THE ARCHAEOLOGY OF EeQw:1

A

BURIAL SITE NEAR CHASE, BRITISH COLUMBIA

by

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We accept this thesis as conforming to the required standard

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ABSTRACT

The archaeology of EeQw:1, a burial site near Chase in south central British Columbia, is a study of a recent Plateau site in territory inhabited ethnographically by Shuswap. In September 1960 a small field party sponsored by the National Research Council of Canada and the University of British Columbia excavated five burials from the desecrated site. All the interments were flexed, either to the left or to the right, and were placed in unmarked pits. Among the collections from EeQw:1 were many varied and finely fashioned artifacts including: chipped points and knives, jade celts, steatite pipes and carvings, antler digging stick handles and harpoons, antler carvings, bone awls, whale bone clubs, sea-shells, a birch bark container, copper ornaments and a wooden mask. An examination of assemblages of other Plateau sites indicated that material from Lytton, Kamloops, and the upper Columbia River in Washington corresponded most closely with the material from EeQw:1. A close correlation between the assemblage from EeQw:1 and one from Kamloops excavated by H. I. Smith, leads to a tentative proposal of four periods in the recent prehistory of the Kamloops - Chase Area. A review of published and unpublished sources of Plateau prehistory indicated many extra-areal influences, especially from the Coast. In the Canadian Plateau, a number of traits may be attributable to the Coast Salish, and include mortuary practices
and artifacts. It has often been suggested that crematory burial practices in the Plateau could be traced to the Tsimshian via the Carrier; however, in the light of the probable antiquity of cremation burial in the Plateau, this position is no longer tenable. Using ethnographic accounts of Plateau societies, Ray has divided the culture area into six sub-areas. These divisions can also be demonstrated in the archaeological record. Finally, the study has raised a number of pertinent questions and problems concerned with Plateau prehistory. The answers to many of these queries may be gained through more fieldwork in any one of three selected locations: the Chilcotin, the Lytton to Lillooet region, and the Kamloops - Chase Area.
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td></td>
</tr>
<tr>
<td>PREFACE</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Purpose and Problems</td>
<td>1</td>
</tr>
<tr>
<td>I THE SETTING</td>
<td>5</td>
</tr>
<tr>
<td>Ecology</td>
<td>5</td>
</tr>
<tr>
<td>Geology</td>
<td>7</td>
</tr>
<tr>
<td>Recent Population</td>
<td>9</td>
</tr>
<tr>
<td>II EXCAVATIONS</td>
<td>11</td>
</tr>
<tr>
<td>Field Techniques</td>
<td>11</td>
</tr>
<tr>
<td>The Burials</td>
<td>11</td>
</tr>
<tr>
<td>III ARTIFACTS</td>
<td>17</td>
</tr>
<tr>
<td>Introduction</td>
<td>17</td>
</tr>
<tr>
<td>Stone Industry</td>
<td>18</td>
</tr>
<tr>
<td>Antler Industry</td>
<td>44</td>
</tr>
<tr>
<td>Bone Industry</td>
<td>55</td>
</tr>
<tr>
<td>Shell Industry</td>
<td>65</td>
</tr>
<tr>
<td>Wood Industry</td>
<td>67</td>
</tr>
<tr>
<td>Tooth Industry</td>
<td>69</td>
</tr>
<tr>
<td>Metal Industry</td>
<td>70</td>
</tr>
</tbody>
</table>
# Table of Contents

## IV ANALYSIS OF EeQw:l DATA AND ETHNOGRAPHIC COMPARISONS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of Burials</td>
<td>72</td>
</tr>
<tr>
<td>The Burial Complex</td>
<td>73</td>
</tr>
<tr>
<td>Artifact Analysis</td>
<td>75</td>
</tr>
<tr>
<td>Art</td>
<td>76</td>
</tr>
<tr>
<td>Summary</td>
<td>83</td>
</tr>
<tr>
<td>Ethnography of the Shuswap</td>
<td>83</td>
</tr>
<tr>
<td>Recent and Prehistoric Culture</td>
<td>88</td>
</tr>
<tr>
<td>Summary</td>
<td>90</td>
</tr>
</tbody>
</table>

## V PLATEAU BURIAL PATTERNS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronological Criteria and Terminology</td>
<td>91</td>
</tr>
<tr>
<td>Canadian Plateau Burials</td>
<td>93</td>
</tr>
<tr>
<td>American Plateau Burials</td>
<td>100</td>
</tr>
<tr>
<td>Summary</td>
<td>106</td>
</tr>
</tbody>
</table>

## VI ARCHAEOLOGY OF THE KAMLOOPS - CHASE AREA

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>108</td>
</tr>
<tr>
<td>Burial Sites Near Kamloops</td>
<td>110</td>
</tr>
<tr>
<td>Conclusions</td>
<td>113</td>
</tr>
<tr>
<td>Summary</td>
<td>115</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>VII  NEW LIGHT ON RECENT CULTURE HISTORY IN THE PLATEAU</td>
<td>117</td>
</tr>
<tr>
<td>Coastal Influences on Interior Cultures</td>
<td>117</td>
</tr>
<tr>
<td>Origin of the Wood Cist Burial</td>
<td>126</td>
</tr>
<tr>
<td>Origin and Spread of Cremation Burials</td>
<td>128</td>
</tr>
<tr>
<td>Plateau Burials Patterns</td>
<td>132</td>
</tr>
<tr>
<td>Population Movements within the Plateau</td>
<td>134</td>
</tr>
<tr>
<td>Ethnographic Subdivisions in the Plateau</td>
<td>134</td>
</tr>
<tr>
<td>Conclusion</td>
<td>139</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>142</td>
</tr>
<tr>
<td>EXPLANATION OF FIGURES</td>
<td>148</td>
</tr>
<tr>
<td>FIGURES</td>
<td>151</td>
</tr>
<tr>
<td>MAPS</td>
<td>174</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>DIMENSIONS AND FREQUENCIES OF CHIPPED POINTS</td>
</tr>
<tr>
<td>II</td>
<td>DIMENSIONS OF DRILLS</td>
</tr>
<tr>
<td>III</td>
<td>DIMENSIONS OF HANDMAULS</td>
</tr>
<tr>
<td>IV</td>
<td>DIMENSIONS OF MORTARS</td>
</tr>
<tr>
<td>V</td>
<td>DIMENSIONS OF ABRASIVE STONES</td>
</tr>
<tr>
<td>VI</td>
<td>DIMENSIONS OF CELTS</td>
</tr>
<tr>
<td>VII</td>
<td>DIMENSIONS OF CELTS FROM PLATEAU SITES</td>
</tr>
<tr>
<td>VIII</td>
<td>DIMENSIONS OF PIPES</td>
</tr>
<tr>
<td>IX</td>
<td>DIMENSIONS OF DIGGING STICK HANDLES</td>
</tr>
<tr>
<td>X</td>
<td>DIMENSIONS FOR TYPE B HARPOONS</td>
</tr>
<tr>
<td>XI</td>
<td>DIMENSIONS OF ANTLER POINTS</td>
</tr>
<tr>
<td>XII</td>
<td>DIMENSIONS OF ANTLER WEDGES</td>
</tr>
<tr>
<td>XIII</td>
<td>DIMENSIONS OF ANTLER CLUBS</td>
</tr>
<tr>
<td>XIV</td>
<td>DIMENSIONS OF BONE PROJECTILE POINTS</td>
</tr>
<tr>
<td>XV</td>
<td>DIMENSIONS OF CREASERS</td>
</tr>
<tr>
<td>XVI</td>
<td>DIMENSIONS OF BONE CHISELS OR WEDGES</td>
</tr>
<tr>
<td>XVII</td>
<td>DIMENSIONS OF MINIATURE BOWS</td>
</tr>
<tr>
<td>XVIII</td>
<td>DIMENSIONS OF COPPER ORNAMENTS</td>
</tr>
<tr>
<td>XIX</td>
<td>ARTIFACTS WITH INCISED GEOMETRIC MOTIFS</td>
</tr>
<tr>
<td>XX</td>
<td>ITEMS PRESENT AT EeQw:l NOT INCLUDED IN RAY'S LIST</td>
</tr>
<tr>
<td>XXI</td>
<td>SELECTED ARTIFACT COMPARISONS FROM KAMLOOPS AND EeQw:l</td>
</tr>
</tbody>
</table>
# LIST OF MAPS

