Short Line Elements

<table>
<thead>
<tr>
<th>Short Line Elements</th>
<th>Stuart Lake Motif Count (Panel Count)</th>
<th>Fraser Lake Motif Count (Panel Count)</th>
<th>Trembleur Lake Motif Count (Panel Count)</th>
<th>Takla Lake Motif Count (Panel Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger Mark</td>
<td>183 (16)</td>
<td>63 (3)</td>
<td>61 (3)</td>
<td>0 (-)</td>
</tr>
<tr>
<td>Finger Dot</td>
<td>35 (6)</td>
<td>0 (-)</td>
<td>19 (1)</td>
<td>0 (-)</td>
</tr>
<tr>
<td>Total</td>
<td>218 (22)</td>
<td>63 (3)</td>
<td>80 (4)</td>
<td>0 (-)</td>
</tr>
</tbody>
</table>

Table 34. Comparison and distribution of short line elements.

Finger marks and finger dots typically occur in clusters, which contributes significantly to their high counts. The overall motif count for short line types is high at 361, whereas the count of panels over which this element is distributed (29) is lower than the mean number for panel distribution (43) across the study area. Finger mark elements appear with both random and structured placement.

**Straight Line Type (N=44).**

Straight line types are represented at all four lakes over a total of 19 panels, with the greatest concentration occurring at Stuart Lake (Table 35). This type is organized into four elements that occur as horizontal and vertical lines, stemmed triangles and cross shapes. These elements are constructed from straight lines and occur in a variety of configurations. Whereas straight line types occur across the study area, not all elements within this classification share an equal distribution. As with many of the other elements in the rock assemblage, all of the straight line elements are present at Stuart Lake (Table 36).
Table 35. Comparison and distribution of straight line type motifs and panels.

Figure 108. Examples of straight line types – edited images.
Distribution and Frequency of Straight Line Elements

<table>
<thead>
<tr>
<th>Straight Line Elements</th>
<th>Stuart Lake Motif Count (Panel Count)</th>
<th>Fraser Lake Motif Count (Panel Count)</th>
<th>Trembleur Lake Motif Count (Panel Count)</th>
<th>Takla Lake Motif Count (Panel Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal</td>
<td>9 (4)</td>
<td>0 (0)</td>
<td>1 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Vertical</td>
<td>5 (4)</td>
<td>0 (0)</td>
<td>3 (2)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Stemmed Triangle</td>
<td>19 (3)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Cross Shape</td>
<td>2 (2)</td>
<td>2 (1)</td>
<td>2 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>35 (13)</td>
<td>2 (1)</td>
<td>6 (4)</td>
<td>1 (1)</td>
</tr>
</tbody>
</table>

Table 36. Comparison and distribution of straight line elements.

**Horizontal, Vertical, Stemmed Triangle and Cross Shape Elements.** Horizontal line elements are represented at Stuart Lake and Trembleur Lake. These elements occur as part of more complex motifs, such as at STLK 02 Panel 10 (Figure 109) and TRLK 04 Panel 01 (Figure 108: #3) and they occur as a single stroke on the panel seemingly unattached to other motifs. Similarly, vertical line elements occur in groups and as single motifs. Vertical line elements are found at Stuart Lake, Trembleur Lake and Takla Lake. Stemmed triangle elements are represented exclusively at Stuart Lake and are found on three panels. Stemmed triangles are depicted upright as in Figure 108: #2 and inverted as part of the complex motif in Figure 110. Cross shapes occur at Stuart Lake, Fraser Lake and Trembleur Lake, often alongside other motifs as in the example from Fraser Lake in Figure 111.

Figure 109. Example of horizontal elements – Stuart Lake – edited image.

Figure 110. Example of inverted stemmed triangle – edited image.
Arched Line Type \((N=66)\).

Arched line types occur across the study area with the greatest concentration at Stuart Lake (Table 37). This type is comprised by six elements that are constructed from curved lines that take a variety of configurations, occurring both horizontally and vertically on the rock surface (Table 38). Arched lines typically occur in conjunction with other symbols and although they do appear as single arched lines, they also appear in tandem (Figure 112).

![Distribution and Frequency of Arched Line Type](image)

**Table 37.** Comparison and distribution of arched line type motifs and panels.
Figure 112. Examples of arched line elements – edited images.

### Distribution and Frequency of Arched Line Elements

<table>
<thead>
<tr>
<th>Arched Line Elements</th>
<th>Stuart Lake Motif Count (Panel Count)</th>
<th>Fraser Lake Motif Count (Panel Count)</th>
<th>Trembleur Lake Motif Count (Panel Count)</th>
<th>Takla Lake Motif Count (Panel Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half Moon Shape</td>
<td>8 (8)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Curve with Dash</td>
<td>4 (4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Horizontal Arch</td>
<td>12 (8)</td>
<td>7 (4)</td>
<td>2 (1)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Vertical Arch</td>
<td>5 (5)</td>
<td>0 (0)</td>
<td>12 (2)</td>
<td>4 (3)</td>
</tr>
<tr>
<td>Horizontal Wave</td>
<td>3 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Vertical Wave</td>
<td>7 (5)</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39 (32)</strong></td>
<td><strong>8 (5)</strong></td>
<td><strong>15 (4)</strong></td>
<td><strong>6 (5)</strong></td>
</tr>
</tbody>
</table>

Table 38. Comparison and distribution of arched line elements.

**Round Form Type (N=65).**

Round form types are represented at all four lakes, occurring most often at Stuart Lake (Table 39). This type is organized into three elements that occur as half circles, circles and dots (Table 40). Like the arched line type, this type is also based on a curved line. This type is identified by the indication of an overall circle shape, whereas the arched line type is comprised of symbols that are primarily still lines.
rather than circles. Whereas the half circle and circle elements are in the outline type design, dots occur as the silhouette type design and are fully covered by pigment (Figure 113). Circles are abundant throughout the assemblage of images and likely represent a variety of subject matter and often occur combined with other elements.

![Graph showing distribution and frequency of round line type](image)

**Table 39.** Comparison and distribution of round line type motifs and panels.

![Examples of round shape elements](image)

**Figure 113.** Examples of round shape elements – edited images.
Table 40. Comparison and distribution of round shape elements.

**Unknown Form Type (N=38).**

Unknown forms are populated by three classifications of elements. Unknown types occur with the greatest frequency at Stuart Lake (Table 41). This classification includes traces of pigment where the motif is no longer discernable. These pigment traces occur over 30 panels across the study area and because of advanced deterioration, individual motif counts are not possible (Table 42). Takla Lake is the only location where traces of pigment are not identified.

Table 41. Comparison and distribution of unknown type motifs and panels.

The second classification of unknown forms includes the markings that resemble "patches of pigment." These elements occur alongside other motifs and are represented at all four lakes. Despite the lack of identifiable subject matter and overall shape, these elements are extremely interesting. For example, at STLK 11 Panel 03 the
patch of pigment on this panel exhibits signs of texture as though the pigment had been wiped with a brush or a cloth of sorts (Figure 114: #2). The same striations are evident in the frog motif, perhaps indicating the use of a tool in its manufacture (Figure 114: #3). This patch of pigment may have been the spot on the rock surface where the painter worked the pigment during the production process or perhaps “erased” a motif.

![Figure 114. Frog motif with pigment patch – edited images.](image)

Other patches of pigment do not exhibit this same sign of texture, but the overall lack of design in this element may, in some instances, indicate a similar use. It is also entirely possible that these patches of pigment are motifs in their own right despite their seemingly shapeless design (Figure 115). At site STLK 10 Panel 01 there is a particularly interesting patch of pigment located on the rock surface just below the panel of motifs (Figure 116). This pigment occurs on a natural hand hold that lines up
with ones thumb when ascending and descending the outcropping – perhaps this patch of pigment is actually a thumb print from the painter.

Figure 115. Examples of pigment patches – edited images.

<table>
<thead>
<tr>
<th>Unknown Elements</th>
<th>Stuart Lake Motif Count (Panel Count)</th>
<th>Fraser Lake Motif Count (Panel Count)</th>
<th>Trembleur Lake Motif Count (Panel Count)</th>
<th>Takla Lake Motif Count (Panel Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trace of Pigment</td>
<td>* n/c (24)</td>
<td>n/c (2)</td>
<td>n/c (4)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Patch of Pigment</td>
<td>5 (5)</td>
<td>2 (2)</td>
<td>1 (1)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Unidentified</td>
<td>23 (15)</td>
<td>2 (2)</td>
<td>3 (3)</td>
<td>1 (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28 (20)</td>
<td>4 (4)</td>
<td>4 (4)</td>
<td>2 (2)</td>
</tr>
</tbody>
</table>

* Denotes not calculable  
** Total does not include trace of pigment

Table 42. Comparison and distribution of unknown elements.
The third and final element in this classification includes the motifs that do not exhibit enough shared characteristics to be grouped elsewhere in the typology. These unidentified motifs occur at each of the four lakes, with the greatest frequency represented at Stuart Lake (Table 42). Taphonomy has certainly played a role in some of the motifs being classified as unidentified (Figure 117). Erosion, exfoliation and calcium carbonate deposits for example have effectively worked to obscure sections of some of the markings, rendering them unidentifiable.
Consistency and Variation

The typology generated in this research has organized the rock markings of the study area into 30 elements based on shared characteristics (Appendix N). Two additional classifications were developed, one for motifs that cannot be grouped together due to a lack of shared features and the other for motifs that are no longer discernable due to taphonomy. These elements were developed from within the body of motifs at Stuart Lake, Fraser Lake and Trembleur Lake that were located during the archaeological survey, as well as, the motifs previously recorded at Takla Lake prior to being destroyed in 1971.
### Distribution and Frequency of All Elements

<table>
<thead>
<tr>
<th>Elements</th>
<th>Stuart Lake Motif Count (Panel Count)</th>
<th>Fraser Lake Motif Count (Panel Count)</th>
<th>Trembleur Lake Motif Count (Panel Count)</th>
<th>Takla Lake Motif Count (Panel Count)</th>
<th>Distribution Lake Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snake</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Human Hand</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Stemmed Triangle</td>
<td>19 (3)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1</td>
</tr>
<tr>
<td>Half Circle</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Curve with Dash</td>
<td>4 (4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Horizontal Wave</td>
<td>3 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Caribou / Moose</td>
<td>2 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Frog</td>
<td>8 (6)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Long Tailed</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Chevron</td>
<td>7 (5)</td>
<td>3 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Human Figure</td>
<td>10 (7)</td>
<td>0 (0)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Finger Dots</td>
<td>35 (6)</td>
<td>0 (0)</td>
<td>19 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Horizontal Line</td>
<td>9 (4)</td>
<td>0 (0)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Half Moon</td>
<td>8 (8)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (1)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Unknown Animal</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Land Mammal</td>
<td>7 (7)</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Paw Print</td>
<td>25 (10)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>1 (1)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Finger Mark</td>
<td>183 (16)</td>
<td>63 (3)</td>
<td>61 (3)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Vertical Line</td>
<td>5 (4)</td>
<td>0 (0)</td>
<td>3 (2)</td>
<td>1 (1)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Cross Shape</td>
<td>2 (2)</td>
<td>2 (1)</td>
<td>2 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Dot</td>
<td>10 (7)</td>
<td>0 (0)</td>
<td>15 (3)</td>
<td>4 (2)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Vertical Arch</td>
<td>5 (5)</td>
<td>0 (0)</td>
<td>12 (2)</td>
<td>4 (3)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Vertical Wave</td>
<td>7 (5)</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Beaver/Otter</td>
<td>31 (15)</td>
<td>2 (2)</td>
<td>8 (4)</td>
<td>2 (2)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Fish</td>
<td>35 (13)</td>
<td>10 (4)</td>
<td>5 (1)</td>
<td>3 (2)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Bird</td>
<td>14 (10)</td>
<td>2 (1)</td>
<td>1 (1)</td>
<td>2 (1)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Forked</td>
<td>11 (6)</td>
<td>6 (3)</td>
<td>5 (1)</td>
<td>1 (1)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Circle</td>
<td>24 (19)</td>
<td>6 (6)</td>
<td>1 (1)</td>
<td>4 (4)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Horizontal Arch</td>
<td>12 (8)</td>
<td>7 (4)</td>
<td>2 (1)</td>
<td>1 (1)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Patch of Pigment</td>
<td>5 (5)</td>
<td>2 (2)</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>2 (2)</td>
</tr>
</tbody>
</table>

* Table does not include unidentified elements or traces of pigment

Table 43. Details regarding the overall distribution of elements across the study area.

Consistency within the rock art assemblage is evident in the subject matter of the markings. Repetition of elements occurs across the study area (Table 43). Ninety-seven percent (29) of the elements within the typology are represented at Stuart Lake; the only element not found there is the Human Hand. Additionally, there are five elements only represented at Stuart Lake and one element only employed at
Trembleur Lake, the remaining 24 (80%) elements are found at two or more lakes. Fraser Lake exhibits the next highest representation of the elements, followed by Trembleur Lake and Takla Lake respectively (Table 44). Of the 790 individual markings within the rock art assemblage, only 38 (5%) exhibit too much variation to be classified with other images.

Variation within the body of elements used to construct the paintings is also evident. Whereas the elements are repeated, there appears to be room for individual expression in some of the markings. For example, frog and bird images exhibit more flexibility in terms of design when compared to other elements in the typology. Bird images in particular exhibit the greatest variation in overall shape, while core “bird characteristics” such as wings, extended necks and feathers are typically maintained.

Additionally, it is expected that some of the elements, while maintaining an overall stable appearance, may stand for a variety of meanings based on the context of their use within the painting. Circles for example may very well stand for a variety of subject matter, such as, a camp, the sun, a lake or pond or a trapline among others. Here it is important to recognize that while determining the meanings of the individual elements and the overall message embedded in the paintings is outside the scope of this research, it is still important to acknowledge that at least some of the elements may have had a range of meanings, interpretations and uses (cf. Munn 1986).

![Distribution of Elements Across Study Area (N=30)](image)

Table 44. Comparison and distribution of all elements across the study area.
The elements within the typology co-occur across the study area in a variety of ways. The information in Table 45 identifies each of the elements within the typology and the number of other elements (from the same typology) that co-occur on the painted panels across the study area. The human hand element co-occurs with the least number of other elements (1), while the circle element co-occurs with the highest number of other elements (27) in the typology. Although some elements never co-occur on the panel with one another, no single element is always depicted in isolation. Appendix Q provides further details pertaining to the information in Table 45.
## Co-Occurring Elements Across Study Area  
* N=30

<table>
<thead>
<tr>
<th>Elements</th>
<th>Number of Co-Occurring Elements (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Hand</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Half Circle</td>
<td>3 (10)</td>
</tr>
<tr>
<td>Long Tail</td>
<td>6 (20)</td>
</tr>
<tr>
<td>Snake</td>
<td>7 (23)</td>
</tr>
<tr>
<td>Unknown Animal</td>
<td>7 (23)</td>
</tr>
<tr>
<td>Curve with Dash</td>
<td>7 (23)</td>
</tr>
<tr>
<td>Chevron</td>
<td>8 (27)</td>
</tr>
<tr>
<td>Horizontal Line</td>
<td>8 (27)</td>
</tr>
<tr>
<td>Caribou / Moose</td>
<td>9 (30)</td>
</tr>
<tr>
<td>Horizontal Wave</td>
<td>13 (43)</td>
</tr>
<tr>
<td>Cross</td>
<td>14 (47)</td>
</tr>
<tr>
<td>Vert. Arch</td>
<td>14 (47)</td>
</tr>
<tr>
<td>Half Moon</td>
<td>15 (50)</td>
</tr>
<tr>
<td>Patch of Pigment</td>
<td>16 (53)</td>
</tr>
<tr>
<td>Fork</td>
<td>17 (57)</td>
</tr>
<tr>
<td>Finger Dot</td>
<td>17 (57)</td>
</tr>
<tr>
<td>Stemmed Triangle</td>
<td>17 (57)</td>
</tr>
<tr>
<td>Vertical Wave</td>
<td>17 (57)</td>
</tr>
<tr>
<td>Paw Print</td>
<td>19 (63)</td>
</tr>
<tr>
<td>Human Figure</td>
<td>19 (63)</td>
</tr>
<tr>
<td>Dot</td>
<td>20 (67)</td>
</tr>
<tr>
<td>Horizontal Arch</td>
<td>20 (67)</td>
</tr>
<tr>
<td>Vertical Line</td>
<td>21 (70)</td>
</tr>
<tr>
<td>Frog</td>
<td>22 (73)</td>
</tr>
<tr>
<td>Land Mammal</td>
<td>23 (77)</td>
</tr>
<tr>
<td>Beaver/Otter</td>
<td>23 (77)</td>
</tr>
<tr>
<td>Fish</td>
<td>23 (77)</td>
</tr>
<tr>
<td>Bird</td>
<td>23 (77)</td>
</tr>
<tr>
<td>Finger Mark</td>
<td>24 (80)</td>
</tr>
<tr>
<td>Circle</td>
<td>27 (90)</td>
</tr>
</tbody>
</table>

Table 45. Co-occurring elements in the study area.

The frequency at which elements within the typology co-occur on the painted panels was calculated at the two-variable level. Elements were counted as co-occurring if they appeared together on the same panel, regardless of the distance between them. A total of 223 two-variable co-occurrences of elements were calculated, of which 96 (43%) co-occur only once across the study area. The remaining 127 (57%) co-occurrences happen two or more times throughout the study area. Whereas 159 (71%) of these co-occurrence happen at only one lake, the remaining are repeated throughout the study area and occur at multiple lakes (Table 46).
Even though co-occurrences were determined at the panel level regardless of the distance between elements, there are observable combinations where elements are seemingly placed close together to form a particular motif / message. One of the best examples of this patterning in the placement of elements is illustrated in Figure 118. This pattern occurs at Stuart Lake, Fraser Lake and Takla Lake. What is particularly interesting here is that not only are fish symbols used along side the vertical arch element but otter/beaver symbols are also used, and in the case of the Fraser Lake example, the vertical arch has been replaced by a horizontal arch. Madeline French interpreted this combination of symbols at Takla Lake as an otter by the bank of a lake (McMurdo, J. 1972: 109-118).
Repeated patterns of element use at levels of three-variables were also noted to exist within the assemblage of markings. There are two fine examples of this level of co-occurrence from Stuart Lake. The first, illustrated in Figure 119, depicts a human figure in profile with an arm extended. Based on the orientation of the feet the extended arm is oriented behind the individual. Adjacent to the human form is a circle and two paw print elements. On both panels there is a fourth element that remains unidentified.
The second example, illustrated in Figure 120, depicts a land animal element in the centre with the circle and finger mark elements that extend in front and behind the land animal for a considerable distance of the rock surface (outside the scope of the photograph). Even though there are subtle differences in these two panels, the general pattern of element placement is strikingly similar.

Figure 120. Patterns of placement and three-variable elements on Stuart Lake – edited images.

The analysis of the motifs conducted in this chapter indicates that a substantial level of repeated symbol use occurs throughout the rock art assemblage across the study area. The repeated use of symbols has been shown to occur not only at each of Stuart Lake, Fraser Lake, Trembleur Lake and Takla Lake, but between those lakes as well; covering a vast area across three First Nations territories. These patterns of repetition include re-occurring individual elements and combinations of elements with two and three variables. It is this repeated use that suggests the content of the rock
markings were collectively understood by the painters and their intended audiences, which indicates the markings could have been effectively used for communication.

**Discussion**

This chapter set out to investigate the visual presence and social significance of the location and imagery of the rock markings. Beginning with First Nations traditional knowledge, themes were identified within the words of the elders who participated in the interviews and the ethno-historical information provided by 19th century First Nations people. Traditional knowledge indicated that both message-paintings and totem-paintings were intended for communication, through which a variety of information could be transmitted; and that movement of the both the painters and the audiences was essential for the success of both types of markings. The themes of movement and communication that resulted from the analysis of the traditional knowledge provided the starting point for the spatial analysis that followed.

In the spatial analysis, the rock art was examined at a variety of spatial scales. These scales included the larger regional level, where the distribution of the markings across the study area was examined. It was at this scale that the relationship between the rock art and water routes and salmon migration was identified. Here, highly visible and easily accessible rock surfaces along the water-ways were identified as preferred locations for the placement of paintings.