<table>
<thead>
<tr>
<th>MAP</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pacific Northwest Plateau</td>
<td>175</td>
</tr>
<tr>
<td>2</td>
<td>Ethno-Linguistic Boundaries in the Pacific Northwest Plateau</td>
<td>176</td>
</tr>
<tr>
<td>3</td>
<td>Chase and EeQw:l</td>
<td>177</td>
</tr>
<tr>
<td>4</td>
<td>Excavation Sites at EeQw:l</td>
<td>178</td>
</tr>
</tbody>
</table>
PREFACE

Early in the summer of 1960, road widening operations in the Neskainlith Indian Reserve unearthed human skeletal material. An elderly resident of the Reserve reburied the bones a short distance away and in the course of digging a new grave struck an aboriginal burial, uncovering a large nephrite adze blade. Word of his find spread rapidly, and very shortly, the site was almost totally demolished by hordes of relic and rock collectors searching for the semi-precious mineral, "jade."

The aboriginal burial ground is on the right bank of the South Thompson River, three miles west of the town of Chase (Map 3). Chase, at the outlet of Little Shuswap Lake, is located thirty-seven miles east of Kamloops in south central British Columbia.

In July 1960, Dr. C. E. Borden of the University of British Columbia and Mr. W. Duff of the Provincial Museum in Victoria made separate trips to the locality. Despite the extensive despoliation of the site, Dr. Borden and Mr. Duff felt that some undisturbed areas might lie beneath the relic collectors' back-dirt. It was decided that a small excavation party should investigate the burial ground and attempt to salvage some information which might otherwise be lost.
The three-man crew, made up of Messrs. Peter Harrison, Derek Smith, and David Sanger, excavated sections of the site during September 1960. Mr. Harrison was in charge of the field work. A grant from the National Research Council of Canada to Project Director, Dr. C. E. Borden, financed the three-week expedition.

**Acknowledgements** I should like to acknowledge the cooperation and assistance given to the project in the field by the following gentlemen: Mr. George Manuel, President of the Native Brotherhood who first directed our attention to the site; Chief Anthony August and Mr. Isaac Willard of the Neskaipness Reserve; Chief Michel Antony of the Adams Lake Reserve; Mr. Peret, Superintendent of the Kamloops Indian Agency; Mr. Peter Harrison, Graduate student at the University of Arizona; and Mr. Derek Smith student at the University of British Columbia.

The site analysis was made possible through the help of a number of specialists for whose assistance I am most appreciative. Dr. Ian M. Cowan and Mr. R. J. Drake of the Department of Zoology identified many of the faunal remains. Dr. William Mathews of the Department of Geology, and Dr. John K. Stager of the Geography Department discussed the regional geology and topography with me. Mr. W. S. Adams of the Metallurgy Department examined and measured the copper specimens. Drs. Miller and Spiro, Radiologists, donated their time and equipment to X-ray a bark container. Mr. Clive Larter made fine line drawings of many of the artifacts, and Mr. James
B. Garner of the Vancouver City Museum kindly provided much unpublished information on Columbia River burial sites.

I should like to thank the officials of the Kamloops Municipal Museum for allowing me to study and photograph their collection from Chase. Mr. Wilson Duff of the Provincial Museum photographed many of the private collections. Without this fine series of colour slides, much of the assemblage could not have been described.

To my wife, Mary Jo Sanger, goes a great measure of appreciation. She provided encouragement and financial support, and devoted many long hours assisting in the analysis and in proof reading the manuscript.

I am grateful for the many helpful comments and suggestions made by the Committee members; Dr. Harry B. Hawthorn, Head of the Department of Anthropology and Sociology at the University of British Columbia; Dr. Wayne P. Suttles of the Department of Anthropology; and Mr. Wilson Duff of the Provincial Museum in Victoria, B. C.

To my thesis advisor, Dr. Charles E. Borden, I am most grateful. Dr. Borden initiated the project, directed the field work, and guided the report. He offered many valued criticisms and suggestions throughout the analysis and in the presentation.
INTRODUCTION

Purpose and Problems

The purpose of this report is to present an archaeological analysis of the burial site near Chase and to utilize the results in an attempt to determine the extra-local relationships of the site as well as its position in the prehistory of the Plateau of northwestern America. The Plateau lies between the Rocky Mountains on the east and the Cascade Mountains on the west. As a cultural area the Plateau includes groups living east of the Rockies, the Kutenai and Flathead (Ray 1939:1), and the Athapaskans to the north. Temporally, the concern is with the recent, or last five hundred years. Spatially, it is necessary to consider both the American and Canadian Plateau, although the stress will be on the Canadian sites.

Archaeologists have been active in the Plateau since the end of the nineteenth century. Except for H. I. Smith's early work in British Columbia, the American Plateau has received most of the attention. Smith's publications concern the results of his investigations around Lytton (1899 a), Kamloops (1900), and the Nicola Valley (1900) in south central British Columbia (Map 1). The coverage in these early monographs is selective. While the more usual artifacts are slighted, the curious and
decorated objects are described in detail. Furthermore, Smith's conclusions naturally are vague and tentative. Since he detected no evidence of cultural change, he assumed that the prehistoric cultures did not differ significantly from those described in ethnographies.

The analysis of the data from the site near Chase permits a re-interpretation of Smith's work and, when combined with his Kamloops data (1900), suggests a number of cultural changes in the Kamloops-Chase area during the last few hundred years of prehistory.

The results of a brief site survey in the Okanagan Valley and Similkameen Valley by Caldwell (1954), a preliminary report on excavations in central British Columbia (Borden 1952 b), and an account of a site survey in the East Kootenay region (Borden 1954 a) complete the list of archaeological publications concerned specifically with the Canadian portion of the Plateau.

Among the numerous monographs, articles, and theses, bearing on the last five centuries of American Plateau prehistory, three publications stand out. The first is the Archaeology of The Dalles-Deschutes Region by Strong, Schenck, and Steward (1930). The authors are particularly interested in the evidence of Chinook influences on the Dalles' cultures, and in the origin of the Columbia River cremation complex.
The Middle Columbia River is covered in part by a detailed monograph by Osborne (1957), who reports on a series of burials and habitations in the McNary Reservoir Region (Map 1). Among his many conclusions is the statement that wood cist burials are a Canadian Plateau innovation which diffused south to the Columbia River. Osborne is also concerned with the origin of cremation.

The third report of major proportions deals with the Upper Columbia River sites from the Grand Coulee to the International Boundary (Map 1). This work by Collier, Hudson, and Ford (1942) records the largest collection of burials and artifacts ever discussed in a publication dealing with recent Plateau prehistory.

Among the problems connected with recent Plateau prehistory, three loom as of special importance. Perhaps the most vital is the effect of extra-areal influences. In the Canadian Plateau the impact of the Coastal cultures is particularly noticeable. It is important to determine the extent of these influences, both in time and in space.

Secondly, the theories of Strong et al. (1930:49,50), Osborne (1957:156), and Ray (1939:65) concerning the origin of the Columbia River cremation complex must be re-examined. Working with archaeological and ethnological materials, these authors regard the apparently recent adoption of cremation by
the Carrier from the Tsimshian as the start of crematory practices in the Plateau.

Finally, on the basis of ethnographic data, Ray (1939:145-149) discusses a number of sub-divisions within the Plateau culture area. He recognizes three lateral sub-areas: (1) the Athapaskan in the north; (2) the Interior Salish in Canada; and (3) the American Plateau groups. Cutting across these lateral divisions are three longitudinal sub-areas formed, according to Ray, by the influence of extra-Plateau cultures. The lateral divisions, Ray maintains, are not a result of extra-areal influences. More archaeological data from recent sites is now available, and it may be possible to apply Ray's sub-areal concept to this information and perhaps project the ethnographic divisions back into prehistoric times.
CHAPTER I

Ecology

The Interior Plateau of British Columbia is not a plateau in the sense of a high table-like formation dropping off at the edges. Rather, it is an elevated area hemmed in on the west by the Coast Range, in the east by the Columbia System, and on the north by the Skeena and Omineca Mountain ranges. In the south the Plateau extends beyond the International Boundary. Deeply incised into the Plateau are several rivers, the largest of which are the Fraser, Thompson, and Columbia rivers (Map 1).

Chase, in the south central section of the Canadian Plateau, has an elevation of 1200 feet above sea level while the elevation of the surrounding hills is 5000 feet (Map 3).

The annual precipitation in the Chase region averages twenty inches. The winters are short and cold, the summers long and hot. At Kamloops, thirty-seven miles west of Chase, the mean minimum February temperature is 7°F and the mean maximum temperature for July is 90°F. Usually the climate of Chase is somewhat more temperate.

The fauna of the area is rich and varied. The wooded slopes and high open meadows of the surrounding hills provide
ideal conditions for Wapiti (*Cervus canadensis nelsoni*) and mule deer (*Odocoileus hemionus hemionus*). Some other mammals are: mountain caribou (*Rangifer arcticus montanus*); mountain goat (*Oreamnos americanus*); Rocky Mountain bighorn sheep (*Ovis canadensis canadensis*); black bear (*Euarctos americanus cinnamomum*); beaver (*Castor canadensis leucodontus* and *Castor c. sagittatus*); yellow-bellied marmot (*Marmota flavidentris avara*); porcupine (*Erethizon dorsatum nigrescens*); hare (*Lepus americanus columbien-sis* and *Lepus a. pallidus*); red squirrel (*Tamiasciurus hudsonicus streatori*); coyote (*Canis latrans lestes*); wolf (*Canis lupus columbianus*); red fox (*Vulpes fulva sp.*); badger (*Taxidea taxus taxus*). Moose (*Alces americana andersoni*) are recent arrivals in the Chase area (Cowan and Guiget 1960).

Numerous varieties of fish can be caught in the South Thompson River and adjoining Little Shuswap Lake. From a human subsistence point of view, the anadromous fish are the most important; they include: sockeye salmon (*Oncorhynchus nerka*); Chinook salmon (*Oncorhynchus tshawytscha*); lake trout (*Salvelinus namaycush*); and steelhead or Kamloops trout (*Salmo gairdneri*). Non-anadromous fish include: kokanee (*Oncorhynchus nerka*); pygmy whitefish (*Prosopium coulteri*); and squawfish (*Ptychocheilus oregonenses*) (Carl et al. 1959).

Migratory water birds of multitudinous species frequent the river and nearby lakes. Members of the grouse and ptarmigan family (*Tetraonidae*) are year around residents of the area.
A great variety of edible plants is available. A complete listing, based upon the notes of J. Teit, has been prepared by Steedman (1928).

Geology

The earliest geologic formation in the area is the Cache Creek Series dating from the Carboniferous Period, and consisting of limestones and quartzites. More recent are the volcanic rocks of the Triassic age Nicola Series (Dawson 1877: 174).

The sculpturing of the land-forms around Chase is attributed to the last period of glaciation. During that time a vast inland lake caused the sedimentation of fine silts which in time accumulated into the massive white silt deposits found along the Thompson River (Dawson 1877). Following the formation of the silts, reposing chunks of ice became entrenched and, in the course of melting, deposited trapped moraine deposits of sand and gravel. Thus the Chase area is typical kettle topography, marked by isolated sand and gravel deposits lining the gouged out basins or kettles.

The burial site is located on a ridge-like formation extending into the flood plain of the South Thompson River. The ridge is a quarter of a mile north of the river, approximately three miles west of Chase, and on the boundary line between the Adams Lake and the Neskainlith Indian reserves (Map 3). Following
the standard Canadian Site Designation Scheme (Borden 1952), the site has been assigned the code symbol EeQw:1.

A secondary road linking Kamloops with Chase along the right bank of the South Thompson River, has cut through the western end of the site isolating a flat-topped section over two hundred feet long, and averaging thirty feet wide (Map 4, Fig. 1). Most of the burials were interred in this portion; however, in the summer of 1961, a few additional inhumations were unearthed west of the road by a relic collector.

EeQw:1, like the surrounding countryside, was covered with grass and used for pasture prior to the discovery of the burials. The ridge is composed of three distinct soil types: (1) a white silty-clay referred to by Dawson as the white silts (1877); (2) a very clean, light brown, coarse sand with some gravel, and (3) a dark organic overburden. The sand deposits overlie the silts on the southern half of the site at depths ranging between a few inches to three feet. On the northern side, the sand and gravel deposits may be up to twelve feet deep—the height of the ridge above the flood plain which is made up of white silts. A profile of the western side of the road cut illustrates the varved white silts on the left and the brown sand and gravels on the right (Fig. 2). The profile is virtually the same throughout the site, except that the contact between the sand and the silts may become more vertical to the east.
The exact circumstances that created this geological formation are not known. As indicated previously, the area is marked by kettles entrenched into the Pleistocene white silt deposits. It may be that the same meander of the South Thompson River which caused the extensive flood plain, also scoured away a portion of a kettle leaving one side perched at a height of about twelve feet. This theory may explain two features of the site: (1) the curve of the formation as the edge of a kettle; and (2) the overlying sands and gravels deposited by the melting ice on the inner edge of the kettle.

Recent Population

In ethnographic times a vast portion of the Canadian Plateau was occupied by groups of Indians speaking the Interior Salish languages (Map 2). The groups occupying the territory around Shuswap Lake and the South Thompson River are called the Shuswap. While the term "Shuswap" refers to a linguistic subdivision of Interior Salish, it is also applied to the people themselves and their culture.

A subdivision of the Shuswap known as the Lake Band resided at the village of Hala'ut, located on the north bank of the South Thompson River three to four miles below the outlet of Little Shuswap Lake (Teit 1909:461). Some of the habitation pits still exist, but because of many years of plowing, the outlines have been almost obliterated. Other pits have been destroyed by
the encroaching river which continually undercuts the banks. Due to lack of time, these pits were not excavated, and it is not known if they are connected with the burials at EeQw:1. The housepits are located one-half mile upstream from EeQw:1.
CHAPTER II

Excavations

Field Techniques

Standard excavational procedures were followed. The site was surveyed and a five-foot grid system established. Each five-foot square was identified by distance and direction from a fixed datum and, whenever possible, excavations were controlled by the grid (Figs. 5, 6). In areas where sand overlay the silts, excavations were terminated upon striking the latter, since any intrusions into the silt would have been plainly visible. Where no silts underlay the sand deposits, excavations were carried down for a depth of from four to five feet. Small pointed mason's trowels were used until a burial was contacted. The final exposing, prior to photographs and sketches, was done with dental hand tools and brushes. The artifacts were taken to the Archaeological Laboratory of the University of British Columbia for further study, and the skeletal material shipped to the University of Toronto for examination.