At the site scale, features and characteristics of the individual rock art sites were investigated in order to determine the capacity to support other activities in addition to rock art production and use. The overall lack of physical space at the majority of sites indicated that rock art sites in the study area were primarily special purpose sites. At the final scale of motif, the markings were examined individually and collectively. Patterns of repetition within the body of symbols across the study area were identified, thereby indicating a level of effectiveness for communication.

This chapter provides detailed analyses of the data produced during the archaeological survey, the ethnographic interviews and the archival research from within the themes of movement and communication. These analyses provide the foundation for the explanations and interpretations that follow in the next chapter; where the themes of movement and communication continue to play important roles.
with regard to identifying the social significance of the rock art locations and the painted motifs throughout the study area.
Chapter Seven

MOVEMENT AND COMMUNICATION

Our people used to use the waterways quite a bit.
The paintings are part of the waterways.
Waterways was a big part of our travels.
And a big part of food gathering, whether right out of the water
or else getting to and from the food gathering areas.
The rock paintings were on a frequently traveled route of our people.

[George Sr.]

Two overarching themes emerge from this investigation of rock art. One is
movement, where this form of human activity played an indispensable role not only in
the functionality of the pictographs in the study area, but at times it was the impetus
for the production of the markings. The second theme is communication and the
ability of the pictographs to carry and transmit various types of information between
people and through time. Embedded within these themes is the importance of both
location and imagery to the functionality of the markings. These themes of movement
and communication are entwined within the route of the rock art that weaves along
the waterways and pathways of the study area.

In this chapter, it is argued that the landscape context of the rock art indicates
the markings were not located at the margins of society, but rather at its core. It is
maintained that despite the seemingly simple materiality of the motifs, the markings
were complex and part of a larger intricate communication system. The themes of
movement and communication are examined in greater detail in order to support
these arguments.

In the pages that follow, the waterscape locales of the rock art are discussed in
terms of how they relate to the acquisition of food resources and local systems of
human movement. From there, the importance of seasonal food resources in First
Nations society is discussed in terms of how annual returns of food stocks affected
human movement, settlement and social interaction. A consideration of the audience
of the rock art and the likely time depth for human presence in the landscape follows,
and the potential temporality of the rock art is addressed. And finally, the rock art
motifs are discussed with regard to how the placement and structure of the markings
enabled communication.
Movement

The theme of movement was initially identified in Chapter Five within the ethnographic portion of the fieldwork, where First Nations elders discussed travel and mobility as being important parts of daily life in the past, and that the rock markings were part of the regular routines of life. The quote at the beginning of this chapter illustrates the connection the paintings in the study area share with travel through the landscape, as reported by George George Sr. The theme of movement also surfaced during the archaeological survey portion of the fieldwork. It was there that the visibility, orientation and accessibility of the pictograph panels identified the essential role movement through the landscape – via water routes and to a lesser extent over foot paths – played in the both the production and use of the markings. The data gathered during the fieldwork indicated that the creation of the markings was dependant on and at times reflective of the movement of the painters through the landscape; and correspondingly, the functionality of the markings was dependant on the presence and movement of the audience along the water routes through the study area.

Movement was used as one of the themes within the analysis conducted in the previous chapter to investigate the rock art in its landscape setting at the spatial scales of territory and site. Through this analysis, the location of the rock art was identified as corresponding with prominent, highly visible outcroppings and cliff faces at the shoreline of lakes. Water travel to and from these sites was identified as essential to both the painters and the audiences. Water travel was also identified as the primary and perhaps the only activity co-occurring with the rock art. A connection between salmon migratory routes and water bodies bearing rock art was also identified during the analysis.

This link between rock art placement, water travel and salmon migration is a key result of the analysis; therefore, it is important to further investigate the role mobility and salmon historically played in First Nations societies. This consideration is important for furthering an understanding of the patterns of movement and settlement initially identified in the analysis chapter and for understanding how the location of the rock art is related to these systems.
**Land and Water Travel**

Historically and prior, the principal livelihood pattern of First Nations peoples throughout the study area was dependent on mobility. Systematic and purposeful travel through the territories enabled the successful exploitation of seasonally abundant resources that was essential for a sustainable way of life. Patterns of movement were based in part on an intimate knowledge of the resources and the terrain within the territories, and on social protocols and established claims to the land (Harmon 1911; Morice 1892-93, 1905). Although there were important cultural variations among the First Nations peoples of the study area, there were also fundamental commonalities in terms of subsistence practices, hunting and fishing technologies and other ways in which life was rooted in the land (Dawson 1881; Jenness 1937; Mitchell and Sam 2002).

For many of the First Nations communities in the study area, territories are and were historically, organized according to the keyoh system (homeland or family hunting and gathering areas). Keyohs are bounded units of land and water where families hold exclusive rights to hunting, fishing and gathering. It is the area of the keyoh that family and extended family members traveled throughout the seasons in order to access food resources. Keyohs play a significant role in the concept of place and they are directly linked to cultural and personal identity.

*The people of every village have a certain extend of country, which they consider their own, and in which they hunt and fish; but they may not transcend these bounds, without purchasing the privilege of those who claim the land. Mountains and rivers serve them as boundaries and they are not often broken over* (Harmon 1911:255).

Population changes through the pre-contact, proto-historic and historic periods, noted by Cranny (1986: 79-87), indicate that different ways of spatially organizing the landscape and controlling access to resources were in place and that these organizational schemes changed over time. Even though these different ways of organizing and using the landscape are not visible archaeologically, it is expected that even in the distant past certain protocols were in place, but they likely differed to the keyoh system discussed here.

Despite the potential natural barriers posed by dense forests, rapid waterways and mountain ranges, a network of pre-contact trails and water routes were
established throughout the study area (British Columbia Archaeology Branch: n.d.; Brown 2002:24; Cranny 1986:74; Izony 2011 4-15; Mackenzie 2001; Morice 1907). These travel routes functioned as physical and social links between places and people (Figure 121). Travel routes facilitated movement to and from the keyohs throughout the year, and these routes enabled economic cooperation, trade and social ties between neighbouring groups to be maintained and societal obligations to be fulfilled.

The main trail continued to Takla Lake, there the trail went along the lake to the Village. This village is ancient, our people from other parts of our territories came here to gather, visit their relatives, held feasts, games and traded. Other Bands came here also; Carrier, Wet’suwet’en and Gitxan. Lots of interactions happened here. These Bands has their trails coming here, sometimes using our trails. Our people also used their trails to go into their territories for their own reasons, in their period of time (Ray Izony 2011:14-15).

Figure 121. Two First Nations Men Playing a Game Called “Lazy Stick,” 1912. Courtesy BC Archives Collections.

The earliest historical reference to First Nations trade networks and long distance travel related to the study area appears in Alexander Mackenzie’s journal, dated June 9, 1793. After having met a group of Sekani people camped near the
Parsnip River, Mackenzie noted they were well armed with iron works and that they had obtained their weapons through trade with Dakelh peoples,

*Their iron-work they obtain from the people who inhabit the bank of that river, and an adjacent lake, in exchange for beaver skins, and dressed moose skins. They represented the latter as travelling, during a moon, to get to the country of other tribes, who live in houses, with whom they traffic for the same commodities; and that these also extend their journeys in the same manner to the sea coast, or, to use their expression, the Stinking Lake, where they trade with people like us, that come there in vessels as big as islands* (Mackenzie 2001:258).

The use of established water routes for transportation and for food resources was an important part of daily life in First Nations societies,

*Once there were no lakes and rivers. There was no Necha-Koh (Nechako River), and only one village, Chunlac. Our elders at Sai-K’uz tell us this is where ‘Utas was born. As a child, he ran off with his Grandfather’s bowl containing all of the water in the world. When the bowl tumbled and broke, ‘Utas splashed the water with his hands, creating the lakes, creeks, and rivers.*

*Since then, we have followed the Necha-Koh and its seasons. Dak’et, “autumn,” is when we travel to the Necha-Koh’s many lakes. In Khit, “winter,” we follow traplines for beaver and muskrat, and return to the lakes in the spring, ‘Oulh, for suckerfish and trout. Traditionally, we hunted ducks and geese in the Necha-Koh’s marshes near Vanderhoof, now a sanctuary for migratory birds. Shin, “summer,” is when the salmon arrive. This is our most important resource* (Carrier-Sekani Tribal Council n.d.).

The prevalence of First Nations water travel is further demonstrated by the English translation of the name Dakelh, “the Natives of New Caledonia, we denominate Carriers (Dakelh); but they call themselves Tâ-cu-lies, which signifies people who go upon water” (Harmon 1911:242). The connection between water travel and Dakelh identity is aptly noted by Kobrinsky (1982:338), “the [Dakleh] band is represented by names which denote bodies of water because it is at as well as by means of these (as travel routes and food sources) that the band is most fully realized, through congregation, as a body of people” (original emphasis).

Father Morice describes the skill and ability of Dakelh people on the water (D.L.S. 1930:170),

*The Indians, as a rule, are most excellent canoeemen. And no wonder, since, strange as it may appear, they perceive the least obstacle in the water, seeing through it as we do through glass, or realizing by the peculiar motions of the waves the real situation and bearings of rocks in the stream. Then a skillfull stroke of the paddle fore or aft prevents all shocks or contact with the canoe, while at the same time it gives embarkation the*
direction most propitious to its safety and smooth running. There are, therefore, few obstacles, short of a regular [water] fall or actual barrage, which a Carrier... will not overcome.

Figure 122. Canoe on Fraser Lake, 1908. Courtesy BC Archives Collections.

The waterways of the study area, together with foot trails provided routes of movement through a vast and rugged region. Historically, First Nations people in the study area were noted for having at least two kinds of canoes, one of which was for lake travel and was made as large as possible and one much smaller for hunting purposes (D.L.S. 1930: 158) (Figure 122). Today, a site on Fraser Lake known as Tsi dzilh dzulh is acknowledged by the Stellat’en First Nation as being a traditional dugout canoe building site (Stellat’en First Nation: n.d.). Due to the perishable nature of wood, there is a lack of archaeological evidence for watercraft in the study area beyond the mention of an historical canoe in Takla territory and a cottonwood canoe at a recent campsite in Nadleh territory (British Columbia Archaeology Branch: n.d.).

As an alternative to foot trails, water routes would have been a more effective means of transportation enabling people to move efficiently through the landscape via canoes and rafts (Figure 123). Father Morice describes the efficiency of water travel compared to forest routes,
[I] was exhausted with fatigue after almost a whole week’s walking through the dense northern forest, when [I] was told by the chief, who alone knew the country, that [we] had reached the valley of a river which, flowing in the direction of the point [we] were then making for, [we] were going to utilize by floating down its swift waters. That was indeed a sweet announcement! The welcome rest, the luxurious travelling, even if it was only on a raft (D.L.S. 1930:167, original emphasis)!

Figure 123. Canoe at Takla Landing, Takla Lake, 1879. Courtesy Government of Canada Library and Archive.

The open waters during the summer months obviously enabled canoe and raft travel, but during the winter months when the lakes were completely frozen the waterways still provided opportunities for movement. Flat expanses of ice provided travel routes across lakes that would have been preferred over snow laden forest trails. Whatever the time of year, the rock markings were firmly entwined in the water routes of the study area and visible to the audience(s) who passed by.

Whereas, the paintings would have been accessible throughout the year, the opportunities to produce rock art would likely have been more limited. The climate and natural environment of the study area provide clues regarding the season of rock art production. The annual temperature range for northern central British Columbia, on average, fluctuates between +30C and -40C (Table 1 and Table 2). It is unlikely that the rock markings were produced during the winter months because of the negative affect the cold would have played in the process of pigment adherence to the rock
surface; whereas during the warmer months of the year, pigment would have been able to bond with the rock. Additionally, the increases in water level required for access to several of the high-elevation sites on Stuart Lake, as discussed in Chapter Five, directly indicate a summer-time production for some of the markings in the study area.

The primary messages pertaining to the needs of the painters and the information they desired to share with the audience(s) would have had an “expiration date” of sorts when the information was no longer valid because of the passage of time. However, depending on the information, some messages may have continued to be relevant throughout the year, as would the totem-paintings that served to alert the painter to the movement of passersby. But other information, layered and nuanced within the paintings could still be active, despite the passage of time. This information, perhaps more deeply and covertly encoded in the markings, speaks to the human presence and activity represented by the markings and the cultural perseverance and identity expressed by the continued presence of the markings in the landscape.

**Water Routes and Salmon**

The water routes through the study area that bear rock markings were shown in the analysis to correspond with salmon migratory routes. The importance of salmon in First Nations society is reflected in a variety of ways, such as the English translation of Nadleh Whut’en, which means the “people who live where the salmon return.” This translation refers to the community of people at Nadleh on Fraser Lake. On several occasions during other projects at the villages of Nadleh and Stellako, community members have referred to Fraser Lake as a “salmon nursery” and as closely tied communities they have always relied on the fish stocks in the Nautley and Nechako rivers (Figure 124).
The importance of fish and salmon in particular is further demonstrated in the Dakelh calendar. Father Morice reported and translated the following lunar periods, the start of which roughly corresponds with January (Morice 1892-93:106),

\[
\begin{array}{ll}
Sa-tco & \text{the big moon} \\
Tcez-sel & \text{small} \\
Tcez-tco & \text{big} \\
Cin-uza & \text{moon of the spring} \\
Tekus-uz & \text{moon of the carp} \\
Tanr-uz & \text{moon of the summer} \\
Kesel-uz & \text{moon of the land-locked salmon} \\
Thallo-za & \text{moon of the red salmon} \\
Pit-uz & \text{moon of the bull-trout} \\
Toh-uz & \text{moon of the white-fish} \\
Panren net’ seKei & \text{“during its half, one navigates”} \\
Sa-tco-din’ai & \text{“next to the big moon”} \\
\end{array}
\]

The significance of salmon is documented within the historical records for the study area (Figure 125). Beginning in 1806, First Nations dependence on salmon is expressed in the journals of Simon Fraser, fur trader who explored and charted much of what is now British Columbia,

\textit{The Natives are numerous. We saw upwards of 30 men already and by all accounts we will see great numbers of them before long as they all flock upon the Banks of the River in the salmon time, of which they lay up great store for the winter, it being their principal food} (Lamb 2007:254, from a letter to James McDougall dated August 6, 1806).
Daniel Harmon, North West Company fur trader, expressed a similar sentiment regarding the importance of salmon in several journal entries,

*Two men have arrived from New Caledonia, who bring the disagreeable intelligence, that salmon, this season do not come up the rivers of that region, as usual. As this kind of fish forms the principal food, both for the Natives and white people...* (Harmon 1911:151, journal entry dated September 13, 1809).

*One of the Natives has taken a Salmon therefore it is to be hoped that in a few Days they will be plentiful – and were it not for the Salmon that comes up these rivers every year more or less the natives would be truly miserable, as they have little else that they can depend upon for subsistence* (Lamb 2006:126, journal entry dated August 22, 1811).

*Salmon begin to come up this River. As soon as one is caught, the Natives always make a feast, to express their joy at the arrival of these fish. The person, who first sees a salmon in the river exclaims, Tānas-lay! Tānas-lay! in English, Salmon have arrived! Salmon have arrived! and the exclamation is caught with joy, and uttered with animation, by every person in the village* (Lamb 2006:137, journal entry dated August 15, 1812).
The cyclical nature of salmon, in terms of the seasonal return to the waters of the study area, afforded a certain level of predictability that influenced patterns of human movement and settlement. Predictability included both the return and failure of salmon runs. At times of failure, people dispersed to smaller lakes and adjacent river systems to harvest other less desirable types of fish, such as, whitefish, kokanee or char (Lamb 2006:126). People also travelled to other village locations where stocks of salmon had been obtained, where they bartered and traded for food supplies (HBCA B.188/a/17/33, September 21, 1832, December 17, 1832; HBCA B.188/a/20/27d, August 24, 1847). Additionally, people turned to hunting and moved into the forested areas in search of small game (HBCA B. 188/a/21/8, September 21, 1851).

Toward the middle of April, and sometimes sooner, they leave their villages, to go and pass about two months at the small lakes, from which, at that season, they take white fish, trout, carp, &c. in considerable numbers. But when these begin to fail, they return to their villages, and subsist on the small fish, which they dried when at the lakes, or on salmon, should they have been so provident as to have kept any until that
late season; or they eat herbs, the inner bark or sap of the cypress tree, berries, &c. At this season, few fish of any kind, are to be taken out of the lakes or rivers of New Caledonia. In this manner the Natives barely subsist, until about the middle of August, when salmon again begin to make their appearance, in all the rivers of any considerable magnitude; and they have them at most of their villages in plenty, until the latter end of September, or the beginning of October (Harmon 1911: 251).

Figure 127. Cleaning Salmon, Stuart Lake, 1909. Courtesy BC Archives Collections.

Salmon Returns

The relative regularity of salmon returns and its importance as a food resource promoted the development of semi-permanent village sites that were established at salmon fishing stations throughout the study area.

The Carriers (Dakelh) reside a part of the year in villages, built at convenient places for taking and drying salmon, as they come up the rivers. These fish they take in abundance, with little labour; and they constitute the principal food, during the whole year (Harmon 1911: 250).
At the turn of the 19th century, the fishing village of Nak’azdli at the east end of Stuart Lake is described as being,

*At the distance of about two hundreds rods from the fort, a considerable River runs out of the Lake, where the Natives who call themselves Tacullies (Dakelh) have a Village or rather a few small huts, built of wood. At these they remain during the season for taking and drying salmon, on which they subsist, during the greater part of the year* (Harmon 1911:160, based on observations made November 1809).

Other seasonal village sites on Stuart Lake were linked to fishing activities. The village of Pinche, for example, was a profitable berry gathering site and an important gateway to what is now Pinche Lake, where First Nations peoples harvested small fish in abundance (Harmon 1911:170, based on observations made August 1811).

The present-day village of Yekooche at the north end of Stuart Lake is historically linked to the site of an important fish weir and the lucrative whitefish production that occurred at nearby Cunningham Lake (Gall 2007: 16). This original fishing station, named Yeko, was located at the mouth of the creek and it functioned to provide food to not only the people who seasonally lived there, but also neighbouring groups, including First Nations people from Fraser Lake, and after the period of contact, Hudson’s Bay Company employees as well (Gall 2007:69).
[W]e came upon a large camp of Indians who were catching the finest trout and whitefish I ever saw. They had thousands of them hung up on poles to dry. Their encampment was the perfect picture. What with the primitive and open lodges, the long rows of fish in the successive stages of desiccation, the half naked children sprawling about in the snow, the dogs too fat and lazy to move, and the numerous dugouts or canoes hauled up on the beach. This lake was encircled by high hills, and the portion of it which we had just come over, was hard and fast for the winter; while just here it was perfectly open and free from ice. We camped here for the purpose of getting one of those Indians to guide us to “Gus Wright’s trail,” which I was desirous of reaching by a short-cut over the mountains (Horetzky 1874: 86-87, based on observations of Yeko made in December 1872).

A correlation between semi-permanent settlement sites and fishing stations also occurred on Fraser Lake. The community of Nadleh is identified as, “… the Natives have a Village, and is where they take and dry salmon” (Harmon 1911:162, based on observations made December 1810). John MacLean, fur trader and explorer, provided a more detailed description of the village of Nadleh a few decades later, 

The Indian village is situated in a lovely spot at the outlet of the lake, and consists of only five or six houses, but every house is occupied by several families. These buildings are of a very slight and simple construction, being merely formed of stakes driven into the ground… (Maclean 1932:134, based on observations made during the 1830s).

The present day villages of Nadleh and Stellako on Fraser Lake played important roles in salmon production before and during the historic period. While at Stuart Lake, Harmon describes the reliance people placed on the salmon produced at Nadleh and Stellako,

Mr. Quesnel accompanied by ten common Men with a small assortment of Goods have gone to re-establish Frasers Lake (Nadleh), which place lies about fifty Miles from this, and where we understand that the Natives this fall dried a considerable quantity of Salmon (Lamb 2006:119, journal entry dated November 11, 1810).  

Severe cold weather, Messrs Stuart and Quesnel &c. are gone to Stillà (which place lies about fifteen Miles from this at the other end of this Lake) to trade Salmon &c (Lamb 2006: 121, journal entry dated January 4, 1811).  