The Burials

Excavations were initially confined to the extreme eastern end of the site where the relic collectors had dug only a few exploratory pits which apparently produced negative results. The very close proximity of one such pit to Burial 1 can be seen
in Fig. 3. Burials 1-3 were encountered at the eastern extremity of the ridge (Map 4). Burial 4 was discovered midway between the ends of the site in a small undisturbed area beneath a foot of relic collectors' backdirt (Map 4). Burial 5 was located under a similar amount of backdirt in the western end (Map 4). The last interment, Burial 6, was found in an undisturbed area but at a depth of only a few inches. The dispersed bones were so badly disarticulated that it could not be determined if a complete individual was represented. Further investigation of this inhumation was prohibited by lack of time. The burial may have been disturbed by animals.

Burials 1-5 were all primary; that is, in normal anatomical articulation. The bodies were flexed moderately to very tightly and interred at depths between twelve and twenty inches. A complete analysis of the burial complex is given in Chapter IV. Here, the location and position of the burials is presented in outline form, together with the associated artifacts and their field catalogue numbers. The location of each burial is plotted on Map 4.

Burial 1 (Fig. 3)

Location: Square E. 170'-175'; N. 0'-5'; depth 12".

Position: On back, oriented east-west, skull to east and facing west, legs tightly flexed and turned to left.
Sex: Unknown
Age: Young child
Artifacts: 101 - Antler digging-stick handle
          102 - Antler sap scraper
          103 - Unknown antler object
          104 - "H" shaped piece of antler
          105 - Drilled antler fragment
          106 - Carved antler fragment
          107 - *Dentalium* shell necklace

Burial 2 (Fig. 4)
Location: Square E. 175'-180', N. 0'-5'; depth 12'-14''.
Position: On back, oriented east-west, skull to east and facing north, legs tightly flexed and turned to left, skull turned to right.
Sex: Unknown
Age: Young child
Artifacts: None

Burial 3 (Figs. 7, 8)
Location: Square E. 175'-180', S. 0'-5'; depth 20''.
Position: On left side and flexed, oriented north-south, skull to north and facing south.
Sex: Male
Age: 42-47 years
Artifacts: 81 - Birch bark basket (?) fragments
108 - Chipped knife
109 - Chipped knife
110 - Chipped knife
111 - Chipped point
112 - Obsidian chip
113 - Bone point
114 - Bone creaser
115 - Crystal quartz burin
116 - Crystal quartz chipped knife
117 - Raw material - chalcedony
118-120 - Smoothed stones
121 - Chipped point
122 - Nephrite adze blade
123 - Raw material - chalcedony
124 - Bone point (center point of leister)
125-126 - Bone points (side points of leister)
127 - Bone needle
128 - Fragment of bone artifact
129-130 - Split beaver incisors
131 - Bone point
132 - Bird ulna
133 - Bird bone
Burial 4 (Fig. 9)

Location: Square E. 100'-105', S. 15'-20'; depth 20".

Position: On right side and flexed, oriented north-south, skull to north and facing west.

Sex: Unknown

Age: Infant

Artifacts: 143–144 - Miniature bone bows
145 - Pierced shell ornament
146 - Antler fragment
147 - Antler fragments
148 - Pierced shell ornament
149 - Bird beak
156 - White ochre
Burial 5 (Figs. 10, 11)

Location: Square E. 35'-40', N. 0'-5' and E. 40'-45', N. 5'-10'; depth 10"-16".

Position: On right side and flexed, oriented east-west, skull to west and facing south.

Sex: Male

Age: Adult

Artifacts: 150 - Nephrite adze blade

151 - Fragmentary wooden object

152 - Red ochre

153 - Bone creaser

155 - Birch bark container

Burial 6

Location: Square E. 20'-25', S. 5'-10', and E. 20'-25', S. 10'-15'; depth 2".

Position: Unknown - burial badly disturbed

Sex: Unknown

Age: Unknown

Artifacts: 72 - Chalcedony scraper

159 - Gaming piece (?)

Also some charred antler and bone fragments.
CHAPTER III

Artifacts

Introduction

This section presents a description and analysis of artifacts from EeQw:1. Approximately four hundred objects are discussed, of which only one hundred and thirty are in the University of British Columbia's collection. The remaining pieces are privately owned or in the Kamloops Municipal Museum. The artifacts in the University collection have been catalogued under the site code EeQw:1, while the Kamloops Museum has assigned other numbers to many of its pieces. Reference to specimens without catalogue numbers signifies private ownership.

The total assemblage from EeQw:1 cannot be described in the desired detail since many of the pieces are not available for study. A great quantity of material was dispersed from the immediate area before the arrival of the field party in September, 1960. Fortunately, Mr. Wilson Duff visited Chase in July and photographed the major collections. It is from his colour transparencies that many of the artifacts are discussed. However, photographs, regardless of quality, cannot substitute for laboratory study of individual specimens, and some limitations should be noted. First, the two-dimensional aspect of a photograph rules out thickness measurement of artifacts; and second,
when a scale is included and the camera lens is not poised directly above the subject, a certain degree of distortion is introduced.

A percentage division of the assemblage, industry by industry, is not particularly meaningful in this report, as selective gathering by the relic collectors may have resulted in a higher than normal incidence of decorated artifacts, and an unusually low proportion of flake knives and scrapers.

Stone Industry

Chipped Points

The absence of an aboriginal pottery tradition has encouraged Pacific Northwest archaeologists to trace cultural similarities through chipped point analysis. Several typologies have been invented, but so far no one system has been universally accepted (Strong et al. 1930:78; Collier et al. 1942:58; King 1950; Daugherty 1956:233; Osborne 1957:73; Cressman 1960:44). The earliest and perhaps most widely used point typology, is based upon the presence or absence of a stem. This system will be employed with some modifications to describe the points from EeQw1. This typology is designed for this site only, and is not intended as a universal system.

Two weaknesses of the Stemmed - Non-Stemmed Typology have become evident from past usage: the absence of a feasible method of indicating size, and the lack of a standard descriptive
terminology. The addition of a small postscript to indicate a point larger or smaller than a set mean dimension has been used by at least one Plateau worker (Garth 1952:51). This system is useful only within a specific sample however, and assists very little in assemblage comparisons.

The second weakness of the typology, the lack of standard outline descriptions, can be overcome by a standard nomenclature. "Oval" points are widest at a point equidistant from either extremity, while "leaf" shaped points exhibit a shift in maximal width towards one extreme. Stemless triangular points are subdivided according to whether the sides are straight or excursive. Incurving triangular points do not occur in the sample. "Pentagonal" points are five-sided, often contracting towards the base; however, only when the contraction is pronounced enough to produce shoulders are the points placed in the stemmed category. Outlines of points displaying these basic characteristics are illustrated in Figure 13.