Messrs. Stuart & Quesnel are returned from Stillà and say they have purchased the quantity of Salmon required for the Season (Lamb 2006: 121, journal entry dated January 10, 1811).

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12 Harmon refers to the community of Nadleh as Frasers Lake.
13 Harmon refers to the community of Stellako as Stillà.
On the 29th ULT. Mr. Stuart and myself with the most of our People set off to go and purchase Furs & Salmon at Frasers Lake and Stillâ – as at this place last fall the natives did not take one fourth part of the quantity of Salmon required for us for the Season. However at the two above mentioned places we procured the quantity wanted and this afternoon returned to this place... (Lamb 2006: 138, journal entry dated January 23, 1813).

Other reserve lands and settlement areas recorded in the late 19th century throughout the study area are identified as functioning as fishing village sites (Figure 129). Included are the communities of Tache and Carsooat on Stuart Lake; Teeslee, Stevan, and Grand Rapids on the Tache River; and Gelangle and Soyandostar on Middle River and Trembleur Lake (Morris 1999:36; Royal Commission on Indian Affairs 1916). The present-day distribution of most of the First Nations villages in the study area is comparable to the historic distribution pattern in this area (Hudson 1983: 57; Morris 1999:35; Royal Commission on Indian Affairs 1916: 818-819, 837-839, 842-843, 844-846).

The link between the development of semi-permanent village sites and fishing locations is less certain for the Takla Lake area. There are several reserve lands along the shores of Takla Lake, some of which were already established at the time of the 1916 Royal Commission on Indian Affairs and others were developed through this commission. Many of the requests for new reserve lands granted in 1916 were identified as being for “general reserve purposes” or as “meadow” rather than specifically for fishing stations (Royal Commission on Indian Affairs 1916: 845-846).

Even though it is primarily through historical records that the correlation between fishing stations and semi-permanent settlements are realized, it is unlikely that this relationship was specifically an historical development, given the prevalence of lake and river food resources that pre-date the historical period. Similarities in settlement and movement systems between the historic and pre-contact period have been identified (cf. Carlson and Dalla Bona 1996). Michael Cranny (1986:79-93) notes in particular that people were utilizing lake and river food resources during the pre-contact period and that salmon and other fish resources played important subsistence roles well into the past; this utilization is further demonstrated in the cultural resource management data sets for the study area (British Columbia Archaeology Branch: n.d.).
The greatest concentration of rock markings on Stuart Lake occurs between the
fishing villages of Pinche and Nak’azdli toward the east end of the lake along the
northern shoreline (Figure 129). The markings at these sites would have been visually
available to those individuals moving to and from these important fishing locations.
During the historic period and prior, Nak’azdli featured significantly in terms of salmon
production and was an important destination for people during the months of late
summer, and early fall, when the salmon arrived. Equally so, Pinche was an important
location for alternative food resources, such as berries and the small fish available via
the creek that leads to what is now Pinche Lake. Given the density of the rock art sites
that occur between Nak’azdli and Pinche and the importance of these fishing locations,
this was likely a high traffic area.

The second greatest concentration of rock markings on Stuart Lake is toward
the northern end of the lake, across the bay from the present day community of
Yekooche. Historically and prior, this part of Stuart Lake was an important gateway to
the whitefish production that occurred at Yeko on nearby Cunningham Lake. As an
important food resource, especially at times of salmon failure, whitefish were
lucratively sought at Cunningham Lake. The rock art sites in this area were situated so
as to be most visible to those individuals moving to and from Stuart Lake from the
whitefish camps on Cunningham Lake. Similarly, individuals who traveled to and from
the community of Yekooche would have been equally exposed to the markings.
On Fraser Lake the rock markings are concentrated at the east end of the lake toward the present day community of Nadleh (Figure 130). Nadleh featured significantly in terms of salmon production during the historic period and prior, as did the community of Stellako at the opposite end of the lake. The rock markings would have been visible to those individuals traveling along the northern shore of Fraser Lake, to and from these important fishing villages and those traveling beyond Fraser Lake via the Nautley and Nechako Rivers.
Historically and prior, the areas north of Takla Lake — specifically Bear Lake and the Driftwood River — were important places for the First Nations peoples who were relocated to Takla Lake during the historic period (personal communication Michelle Lochhead). Given the prevalence and importance of salmon and other fish stocks throughout the study area, it is expected that at least some of these locations served as fishing stations. At Takla Lake, the destroyed rock markings were concentrated along the eastern shore of the main arm of the lake (Figure 131). This location would have made the markings visible to those traveling from Bear Lake (north of Takla Lake) via the Driftwood River to Takla Lake and beyond. The many reserve lands, trails and resources along the shoreline of Takla Lake would have brought people to the area for
a variety of reasons during the historic period and prior. The markings would have been visible to people moving along this water corridor (Figure 132).

Figure 131. Map of rock art locations and other archaeological sites at Takla Lake.
The spatial relationships between rock markings and settlement sites on Trembleur Lake are somewhat less defined than at Stuart Lake and Fraser Lake. This lack of definition is due to the wide distribution pattern of the markings on the shoreline. The majority of the markings on Trembleur Lake occur along the western end of the lake and are not spatially related to any identified fishing village locations (Figure 129). Additionally, the fishing village of Gelangle associated with Trembleur Lake is located on Middle River. Middle River leads directly to Trembleur Lake from Takla Lake, the terrain of which is low lying, flat land, devoid of rock surfaces. No rock markings occur along the banks of the river in the vicinity of the fishing village.
Only two sites occur within the vicinity of identified fishing village locations on Trembleur Lake (Figure 129). It is near the fishing village of Soyandostar that two rock art sites occur. These markings would have been visually available to individuals arriving and leaving the village, as well as to those traveling the water corridor from the northern tip of Takla Lake, through Middle River and along the eastern shoreline of Trembleur Lake. A significant portion of the rock art in the study area falls along this water corridor, which continues past Trembleur Lake through the Tache River to Stuart Lake and beyond; someone traveling the length of which, or even a portion of, would potentially be exposed to an abundance of rock markings – this water corridor would have been a lucrative area for communication (Figure 132).

**Landscape Context**

*Routes represent customary patterns of movement, shaping experiences over time as different layers of meaning are added to the surrounding landscape.*  [Snead 2002:757]

The landscape context of the pictographs indicates that the preferred setting for rock markings was along the shorelines of major lakes that figured significantly in terms of salmon migration and production. In addition to the movement of salmon, these lakes and their river tributaries also provided people with travel routes through the landscape. These waterways enabled people to access important fishing, hunting and gathering areas and to maintain social connections and engage in trade across the study area and beyond.

At these lakes, the markings occur on prominent rock surfaces with close proximity to the shore (Figure 133). The rock panels that bear markings are almost explicitly oriented toward the water – the exception being three sites on Stuart Lake that indicate an inland orientation. These prominent outcroppings exhibit a considerable visual presence in relation to people traveling through the landscape via the waterways. These water corridors structured a pattern of movement where the prominent cliff faces together with the markings would have acted as landmarks, guiding and orienting people as they traveled the waterways (Figure 134).
The permanence of the water corridors and the longevity of the rock markings ensured the movement of people and information over generations. Through repeated use and with the passage of time, these corridors would have become “fixed routes” through the landscape where information was produced, stored and retrieved via the rock paintings; transforming the individual panels into a rich palimpsest of traditional knowledge and cultural expression. The route itself shaped the experience of travelers and meanings embedded in the route accrued through time based on this experience (Figure 135). In addition to the meanings of the symbols contained within the paintings, the presence of the rock art, including the addition of new paintings at various places over time along the way, would have enhanced and altered the significance of the route (Figure 136).

The general pattern of land use in the study area involves networks of short term occupation / use sites. Most of the known archaeological sites in the study area occur with concentration along the shores of lakes and rivers, many of which were
repeatedly used over time (Table 47). The rock art, with its similar pattern of site concentration and waterscape distribution, is integrated within this broader general pattern of land use. The rock art is most distinctly integrated within the system of movement and travel – primarily via water routes, and in a few cases at Stuart Lake via shoreline foot paths – that was part of the overall land use pattern.

The natural features and resources of the study area, along with established social protocols were factors in how people decided where and when to move and inhabit the landscape. Systems of movement and settlement in First Nations society were entwined with one another. Movement through the landscape was essential to the exploitation of seasonal resources and the maintenance of social relationships. Systems of settlement corresponded to this movement, which was by necessity, semi-permanent and repetitive in nature. The rock art is entwined in these patterns of mobility and settlement.

The importance of salmon in First Nations society suggests the lakes and rivers known to contain this important food resource would have frequently been used by
the majority of society members. This type of use would have occurred with the greatest intensity during the spawning months in late summer and early fall; but the waterways would have also facilitated movement for other purposes throughout the remainder of the year.

Figure 135. Rock outcropping at Fraser Lake with painted panel, edited image.

This insight, together with the prevalence of water travel in First Nations societies for activities including and exceeding salmon fishing indicates that the rock art was incorporated within the ordinary economic, mobility and social spheres where it was integrated with the most important food resource – salmon. At Stuart Lake and Fraser Lake the rock art was also integrated with the most economically important places in the landscape – salmon fishing stations; indicating the rock art was not separate from the regular routines of landscape use, it was part of the ensemble of human action and activity that regularly took place.

The landscape and taskscape context of the rock art indicates that the activities associated with the production and use of the markings occurred within areas of public usage of the landscape, where the rock art was positioned so as to communicate effectively to a variety of people traveling through the water corridors. Even if the activities that occurred as part of the production of the markings were ritualistic or
spiritual in nature, these activities were not spatially segregated from the ordinary sphere of public activity.

![Figure 136. Cliff face at Trembleur Lake with painted panels, edited image.](image)

**Audiences**

The landscape context of the rock art provides clues regarding the audience (cf. Bradley 2000, 2002; Cannon and Ricks 2007; and Shock 2007). Even though “we cannot specify the exact composition of the group to whom that information was addressed, we can say something about the likely character [of the audience] by considering where those messages were located in the landscape” (Bradley 1997:9). The location of the rock art in terms of the broader surrounding landscape of the study area has been discussed in this chapter as being a part of the ordinary sphere of landscape use. This location is indicative of a public rather than private placement. The water location and orientation for the majority of the markings, at the most fundamental level, indicates that the audience was comprised of those individuals and / or groups who
were mobile and moving through the landscape via the water. The few inland oriented markings indicate that to a lesser degree, people moving over shoreline foot paths were also part of the audience.

Given the high degree of mobility in First Nations societies and the existence of social protocols governing land and resource use, it is expected that the local population occupying the study area was the primary intended audience for the rock markings. The elders participating in the interviews indicated that people in the past used the markings to communicate with one another and that much of the content referred to the activity and location of people and animals out on the landscape. The elders indicated that the intended audience had the necessary knowledge of the markings and the landscape in order to interpret the message within the paintings and to know where to find the people or animals referred to in that message.

It would have been the people with an intimate knowledge of the local landscape that could have encoded and interpreted this traditional ecological knowledge within the message-paintings. The people with this intimate knowledge were the ones entrenched in the local landscape as part of their daily lives; and they were the ones to whom the paintings were a reservoir of knowledge to be actively used and shared, to be “employed socially” (cf. Jones, A. 2003: 334-335).

The messages encoded in and expressed by the motifs communicated to the audience(s) with varying temporality. There is the short-term message that communicated action and direction, and may even have been pressing in terms of how soon the audience(s) should react; the medium-term message that identified a particular community or clan and expressed a relationship to the landscape and to the rock art; and the long-term message that acted as a mechanism for intergenerational teaching and learning about the resources and the landscape.

The potential for long-distance travel offered by the water conduits through the study area also indicate that people from “outside groups” were also potentially exposed to the markings. The spatial correlation of the rock art sites with salmon fishing stations at Stuart Lake and Fraser Lake and the fact that people from distant villages traded and bartered during times of salmon failure, further supports the notion that different people from different areas were also exposed to the markings. People from “outside” the social realm of the markings would not necessarily have
possessed the knowledge to interpret the markings and to understand the places in the landscape being referred to by the symbols, but they would have been exposed to the paintings nonetheless. Even though the adversaries whom the totem-paintings targeted could have been from within the local clans, people coming in from “outside” to trade and barter for fish; and to maintain and generate social ties may also have been viable targets for the totem-paintings.

As part of this consideration of the audience, it is important to look at the time depth of human presence in the region of the study area and to contemplate the potential age of the rock markings. It is these concepts that are examined in greater detail in the next section.

**Human Presence and Rock Art Temporality**

Human presence within the surrounding region of the study area was until recently thought to have begun approximately 4,000 years ago (King 2009:10). Excavations conducted in 2008 on the upper banks of the Fraser River in the city of Prince George, however have significantly altered this understanding. Prince George is approximately 160 kilometres or 100 miles east of the study area. Radiocarbon analysis from this site has yielded dates approaching 10,000 years B.P. (Craig and Jackman 2009:24). These dates correlate with de-glaciation that occurred 11,500 years B.P. and the establishment of climatically stable conditions and habitable land in the region by ca. 10,000 years B.P. (Fladmark 1982, 1983). Environmentally speaking, the present-day forest patterns may have been established as early as ca. 9,000 B.P. (Craig and Jackman 2009:20) and drainage channels throughout the study area are believed to have been established by ca. 5,000 B.P. (Fladmark 1982, 1983). Archaeological sites in the study area are dominated by pre-contact components and some demonstrate repeated use through time (Table 47).
Table 47. Chronology of other archaeological sites in the study area.

Whereas the overall chronology for the study area is significantly established, the temporality of the rock art is less understood. This lack of chronology applies to virtually all of the rock art in the province and is attributed to the difficulties associated with dating paintings and carvings, as well as, the minimal role rock art has generally played in British Columbia archaeology. Dating has been, and continues to be a central issue in rock art research because unlike other archaeological materials rock markings, painted or otherwise rarely occur in dated or dateable contexts (Bednarik 2001; Chippindale and Nash 2004a; Keyser 2001). Much effort has been spent by researchers around the world developing and testing suitable dating methods for rock markings and these efforts have been met with varying degrees of success (cf. Aubrey et al. 2007; Whitley 2013).

Chemical analyses yielding relative or absolute dates were not conducted as part of this research for three important reasons. First, uranium-thorium dating techniques provide the opportunity to determine the temporality of calcium carbonate deposits laid over or under pigment, thereby indicating a minimum age for pictographs. Because uranium-series dating is best suited for extremely old deposits (3000+ years), it is unlikely that the rock art in the study area is old enough for this dating technique to be successful, despite the prevalence of calcium carbonate deposits at many of the sites (cf. Aubrey et al. 2007; personal communication Dr. Jago Cooper).
Second, issues relating to the amount of available carbon and the inability to pre-treat and remove contamination within the pigment samples, significantly diminishes the possibility of acquiring a reliable date through radiometric methods (Appendix R and Appendix S). And finally, the cultural sensitivity of the rock markings prevents systematic sampling beyond the collection of serendipitously exfoliating pieces of rock. Given the issues with obtaining reliable dates from pigment samples, there would be no purpose, at this time, to continue sampling.

However, some information regarding the potential relative dating of the markings does exist in the ethnographic literature and reports for the study area. Even though this information is scant at best, it is important to consider it here and identify what can be determined about the age of the markings, without formal chemical analyses.

One of the earliest records of the rock art in the study is found in the journals of George M. Dawson, geologist for the Geological Survey of Canada. Dawson visited two rock art sites on Fraser Lake in 1876 (Cole and Lockner 1989:263). In his description of the rock markings at one of these sites he recorded comments made by the local First Nations people who were acting as his guides. These First Nations people referred to the markings as having been created by the Akulty Siwashes, which is identified by the editors, as a Chinook Jargon term that refers to “Indians a long time ago” (Cole and Lockner 1989:264) – it is as though Dawson’s informants were suggesting that the production of rock paintings had already ceased by this time (Cole and Lockner 1989:264). Dawson does not make reference to an ongoing rock art practice.

At Takla Lake, Madeline French identified her grandfather as the producer of the rock markings that were investigated and destroyed in 1971 (McMurdo, J. 1972:107). Given an approximate age of 70 at the time she was interviewed, it is possible that her grandfather produced the marking in the mid to late 1800s. No additional ethno-historical information regarding the age of the Takla Lake markings has been uncovered during this research.

In 1893, Father Morice gathered information from First Nations people regarding one of the painted panels on Stuart Lake (Figure 137). Although the local First Nations people were able to identify much of the subject matter depicted in the
markings, they were not always in agreement about the interpretation of the images (Morice 1893:207). At this time, Morice indicated that the markings were considered to be “very old” and that some of the rock inscriptions were no longer intelligible to the First Nations people, suggesting that the practice of painting was beginning to cease or that it had already come to an end by this time (Morice 1893:207, 209, 210).

It is difficult to determine with certainty if rock art production had ceased by the time Morice and Dawson made these recordings. Morice’s sketch of the painted panel on Stuart Lake is intricate and detailed, but it does not include all elements that are visible today (Figure 138). Given Morice’s propensity for intricate sketches and hand-drawn detailed maps throughout his writing career, it is unlikely he missed elements on the painted panel. Perhaps this indicates a continuation of the painting tradition after Morice’s recording in 1893; which further suggests an early contact period for the creation for some of the markings on this panel. It is however; equally plausible that the lighting conditions under which Morice viewed the panel prevented some of the details from being visible. Second, although Morice provides information about the production of a totem-painting at this site it is difficult to determine if the painter was Morice’s contemporary or if he was making general inferences about the painter who had acted in the past, distant or otherwise (Morice 1893:207),

*It is to be seen about half way between this place, Stuart’s Lake or Na’kraztli (Nak’azdli) and Pintce (Pinche), the nearest village by water. By painting in such a conspicuous place the totem which had been the object of his dream, the Pintce Indian meant to protect himself against any inhabitant of Na’kraztli, as the intimate connection between himself and his totem could not fail, he believed, to reveal by an infallible presentment the coming of any person who had passed along the rock adorned with the image of his totem.*
Figure 137. Rock markings at STLK 09 Panel 4 – edited image.

Figure 138. Father Morice’s sketch of a painted panel at Stuart Lake, circa 1890. Illustration by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.
The tendency for First Nations people to report the markings as being from a distant time period also occurs into the 20th century. In 1929, it was reported by R. Watson, then editor of the Hudson’s Bay Company’s magazine, *The Beaver* that this same painted panel “dated back farther than the oldest Indian at that time could remember” (Corner 1968:115). Of course it depends on when “the oldest Indian” was born, but it is likely that an elder in 1929 may have been born in the mid to late 1800s, again positing the production and knowledge of the markings sometime prior to the arrival of Europeans.

All of the rock art sites in the study area that are documented in the provincial archaeology database are reported to be from the pre-contact era. This pre-contact claim is supported by the remarks reviewed here that were made in the mid to late 19th century indicating the perceived antiquity of the markings and the occasional loss of fluency in understanding the imagery. But, given the extent of human presence in the study area and surrounding region, the pre-contact era is substantially long and it is still unknown how far back in time the markings were produced.

Dawson comments briefly about the condition of the markings he saw on Fraser Lake and says that “neither of them [are] at all clear... one faintly shows as opposite, red pigment on a whitish stain on the rock” (Cole and Lockner 1989:263). Here, Dawson is referring to the calcium carbonate that appears across this panel and to the faded appearance of the markings (Figure 139). Dawson’s comments regarding the taphonomic processes visible in 1876 that were affecting this painting also indicates a potential distant time depth for the production of the markings, but this remains uncertain.
Rock art survival, according to Josephine Flood, is “an accident of taphonomy” (Flood 1996: 9). Rock paintings undergo a variety of selection processes that favour certain conditions (Bednarik 1994:70; 2001: 111-137). Pigment colours change and deteriorate with the passage of time, solar and weather exposure, and moisture levels among other natural and cultural forces (Bednarik 2001: 133-137; Whitley 2005). The longevity of rock paintings is also dependent on the ability of the pigment to adhere to the rock surface. As a result, pigment survival in rock art varies significantly and is dependent on the composition of the pigment and the environmental conditions surrounding the rock surface.

Ochre pigments have an outstanding ability to penetrate porous rock surfaces and to physically bond into a stabilizing agent such as silica skins (Bednarik 1994:71). Bednarik has noted that “the observation that the oldest open-air paintings in a region are always a specific hue of dark-red... is almost certainly a product of taphonomic process” and that it is by no coincidence that the “most stable of the iron minerals, such as haematite, are of that colour” (1994:70).