Typology of Chipped Points

N - Not Stemmed

A. Leaf Shaped
   (a) Pointed at both ends
   (b) Pointed at one end
      1. Convex base
      2. Straight base
      3. Concave base
I. Serrated along one side
   II. Serrated along both sides
   III. Notched more than twice on either side

B. Triangular (straight sides)

B(r) Triangular (excurvate sides)
   (a) Straight base
   (b) Concave base
   (c) Convex base
   (d) Concave base with single spur
       1. Unnotched sides
       2. Notched once on either side
       3. Notched more than once on one side and once on the other
          I. Notched in center of base
          II. Two notches in center of base

C. Pentagonal
   (a) Concave base
   (b) Straight base
   (c) Convex base

D. Ovoid
   (a) Pointed at both ends
   (b) Pointed at one end
       1. Straight base
S - Stemmed Points

A. Contracting Stem
   (a) Shouldered
   (b) Barbed
      1. Straight base
      2. Concave base
      3. Convex base

B. Parallel Sided Stem
   (a) Shouldered
      1. Straight base

C. Expanding Stem
   (a) Shouldered
   (b) Barbed
      1. Convex base
      2. Straight base
      3. Concave base
      I. Serrated along one side
      II. Serrated along both sides

Table I indicates the marked numerical superiority of non-stemmed over stemmed points. Most common are the small side notched straight-based triangular points (NBa2) (Fig. 13, E). The NBb3 and allied forms, which comprise over sixteen per cent of the sample, are notched at least three times, once on one side and twice on the other. An intentional variant of the triangular side notched point is the form with a unilateral spur (NBd) of which there are eight examples (Fig. 13, F).
TABLE I

DIMENSIONS AND FREQUENCIES OF CHIPPED POINTS

<table>
<thead>
<tr>
<th>Point Type</th>
<th>Number</th>
<th>Maximum Length (cm)</th>
<th>Minimum Length (cm)</th>
<th>Maximum Breadth (cm)</th>
<th>Minimum Breadth (cm)</th>
<th>Mean Length (cm)</th>
<th>Mean Breadth (cm)</th>
<th>% of Total</th>
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<td>100.0%</td>
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</table>
Leaf shaped points, constituting fifteen per cent of the sample, are generally larger than the triangular forms. Of interest is the number of serrated forms. As is true of the multi-notched points, the extra flakes removed would not appear to make the artifact more efficient (Fig. 13, C).

Most of the points are made from glassy basalt. A few are of chalcedony, chert, and crystal quartz. The high percentage of non-stemmed points (83%) is not exceeded at any other Plateau site. Two-thirds of the points from the Upper Columbia are stemless, while downstream sites have increasingly higher percentages of stemmed points (Collier et al. 1942:63; Osborne 1957:80; Garth 1952:51; Strong et al. 1930:79). Collections from two site surveys along the banks of the Fraser River between Lytton and Kelly Creek have a high proportion of stemmed points (Hills 1961; Sanger 1961b).

The multi-notched points appear to be a Canadian Plateau feature, as they are reported only from Lytton and Kamloops (Smith 1899a:136; 1900:409).

**Chipped knives.** Bifacially chipped artifacts which are not points or drills are classified as knives. The series of eighteen illustrated in Figure 15 were found during excavation or gathered from the surface, where they had been discarded by collectors. The rejection of the flake knives in favour of more finely fashioned objects may be responsible for the low incidence of chipped knives in private collections.
Some of the knives are merely retouched flakes, but others suggest that definite forms were intended. Notable among these are two large carefully flaked ovoid knives averaging 16 cm long and 9 cm wide. Many of the larger "points" are probably knives.

Glassy basalt was the most commonly used material; however, some examples are made of quartz and chalcedony (Fig. 15; A, B, C).

Chipped Scrapers. Scrapers are distinguished from knives on the basis of flaking; the former are unifacially worked and the latter bifacially. The distinction is somewhat arbitrary, and it is recognized that the function may not be wholly dependent upon the method of manufacture. Although there are nineteen scrapers in the University collection (Fig. 16), none are illustrated in the numerous photographs of private assemblages, a situation which again reflects the selective collecting by relic hunters.

The scrapers are small and based on thin flakes. No examples of end scrapers were noted, nor are there indications that any of the recovered specimens were hafted. Basalt and occasionally chalcedony flakes were made into scrapers.

Drills. The six available drills from EeQw:1 can be subdivided into three types: Type A is lanceolate (Fig. 13; M); Type B has a parallel-sided pile and an expanding triangular base (Fig. 13; N); Type C has a tapering pile with projections near
the base (Fig. 13; 0). All types are characterized by high median ridges.

**TABLE II**

**DIMENSIONS OF DRILLS**

<table>
<thead>
<tr>
<th>Type</th>
<th>Length (cm)</th>
<th>Width Pile (cm)</th>
<th>Width Base (cm)</th>
<th>Material</th>
</tr>
</thead>
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<td>0.5</td>
<td></td>
<td>Basalt</td>
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<tr>
<td>A</td>
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<td>1.0</td>
<td></td>
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<td>A</td>
<td>5.7</td>
<td>1.3</td>
<td></td>
<td>Chalcedony</td>
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<td>B</td>
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<td>0.35</td>
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<tr>
<td>C</td>
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<td>1.25</td>
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</table>

**Burin.** A single quartz crystal burin is associated with Burial 3. (EeQw:1 - 115; Fig. 14; A). A pyramidal graving point is formed by detaching three flakes parallel to the long axis of the artifact. This graving tool is 6.0 cm long and 2.0 cm wide.

**Hand Mauls and/or Pestles.** The eleven hand mauls from the site are all circular to elliptical in cross section, and have tapering shafts. Two distinct types of mauls are recognized: Type A, which has sharply flaring ends, and Type B with slightly
expanding ends (Fig. 17). Six mauls are classified as Type A and five as Type B. Possibly some of the mauls served as pestles or performed a dual function.

Two zoomorphic mauls are included in the Type A group. Well defined eyes and a prominent nose suggest that animals are represented. Two of the Type B mauls have nipple or cone tops, while the remainder are rounded.

**TABLE III**

**DIMENSIONS OF HAND MAULS**

<table>
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<th>Artifact Number</th>
<th>Length (cm)</th>
<th>Diameter of Striking Head (cm)</th>
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<th>Comment</th>
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<td>Greywacke</td>
<td>Zoomorphic</td>
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</table>

The distribution of hand mauls in the Plateau is discussed by Smith (1899 b). Excavations in the region since have not significantly affected the situation.

**Hammer Stones.** Four hammer stones of naturally rounded igneous rock have been found at EeQw:1. No measurements are available.
Mortars. Two mortars or bowls are present. The larger mortar (Fig. 17:A) is made from a granite boulder. Except for the smooth depression, the original surface of the boulder is not modified. The smaller bowl is fashioned from a coarse igneous rock; the surface of the depression is not smoothed.

![Table IV](image)

**DIMENSIONS OF MORTARS**

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<th>Diameter</th>
<th>Height</th>
<th>Diameter of Depression</th>
<th>Depth of Depression</th>
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</thead>
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<td>8.5</td>
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</tbody>
</table>

Smith reports very few mortars from Kamloops (1900:413), and only two are mentioned from the Upper Columbia sites (Collier *et al.* 1942:75). None are present in the McNary Reservoir assemblages described by Osborne (1957:63). Mortars appear in quantity in Lillooet sites and at Lytton (Smith 1899a:139); they are also common at The Dalles (Strong *et al.* 1930:97, 98).

**Shaft Smoothers.** Eleven sandstone shaft smoothers are represented in the EeQw:1 assemblage. They are either hemi-cylindrical or rectangular in cross section, and grooved once down
the center of the flat surface. In all instances the groove is parallel to the long axis of the artifact. Two hemi-cylindrical shaft smoothers (728, 729), which are reputed to have been found in the same grave, are of equal size. They are 15.0 cm long and 4.5 cm wide. The groove is 0.75 cm wide. No dimensions are available for the remaining nine examples.

Shaft smoothers are common in many Plateau sites. Generally, they are made from rough textured rock, are hemi-cylindrical in cross section, and occur in pairs. Differences may appear in the positioning of the groove. The examples from EeQw:1, Kamloops (Smith 1900:419), the Upper Columbia (Collier et al. 1942:75) and The Dalles (Strong et al. 1930:91) are characterized by a groove down the center of the flat surface, while some specimens from Lytton (Smith 1899a:146) and the McNary Reservoir Region have a diagonal groove (Osborne 1957:61, 62).

**Abrasive Stones.** There are eleven basalt or argillite abrasive stones. Ten are roughly rectangular in outline with square to rounded ends and parallel sides (Fig. 18; A). One whetstone (EeQw:1-64) is ovoid in outline, with a pronounced groove worn obliquely across the surface from end to end (Fig. 18; B). The artifact is 9.5 cm long, 7.0 cm wide, 0.8 cm thick. The groove is 0.6 cm wide.

The arithmetic mean of the dimensions in Table V is 9.6 cm for the length and 1.8 cm for the width.
### TABLE V

**DIMENSIONS OF ABRASIVE STONES**

<table>
<thead>
<tr>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.25</td>
<td>2.0</td>
<td>EeQw:1-1 - one end exhibits a series of ground facets. (Fig. 18; A).</td>
</tr>
<tr>
<td>14.8</td>
<td>3.2</td>
<td>Square ends, one side excursive, other side straight.</td>
</tr>
<tr>
<td>10.5</td>
<td>2.5</td>
<td>Square ends, sides straight.</td>
</tr>
<tr>
<td>9.5</td>
<td>2.2</td>
<td>Rounded at both ends, sides straight.</td>
</tr>
<tr>
<td>8.5</td>
<td>2.0</td>
<td>Rounded at both ends, sides straight.</td>
</tr>
<tr>
<td>9.8</td>
<td>1.3</td>
<td>Square end, sides straight. Decorated with three oblique lines at one end and four lines at the other end.</td>
</tr>
<tr>
<td>10.3</td>
<td>1.0</td>
<td>Rounded both ends, side rounded.</td>
</tr>
<tr>
<td>8.0</td>
<td>1.5</td>
<td>Square ends, sides straight.</td>
</tr>
<tr>
<td>7.5</td>
<td>1.2</td>
<td>Square at one end, rounded at the other, sides straight.</td>
</tr>
<tr>
<td>7.5</td>
<td>1.2</td>
<td>Rounded at both ends, sides straight.</td>
</tr>
</tbody>
</table>

Abrasive stones occur commonly in the Canadian Plateau (Smith 1899a:14; 1900:147), but infrequently in American sites (Collier et al. 1942:75; Osborne 1957:56; Strong et al. 1930:104, 105). The apparent scarcity of whetstones in the American Plateau may reflect a less common use of grinding techniques than in the Canadian Plateau.
Celts or Adze Blades. Twenty-six celts from the various collections were available for study. They are made from nephrite or jadeite, two hard minerals which can be positively identified only by laboratory analysis. The term "jade" is commonly used to describe these minerals (Hurlbut 1955: 369).

The celts are large and rectangular. Many retain evidence of sawing in manufacture, while others are more carefully finished. Most have asymmetric straight bits and some are bevelled at both ends. The colouring ranges from dark green to white with green being more common.

The arithmetic mean length of the celts is 19.7 cm and the mean width 4.5 cm. Two-thirds of the celts range in length from 15.0 cm to 24.0 cm. The longest example measures 38.0 cm and the shortest 5.6 cm (Table VI).

Jade celts occur in most Plateau sites. The examples from the Canadian Plateau are usually characterized by straight bits, while celts from the Columbia River sites are more often symmetrically bevelled (Collier et al. 1942:70, 71; Osborne 1957:59). Since the size of celts in different parts of the Plateau may be significant, Table VII gives the maximum, minimum, and mean lengths of adze blades from various Plateau sites.

Table VII reveals a trend to larger celts in the northern and eastern sections of the Plateau. The preference appears to be cultural and does not reflect the availability of
<table>
<thead>
<tr>
<th>Artifact Number</th>
<th>Figure</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Thickness (cm)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>EeQw:1-41</td>
<td>20;B</td>
<td>26.5</td>
<td>5.0</td>
<td>1.2</td>
<td>Groove along one edge</td>
</tr>
<tr>
<td>EeQw:1-50</td>
<td>20;C</td>
<td>14.5</td>
<td>5.5</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td>EeQw:1-122</td>
<td>20;A</td>
<td>11.0</td>
<td>5.5</td>
<td>1.4</td>
<td>Rectangular</td>
</tr>
<tr>
<td>EeQw:1-140</td>
<td>20;D</td>
<td>16.0</td>
<td>4.5</td>
<td>1.2</td>
<td>Rectangular</td>
</tr>
<tr>
<td>A 703</td>
<td></td>
<td>38.0</td>
<td>6.5</td>
<td></td>
<td>Rectangular, largest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.5</td>
<td>5.0</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.5</td>
<td>3.0</td>
<td></td>
<td>Tapering from bit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20.0</td>
<td>5.0</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19.5</td>
<td>4.0</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.6</td>
<td>4.6</td>
<td></td>
<td>Rectangular-white</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.6</td>
<td>4.2</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.0</td>
<td>3.4</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28.0</td>
<td>2.3</td>
<td></td>
<td>Rectangular, convex bevel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20.4</td>
<td>4.2</td>
<td></td>
<td>Rectangular, groove down center of face</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26.8</td>
<td>4.4</td>
<td></td>
<td>Rectangular, groove down center of face</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26.6</td>
<td>4.0</td>
<td></td>
<td>Celt blank, no bit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.6</td>
<td>4.4</td>
<td></td>
<td>Rectangular, white</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14.0</td>
<td>4.4</td>
<td></td>
<td>Tapering from bit-white</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14.2</td>
<td>5.0</td>
<td></td>
<td>Tapering from bit-white</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24.0</td>
<td>4.8</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.0</td>
<td>5.2</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17.8</td>
<td>4.0</td>
<td></td>
<td>Tapering from bit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27.6</td>
<td>4.6</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.0</td>
<td>4.0</td>
<td></td>
<td>Tapering from bit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.2</td>
<td>4.4</td>
<td></td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17.0</td>
<td>4.4</td>
<td></td>
<td>Rectangular</td>
</tr>
</tbody>
</table>
### TABLE VII

**DIMENSIONS OF CELTS FROM PLATEAU SITES**

<table>
<thead>
<tr>
<th>Site Locality</th>
<th>Sample Number</th>
<th>Maximum Length (cm)</th>
<th>Minimum Length (cm)</th>
<th>Mean Length (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lytton</td>
<td>?</td>
<td>10.0</td>
<td>2.5</td>
<td>?</td>
</tr>
<tr>
<td>McNary Reservoir</td>
<td>4</td>
<td>13.9</td>
<td>4.7</td>
<td>9.7</td>
</tr>
<tr>
<td>Lillooet (Wilson Collection)</td>
<td>7</td>
<td>20.0</td>
<td>4.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Upper Columbia</td>
<td>7</td>
<td>31.0</td>
<td>8.8</td>
<td>17.5</td>
</tr>
<tr>
<td>Nicola Lake</td>
<td>?</td>
<td>35.0</td>
<td>5.0</td>
<td>?</td>
</tr>
<tr>
<td>EeQw:1</td>
<td>26</td>
<td>38.0</td>
<td>5.6</td>
<td>19.7</td>
</tr>
</tbody>
</table>

The raw material, as most of the jade in the Canada Plateau probably comes from the Lytton area. The celts from the Upper Columbia sites are of nephrite and anthophyllite. The latter mineral was apparently imported from the Skagit River region of northwestern Washington (Collier et al. 1942:115).