The paintings in the study are all red in colour and X-ray Fluorescence scanning of three pigment samples, one from Stuart Lake and two from Trembleur Lake identifies increased levels of iron on the pigment side of the samples (Appendix G). The presence of iron on the pigment side of the samples and the obvious red colour of the
paintings indicates an ochre-based pigment was likely used. The remaining composition of the pigment remains unknown.

Elsewhere in the province, components such as fish eggs, blood, saliva, tree pitch/sap and bear grease have been identified as organic binders used in the preparation of pigment utilized for rock paintings (Corner 1968; Teit 1900; York et al. 1993). The organic binders used in the pigment for the study area are unknown, but it is possible that over time a variety of organic materials were utilized.

Even though ochre based pigments have the potential to survive for a substantial amount of time, it is unlikely that the paintings in the study area are thousands of years old. Although human presence in this landscape extends back into the distant past, the open air setting of the rock art sites and the dramatic changes in weather throughout the year would likely prevent an extensive timeframe of preservation (cf. Bednarik 2001; Whitley 2013). It is more reasonable to consider the markings to be several hundred years old, at most. It is only through adequate chemical analyses of pigment samples that absolute or relative dates for the paintings can be determined.

The most concrete information about the age of the markings in the study area is that at least some of the assemblage visible today was known to be in the landscape at the time Dawson visited Fraser Lake in 1876 and Morice recorded images at Stuart Lake in 1893. Accounts from First Nations people living at that time indicated that the production of the markings had occurred too far in the past for them to identify the painters. It is reasonable that the markings could have been created two or three generations prior – or longer, suggesting an approximate production time during the 1700s and forward, but again this date range is uncertain.

The first half of this chapter focused on the landscape setting of the rock art and how the placement of the markings at the water’s edge on visibly dominant cliff faces, oriented toward the water, coupled with the prevalence of water travel in First Nations societies indicate the rock art was intentionally exposed to water travelers. The few inland sites on Stuart Lake located adjacent to nearby foot paths also indicate the paintings were visibly available to land travelers. These characteristics together with the integration of the markings with the local system of movement and with salmon which was one of the most important food resources in the landscape,
demonstrates the rock art occupied a central rather than peripheral location within society. The highly mobile lifestyle of First Nations peoples historically and prior indicate the places chosen for rock markings were likely high traffic areas and afforded the necessary exposure required for the functionality of the markings.

In the remainder of this chapter, the communicative aspects of the rock art are examined. The repetition of symbol use throughout the study area and the consistencies within the design of the markings are discussed. The way in which meaning is carried through this system of communication is considered and the manner in which how such seemingly simple markings can communicate detailed information is contemplated.

Communication

*What makes communication possible, so the story goes, is a common language.* [Sperber 1995:191]

Although there are no documented accounts of people successfully communicating via the rock paintings, there is historical evidence of the extent to which First Nations people in the study area effectively communicated with one another through encoded messages strategically placed in the landscape. The first example of this effectiveness was recorded in 1876 at Fraser Lake by George Mercer Dawson (Cole and Lockner 1989). In October of that year, Dawson hired a Dakelh man to guide him from Fraser Lake to Francois Lake, where Dawson recorded this experience,

*Where stopped for lunch, found an old canoe drawn up, & near it, tied to a piece of bark-string & depending from a pole, a bundle of weeds, about 9 inches long, neatly folded together, & a piece of spruce bark, on the inner side of which roughly drawn a figure… Could not quite understand the Indians explanation of these signs, but appears that the Indian owning the canoe left it here, & not having returned, or been seen for a long time, is supposed to be dead. These signs put up by some of his friends to make this known* (Figure 140).
The second example of this efficiency was documented by Father Morice while at Stuart Lake (Morice 1893:210),

I was traveling in the forest at a time when the yearly reappearance of the salmon was eagerly looked for. At a certain spot not very far from a stream we came upon one of those aboriginal drawings made by an old man who had no knowledge of the syllabic signs now used to write the Dëne languages. The drawing represented a man with a woman, a horse with a burden, the emblem of a bear with three marks underneath, and a caribou. Above the whole and hanging form a broken branch were four pieces of young bark cut out in the conventional form of the fish. Now the message was instantly read by my companions, and it ran thus: “Such a one (whom they named) has passed here with his wife, and a good load of furs, after having killed three bears and one caribou; and furthermore he captured four salmon two days ago. He is now gone in that direction that we follow ourselves.” This date could evidently not have been told had the Indian not marked with charcoal the sign of the salmon. He was so well aware of this and was so much intent upon fixing the time of the first appearance of the fish that he had had recourse to the pieces of bark, the relative degree of freshness of which he knew could easily be determined by the experienced eye of his fellow [Dakelh].

The intricate level to which Dakelh people communicated graphically is further demonstrated by the symbols in Figure 141 that were typically drawn onto trees with
charcoal (Morice 1893:210-211). Morice describes the use of these charcoal symbols and the creation of message trees (D.L.S. 1930:93),

*Thenceforth the traveller through the northern forest of British Columbia could not help noticing that there had come into the country some artificial way of rendering one’s thoughts which was beyond him. The Indian would tear off part of the bark of a tree trunk, or blaze it with his axe, and, with one of those pieces of charcoal ... would write on the bared wood such information, message or appeal as he wished, which would afterwards be deciphered by the future passerby.*

![Diagram of hunting communication symbols](image)

Figure 141. Dakelh hunting communication symbols identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.

Additionally, people used tree branches which were cut, secured into the ground and then modified in order to impart a message (Figure 142). These messages were located at prominent places along forest paths (Morice 1893:210). This type of graphic communication was used in conjunction with the hunter’s symbols discussed above (Morice 1893:210-211). This mode of communication and the detailed information that could be passed on in this manner is illustrated in Figure 142.
During Father Morice’s (1890) residency at Stuart Lake (1885-1904), he adapted Cree syllabics for the Dakelh language and introduced this phonetic-based writing system into the study area. These symbols were initially used by Morice for translating hymns and prayers, as well as, circulating a Dakelh newspaper (cf. Moise and O’Hara 1992). The Dakelh syllabics and other versions of the symbols were widely used by First Nations peoples in the study area and beyond for written documentation such as letters, diaries and tombstones (Hall 1992; Yinka Dene Language Institute n.d.). Additionally, the First Nations people in the study area used the syllabics in the construction of message-trees.

In 1993, a message tree was located in Nadleh Whut’en territory and due to perilous conditions it was re-located to the University of Northern British Columbia for safekeeping (Figure 143). This message-tree is depicted in Figure 143 below and is another example of how First Nations people in the study area used graphic symbols to communicate tremendous amounts of information. The plaque on the display case indicates the inscription on the tree was translated from syllabics into Dakelh as:

<table>
<thead>
<tr>
<th></th>
<th>A. an unmodified branch</th>
<th>B. “we are going to camp a short distance off. You need not be in a hurry.”</th>
<th>C. “we are going to camp a long distance from here; hurry up!”</th>
<th>D. “we have turned back a while, but finally gone on.”</th>
<th>E. “a burnt rag hanging from a bent down rod; it is the signal of famine and an appeal for help, the direction of the stick always points to the trail of the distressed party.”</th>
<th>F. “a small bunch of dry grass wherein a small rod has been driven as an indication that a member of the band has been shot.”</th>
<th>G. “a short stick is found hanging across the trail...everybody will understand that a person in the preceding party has come to his death from natural causes.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>142</td>
<td>Dakelh communication signs identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and then into English as:

\[
\begin{align*}
zi &\text{ hooni} \\
Pierre &\
hadi &\text{ ni} \\
Antoine; &
\end{align*}
\]

\[
\begin{align*}
\text{there is a body} \\
Pierre &\
\text{hello I am saying this} \\
Antoine &
\end{align*}
\]

**Repetition and Consistency**

The communicative nature of the rock markings was initially identified in Chapter Five, during the interviews with First Nations elders and it was apparent in the ethno-historical literature discussed in the same chapter. It was through First Nations traditional knowledge – contemporary and historical – that two distinct types of pictographs were recognized: message-paintings and totem-paintings. Even though the functionality of these two types of markings differed, they both worked to communicate and pass on information. In the case of the message-paintings, information was communicated to the audience, whereas the totem-paintings communicated information telepathically back to the painter.
Message-paintings enabled communication relating to every-day economic, social and subsistence related activities and issues – such as, important animal sightings, the commemoration of events, as well as, the activity and location of the painter out on the land, including incidents that happened during hunting or fishing trips. While message-paintings functioned to facilitate communication between people who were skilled at “reading and writing” the motifs, the totem-paintings were an expression of the painter’s ability to tap into the power of their personal totem. Through the painted image of that totem, strategically placed within the landscape, the painter ensured protection in the form of advanced warning regarding approaching adversaries (Moric 1893: 203, 207). Message-paintings and totem-paintings are further discussed in Chapter Eight.

In addition to the theme of movement, communication was also used in the previous chapter as an analytical theme. There the markings were considered at the spatial scale of motif, where a typology was generated and the stylistic attributes of the markings were identified and examined in detail. The analysis conducted in the previous chapter identified patterns of repeated symbol use across the study area. The identification of patterns within the rock art motifs is the second key result of the analysis in this research. Because patterns of repeated use are essential for communication, it is therefore important to further examine the potential of the markings to carry and transmit information.

The patterns of repetition within the rock art imagery that were identified during the analysis indicated not only the repeated use of single symbols, but also the repeated use of combinations of symbols – at the levels of two and three variables. Two-variable co-occurrences were noted for the fish and the beaver/otter symbols with the vertical arch; and three-variable co-occurrences of the human figure with the circle and paw print symbols, and the land animal with the circle and the finger mark symbols were identified. These patterns were shown to occur at each of the four lakes bearing rock markings, and the patterns were also shown to exist between lakes. Multiple examples of patterning within a body of symbols, such as those evident in the rock art assemblage, are what imply that a shared meaning and understanding existed (Dibble 1989:330; Whitely 2005:80). It is this repetition and the deliberate and intentional use of the symbols that strongly indicates the rock markings carried
information that was collectively discernable to the people engaged in the production and use of the rock paintings across the study area.

The overall manner in which the motifs were designed is consistent across the study area. There is a tendency exhibited throughout the assemblage to render objects / subject matter with simple efficient straight and curved lines. For the elements characterised within the typology as “figurative,” the subject matter has been reduced to these efficient lines where the principal characteristics of the object have been retained. Although almost all of the rock art motifs bear this reduced appearance; the fish symbol is a prime example of this reduction, where along with the recognition of the fish’s body, the tail, gills and fins have been maintained and are represented by simple straight lines (Figure 144). Elements within the “non-figurative” category also exhibit this same design, but because the subject matter remains unidentified for these elements it is difficult to acknowledge the retention of key characteristics or to see the ways in which the object has been reduced. It is expected that a similar tendency to reduce the overall shape and maintain key characteristics also exists for at least some of the symbols in this class of elements.

![Figure 144. Photograph of fish symbol at Stuart Lake - edited image – (right) with illustration of fish tattoo symbol (left) produced by Morice (1893). Illustration reproduced with permission from Early Canadiana Online, produced by Canadian.org. CIHM 15679.](image)

These simple efficient lines were well suited for rock art production in that they would have been easy to produce on shoreline rock surfaces. With paint prepared ahead of time, the production of rock markings could have been completed in a timely and efficient manner. The use of uncomplicated designs is effective in terms of rock art
production, but not necessarily so in terms of use. Whereas symbols of a more elaborate and naturalistic design are readily interpreted by a general audience, symbolic forms such as the fish and beaver/otter markings require more interpretation. Although the meanings and proper uses of naturalistic and stylized images would have been taught, interpretation of highly symbolic elements would have required more understanding of the overall system of communication (Bradley 2000:70). With proper insight however, the markings in the study area would have been unproblematic to interpret from within a specific social network.

Garrod et al. (2007) have successfully argued that illustrative representations of real-life objects morph into symbolic forms through repetition of use and social interaction. This process enables the use of increasingly uncomplicated designs that are simple to produce and interpret by individuals from within a social sphere (Galantucci and Garrod 2012:8; Garrod et al. 2007: 964; Munn 1986), but when the same symbols are viewed from outside that social context, it is much more difficult to identify the concepts and objects being signified (Tomasello 2008:8). The communicative success of the use of symbolic forms, like the rock art imagery discussed here, rather than detailed naturalistic illustrations, reflect[s] conceptual pacts established between the communicators through an interactive [social] grounding process ... although conceptual pacts lead to descriptions that are simpler than their precursors, as happens in the evolution of graphical signs, such descriptions are no more symbolic than their precursors (Galantucci and Garrod 2012:8).

Detailed graphic signs, such as icons resemble the objects they represent because they have maintained “the look” of that object; whereas, symbols relate arbitrarily to the objects they represent and they are the result of convention (Garrod et al. 2007:964). Icons are understood to carry information in their structure, however information in symbols “resides in the users’ knowledge of previous use of the symbol... hence, symbols can be graphically simpler than icons” (Garrod et al. 2007:964-965). The signs in Figure 145 illustrate a modern example of an evolution from detailed icons to simple symbols that are the result of social pacts between participants in a communication game. This communication game represents an example of sign evolution with a dramatic speed of change, because change in sign
morphology was the focus of the game. Outside of this game, systems of signs would not normally evolve this quickly.

![Figure 145](image)

Figure 145. An evolution of signs of a computer and monitor within a closed social network, originally produced by Garrod et al. 2007.

Interpreting the final symbol in Block 6 of Figure 145 as a representation of the computer system depicted in Block 1 is possible once the evolution of the sign, as illustrated in this figure, is known. Similarly, the fish symbol (and the other rock art motifs) within the rock art assemblage can be interpreted, once its “evolution” is known – this is achieved through the identification of the retention of its tail, gills and fins which allows us to see how it represents a fish;\(^{14}\) just as we are able to see how the arching line in Block 6 represents a computer system. The importance of fish in First Nations societies, as discussed in the previous two chapters, indicates the level of familiarity people had with this particular food resource; perhaps the stylized and simplified form of the fish symbol indicates it is a sign, like its real world counterpart, that has been in use for a long period of time.

Having the opportunity to see the icon for the computer system evolve into its symbolic form through this example, essential posits the reader within the interactive social sphere of its creation. All the time the reader remains outside this sphere – or

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\(^{14}\) The fish symbol was interpreted in this research through ethno-historical information discussed during the analysis chapter, based on 19\(^{th}\) century First Nations interpretations to Father Morice at Stuart Lake.
unable to see Block1 through to Block 5 – they are unable to interpret the computer in its symbolic form in Block 6; just as it is not possible to interpret the fish symbol in the rock art assemblage without the insight provided by the interpretation. But, once it is known what the symbol represents, it becomes easy to see or interpret; as would happen with the other symbols in the rock art assemblage. Galantucci and Garrod (2012:983) have identified that once signs change from detailed icons to simple symbols, like those in Figure 145 and the rock art symbols in the study area, the location of information changes from within the sign to the users’ memory.

Carrying Meaning and Affecting Movement

Seemingly mundane objects of everyday use and “simple” technologies of production are for more complex than their materiality might suggest. [Dobres 2000:108]

Knowledge of the interpretation of the system of rock art symbols used across the study area would have been fixed in memory and based on experience not only with the symbols, but also the landscape. Communication via the rock markings was equally dependent on the placement of the markings in the landscape as it was on the choice of painted symbols. Knowledge of the landscape, resulting from experience, together with memory and understanding of the interpretations of the symbols comprised the technology of rock art production and use (cf. Ridington 1988:107) – and it is this complex technology that afforded fluency for the painters and audiences. Location was not only important in terms of the placement of the rock markings along the lakeshores, but at times it would have formed an important part of the message contained within the paintings. First Nations elders participating in the interviews indicated that the rock markings contained locational information, such as the whereabouts and activities of the painters; the location of game trails and hunting territories; and the location of important animal sightings (see Chapter Five). Ethno-historical information also indicated a locational component within the rock markings, specifically information about people passing by painted totems. Information was communicated, in part by the locations chosen for the paintings and in part by the content of the markings.
For the message-paintings, functionality was dependant on content and location, as well as, a shared understanding of that content, between the painters and the audiences. Without this common understanding, the paintings would have been illegible to the audience. The placement of the markings was equally important because a “mis-placed” message-painting, just like a “mis-constructed” symbol would be ineffective for communication.

Memory and knowledge of the interpretation of the symbols used to construct the message-paintings would have been essential to the success of this type of marking; whereas the totem-paintings would not have had this same requirement. Message-paintings needed to be constructed so the audience could infer the meanings of the message, while totem-paintings were not reliant on the audience’s understanding of the symbols, just their presence within the “range” of the painting. Totem-paintings could be elaborate and specific to the needs and vision of the painter.

Message-paintings indicating the location of hunting regions, game trails and animal sightings would have functioned to alert the audience of these locations, thereby enabling them to pursue a route through the landscape specific to their needs. Message-paintings would have also identified areas and territories that were off limits to those who lacked the necessary rights, perhaps causing them to choose an alternate route.

Totem-paintings also communicated locational information, but in a manner significantly different to the message-paintings. Rather than provide information to the audience – as with the message-paintings – totem-paintings communicated back to the painter and alerted her/him to the location of adversaries as they passed by the painted totem image. Individuals aware of the power and presence of totem-paintings and with good reason to be wary of this type of marking would perhaps avoid areas known to be heavily populated by pictographs and compensate by opting for alternate travel routes.

Totem-paintings were also reliant on placement. Sites chosen for these types of markings were necessarily strategically located in the landscape so as to be informative, to the painter, regarding the whereabouts of rivals and passersby. Dreams, as discussed in Chapter Five, provided the content of the totem-paintings and the painter’s knowledge of the landscape and the movements of people through that
landscape provided the necessary insight as to where to place the markings. The painters and the audiences did not need to have a shared understanding of this type of image, as with the message-paintings. The success of the totem-paintings was dependant on the relationship between the painter and their totem,

*It was while dreaming that they pretended to communicate with the supernatural world, that their shamans were invested with their wonderful power over nature, and that every individual was assigned his particular natural or tutelary animal-genius. Oftentimes they painted this genius with vermilion on prominent rocks in the most frequented places, and these rough inscriptions are about the only monuments the immediate ancestors of the present Denès (Dakelh) have left us* (Morice 1889:161).

For both types of paintings, information was transmitted through the markings and people would have responded to the messages they received in order to structure their activities and movement through the landscape. The important details communicated and transmitted by the markings not only reflected movement, but also affected movement. This system of graphic communication, comprised by a variety of encoded messages documented at particular places in the landscape, resided outside the every day spoken word and although these symbols did not replicate speech, grammar or language as such, these markings did communicate thoughts and knowledge with the same effectiveness as a system of writing communicates ideas and issues.

The graphic images drawn onto trees and crafted from bark and bent sticks that were discussed at the beginning of this section, contained a tremendous amount of detailed information regarding the movement and activities of people out in the landscape. Through these symbols people would have “envision[ed] information” (Tufte 1990:33) and recalled details of the landscape and important places throughout the territory. The elders spoke of the rock art motifs as having this same capacity for communication and they recognized the ability of people long ago to glean a tremendous amount of information from a few simple markings. It was likely this practice of communicating detailed messages with symbols that enabled the Dakelh syllabics discussed earlier in this section, to be integrated into First Nations societies because people were already adept and well-practiced at using signs to encode messages throughout the landscape.
Discussion

The repeated use of symbols and the re-occurrence of combinations of symbols indicates that a shared knowledge of the underlying meanings of these symbols existed that was understood amongst the people engaged in the practice of rock art production and use in the study area (cf. Dibble 1989; Whitley 2005). The similarity, in terms of style, content and purpose, between the message-paintings discussed by elders during the interviews with other forms of graphic communication documented by Father Morice and George Dawson in the mid 19th century indicate that the paintings were an interrelated component of a broader graphic system of communication. This system of communication was embedded, in a variety of ways, in the landscape where movement, memory and experience played essential roles.

The topographic features of the landscape provided specific locales for the production and use of rock markings that were close to the water’s edge, but lacked the necessary spatial properties and terrain characteristics to host group activities. This dichotomy of opportunity and constraint, governed by human choice, worked to influence not only the placement of markings in the landscape, but also decisions about the social role of the markings where the needs for communication superseded the needs for group performance.