**Pipes.** Only tubular pipes made of steatite occur at EeQw:1. All are of the trumpet type; that is, the bowl flares out sharply, like a trumpet bell (Fig. 19). Of eleven specimens five are complete and the remainder fragmentary.

Many of the pipes are decorated with incised lines, and encircling bands carved in relief. These bands, which sometimes
rise as much as 1.5 cm, occur at the junction of the bowl and the stem. One small pipe is decorated with a human head carved on the bowl in bas-relief (Fig. 26). The details of sculpture will be discussed in conjunction with other steatite carving.

None of the pipes has a mouth disc, nor has any been perforated for suspension.

Numerous tubular pipes have been reported from other parts of the Plateau. Some trumpet pipes from Kamloops are virtually identical with those from EeQw:l (Smith 1900:429). From Lytton, Smith (1899a:154, 155) describes trumpet and cigar shapes, both with mouth discs. A group of six pipes viewed in a collection from the Lillooet area display an outline which is mid-way between the sharply flaring trumpet bowl varieties and the gently expanding cigar forms. They are undecorated and have mouth discs.

Many pipes, both trumpet and cigar shaped, are reported from the American Plateau. Five complete specimens and one fragmentary example are discussed by Collier et al. (1942:72-74) from the Upper Columbia. Two of the complete specimens are cigar pipes with mouth discs, while three trumpet forms lack the disc and expand sharply to form the bowl. A fragment of a trumpet pipe has a single raised band at the junction of the bowl and the stem.

Five whole and fragments of two other pipes from the McNary Reservoir are described by Osborne (1957:57-59). Three
<table>
<thead>
<tr>
<th>Length of Bowl and Stem (cm)</th>
<th>Length of Stem (cm)</th>
<th>Length of Bowl (cm)</th>
<th>Diameter of Bowl (cm)</th>
<th>Width of Stem (cm)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.2</td>
<td>14.5</td>
<td>5.7</td>
<td>3.2</td>
<td>1.5</td>
<td>Single band, 4 lines at base of stem, complete</td>
</tr>
<tr>
<td>15.8</td>
<td>10.5</td>
<td>5.3</td>
<td>3.2</td>
<td>1.6</td>
<td>Three bands</td>
</tr>
<tr>
<td>12.2</td>
<td>8.3</td>
<td>3.9</td>
<td>2.8</td>
<td>1.4</td>
<td>Single band</td>
</tr>
<tr>
<td>6.6</td>
<td>2.6</td>
<td>4.0</td>
<td>2.5</td>
<td>1.3</td>
<td>Two incised lines on stem</td>
</tr>
<tr>
<td>6.0</td>
<td>3.0</td>
<td>3.0</td>
<td>2.0</td>
<td>1.1</td>
<td>Face carved on side of bowl, single band (Fig. 26)</td>
</tr>
<tr>
<td>13.0</td>
<td>8.0</td>
<td>5.3</td>
<td>2.8</td>
<td>1.3</td>
<td>Two bands</td>
</tr>
<tr>
<td>14.0</td>
<td>14.0</td>
<td>---</td>
<td>---</td>
<td>1.5</td>
<td>Two bands, no bowl</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>3.6</td>
<td>2.5</td>
<td>---</td>
<td>Single band, no stem</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>4.2</td>
<td>2.8</td>
<td>---</td>
<td>No stem</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>5.2</td>
<td>3.5</td>
<td>---</td>
<td>No stem</td>
</tr>
</tbody>
</table>
cigar forms have mouth discs; the trumpet pipes are smaller and lack the disc.

Six tubular pipes, also from the McNary Reservoir, are illustrated by Garth (1952:40-43). They are all trumpet forms; however, the flare of the bowls is not pronounced. Five of the six examples have mouth discs.

Twelve trumpet pipes are reported from The Dalles (Strong et al. 1930:Plate 24). All the complete specimens have a single raised band at the base of the gently expanding bowls.

Sufficient data are available now to make some comments on the distribution and the characteristics of tubular pipes, although a discussion of evolution of form is necessarily limited by the lack of absolute dates. Numerically, trumpet pipes predominate, especially at Kamloops, EeQw:1, and the Upper Columbia. West of Kamloops and the Upper Columbia sites, the occurrence of sharply flaring bowls becomes decidedly less pronounced; at the McNary Reservoir they disappear entirely in the cigar pipe, and along the Fraser an almost hybrid form is evident. Mouth discs, non-existent at EeQw:1 and on the Upper Columbia, are common on trumpet pipes elsewhere, and invariably occur on cigar shapes.

Ground Slate Knives. Ground slate knives are rare at EeQw:1. Of two specimens found, only one can be described in detail; the other has been lost. The latter artifact was about
15 cm long, shaped into a flat point with two cutting edges each doubly beveled, and with a deep concave base producing two spurs.

A second slate artifact is a large tanged knife. It measures 21.0 cm long and 6.2 cm wide. The wide blade is hexagonally ground and smoothly finished, except for the tang and basal region which is rough. The roughness which extends beyond the shoulders, forming a triangular area on the blade, suggests that the final polishing took place after the artifact was hafted.

Ground slate knives are typical of western Canadian sites. They occur sporadically at Kamloops (Smith 1900:414), and not at all in the Upper Columbia sites or the McNary Reservoir (Collier et al. 1942; Osborne 1957:65; Borden n.d. b). Smith (1899a:140) reports a considerable amount of ground slate from Lytton; however, surface collections from sites on the Fraser between Lytton and Kelly Creek contain only two pieces.

**Stone Saws.** While there are no artifacts which are definitely saws, four slabs of phylite (Eeqw:1-15) included with Burial 3 may have been intended for sawing. The slabs are rectangular and measure 20 cm by 12 cm and are 1 cm thick. Stone saws are found infrequently. Smith notes several in his Lytton collection (1899a:143), but remarks on their absence at Kamloops (1900:147).
Smooth Pebbles. Three small smooth pebbles (EeQw:l-118-120) were associated with Burial 3. Teit (1930:196) reports that smooth pebbles were often picked up and kept as fetishes.

Smoothed pebbles are also reported as grave additions by Smith from Lytton (1899a:160) and by Osborne (1957:68) from the McNary Reservoir.

Pigments. Ochre was associated with Burials 4 and 5 and was noted in various collections. A small chunk of white ochre, possibly volcanic ash, was found with Burial 4 (EeQw:l-156), and a larger piece of red ochre, or hematite (EeQw:l-152), was associated with Burial 5. A private collection includes a sizeable piece of red ochre which was apparently found in a birch bark basket fragment. It is not known if the association of pigment and basket is true.

Ochre stains appear on several artifacts in collections; however, the collectors' children, playing with the material, may be responsible for the colouring.