In an entirely different physical context the rock art could have taken on alternative social roles. However, in this particular landscape and cultural setting almost all of the sites chosen for markings were spatially limited in terms of their social functionality; consequently the rock markings were ideologically explicit in terms of their use. Despite the spatial limitations of the rock art sites, the markings were well placed to communicate information to those mobile members of society who frequented the waterways and footpaths of the study area.

The significance of the waterscape placement of the rock art is the exposure this location afforded. The prevalence of water travel in First Nations society and the presence of suitable rock surfaces along the shoreline of major water corridors made these places ideal for communication. Both the message-paintings and the totem-paintings were well placed to take full advantage of high traffic areas.

The fact that this system of communication was based on messages strategically placed in the landscape, parties to the communication efforts were not
affected by the typical physical and temporal limitations associated with communication that required people to be in the same place at the same time. The production and use of the rock markings was a social adaptation to a highly mobile lifestyle that enabled people to maintain long distance communication and ensure the formation and continuation of social networks and relationships. Through the practice of rock art production and use, connections between people and between people and landscape were established and maintained.

The communicative potential of the rock markings is demonstrated by the distribution of commonly occurring elements across the study area, as well as, through the employment of repeated co-occurrences of symbols and repetitive combinations of symbols. The repeated patterning evident in the assemblage of rock markings is indicative of meanings and interpretations that were collectively recognizable and agreed upon by the people utilizing this system of graphic communication.

The technology of rock art was complex where communication was achieved by a combination of elements. The painted symbols together with their placement in the landscape were jointly essential for communication; as was memory on behalf of the communicators regarding the interpretations of the symbols; and the mobility of the painters and the audiences through the landscape coupled with their knowledge and experience of that landscape, thereby demonstrating that “seemingly mundane objects of everyday use and “simple” technologies of production are far more complex than their materiality might suggest” (Dobres 2000:108).

The context in which the message-paintings were created and used was directly connected to the day to day activities in which everyone participated. Painting the rocks with messages was a common practice that was likely available to the general population when needed. The totem-paintings however, were more than likely only available to a few select members of society. Unlike the message-paintings, the production and use of these totem-paintings was dependant on a level of power and ability vested in only a few members of society.

Even though the message-paintings and the totem-paintings differ significantly in terms of their functionality, in both cases the purpose of the markings and their communicative ability could only come to fruition through the movement of the audience through the landscape. The role movement played in this system of
communication was paramount. Regular human movement through the landscape is what made the rock markings, and the other forms of graphic communication discussed here, effective as well as necessary. Memory of the interpretation of the symbols and knowledge of the landscape were essential for both the production and use of the rock art. The location and the imagery contained within the markings were equally important. Pictographs throughout the study area needed to not only be constructed with the appropriate symbols, they also needed to be appropriately located, and that location was the water’s edge.
Chapter Eight

LANDSCAPE AS DOCUMENT, THEN AND NOW

This research set out to answer some fundamental questions about British Columbia rock art and its significance in past First Nations societies, using the pictographs in Tl’azt’en and Nadleh Whut’en traditional territories and the markings at Takla Lake that were destroyed in 1971, as case studies. The primary research question focused on the location and the motifs of the rock art: what is the social significance of the placement and imagery of waterscape rock markings? Other objectives were to understand the meanings embedded in past landscapes through an investigation of rock art and to integrate informed and formal approaches into the practice of rock art archaeology; thereby addressing issues of marginality in terms of the position of rock art within British Columbia archaeology and the relationship between First Nations traditional knowledge and Western ways of knowing.

In this concluding chapter, the strengths and limitations of this research are assessed and avenues for future study are identified. The use of informed and formal research approaches is reflected upon and the findings of this study are discussed in the context of the primary research question and the broader concepts of continued meanings and cultural identity to which this study speaks. This chapter starts with a final discussion of the system of symbols used throughout the study area.

The Social Employment of Symbols

The rock markings in the study area have been identified in this thesis, as being part of a broader system of communication that included bodily and facial tattoos, as well as, charcoal-drawn signs used by hunters in the forest. Arguments advanced in this thesis, have focused on the communicative functionality of the message-paintings and the totem-paintings; but how do the symbols used on rock relate to symbols used on other media? In order to better understand this relation, the social employment of symbols is explored in this chapter. This section begins with a comparison of message-paintings and totem-paintings, including a consideration of the role of shaman in rock art production and use, followed by a discussion of symbols used on other media, such as, trees and the body.
Message-paintings and Totem-paintings

This research has demonstrated that the message-paintings were grounded in the “everyday” and directly associated with economic and subsistence pursuits, where communication between the painter and the audience was central to the functionality and purpose of this type of pictograph. Through these painted messages, people traveling through the landscape were able to communicate with one another in a detailed and specific manner. Painted messages were capable of indicating information essential for locating the painter, identifying the whereabouts of animals and other essential resources, recording and commemorating important events and requesting help when and where needed (see Chapter Five).

Conversely, totem-paintings were associated with the supernatural world and directly related to the painter’s experience and relationship with that world (Morice 1893: 203 and 207). It was through the painter’s bond with their personal totem – an animal that had been identified in dreams – and the adornment of a representation of that animal onto the rocks, that telepathic communication between painting and painter was enabled (Morice 1893: 203 and 207). This communication functioned primarily to alert the painter to rivals as they passed by the painted totem, thereby affording a level of protection for the painter in the form of advanced warning (Morice 1893: 203 and 207).

A dynamic relationship existed between the communication performed through paintings on the rock and mobility, imagery and location. For rock paintings, the presence and action of people in the landscape are what made the markings effective, as well as, necessary. It was during the action of traversing the landscape that message-paintings would be both incurred and encountered – mobility through the territories was essential for the production and use of this type of marking.

Totem-paintings shared a similar relationship with the movement of people negotiating the landscape: the painters of this type of pictograph tapped into the power of their totem to receive warning (communication) about the presence and action of rivals. Travel across the territories, via the water routes, by the painters and their audiences (in cases of the message-paintings) and by the painters and their adversaries (in cases of the totem-paintings) is what enabled communication to occur. Without this action and movement of people through the landscape, neither type of
painting would have been required or effective (see Chapter Seven).

High-traffic areas were lucrative places for the social employment of both types of rock markings. Such places offered the exposure needed to effectively communicate with the audience through message-paintings (see Chapter Six). The probability of successfully detecting rivals and adversaries would be enhanced by placing totem-paintings in areas with high traffic flow (see Chapter Six). For both types of markings, the painter’s knowledge of the landscape, as well as, of the patterns and movement of others was paramount for the production and use of rock paintings – without this knowledge and experience, paintings could potentially be “mis-placed” and ineffective for communication.

Just as mobility and location were essential components of rock art production and use, the motifs used to construct the rock paintings were equally important. Message-paintings needed to be composed so as to effectively express the painter’s message and that meant using symbols commonly understood by the painters and their audiences (see Chapter Six). Without this common understanding, message-paintings would be illegible to the audience. Whereas an accurate interpretation of the motifs was essential with message-paintings, it was not necessary with totem-paintings. The functionality of totem-paintings was based on the relationship the painter had with their totem and its perceived ability to identify and communicate the presence of the painter’s enemies that were “within range” of the totem-painting.

The motifs used to construct the totem-paintings were derived from dreams (Morice 1893: 203). Opportunity to obtain a guardian spirit or totem was available to individuals in society, but not all dreams resulted in the required “significant visitation from the animal world, but only a dream so vivid and intense that it printed itself indelibly on the memory” (Jenness 1943:542). Once obtained, this totem could be summoned at times of crisis (Jenness 1943:542). Historically, it is reported that at Fraser Lake most individuals were unsuccessful in the dreaming process and that only a few obtained a guardian spirit; it was these people that went on to be medicine men (Jenness 1943:542, 543). Whereas, at Stuart Lake “every youth obtained guardian spirits, but that only a few favored individuals, through dreams of a special character, apparently, acquired definite medicine power and ranked as medicine men” (Jenness 1943: 543). It was this guardian spirit that was painted “with vermillion on prominent
rocks in the most frequented places…” (Morice 1889:161).

Despite the differences between message-paintings and totem-paintings, both performed important communicative functions. Whereas message-paintings were connected to ordinary life and enabled practical communication between people, the totem-paintings were employed as extraordinary communicative devices by a selection of society members. Communication via totem-paintings was limited in terms of who could use this type of marking and specific to those individuals who had successfully acquired totems through dreaming.

This dynamic between the supernatural and natural worlds that was enabled through totem images was further exploited by shaman (Morice 1889:161). Shaman, believed to be endowed with the supernatural, would succumb to the power of their totems through physical exertion, such as, dancing and drumming in order to perform their services (Morice 1889: 157-161). Shaman were accredited with powers of controlling evil spirits, dealing with famine, preventing hostile weather and procuring favourable winds, “hastening the arrival of salmon and ensuring its abundance” and healing the sick (Morice 1889:157).

All individuals who obtained a totem, did so from “the same supernatural world that the shaman were invested with” (Morice 1889: 161), but it is likely, given the powers of the shaman, that they experienced a heightened relationship with their totem, compared to others who were not acclaimed medicine men. This heightened sensitivity would have made the communication through totem-paintings created by shaman, markedly potent.

**Communication Praxis and Other Symbols**

Message-paintings and totem-paintings were part of a socially derived graphic communication praxis that also included symbols in contexts other than rock. These symbols were used in Chapter Six to aid the development of a rock art typology: specifically, tattoo images and hunter’s signs. The message-paintings, as discussed by the informants participating in the interviews (see Chapter Five), share the same functionality as the hunter’s signs identified to Father Morice (1893: 206-211) by First Nations peoples from the Stuart Lake area, in the late 19th century. The rock markings, located during the archaeological survey in this research, exhibit similar characteristics
to the hunter’s signs – both types of symbols bear remarkable similarity to one another in terms of style and subject matter. Both the rock art symbols and the hunter’s signs were embedded within the ordinary sphere of economic activities; including hunting, fishing and trapping endeavours.

The location of hunter’s symbols, drawn onto trees, was as paramount as the places chosen for markings onto rock – location played an essential role in the accessibility and visibility of the markings and this is what ensured the audience could find the symbols on land and on the water (Figure 146). A shared understanding of the symbols used to compose these types of messages, whether on rock or on trees, was also essential for the audience to comprehend the message and respond accordingly. Messages left on rock and on trees enabled people, who were engaged in a highly mobile lifestyle, to maintain communication over distances and through time.

![Figure 146. Dakelh hunting communication symbols identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.](image)

Hunter’s signs were the land-based counterpart to waterscape message-paintings. These types of messages coincided with the system of footpaths and water routes that networked through the study area (British Columbia Archaeology Branch,
n.d.; Morice 1893, 1905, 1907). Messages on wood and on rock would have been composed from the same set of symbols and shared the same underlying patterns of construction, placement in the landscape and overall purpose. With the passage of time, messages drawn in charcoal onto trees incorporated the syllabic symbols developed by Father Morice at the turn of the 20th century (see Chapter Seven). No rock paintings in the study area exhibit syllabic symbols, perhaps indicating that the use of message-trees outlasted the use of message-paintings.

The acquisition of guardian spirits was not only documented onto rock in the form of totem-paintings, but also onto the body (Figure 147). Tattoos placed on forearms were typically representations of totem images; “the bearer of whose symbol was supposed to create a reciprocal sympathy and a sort of kinship between the totem and the tattooed individual” (Morice 1893: 182). Similarly, tattoos placed on the chest were depictions of totem images – “a much coveted tattoo was the grizzly bear, the marking of which cast many a ceremonial banquet and entitled the person thus honored to exceptional regard” (Morice 1893:182).

Figure 147. Dakelh bodily tattoos identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadiana.org. CIHM 15679.

The ability of shaman to access the power of their totem was extended to media beyond rock and the body. Shaman would carve or paint the images of their totems onto snowshoes or arrows to “ensure success in the chase” (Jenness 1943:564). Additionally, shaman wore a necklet made of bone or skin, adorned with a depiction of their totem (Jenness 1943:560, 564). This necklet, in addition to other paraphernalia, was an essential healing tool. Once in a healing trance, the shaman would declare, himself to have fallen under the control of his familiar genius. Therefore, pointing its image (fish, bird, mammal etc.) in the direction of the patient he would dance towards him and drop on his head his spirit’s representative which (eye witnesses assure me) would at once fade away. Then sucking that part of the body which most ached, he
would take out of his mouth either a thorn, a bug, a toad, etc., which he would exhibit as the cause of the complaint. Then, after a momentary recess from the patient he would dance back to him and lo! the image of his genius would come back of itself to his outstretched arms and the patient would shortly feel all right (Morice 1889:158).

Representations of totems enabled communication with the supernatural world that in turn provided the bearer/painter insight, protection and guidance. This ability was not limited to the media of rock, but included portable objects and the body. Totem-paintings and totem-tattoos were important components of the shaman’s accoutrements and were composed of the same symbol – that particular shaman’s totem. The symbols used to represent totems were drawn from the overall corpus of symbols available in society (Morice 1893: 209).

Slight differences are noticeable between the bodily tattoos and facial tattoos illustrated by Morice (1893: 209); where tattoos placed on the body, which may indicate totem-tattoos, appear slightly larger and with more detail than those utilized in facial tattoos (Figure 147 and Figure 149). The style and shape of bodily tattoos are reminiscent of the silhouette-type of pictograph noted in the rock assemblage throughout the study area, where the subject matter was drawn with an internal space that was filled in with pigment, rather than by the straight or curved lines as with the outline-type of pictograph (see Chapter Five).
Tattoos occurring elsewhere on the body were constructed by symbols other than totem images. Facial tattoos consisted of lines radiating out from the corners of the mouth; on the forehead; chin and occasionally the temples – “face tattooing had nothing to do with the totem crest, personal or gentile, of the bearer” (Morice 1893:182) (Figure 148). Figures used in facial tattoos typically consisted of birds, fish or animals and were not derived from dreams (Figure 149). These types of facial tattoos are remarkably similar to symbols used in rock paintings throughout the study area; particularly the outline-type motifs (see Chapter Six and Appendix L).

Facial painting, in addition to permanent marking, consisted of alternating red and black lines where “personal taste and fancy were the only rules followed” (Morice 1893:183). Tattoos on arms and legs consisted of one or two angular lines, placed on the forearm or above the ankle to prevent premature weakness of the limbs (Morice 1893:182). Facial tattoos were more varied in terms of symbols used than totem-tattoos that were limited to representations of totem animals. Arm and leg tattoos were strategically placed for health reasons and limited in terms of the number of symbols available for this purpose.
Figure 149. Dakelh facial tattoos identified by First Nations people in the Stuart Lake area, circa 1890. Produced by Morice (1893). Reproduced with permission from Early Canadiana Online, produced by Canadia.org. CIHM 15679.

Discussion

Rocks, trees and the body were all forms of social media through which people employed graphic symbols to communicate in significant and specific ways. The symbols used for rock paintings, tree-messages and tattoos originated from within the same overall corpus of graphic signs that were available within society. Based on the symbols identified by Morice (1893: 208, 209) and the rock art located during the survey work in this thesis, the subject matter is consistent between rock paintings, tattoos and message-trees, with only slight morphological modifications evident between media types.

In addition to these contextual options for the use of symbols, internal intricacies regarding the placement and choices of images used played a significant role in terms of connotations and the achievement of communication. The importance of placement and imagery in terms of the message-paintings and the totem-paintings has been discussed at length throughout this thesis (see Chapter Six and Chapter Seven). The similar functionality of the message-paintings and the hunter’s signs indicates that message-trees would have been equally reliant on placement and imagery.

The imagery and placement of tattoos on the body was strategic to the purpose of the markings and the identity of the bearer. Only individuals who had achieved totems through dreaming could bear totem-tattoos and adorn totem-paintings onto rock. The group of people able to employ these symbols included, but perhaps were
not limited to, medicine men (cf. Jenness 1943). These types of images were however, limited in terms of access by the general population. Other types of tattoos, such as facial, leg and arm markings like the message-paintings were apt to be available to the overall population as needed/desired.

Paintings, tattoos and hunter’s signs were part of a communication code that was socially derived within the First Nations communities in the study area. The social employment of symbols, whether on rock, trees or the body, was an integral component to group and individual identity. Through these symbols, people identified and mapped their place in the landscape and in society, as well as, their relationships with each other and with the supernatural world.

**Looking Back and Moving Forward**

When this research began, the primary task was to determine how to integrate what could potentially turn out to be two disparate types of information; First Nations traditional knowledge and archaeological data. Each type of information was known to offer inroads to the investigation of rock art, but were they compatible? Could they be integrated? And then there was the matter of making sure the information gathered, with each type of method, was relevant to the research aims of this study. What was needed was a way to bridge the tangible, material evidence collected through archaeological methods and the intangible, intellectual evidence of traditional knowledge.

This bridge emerged through the grounded theory approach used in this investigation that ensured every stage of the study was firmly rooted in the data and in the landscape. This grounded approach enabled knowledge about the rock art to be derived a posteriori rather than relying on a pre-established hypothesis, or relying on unsubstantiated ideas about rock art and drawing from information culturally and spatially external to this landscape. Integrating these two approaches was a continual process of comparing and contrasting that occurred in an ongoing manner throughout the research.

By seeking First Nations perspectives of rock art and positioning traditional knowledge on equal and critical footing with archaeological data it was possible to identify and illuminate the links between the material culture of the rock art; the
spatial data from the landscape; and First Nations traditional knowledge. First Nations perspectives provided unique insight into possible rock art interpretations that were not otherwise obtainable; as did the spatial data and information gleaned directly from the rock art sites – both data types enhanced the other and each were richer because of being integrated. It was the practice of these two approaches cooperatively that provided the distinctive insight and the alternative perspective of rock art that this research sought.

Through this amalgamation of methods, specifically informed and formal approaches, this research brings a synthesized scholarship of rock art to a previously understudied landscape. The methods developed in this research demonstrate the applicability of combining informed and formal approaches and the utility of investigating both the symbols and the setting of the rock art to reveal something new and useful in terms of knowledge.

These methods transcend the study area and are applicable to broader, international rock art studies interested in balancing and integrating traditional knowledge with other lines of evidence such as, physical characteristics of the landscape and archaeological materials. Although it is the combination of methods that is central to this thesis, the formal methods, developed in this research, offer opportunities to contextualise rock art, and other archaeological materials, in geographic settings where traditional knowledge is scarce. Identifying the relationship between rock art placement and others forms of landscape use, such as systems of subsistence, settlement and mobility, as conducted in this thesis, can be useful to studies of rock art in settings around the world.

This study of pictographs integrates rock art with landscape and with people. In doing so, it addresses some of the gaps identified at the onset of this thesis (Chapter One and Two) – specifically, the lack of social understanding of rock art in British Columbia and the lack of knowledge regarding the significance of rock art in terms of broader uses of past landscapes.

This research affords insight into aspects of the rock art in the study area that were previously not known. Specifically regarding, the social context of the rock art and its potential for communication – in both practical and metaphysical ways; the link between the location of the rock art, water travel and salmon migration; and the
intricacies within the assemblage of markings, where repeated symbol use and repeated combinations of symbols occur across a vast landscape. These findings take the understanding of rock art into the realm of social meanings, where studies focused exclusively on painted and carved motifs typically do not reach.

As a result, this study challenges existing assumptions within the discipline of archaeology in British Columbia regarding the utility of rock art as a viable avenue of inquiry and insight into the human past. This research shows that rock art, as a focal point of study, is indeed suitable for a social approach for investigating the past; as a result, a more disciplinary integration of rock art within British Columbia archaeology is warranted.

Even though the temporal context of the rock art is considered and discussed in this thesis (see Chapter Seven), there are no definitive dates for the rock art beyond the fact that some of the markings were known to be present in the landscape during the pre-contact era, prior to 1876 at Fraser Lake and prior to 1892 at Stuart Lake. Given the difficulty associated with establishing reliable dates for the rock art in the study area (see Chapter Seven); specifically, issues relating to the lack of sufficient availability of carbon within the samples, the inability to pre-treat and remove contaminants from the pigment and the incompatibility of uranium-series dating for the rock art in this landscape (despite the prevalence of calcium carbonate deposits), alternative methods need to be considered. One way of coping with these issues in this particular study area, may be through excavation and the possibility of locating pigment in a dateable context.

Although the vast majority of rock art sites in the study area do not present opportunities for excavation, Site TRLK 02 at Trembleur Lake exhibits the presence of ground cover that would be suitable for excavation. Additionally, the physical characteristics of the site, specifically the type of ground cover directly beneath the motifs make for an ideal opportunity to conduct excavations in close proximity to the painted panels. This proximity may provide opportunities to locate and date fallen pigment fragments (cf. Gordon 2008).

The case studies presented in this thesis demonstrate that when First Nations people have a role in archaeology, its practice and the outcomes of research are benefitted. The people participating in the interviews, in this study, demonstrated
their knowledge of the rock art and of the past, as well as, their interest and willingness to share that knowledge. This thesis confirms there is a valuable place for First Nations perspectives and knowledge in rock art studies and in archaeology in general, but is there a way for archaeology to be of benefit to these First Nations communities?

While this work succeeds in enabling First Nations voices to be heard thereby, empowering the intimate scale of knowledge that resides at the community level within this landscape, about this landscape and about this rock art, how else can it or should it benefit the communities participating in the research? Tethering the objectives for learning to social and political interests of the communities is one important way for archaeology to be more beneficial to First Nations peoples (Klassen 2013:xx). Adopting more of the collaborative ideologies and methods associated with participatory action research, where researchers “take up questions identified by community members and pursue them through a process of joint decision making and problem solving” is an intrinsic way of ensuring research brings benefits to the people and communities involved in research (Wylie 2009:7).

At the beginning of this study, chief and council at each of the communities provided permission for the research to be conducted in their respective territories and they approved of the overall research design (see Chapter Four). In doing so, their interest in the rock art was expressed. In each community, the gatekeepers and the interviewees determined the extent of their own participation in this research. These choices and decisions on behalf of community members were an important component of the ethical and professional conduct of this project however, the research objectives specific to each of the communities were not identified beyond the recognition that the academic objectives associated with this study were amenable. Engaging in such discussions, early on at the research design stage, would have enabled the interests of the First Nations communities to be drawn out and incorporated into the methodological process in this research. Perhaps in doing so, more collaboration would have been encouraged and achieved and that may have enabled more of the communities’ objectives to be met and perhaps even furthered the results of this research.
In this study, the role of mobility is identified as a key component of the dynamic between people, landscape and rock art, in terms of communication, experience and knowledge. Mobility was developed as a theoretical concept in this thesis alongside ideas of marginalization, audience and landscape (see Chapter Three). These concepts were informative, useful and effective to the methodological and analytical processes used in this research.

However, further exploration of these concepts in more localized terms could bring new and additional insight regarding the human presence, action and interaction embedded in the landscape of the study area (personal communication with Dr. Mark Gillings and Dr. Andrew Jones, April 15, 2015). Investigating the historical and contemporary cultural processes associated with the distribution of knowledge in First Nations communities throughout the study area could advance the concept of audience in terms of its endemic qualities. Similarly, investigating how human movement in the study area changes with the seasons would bring about a more local distinction of the dynamic between people and landscape and how seasonality might impact the social role of the rock art.

One of the surprises in this research was the applicability of human movement and communication to the study of rock art: things dynamic and active to understand something stationary and quiet (see Chapter Six and Chapter Seven). Other compelling juxtapositions arise from this research that could formulate the basis for future studies: what does it mean to graphically communicate and document knowledge in societies oriented around oral traditions? What is the significance of making natural places permanent through the “documentation” of symbols onto rock, in societies that were decidedly mobile?

The rock art landscape of the study area has been physically altered by the permanent removal of the six pictographs on Takla Lake that were destroyed in 1971 (cf. McMurdo, J. 1972). This destruction interrupts the system of rock art across the study area in the same way that a history book with missing pages tells only a partial story. The photographs of these pictographs and the report created by McMurdo (1972) have enabled some that story to remain, but without the physical sites and the original markings, gaps linger. Additionally, the effects of taphonomy have undoubtedly removed other rock art sites in the study area and this too contributes to
a partial picture of rock art.

Despite the expansive study area and the large contingent of rock markings that were investigated in this thesis, this research also only provides a partial picture of rock art. Through this study, continuity has been demonstrated within the rock art that extends across Tl’azt’en and Nadleh Whut’en traditional territories and includes the destroyed paintings at Takla Lake, but how far across the landscape do the repeated symbols and combinations of symbols identified in this thesis occur? How relevant are the boundaries used in this research to the people engaged in the practice of rock painting? Pushing and stretching the boundaries of the study area would provide opportunities to continue identifying commonalities and anomalies with the rock art in northern central British Columbia.

Locating and including rock art in non-waterscape settings, as part of this expansion to the study area, would provide opportunities for comparisons of markings in different environments, thereby enabling further insight into the use of rock art in past societies and the potential detection of additional rock art styles. Despite the logistical difficulties associated with studying rock art in this northern landscape, the value of such work, as demonstrated in this thesis, far outweighs the challenges.

Meanings Then and Now

The interconnections between audience, movement and communication in terms of the rock art have been discussed in this thesis (Chapter Six and Chapter Seven). The rock art has been identified as an ideological expression that was distributed throughout the landscape in areas where the most economically and socially important activities occurred. Given the prevalence of water travel in First Nations society, the water’s edge provided the ideal location for communication, during the early historic and late pre-contact periods. The primary significance that occurred as a result of the location and the imagery of the rock art is the social interactions that the markings promoted. The asynchronous communicative ability of the markings essentially enabled virtual relationships to be forged and maintained across time and space. This ability to socially interact at a distance would have been essential and beneficial considering the important role seasonal mobility played in societies throughout the study area.
Through human presence, action and interaction the natural topography is transformed into a meaning-enriched landscape(s). Landscapes are never complete; they are always transitioning (cf. Ashmore 2007; Bender 2001). Through the actions and interactions that occur as a result of the ongoing presence of people, new and alternative landscapes continually evolve. Through a consideration of the actions and interactions associated with the production and use of the pictographs, the rock art landscape of the study area evolves into a document, essentially an inscribed reflection of the social relationships forged and affected by the markings; a testament to past peoples’ skill and knowledge of how to “read” and “write” the symbols; evidence of the traditional ecological knowledge and wisdom of past peoples, bound within the rock art symbols; and a statement of the cultural identity that formed through the practice of this particular rock art tradition and the use of this landscape for communication and for physical, spiritual and social survival.

The rock art documents a knowledge system that weaves through the landscape and through the generations. The rock art is representative of the traditional ways of living and habitus that were guided by the environment and the seasonal rhythms of water and ice, and the ways in which the fish, animals and plants responded to the tempo of the environment. Although the presence of the rock art in the landscape pushes through the seasons, it too largely operated according to this same ecological timeframe, where its production and its primary use ebbed and flowed with the seasons (as discussed in Chapter Seven). This connection to the landscape and the immersion in the environment was the foundation of traditional living; along with the responsibilities and obligations to the land, to others and to the future that were a part of the cultural identities of First Nations peoples throughout the study area. The rock art was directly linked and reflective of this connection to the landscape and the relationships people shared with one another.

Although the chronology of the pictographs in the study area is uncertain, ethnographic information and considerations of taphonomy, as discussed in Chapter Seven, indicate that the markings are conceivably at most a few hundred years old and that the practice of rock art was still in place during the mid to late 19th century. Part of the preservation of the rock markings may also be due to the late contact period for this part of the province that essentially delayed the affects of European presence in
the interior regions. Therefore, the rock art may represent some of the latest continuous cultural traditions in use before the disruptive affects of European contact took hold.

Although European contact in the province of British Columbia occurred in 1778 with the arrival of Captain James Cook, contact occurred much later in the northern interior of the province. Through trade routes and trade relations with coastal peoples, Dakelh peoples were already familiar with many European goods before they encountered Alexander Mackenzie in Dakelh territory in 1793 (Mackenzie 2001:258). With regard to the study area specifically, European presence in the landscape was solidified with the establishment of the trading forts of Fort St. James at Stuart Lake in 1806 (cf. Lamb 2007) and Fort Fraser at Fraser Lake in 1807 (cf. Lamb 2007). A missionary presence was firmly established in the study area by the 1840s with the activity of Father Demers, who was followed a few decades later by Father Morice in the 1880s (D.L.S. 1930; Morice 1889; Usher n.d.).

When Europeans arrived, they brought new ideas and ways-of-doing that impacted First Nations peoples and their cultures at every turn (cf. Daly 2005; Fisher 1992; Laforet and York 1998). Because traditional life was literally rooted in the landscape any cultural changes that occurred as a result of contact affected the relationship First Nations people shared with the land. As this relationship with the land changed, the needs of communication that had been met by the rock art also changed, eventually bringing an end to its practice. If contact had happened earlier, the presence of the pictographs within the landscape would have likely been diminished at an earlier time period.

The examples provided at the beginning of Chapter Six of the incorporation of rock art symbols into the grocery store sign at Fort St. James; at the entrance way to the school in Tache; in the pages of tourist brochures; and on First Nations websites demonstrate modern uses of the markings in a contemporary landscape. These examples also demonstrate the ongoing meaning and importance of the rock art that is perceived by First Nations peoples today, as does the interest in this research by each chief and council that kindly provided permission for this study and the community members who participated in the interviews.
Although these modern contexts of the rock art differ to how the elders spoke of the use of the markings, people are still communicating through the symbols. Even though the spatial and temporal context of the use of these symbols has changed, as has the medium that is no longer solely dependant on rock surface, the essence of the communication has remained. This essence is the cultural identity that is expressed and re-enforced through the rock art imagery. The original markings forged into rock at the water’s edge document traditional living and the presence and wisdom of past peoples. These modern uses and versions of the rock art continue to act as an expression of this cultural identity in alternative and contemporary ways; thereby demonstrating that just as landscapes are never finished they are never entirely new either; but rather, they are a palimpsest of past, present and future landscapes that are imbued with a multiplicity of meanings that have persisted and changed with the passage of time.
This Agreement dated for reference the 27th day of July, 2009

COMMUNITY RESEARCH AGREEMENT

At the Water’s Edge: An Integration of Ethnographic and Archaeological Methods in the Study of Rock Art in Northern Central British Columbia, Canada

BETWEEN:

TAKLA LAKE FIRST NATION

(the "First Nation")

AND:

Suzanne Mitchell  M.A.
Principal Researcher

Doctoral Candidate
University of Leicester
Leicester, England

(the "Researcher")

PROJECT DESCRIPTION  This project seeks to understand and identify the ways in which traditional Indigenous land use and changes in land use affected the creation of rock art during the pre-contact and historic periods, in what is now Northern British Columbia, Canada. The physical landscape of Northern British Columbia is comprised of a diversity of ecosystems. The Indigenous peoples of this area have a history of innovative resource harvesting methods that have enabled them to live successfully in this diverse land for thousands of years. First Nations people not only utilized the land for their physical survival in terms of food and other necessities; they also used the land in ways that enabled their cultural, social, and spiritual survival. This project strives to understand if and how this differentiated way of using the land was reflected in the production and use of rock art.

WHEREAS the Researcher and the First Nation agree to conduct the research under the conditions in this agreement and to comply with the intent of the principles set forth herein;

WHEREAS the research study contemplated by this Agreement is of mutual interest and benefit to the Researcher and the First Nation, it will further the articulation and dissemination of the role the land plays in the First Nation’s culture and society, and will further the documentation of rock markings within the First Nation’s traditional territory.
WHEREAS the Researcher includes Suzanne Mitchell, Doctoral Candidate – University of Leicester, the conduct of Suzanne Mitchell and any/all research staff under her supervision are bound by this agreement.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties hereto understand and agree as follows:

1. SCOPE OF THE PROJECT
   1.1 The overall objective of the study is to develop an understanding of the connection between markings in the land and land use in the Takla Lake First Nation culture and traditional territory.

2. METHODS AND PROCEDURES
   2.1 Data will be gathered using the following methods or procedures:
      a) archaeological surveys of land and waterways in the Takla Lake First Nation traditional territory
      b) individual interviews with community members
      c) follow-up meetings
   2.2 Information collected in the field through archaeological surveys will be recorded by way of notes, waypoints, and photographs. Interviews and group meetings and follow-up meetings will be audio recorded and transcribed. Key themes will be identified and used for the development of a conceptual understanding of land use and the role rock markings play in land use. This conceptual understanding will be validated by the First Nation for accuracy.

3. RESPONSIBILITIES OF THE RESEARCHER
   3.1 The Researcher shall provide both the hard and electronic copies of research results to the First Nation including a copy of the audio tape/disk.
   3.2 The Researcher, in undertaking research, shall:
      a) respect traditional copyrights;
      b) respect local customs and values;
      c) provide honorariums for individuals participating in the interview process, and
      d) contribute to the interests of the First Nation in whatever ways possible so as to maximize the return to the First Nation for their cooperation in the research endeavor.

4.
RESPONSIBILITIES OF THE FIRST NATION
The First Nation, in providing support for the research, shall:

4.1
The First Nation will provide support to the research by identifying participants for interviews; provide information pertinent to the location of markings; provide logistics support, provide general guidance to the project and provide office space in which to conduct interviews if necessary.

5.
NON-COMMERCIAL PURPOSE
5.1
No research products, traditional or Indigenous knowledge will be used for commercial purposes.

6.
INFORMED CONSENT
6.1
Informed consent of individual participants is to be obtained in these agreed ways:

a) An individual consent form will be read by the researcher to the participants prior to conducting the interviews. The consent form will include the contact information of each the Researcher, the Researcher’s supervisor, the University Research Office. A copy will be left with the participant should they wish to contact the Researcher for additional information.

b) Participants have the right to withdraw from the project at any time for any reason. In this case, that participant’s data will be destroyed.

7.
CONFIDENTIALITY
7.1
The names of participants and the First Nation are to be protected and respected in these agreed ways:

a) All interviewees have the right to choose to remain anonymous or choose to be credited for their contributions and knowledge.

b) For those wishing to remain anonymous, all interviews will be confidential. In no instance will the name of a participant wishing to remain anonymous be attached to a record. Appropriate acknowledgement will be documented for those individuals wishing to be credited for their contributions.

c) The contribution of the First Nation to the study will be acknowledged in all published reports. However, the First Nation also has the right to remain anonymous in future publications.

8.
EXPECTED OUTCOMES, BENEFITS AND RISKS
8.1
This research study will benefit the First Nation collectively in the following ways:

a)
Documentation
The rock art, and other forms of markings in the Takla Lake First Nation traditional territory will begin to be formally documented.

b) Informational
The data gathered during this research will be useful in ways relating to contemporary and future issues about the land, its use, and importance to the First Nation.

c) Financial
Participants in the individual interviews will be compensated at the rate of $50 per interview.

8.2 The Researcher wishes to use this research study for benefit in these ways:

a) publish results in the Researcher’s PhD dissertation
b) publish results in peer-reviewed journals and other scientific publications
c) present the results in scientific and professional meetings/conferences.

8.3 The researchers will work with the First Nation to ensure that the research will pose minimal risk to the First Nation.

9.0 DATA MANAGEMENT

9.1 A copy of the audio tape/disc and the transcript will be kept by the Researcher for a period of up to 5 years upon which it will then be destroyed. A copy of interview tapes and transcripts will be provided to the First Nation for record.

9.3 A final report that will include all the synthesized data will be provided to the First Nation upon completion of the project, as will a copy of the PhD dissertation.

10. DISSEMINATION OF RESULTS

10.1 Any future publication or dissemination of research results, beyond what is described in this agreement shall not be undertaken without an agreement between the Researcher and the First Nation.

10.2 The First Nation will be the first to receive research results and be invited to provide input and feedback on the results. The results should be presented in a format and language appropriate and accessible to the First Nation.

10.3 The Researcher agrees to participate in community meetings to discuss the results and their implications.

10.4 Results will be reported to the public at large scientific journals or other publications.

11.
TERM AND TERMINATION
11.1
This agreement shall have an effective date of September 1, 2009 and shall terminate on September 30, 2012 with the possibility to extend this agreement with the consent of both the First Nation and the Researcher.
11.2
The Researcher agrees to stop gathering information for the research project under the following conditions:
a) If First Nations leaders make such a request;
b) If the researcher believes that the research will no longer benefit the First Nation or the aims of the project.

Signed by: Dolly Abraham
Chief Dolly Abraham
Representative of the Takla Lake First Nation
Date: Aug 7/09

Signed by: Suzanne Mitchell
Principal Researcher
Date: Aug 7/09
BAND COUNCIL RESOLUTION

NOTE:

The words "from our Band Funds" or "capital" or "revenue", whichever is the case, must appear in all resolutions requesting expenditures from the Band Funds.

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<tr>
<th>The council of the</th>
<th>Capital account</th>
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<td>TAKLA LAKE FIRST NATION</td>
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<td>Date of duly convened meeting</td>
<td>August 7, 2009</td>
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<td>Province</td>
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<td>Revenue account</td>
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DO HEREBY RESOLVE:

WHEREAS the Takla Lake First Nation is in full support of the COMMUNITY RESEARCH AGREEMENT pertaining to the project entitled Meaning-full Landscapes: Rock Art and Land Use in Northern British Columbia being conducted by Suzanne Mitchell.

Quorum: any 3 of the 5

Chair: Dolley Abraham

Councillor Katherleigh George

Councillor Irene French

Councillor Anita Williams

FOR DEPARTMENTAL USE ONLY

Canada
This Agreement dated for reference the 30th day of June, 2010

COMMUNITY RESEARCH AGREEMENT

At the Water’s Edge: A Comparative Case Study of Archaeological and Ethnographic Approaches to Rock Art Studies in Northern British Columbia, Canada

BETWEEN:

TL’AZT’EN FIRST NATION

(the “First Nation”)

AND:

Suzanne Mitchell M.A.
Principal Researcher

Doctoral Candidate
University of Leicester
Leicester, England

(the “Researcher”)

PROJECT DESCRIPTION

This project seeks to explore the relationship between traditional land/water use and rock markings in northern British Columbia. A combination of formal and informed methods will be employed in order to identify and understand how the differentiated ways of using the land/water affected the placement and imagery of rock markings. Particular focus will be placed on rock markings located along lakeshores. Rock markings are an important class of archaeological material that provides distinctive opportunities for insight into the human past. This insight stems from the fact that we find rock markings today to be located exactly where they were placed and used by the people who created them. It is this location that is of central concern in this project. This project is firmly rooted in the belief that an understanding of land/water use is necessary in order to understand why the painters chose their locations and what their paintings mean. Spatial analysis is also an important part of this project, where the locations of the paintings will be compared with other features in the land, such as, archaeology sites, place name sites, traditional use areas, natural features, and other important places in order to recognize patterns and therefore better understand the placement of the rock markings. Contributions from community members in the form of interviews about land and water use will be an important part of this study, because this project also seeks to demonstrate the importance of including First Nations peoples in archaeological studies in northern British Columbia.
WHEREAS the Researcher and the First Nation agree to conduct the research under the conditions in this agreement and to comply with the intent of the principles set forth herein;
WHEREAS the research study contemplated by this Agreement is of mutual interest and benefit to the Researcher and the First Nation, it will further the articulation and dissemination of the role the land plays in the First Nation’s culture and society, and will further the documentation of rock markings within the First Nation’s traditional territory.
WHEREAS the Researcher includes Suzanne Mitchell, Doctoral Candidate – University of Leicester, the conduct of Suzanne Mitchell and any/all research staff under her supervision are bound by this agreement.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties hereto understand and agree as follows:

1. SCOPE OF THE PROJECT
   1.1 The overall objective of the study is to develop an understanding of the connection between rock markings in the land and land use in the Tl’azt’en First Nation culture and traditional territory.

2. METHODS AND PROCEDURES
   2.1 Data will be gathered using the following methods or procedures:
      a) archaeological surveys of land and waterways in the Tl’azt’en First Nation traditional territory
      b) individual interviews with community members
      c) follow-up meetings
   2.2 Information collected in the field through archaeological surveys will be recorded by way of notes, waypoints, and photographs. Interviews and group meetings and follow-up meetings will be audio recorded and transcribed. Key themes will be identified and used for the development of a conceptual understanding of land use and the role rock markings play in land use. This conceptual understanding will be validated by the First Nation for accuracy.

3. RESPONSIBILITIES OF THE RESEARCHER
   3.1 The Researcher shall provide both the hard and electronic copies of research results to the First Nation including a copy of the audio tape/disk.
   3.2 The Researcher, in undertaking research, shall:
      a) respect traditional copyrights;
b) respect local customs and values;
and
c) contribute to the interests of the First Nation in whatever ways possible so as to maximize the return to the First Nation for their cooperation in the research endeavour.

4. RESPONSIBILITIES OF THE FIRST NATION
The First Nation, in providing support for the research, shall:

4.1 The First Nation will provide support to the research by identifying participants for interviews; provide information pertinent to the location of markings; provide logistics support, provide general guidance to the project and provide office space in which to conduct interviews if necessary.

5. NON-COMMERICAL PURPOSE
5.1 No research products, traditional or Indigenous knowledge will be used for commercial purposes.

6. INFORMED CONSENT
6.1 Informed consent of individual participants is to be obtained in these agreed ways:

a) An individual consent form will be read by the researcher to the participants prior to conducting the interviews. The consent form will include the contact information of each the Researcher, the Researcher’s supervisor, the University Research Office. A copy will be left with the participant should they wish to contact the Researcher for additional information.

b) Participants have the right to withdraw from the project at any time for any reason. In this case, that participant’s data will be destroyed.

7. CONFIDENTIALITY
7.1 The names of participants and the First Nation are to be protected and respected in these agreed ways:

a) All interviewees have the right to choose to remain anonymous or choose to be credited for their contributions and knowledge.

b) For those wishing to remain anonymous, all interviews will be confidential. In no instance will the name of a participant wishing to remain anonymous be attached to a record. Appropriate acknowledgement will be documented for those individuals wishing to be credited for their contributions.

c)
The contribution of the First Nation to the study will be acknowledged in all published reports. However, the First Nation also has the right to remain anonymous in future publications.

8.

EXPECTED OUTCOMES, BENEFITS AND RISKS

8.1
This research study will benefit the First Nation collectively in the following ways:

a) Documentation
The rock markings Tl’azt’en First Nation traditional territory will begin to be formally documented.

b) Informational
The data gathered during this research will be useful in ways relating to contemporary and future issues about the land, its use, and importance to the First Nation.

8.2
The Researcher wishes to use this research study for benefit in these ways:

a) publish results in the Researcher’s PhD dissertation
b) publish results in peer-reviewed journals and other scientific publications
c) present the results in scientific and professional meetings/conferences.

8.3
The researchers will work with the First Nation to ensure that the research will pose minimal risk to the First Nation.

9.0
DATA MANAGEMENT

9.1
A copy of the audio tape/disc and the transcript will be kept by the Researcher for a period of up to 5 years upon which it will then be destroyed. A copy of interview tapes and transcripts will be provided to the First Nation for record.

9.3
A final report that will include all the synthesized data will be provided to the First Nation upon completion of the project, as will a copy of the PhD dissertation.

10.

DISSEMINATION OF RESULTS

10.1
Any future publication or dissemination of research results, beyond what is described in this agreement shall not be undertaken without an agreement between the Researcher and the First Nation.

10.2
The First Nation will be the first to receive research results and be invited to provide input and feedback on the results. The results should be presented in a format and language appropriate and accessible to the First Nation.

10.3
The Researcher agrees to participate in community meetings to discuss the results and their implications.

10.4
Results will be reported to the public at large scientific journals or other publications.

11.

TERM AND TERMINATION

11.1
This agreement shall have an effective date of May 28, 2010 and shall terminate on September 30, 2013 with the possibility to extend this agreement with the consent of both the First Nation and the Researcher.

11.2
The Researcher agrees to stop gathering information for the research project under the following conditions:

a) If First Nations leaders make such a request;
b) If the researcher believes that the research will no longer benefit the First Nation or the aims of the project.

Signed by: 
Chief Ralph Pierre
Representative of the Tl'azt'en First Nation

Date: 8/3/10
APPENDIX C
RESEARCH AGREEMENT AND MEMORANDUM OF UNDERSTANDING – NADLEH WHUT’EN FIRST NATION

AGREEMENT

BETWEEN: Suzanne (Sue) Mitchell,

AND: Nadleh Whut’en Band

RE: Research in Nadleh Whut’en’s Territory

I, Sue Mitchell, propose to undertake the following research project in Nadleh Whut’en’s Territory, in accordance with Guidelines for Researchers / Access to Information.

[Attach detailed project description, per section 2 (c), RULES and PROCEDURES, Guidelines.]

In return for permission to conduct this research project in Nadleh Whut’en Territory, to use the resource files of the Nadleh Whut’en, and for assistance from Nadleh Whut’en members in conducting this research, I agree to the following terms:

a) all audio/visual recordings, documented notes, and research findings gathered through the research will belong to the Nadleh Whut’en and the Nadleh Whut’en will have the right to copyright;

b) original audio/visual recordings and copies of field notes must remain with the Nadleh Whut’en, while copies of all audio/visual recordings and originals of notes, transcripts, and other records may be kept by the researcher unless otherwise specified by the Nadleh Whut’en

c) all information gathered in the research work will be available for examination at any time by the Nadleh Whut’en

d) all findings of the research will be given to the Nadleh Whut’en, and to all the consultants involved, in draft form prior to publication;

e) approval of the Nadleh Whut’en must be obtained, in writing, regarding any aspects of publication of research findings;

f) any commentary that the Nadleh Whut’en may wish to make on the publication will be included in the published version;

g) an expected completion date will be specified;

h) the researcher will furnish the Nadleh Whut’en with copies of all reports and publications resulting from the research project.
Memorandum of Understanding

between

Nadleh Whut’en Band

and

Suzanne (Sue) Mitchell
PhD Student
University of Leicester
(“the researchers”)

(collectively referred to herein as the “Parties”)

BACKGROUND

A. The Nadleh Whut’en supports and approves its participation in the “At the Water’s Edge: A Comparative Case Study of Archaeological and Ethnographic Approaches to Rock Art Studies in Northern British Columbia, Canada” in principle.

B. The Parties have entered into a collaborative research project to work towards the following goals and objectives:
   - To locate and record rock markings in Nadleh Whut’en traditional territory,
   - To study and develop an understanding of the placement and imagery of these rock markings,
   - To identify patterns between the locations of rock markings and natural features in the land, as well as, traditional use areas,
   - To record community knowledge regarding traditional land/water use as it pertains to areas of rock markings,
   - To highlight the importance of including First Nations people in archaeological studies in Northern BC.

C. In support of these goals and objectives, the Parties will seek to combine traditional and innovative forms of research.

D. The Nadleh Whut’en wishes to ensure that its people’s customary stories and related teachings do not become the property of the University of Leicester or its supported or affiliated researchers.

E. The Parties wish to carry out their goals and objectives in the context of the following principles:
   a. respect for all partners involved
   b. transparency in all dealings with respect to the research project
   c. observation of cultural customs and practices, with respect to traditional knowledge. The University of Leicester and its supported or affiliated researchers should not personally acquire any royalties from publishing materials containing Nadleh Whut’en stories, myths, legends, folklore, oral traditions or other traditional knowledge; and
d. collaborative decision-making.

**THEREFORE, THE PARTIES HAVE THE FOLLOWING UNDERSTANDING:**

**Process**
1. A mutually agreed-on process will be followed to prioritize the specific projects done to reach the goals and objectives outlined above. For any project, this process shall minimally include:
   a) development of an academic- and community- informed project research plan (including budget), with explicit reference being made in the plan as to how the project will contribute to the Parties’ broader goals and objectives.
   b) review and approval of the research plan by the Nadleh Whut’en administration and elders.

**Informed Consent**
2. The informed consent of individual community members must be secured in writing before they participate in research or recordings. The written permission of the individual community members to release the information to the Nadleh Whut’en will be sought by the researchers, including any restrictions the individual community members might wish to attach to the use of this information. Written informed consent is evidenced by the signature of the individual community member on the Participant Consent Form.

**Disposition of Research Materials**
3. Originals of all audio/visual recordings (in digital and/or analog formats) and copies of all notes, transcripts, photographs, and other records of the research will be kept by the Nadleh Whut’en. Copies of all audio/visual recordings and originals of notes, transcripts, photographs and other records will be kept by the researchers.
4. The Parties will ensure that a final, permanent repository for the research materials, to be created by the researchers, will be utilized. Additionally, the researchers will make as a condition of the deposition that the repository will provide access to Nadleh Whut’en members. Further, the repository will adhere to any confidentiality or use restrictions made by the individual community members under section two of this Memorandum.

**Protection of Customary Intangible Property**
5. The Parties agree that the researchers will respect customary Nadleh Whut’en property laws. To facilitate this, the Parties agree that the researchers will endeavour to, where reasonably possible, not record known customary intangible properties, respecting private and confidential sacred matters (“Customary Intangible Property”).
6. The Parties recognize that the Nadleh Whut’en elders may provide guidance and advice in identifying and delimiting Customary Intangible Property.

**Publication**
7. Subject to the terms of the arrangement set out in this Memorandum of Understanding, the Nadleh Whut’en hereby grants the researchers a licence to publish for scholarly and educational purposes the information collected during the course of the research project.
8. The researchers will ensure that two copies of all publications, conference papers and other educational and scholarly materials produced in the course of the project be deposited with the Nadleh Whut’en.
Ownership of Customary Intangible Property

9. In publications resulting from this collaborative arrangement, no claim of copyright or exclusive rights by the researchers or their publishers will be made on legends, myths, folklore or Customary Intangible Property that are the acknowledged intellectual property of the Nadleh Whut’en community or community members.

10. Any publication done for scholarly and/or educational purposes will include the following provision: “The text of the stories, myths, legends, and folklore belong to the Nadleh Whut’en people and therefore no claim of copyright or exclusive rights is made upon them.”

Confidentiality and Royalties

11. The Parties agree that where Customary Intangible Property, referred to above in sections five and six of this Memorandum of Understanding, is shared with the researchers, or mistakenly recorded by them, they will use all reasonable efforts to prevent the publication of, or public access to, this information.

12. The Parties will not acquire any royalties or monies tantamount to royalties for publishing materials that contain Nadleh Whut’en stories, myths, legends, folklore, or Customary Intangible Property. This does not constrain the researchers from publishing linguistic analysis.

Dispute Resolution

13. In case of a dispute arising from the implementation of this Memorandum of Understanding, the Parties shall exhaust alternative dispute resolution models such as negotiation and mediation before employing other forms of dispute resolution such as arbitration or adjudication. Parties shall act in good faith to resolve the dispute.

14. In the case of a dispute arising regarding the proper management of Customary Intangible Property, the elders shall specify the means for settling the dispute, such as mediation.

Insurance

15. The parties acknowledge that they have adequate liability insurance applicable to their officers, employees, and agents while acting within the scope of their employment by the parties. Therefore, each party hereby assumes any risks of personal injury and property damage attributable to the negligent acts or omissions of the party and its officers, employees, and agents.

Notification

16. Any notice of written communication required under this agreement may be given as follows:

Sue Mitchell  
Prince George BC  

Nadleh Whut’en Band  
Box 36  
Fort Fraser, BC, V0J 1N0  
Ph: (250) 690-7211  
Fax: (250) 690-7316

Amendments

17. Amendments to this Memorandum of Understanding must be in writing and signed by authorized representatives of the Nadleh Whut’en and the University of Leicester.
Duration of Agreement

18. The term of this Memorandum of Understanding is from May 28, 2010 to September 30, 2013 and may be renewed. The Parties will review this agreement annually.

19. The Parties may terminate this Memorandum of Understanding in writing at any time subject to 10 days notice.

AGREED THIS 28th DAY OF May, 2010

SIGNATURES:

[Signatures]

Researcher
Chief: Nadleh Whut’en
Lands Manager: Nadleh Whut’en

PLACE: July 01, 2010
APPENDIX D  
ETHICS APPROVAL FROM THE UNIVERSITY OF LEICESTER

To: SUZANNE MITCHELL

Subject: Ethical Application Ref: sm536-50c9

(Please quote this ref on all correspondence)

22/02/2012 14:47:27

Archaeology & Ancient History

Project Title: At the Water’s Edge: A Comparative Case Study of Archaeological and Ethnographic Approaches to Rock Art Studies in Northern British Columbia, Canada.

Thank you for submitting your application which has been considered.

This study has been given ethical approval, subject to any conditions quoted in the attached notes.

Any significant departure from the programme of research as outlined in the application for research ethics approval (such as changes in methodological approach, large delays in commencement of research, additional forms of data collection or major expansions in sample size) must be reported to your Departmental Research Ethics Officer.

Approval is given on the understanding that the University Research Ethics Code of Practice and other research ethics guidelines and protocols will be compiled with

- http://www2.le.ac.uk/institution/committees/research-ethics/code-of-practice
- http://www.le.ac.uk/safety/

The following is a record of correspondence notes from your application sm536-50c9. Please ensure that any proviso notes have been adhered to:

--- END OF NOTES ---
APPENDIX E
SITE AND PANEL RECORDING FORM

Rock Art Site and Panel Recording Form

1. SITE
Date: ___________ Map # ___________ Temp. Site # ___________
GPS: ______________________ / ______________________ ± __
Site Location:

Access:

Site Type:

No. Panels: ____ Page # _____ of _____ Site drawing to be completed on reverse →
******************************************************************************

2. PANEL
Panel # ________ of ________
Panel Orientation: __________________________
Panel Direction: ___________ Inclination: ___________
No. of Motifs: ________ Marking Type: ___________
Condition/Vandalism:

Comments:

Panel drawing to be completed on reverse →
Site Sketch: Site # _________
Panel Sketch: Site # __________
# APPENDIX F
## STUART LAKE ROCK ART RECORDING FORM

<table>
<thead>
<tr>
<th>STUART LAKE ROCK ART RECORDING PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site #: _____________________________</td>
</tr>
</tbody>
</table>

**Panel Sketch:**

---

**GPS:** _____________________________ / _____________________________ ± _____

**LOCATION:** MAINLAND OR ISLAND  (CIRCLE ONE)

**SECTION OF LAKE:**

**ACCESS:** WATER  SHORE  INLAND

**ORIENTATION**

**DIRECTION:** ___________________________  **CONDITION:** ___________________________

**BEST VISIBILITY:** TO NORTH ARM  FROM NORTH ARM  BOTH

**PAINTED FROM:** ___________________________

---

**COMMENTS:**

---

---

---

---
TR2 – Pigment Side in Blue (Trial 1); TR2 – Non-pigment side in Red (Trial 2)

Brief Interpretation: For this particular sample, we see an increase in the Ca and Sr elements in the non-pigment side of the sample. I think this is likely attributed to a greater amount of white material on this side (is this some sort of calcium carbonate on the outside of the rock?). We do see an increase in the Iron concentration which I think is the XRF identifying the pigment used on the sample.

TR6 – Pigment Side in Blue (Trial 1); TR6 – Non-pigment side in Red (Trial 2)

Brief Interpretation: A similar story with a higher concentration of iron on the pigmented side of the sample. This sample is different with a major titanium peak occurring in the non-pigment side. I assume this is due to how small the sample is and that the non-pigment side is labeled with an artifact number and the pXRF is reading whatever the glue and writing is used to put on this artifact number.
ST9 – Pigment Side (Trial 1) in Blue; ST9 – Non-pigment side (Trial 2) in Red

Brief Interpretation: Here we see a clear difference in the iron concentration between the two sides of the sample with the pigment side showing a major increase. Once again, the base rock appear to be contain large amounts of calcium (this could also be the calcium precipitate on the outside of the sample). Other elements occur in fairly small amounts.
APPENDIX H
SIGNED INTERVIEW CONSENT FORMS

INFORMED CONSENT

Consent Form to Participate in Research

This consent form is to state that I agree to participate in the interview process associated with the research project entitled, At the Water’s Edge: An Analysis of the Content and Context of Rock Markings in Northern British Columbia, Canada as explained to me by Sue Mitchell, and that I understand I am under no obligation to agree to this interview.

I understand that my interview will last approximately 30 – 50 minutes, and that a follow-up interview may be requested and scheduled.

I understand that the information I provide will be audio recorded.

I understand that I am free to withdraw my consent at any time without negative consequences.

I understand that my contribution to this study will potentially form a key part of a Doctoral (PhD) study and dissertation/thesis, which will be published.

I understand that the information I provide may be used in additional publications, research projects, or academic presentations.

I understand that I may choose to remain anonymous or have my contribution acknowledged by the inclusion of my name in written reports.

I understand that I am free to ask questions and discuss this study prior to signing this form and after being interviewed.

I understand my participation is voluntary.

I understand that I may request to view relevant parts of the manuscripts associated with this study in order to ensure that the information provided by me is not quoted out of context and that it is correctly interpreted.

I understand that I may contact the following people if I have concerns or questions regarding this project:

1. 
2. 
3. 
4. Chief and Council in my community

I fully understand the information contained in this agreement, and therefore I freely consent and agree to participate in this study on this day.

Participant Name: __________________________ Signature: __________________________

I would like to:

Remain anonymous: (my name will not appear in any written records)

Have my contribution acknowledged: (my name will appear in written records)

I have explained the details of this project and believe the person signing this form is providing informed consent:

Signature of Investigator: __________________________ Date: __________________________
INFORMED CONSENT

Consent Form to Participate in Research

This consent form is to state that I agree to participate in the interview process associated with the research project entitled: At the Water’s Edge: An Analysis of the Context and Content of Rock Markings in Northern British Columbia, Canada as explained to me by Sue Mitchell, and that I understand I am under no obligation to agree to this interview.

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I understand that the information I provide will be audio recorded,

I understand that I am free to withdraw my consent at any time without negative consequences,

I understand that my contribution to this study will potentially form a key part of a Doctoral (PhD) study and dissertation/thesis, which will be published,

I understand that the information I provide may be used in additional publications, research projects, or academic presentations,

I understand that I may choose to remain anonymous or have my contribution acknowledged by the inclusion of my name in written reports,

I understand that I am free to ask questions and discuss this study prior to signing this form and after being interviewed,

I understand my participation is voluntary,

I understand that I may request to view relevant parts of the manuscripts associated with this study in order to ensure that the information provided by me is not quoted out of context and that it is correctly interpreted,

I understand that I may contact the following people if I have concerns or questions regarding this project:

1) ____________________________
2) ____________________________
3) ____________________________
4) Chief and Council in my community

I fully understand the information contained in this agreement, and therefore I freely consent and agree to participate in this study on this day. ____________________________

Participant Name: ____________________________ Signature: ____________________________

I would like to:
Remain anonymous: ___ (my name will not appear in any written records)
Have my contribution acknowledged: ___ (my name will appear in written records)

I have explained the details of this project and believe the person signing this form is providing informed consent:
Signature of Investigator: ____________________________ Date: ____________________________
INFORMED CONSENT

Consent Form to Participate in Research

This consent form is to state that I agree to participate in the interview process associated with the research project entitled, At the Water's Edge: An Analysis of the Content and Context of Rock Markings in Northern British Columbia, Canada as explained to me by Sue Mitchell, and that I understand I am under no obligation to agree to this interview,

I understand that my interview will last approximately 30 – 50 minutes, and that a follow up interview may be requested and scheduled,

I understand that the information I provide will be audio recorded,

I understand that I am free to withdraw my consent at any time without negative consequences,

I understand that my contribution to this study will potentially form a key part of a Doctoral (PhD) study and dissertation/thesis, which will be published,

I understand that the information I provide may be used in additional publications, research projects, or academic presentations,

I understand that I may choose to remain anonymous or have my contribution acknowledge by the inclusion of my name in written reports,

I understand that I am free to ask questions and discuss this study prior to signing this form and after being interviewed,

I understand my participation is voluntary,

I understand that I may request to view relevant parts of the manuscripts associated with this study in order to ensure that the information provided by me is not quoted out of context and that it is correctly interpreted,

I understand that I may contact the following people if I have concerns or questions respecting this project:

1) 
2) 
3) 
4) Chief and Council in my community

I fully understand the information contained in this agreement, and therefore I freely consent and agree to participate in this study on this day.

Participant Name: [Blank]
Signature: [Signature]

I would like to:

Remain anonymous: [Blank] (my name will not appear in any written records)

Have my contribution acknowledged: [Blank] (my name will appear in written records)

I have explained the details of this project and believe the person signing this form is providing informed consent.

Signature of Investigator: [Signature]
Date: [Date]

342
INFORMED CONSENT
Consent Form to Participate in Research

This consent form is to state that I agree to participate in the interview process associated with the research project entitled, At the Water’s Edge: An Analysis of the Content and Context of Rock Markings in Northern British Columbia, Canada as explained to me by Sue Mitchell, and that I understand I am under no obligation to agree to this interview.

I understand that my interview will last approximately 30 – 50 minutes, and that a follow up interview may be requested and scheduled.

I understand that the information I provide will be audio recorded.

I understand that I am free to withdraw my consent at any time without negative consequences.

I understand that my contribution to this study will potentially form a key part of a Doctoral (PhD) study and dissertation/thesis, which will be published.

I understand that the information I provide may be used in additional publications, research projects, or academic presentations.

I understand that I may choose to remain anonymous or have my contribution acknowledged by the inclusion of my name in written reports.

I understand that I am free to ask questions and discuss this study prior to signing this form and after being interviewed.

I understand my participation is voluntary.

I understand that I may request to view relevant parts of the manuscripts associated with this study in order to ensure that the information provided by me is not quoted out of context and that it is correctly interpreted.

I understand that I may contact the following people if I have concerns or questions regarding this project:
1. [Name]
2. [Name]
3. [Name]
4. Chief and Council in my community

I fully understand the information contained in this agreement, and therefore I freely consent and agree to participate in this study on this day. __________ Signature: ______________________ Date: __________

Participant Name: [Name] Signature: ______________________ Date: __________

I would like to:
Remain anonymous: [ ] (my name will not appear in any written records)
Have my contribution acknowledged: [ ] (my name will appear in written records)
I have explained the details of this project and believe the person signing this form is providing informed consent.

Signature of Investigator: ______________________ Date: __________
INFORMED CONSENT
Consent Form to Participate in Research
This consent form is to state that I agree to participate in the interview process associated with the research project entitled, *At the Water’s Edge: Spatial and Semiotic Analyses of Rock Markings in Northern British Columbia, Canada* as explained to me by Sue Mitchell, and that I understand I am under no obligation to agree to participate in this interview.

I understand that my interview will last approximately 30 – 50 minutes, and that a follow up interview may be requested and scheduled,

I understand that the information I provide will be audio recorded,

I understand that I am free to withdraw my consent or make changes to the permissions I provide at any time without negative consequences,

I understand that my contribution to this study will potentially form a key part of a Doctoral (PhD) study and thesis, which will be published,

I understand that the information I provide may be used in additional publications, research projects, or academic presentations,

I understand that I may choose to remain anonymous or have my contribution acknowledged by the inclusion of my name in written reports,

I understand that I am free to ask questions and discuss this study prior to signing this form and after being interviewed,

I understand my participation is voluntary,

I understand that I may request to view relevant parts of the manuscripts associated with this study in order to ensure that the information provided by me is not quoted out of context and that it is correctly interpreted,

I understand that this project has been granted Ethics Approval by the University of Leicester,

I understand that I may contact the following people if I have concerns or questions regarding this project:

1. 
2. 
3. 
4. Chief and Council in my community

I fully understand the information contained in this agreement, and therefore I freely consent and agree to participate in this study on this day,  June 18th, 2016  
Participant Name: George  Signature: 
I would like to: 
Remain anonymous: (My name will not appear in any written records)
Have my contribution acknowledged: (My name will appear in written records)
I have explained the details of this project and believe the person signing this form is providing informed consent: 
Signature of investigator:  Date: June 18th, 2016.
APPENDIX I
PROJECT DESCRIPTION

Project Description
At the Water’s Edge: An Integration of Ethnographic and Archaeological Methods in the Study of Rock Art in Northern British Columbia, Canada

Conducted by Sue Mitchell
PhD Student – University of Leicester

This project is a study of the rock paintings in Tl’azt’en, Nadleh Whut’en and Takla Lake First Nations traditional territories.

It is being conducted as a university research project through the University of Leicester in England.

This project is interested in understanding how the locations of the rock art sites are connected to the ways in which people of the past traveled through and used the land the water.

The results of this project will be published and a copy will be made available to you through your band office.
APPENDIX J
INTERVIEW QUESTIONS

Interview Questions

Have you encountered rock art when you have been out on the land/water?

   If so, at what kind of places?
   How are those places used?

Have you seen the pictures of the rock paintings that used to be at Takla Lake?

Is the rock art important to you?

   Can you explain why/how?

Do you know why the people in the past made the paintings?

   Can you tell me about that?

How are these lakes used today?
How did people use these lakes long ago?

When people go out on the land/water how do they know where they can go?
How do they know where they are not supposed to go?
How is the land/water shared/restricted?
APPENDIX K

SEMANTIC THESAURUS – SITE AND PANEL INFORMATION

Semantic Thesaurus – Sites and Panels

1. Site Number
   a. TRLK01

2. Panel Number (Primary Key)
   a. TRLK01-01/05

3. Panel Waypoint
   a. N54 33.29 W124 28.110

4. Margin of Error
   a. + or – distance in feet

5. Panel Location
   a. Shoreline
      i. Panel is located on rock surface that is directly AT the shore.
   b. Near Shoreline
      i. Panel is located on rock surface that is NEAR the shore

6. Panel Cardinal Direction
   a. North
   b. South
   c. East
   d. West
   e. North West
   f. North East
   g. South West
   h. South East

7. Panel Orientation (Audience)
   a. Water General - Water travel from any direction
   b. Water Specific – Water travel from a particular direction
   c. Inland – Land travel opposed to water travel

8. Panel Access (Painter)
   a. Water Only
      i. Painter had to have been in a watercraft at the time the painting was made.
   b. High Water Only
      i. Painter had to have been in a watercraft during high water time when the painting was made – specific time of year indicated by high water.
   c. Ledge
      i. Painter arrived by water and was on a ledge at the time the painting was made.
   d. Shore or Terrace
      i. Painter was on land at the time the painting was made.

9. Inland Route Available? (To get directly to the panel, just walking)
   a. Yes
   b. No
10. Panel Type
   a. Outcropping – exposed rock surface that protrudes above the soil, is smaller than a cliff face
   b. Cliff Face – the vertical face of a cliff, larger than an outcropping
   c. Island Cliff Face
   d. Unknown

11. Suitability of Ground Surface for Other Activities: at panel and immediate area
   a. Highly suitable
      i. Ample room for a group of people to be engaged in other activities = flat ground, more space than “suitable” and no incline
   b. Suitable
      i. Room for a group of people to engage in other activities; some incline still evident = flat ground, some room for activities; little incline
   c. Limited
      i. Options for type of activities are limited due to space available or type of terrain or seasonal flooding
   d. Not Available
      i. No option for people to engage in other activities that would be represented archaeologically.
FRASER LAKE
Site: FRLK01
Panels 01-03/03

Panel 1
Panel 2
Panel 3

Panel 1
Panel 3
Panel 2
FRASER LAKE
Site: FRLK03
Panels 01–02/05
PG 1 OF 2

Panel 5
Panel 3 & 4
Panel 1 & 2

Panel 2
Panel 1 & 2
Panel 1
FRASER LAKE
Site: FRLK04
Panels 01/01
FRASER LAKE

Site: FRLK05
Panels 01/01

Panel 1
FRASER LAKE
Site: FRLK08
Panels 01-02/02

Panel 1

Panel 2

Panel 1 & 2
TREMBLEUR LAKE
Site: TRLK01
Panel: 01/01
TREMBLEUR LAKE

Site: TRLK03
Panels: 01-02/02
TREMBLEUR LAKE
Site: TRLK04
Panels: 01-02/02
TREMBLEUR LAKE
Site: TRLK05
Panels: 01-02/02
TREMBLEUR LAKE
Site: TRLK06
Panels: 01-03/03

Broken section of rock with pigment
TREMBLEUR LAKE

Site: TRLK07
Panels: 01/01
TAKLA LAKE
Site: TKLK 01
Panel: 01/01
Borden #: GhSk1

TAKLA LAKE
Site: TKLK 02
Panel: 01/01
Borden #: GiSk1

Archaeology Permit Report 1971-23 (John McMurdऩ 1971)
TAKLA LAKE
Site: TKLK 03
Panel: 01/01
Borden #: GiSl 1

Figure A

Figure B

FIGURE C

TAKLA LAKE
Site: TKLK 04
Panel: 01/01
Borden #: GiSl 2

Figure B

Figure A

Archaeology Permit Report 1971-23 (John McMurdo 1971)
TAKLA LAKE

Site: TKLK 05
Panel: 01-02/02
Borden #: GiSl 3

Archaeology Permit Report 1971-23 (John McMurdo 1971)
TAKLA LAKE

Site: TKLK 06
Panel: 01-02/02
Borden #: GiS1 4
STUART LAKE
Site: STLK01
Panels: 01–05/05
STUART LAKE
Site: STLK02
Panels: 01-09/18

Panels 1-7
Panels 9-18
STUART LAKE

Site: STLK02
Panels: 09-18/18
STUART LAKE

Site: STLK03
Panels: 01-05/05
STUART LAKE
Site: STLK04
Panels: 01-05/05
STUART LAKE
Site: STLK05
Panels: 01-03/03
STUART LAKE
Site: STLK 06
Panels: 01-04/04
STUART LAKE
Site: STLK 07
Panels: 01-02/02
STUART LAKE
Site: STLK 08
Panels: 01-02/11
STUART LAKE
Site: STLK 08
Panels: 03–04/11
STUART LAKE
Site: STLK 08
Panels: 05-06/11

Panel 5

Panel 6
STUART LAKE
Site: STLK 08
Panels: 07–11/11
STUART LAKE
Site: STLK 09
Panels: 01-06/06
STUART LAKE

Site: STLK 10
Panels: 01–04/04
STUART LAKE
Site: STLK 11
Panels: 01-05/05
STUART LAKE

Site: STLK 12
Panels: 01/01

Panel 1

STUART LAKE

Site: STLK 13
Panels: 01/01

Panel 1
STUART LAKE
Site: STLK 14
Panels: 01-08/13

Panel 1
Panel 2
Panel 3
Panel 4
Panel 5
Panel 6
Panel 7
Panel 8

Map of Stuart Lake area.
STUART LAKE
Site: STLK 14
Panels: 09–12/13
STUART LAKE
Site: STLK 15
Panel: 01/01
APPENDIX M
SEMANTIC THESAURUS – MOTIFS

Eroded Pigment
Evidence of pigment that has deteriorated by taphonomy

Unidentified
Symbol present, but shape does not fit into identified categories and subject matter is not known; too unique for a category to be developed

Patch of Pigment
Pigment that appears as a purposeful blotch but no overall intended shape; not eroded pigment (possibly a place to work the pigment prior to production)

Finger Mark
Finger-print size; can be slightly lengthened into a small/short tally mark

Finger Dot
Small dot appearing to have been made by finger tip, smaller than a finger-print or short tally mark, usually appears as a group of small dots

Horizontal Line
Straight or semi-straight line drawn horizontally; can stand separately or be attached to another symbol

Vertical Line
Straight or semi-straight line drawn vertically

Stemmed Triangle
Standard triangle shape, coloured in, with stem; can stand separately or be attached to another symbol (sometimes appears along the wings of a bird symbol or as thick down arrows on a horizontal arch)

Cross Shape
Symbol that appears as the letter x or as +

Dot
A “coloured in” circle, larger than a finger dot, but has purposeful shape unlike the patch of pigment which may be roughly the same size but the patch of pigment lacks the distinct shape that the dot has (the one and only oval shape in the assemblage has been carded to the dot category)

Circle
Circle shape usually drawn as an outline, may have symbols known or unknown enclosed inside its shape, may have rays extending outward from its edge

Half Moon
Similar shape to a half moon, can be coloured in or as an outline

Curve with Dash
A distinct curved line with a short dash like line directly adjacent (may be the same as horizontal arch/vertical arch with fish/otter symbol adjacent)

Horizontal Arch
An arched line drawn horizontally, may appear as a single line or in parallel lines

Vertical Arch
An arched line drawn vertically, may appear as a single line or in parallel or multiple lines
Horizontal Wave
A wavy line drawn horizontally

Vertical Wave
A wavy line drawn vertically

Caribou/Moose
Terrestrial animal figure where body and legs are indicated, distinguished by antlers/horns

Land Animal
Terrestrial animal figure where body and legs are indicated, is distinguished by lack of antlers/horns, may have indication of ears; such as dog/wolf/fox/bear etc

Otter/Beaver
Animal figure represented by two joined “upward arrows” with a tail indicated; may also appear more naturalistic with rounded coloured-in body and tail; tail extends past what appears to be the hind legs; based on interpretation in Morice 1883

Unknown Animal
Recognizable as an animal form, but symbol does not fit into identified categories

Long Tailed Creature
Animal form indicated with exceptionally long, exaggerated, tail

Animal Form (Chevron)
Similar to the “upward arrow” shape indicated in the beaver/otter/lizard category, but here the form has just one “upward” or “downward” arrow as though it is half of an otter/beaver image

Animal Form (Forked)
Similar to the fish category but without the “barb”; appears as part of a fish image, key is the forked tail unlike the otter/beaver/lizard image that does not have a forked tail but an extended tail

Frog
Animal form with extended front and hind legs similar to that of a frog or toad; or a round bodied animal with front and hind legs indicated; can appear with designs on back/body; no separate head indicated

Snake
Animal form indicated by wavy line and emphasized head; unlike the Horizontal and Vertical Wave that do not have a “head” indicated

Fish
Animal form indicated by a “barbed fork” line as identified in Morice 1883; representative of a silhouette of a fish hanging and viewed in profile; can appear more naturalistic with a shaped body that is coloured-in

Bird
Animal form indicated by a single “upward arrow” shape but with an extended arched “neck” protruding from the top as identified in Morice 1883; a rounded or otherwise shaped body with extended wings and legs, that may have indication of feathers drawn with straight lines or stemmed triangles or slightly enlarged flanges; bird tail or bird rump present
Paw Print
Represented by a triangle-like shape representing the pad of a paw and a series of four or five short lines representing the claws of a terrestrial mammal; can be drawn in outline or silhouette style

Human Body
Human form indicated by head, arms and legs with feet and hands; distinguished by the lack of tail

Human Hand Print
Human hand indicated by palm with four fingers and thumb
<table>
<thead>
<tr>
<th>Terrestrial Mammals</th>
<th>Stuart Lake (64 Panels)</th>
<th>Fraser Lake (16 Panels)</th>
<th>Tremblour Lake (15 Panels)</th>
<th>Table Lake (8 Panels)</th>
<th>Present at # of Lakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribou / Moose</td>
<td>2% 2 2</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>25% 2 2</td>
<td>2</td>
</tr>
<tr>
<td>Land Mammal</td>
<td>8% 7 7</td>
<td>6% 1 1</td>
<td>8% 1 1</td>
<td>- 0 0</td>
<td>3</td>
</tr>
<tr>
<td>Semi-Aquatic Mammals</td>
<td>16% 15 31</td>
<td>13% 4 8</td>
<td>31% 4 8</td>
<td>25% 2 2</td>
<td>2</td>
</tr>
<tr>
<td>Beaver / Otter</td>
<td>16% 15 31</td>
<td>13% 4 8</td>
<td>31% 4 8</td>
<td>25% 2 2</td>
<td>2</td>
</tr>
<tr>
<td>Amphibians</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frog</td>
<td>7% 6 8</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>25% 2 2</td>
<td>2</td>
</tr>
<tr>
<td>Snake</td>
<td>1% 1 1</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>1</td>
</tr>
<tr>
<td>Aquatic Species</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>15% 13 35</td>
<td>25% 4 10</td>
<td>8% 1 6</td>
<td>25% 2 3</td>
<td>1 4</td>
</tr>
<tr>
<td>Birds</td>
<td>12% 10 14</td>
<td>8% 4 2</td>
<td>13% 1</td>
<td>1 2</td>
<td></td>
</tr>
<tr>
<td>Unidentified Animal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Tailed Creature</td>
<td>1% 1 1</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>1% 1 1</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>- 0 0</td>
<td>1</td>
</tr>
<tr>
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**KEY**

S = Stuart Lake  
R = Trembleur Lake  
K = Takla Lake  
F = Fraser Lake
## APPENDIX P

### TABLE OF DISTANCE OF OTHER ARCHAEOLOGICAL SITES FROM SHORELINE AT LAKES WHERE ROCK ART OCCURS

(Page 1 of 2)

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<td>TU</td>
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<td>House Pit; Cemetery; Lithics</td>
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<td>569</td>
<td>Takla Lake</td>
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<td>Trail</td>
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<td>CMT</td>
<td>TU</td>
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FCR = Fire Cracked Rock   CD = Cultural Depression   TU = Traditional Use
CMT = Culturally Modified Tree   Pre C = Pre contact   His = Historic
APPENDIX Q
TABLE OF COMBINATIONS OF MOTIFS

396


From: Darden Hood [dhood@radiocarbon.com]
Sent: Monday, December 01, 2014 4:10 PM
To: Mitchell, Suzanne
Cc: Sonia Oberoi
Subject: Beta - Darden Hood - radiocarbon dating - FW: Inquiry regarding services

Sue, hi, Sonia forwarded me your message.

Two big challenges with this type of material (1) amount of available carbon (2) ability to pretreat and remove contamination. Recently I received a similar request and when I received picture of the sample in the field, told the client it was hopeless. Way too much organics (soil, weeds, scattered surface debris) encompassed the site.

So if this is an exposed site, then in my experience I would say “no”, it’s not likely you are going to get a good date. If it’s from a very isolated site (e.g. deep within an undisturbed cave, away from wind and rain), then different subject.

The exfoliation also concerns me since this is often due to freeze-thaw, meaning enough water has been around to introduce contamination.

The carbonate also generates problems. The acid used to remove it will most likely also attack the primary organics. There are special procedures for such thing which attempts a very low combustion of the organics in hopes of not dissociating the carbonate contaminant but the lack of pretreatment still overwhelms to produce poor accuracy.

I think the only real successes I’ve seen here are when there is clear carbon (e.g. charcoal “ink”) within an isolated system. Other’s have been hit or miss. I look forward to your response.

Darden

---------- Forwarded message ----------
From: Mitchell, Suzanne
Date: Sun, Nov 30, 2014 at 6:49 AM
Subject: Inquiry regarding services
To: "lab@radiocarbon.com" <lab@radiocarbon.com>

Hello
I have a few samples of exfoliated rock pieces that have pigment and calcium carbonate deposits on them that I am interested in submitting for dating analysis. I do not know the organic binding agent that may have been used in the preparation of the pigment, all that is known is that it is likely red ochre based. Is this a type of material you can process and determine age?
Thank you
Regards
Sue Mitchell
Dear Sue, I contacted Dr. John Southon at UCI about your inquiry and here’s his reply:

I think the short answer is probably not. Yeah you could give them a date but what does it mean? The ochre itself is inorganic. I’m assuming the carbonate is on top of the pigment and therefore presumably post-dates it, but it will contain some geologic component that will screw things up. Any organic binder in the pigment might tell you something but there may be oxalate crusts mixed in with the carbonate so how would you separate the organics in the pigment from those. One technique is to find a surface next to the pigmented part you want to date and scrape the surface off that and use it as a background for the pigmented piece. But that doesn’t sound terribly convincing, right?

Best regards,

Guillaume Labrecque

RADIOCHRONOLOGY LABORATORY  C.E.N. (Centre for Northern Studies) Université Laval, Abitibi-Price, Room 0248 2405 Rue de la Terrasse Quebec G1V 0A6 CANADA

Phone: (418) 656-2131 ext. 4486 Fax: (418) 656-2978


From: Mitchell, Suzanne
Sent: Saturday, November 29, 2014 10:49 PM
To: lab@radiocarbon.com
Subject: Inquiry regarding services

Hello
I have a few samples of exfoliated rock pieces that have pigment and calcium carbonate deposits on them that I am interested in submitting for dating analysis. I do not know the organic binding agent that may have been used in the preparation of the pigment, all that is known is that it is likely red ochre based. Is this a type of material you can process and determine age?
Thank you
Regards
Sue Mitchell
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Ashmore, Wendy

Association of Canadian Universities for Northern Studies


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426
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Takla Lake First Nation

Teit, James A.

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