Red ochre is reported from The Dalles (Strong et al. 1930:117), the McNary Reservoir (Osborne 1957:91), the Upper Columbia (Collier et al. 1942:76), Cache Creek (Borden n.d. a), Lytton (Smith 1899a:155), and Kamloops (Smith 1900:430). Osborne (1957:96) also records green (from tuffaceous sandstone) and white (volcanic ash) ochre from the McNary Reservoir.
Gaming Piece (?). A small steatite artiface (Eel2w:1-75, Fig. 21) associated with Burial 6 is 2.0 cm long, and 1.5 cm wide. The ends of the object are squared off by grinding. The piece is hemi-cylindrical in cross section, and grooved the length of the flat surface. This piece is decorated with a single zigzag line at each end and three sets of incised lines in groups of five. On the basis of design and size a function such as gaming piece is suggested. The shape and size of the groove suggests that the artifact was originally the stem of a steatite pipe which was modified to its present shape, perhaps after being broken.

Steatite Serpent. A serpent, carved of black steatite (A680; Fig. 24A) is 14.75 cm long and 2.5 cm wide. The carving represents a rattlesnake (Crotalus viridis) with the rattles indicated by six incised encircling lines. A "V" incised on both the dorsal and ventral side separates the head from the body. The eyes are mere slits without further detail.

Steatite Bears or Coyotes. Two figurines, perhaps intended to represent bears or possibly coyotes, are carved in steatite (A677, A678; Fig. 22). The smaller figure (A678; Fig. 22), is 5.0 cm high and 2.5 cm wide. The head, tilted upwards, is the most intricately carved portion of the figure. Small erect pointed ears are set off from the rest of the head by a deep line incised from one side of the head to the other. There is a thin eyebrow ridge which broadens as it approaches the center of the face where it forms the beginning of a snout. Another line is incised below the eyes.
The eyes are lenticular, tending to flatten on the lower edge, with a large iris in bas-relief following the outline of the eye. The mouth is open with prominent lips. Teeth are represented by eight shallow lines incised into each jaw. Nostrils are not represented on the bulbous nose.

A deep incision separates the head from the body and is the only trace of a neck. In contrast with the head, the body is rudimentarily carved. A band curves from the back of the neck to form the hind quarters upon which the figurine rests. Branching off the upper portion of this band are the forelimbs which slope down towards the base of the figure and then bend upwards at the elbow. Forepaws rest on either side of the abdomen with incised lines indicating claws. The hind legs curve around to the front but do not meet; between their extremities is drilled a hole. This hole is 1 cm deep and 0.8 cm wide. A larger hole is drilled into the base; it is 1.25 cm deep and 1.25 cm wide. These holes do not connect.

The second figure (A677; Fig. 22A) differs both in size and complexity from the carving discussed above. It is 7.5 cm high and 3.25 cm wide. The head of this bear is tilted upwards although not to the same degree as that of the small sculpture. The ears are neither as pointed nor as high, but the eyebrow ridges are more prominent. The eyes approximate the classic Northwest Coast type (Duff 1956:51). They are disproportionately large, the upper lid forming a crescent which
extends from the snout almost to the incised line of the neck. The iris is small, circular, and carved in relief. Directly below the iris, the eyelid dips abruptly then rises to meet the upper lid. There is a shallow depression below the eyes. The muzzle ends in a nose complete with two nostrils separated by a septum. The mouth is open with prominent lips. Teeth are carved into the jaws; the canines are represented by two solid bars of stone while sixteen other teeth are carved in relief on the mandible. There is a roughness between the canines to represent incisors.

A constriction separates the head from the body. The forelimbs and paws are in the same position as those of the smaller animal. Hing limbs are absent, and there are no holes drilled into the base. A groove encircles the figure 2 cm from the base.

**Bird Bowl.** A zoomorphic bowl, representing a bird (Fig. 23) is made from green steatite. Its exact dimensions cannot be given as no scale was included in the photograph from which this study was made; however, the carving fits into the palm of the hand.

The head is tilted upward and is not intricately carved. There is a pronounced ridge over the eyes, which are large and circular with a single spur slanting in towards the beak. The iris occupies almost the entire eye and is in slight relief from the eyelids. A circular hole drilled into the top
of the head is possibly a receptacle for feathers or similar decoration. The beak is solid, but upper and lower mandibles are separated by a line whose anterior position curves sharply downward, as in the bill of a predatory bird.

A constriction separates the head from the body. The back is vertical down to the flaring tail where the feathers are represented by a series of parallel lines. Legs with four toes are carved in relief onto the sides of the body; however, these legs are more reptilian than bird-like. A single wing forms the sides of the bowl, the feathers being indicated by incised lines. A heavy line represents the shaft and branching off at right angles are the barbs. The bowl is round, and deep enough to hold a few ounces of liquid. It is more shallow at the front than elsewhere, and the front rim is decorated by a series of vertical parallel lines.

The species of the bird cannot be definitely identified; however the hooked beak suggests a bird of prey.

**Human Figure Bowl.** Among the carved steatite objects is a human figure bowl of dark coloured steatite 4.9 cm by 2.5 cm (Figs. 25, 26).

The head is large, tilted upwards, and has just a suggestion of a protruding top-knot. A continuous groove runs from ear to ear and sets off the eyes which are long and curved with narrow irises. Exaggerated cheek furrows continue to the
nose and accentuate still further the broad alae of the hooked nose. The mouth is open displaying a tongue, and teeth which are carved into the gums. The back of the head is flattened and the ears are represented by slits. A constriction between the head and body indicates the neck.

The body is carved on both the dorsal and ventral sides. A bifurcating line with horizontal notches is carved in relief down the center of the back, while the left arm continues past the shoulder and ends as a serpent's head above the right shoulder. At the base of the figure the buttocks of a squatting human are carved (Fig. 26). The front of the figure is carved to indicate the internal skeleton (Fig. 25); two curving lines representing the clavicles articulate with the sternum, and the lowest ribs join with the sternum in a cone.

Located below the chest, the bowl is formed by the lower ribs on the top, the thighs on the sides, and the lower legs on the bottom. The depression has been formed by gouging out the abdomen. Only if the figure is placed on its back could the shallow bowl hold any appreciable amount of liquid, although it is possible to stand the figure upright (Fig. 26).

**Human Face.** A small steatite face, 2.8 cm high and 3.4 cm wide, is carved in bas-relief (Fig. 24B). The small top-knot, set off from the scalp by an encircling groove, was damaged prior to excavation. The prominent eye-brow ridges, and bulging irises between recurving eyelids are typical of the
steatite carving complex outlined by Duff (1956). The nose is prominent and hooked, with flaring alae accentuated by the continuation of the deep cheek furrows. Teeth are not carved into the broadly "smiling" mouth, nor are the lips overly prominent. A prominence in the center of the lower lip suggests the tongue.

**Face on Pipe.** One of the tubular steatite pipes has a small face carved on the bowl (Figs. 20 and 24C). The face is almost circular with large eyes and oval irises between recurving upper and lower eyelids. The nose is hooked and, like the previously described face, deep cheek furrows accentuate the broadly flaring alae. A slightly open mouth is carved with prominent lips, but no teeth are represented. Beneath the chin, and continuing to the pipe stem, is a series of parallel lines perpendicular to the long axis of the pipe.

One of the few comprehensive studies of an aspect of Northwest Coast prehistory concerns the steatite carving complex (Duff 1956). The carvings from EeQw:1 are important as they are the only steatite sculptures from a site known to be recent. Some relationship between these stone carvings and those of the Marpole Phase of the Fraser Delta is likely. Since examples from the Marpole Phase have been dated to the First Millennium B.C. (Borden 1950:18-19, 23; 1961:117), a remarkable continuity of some two thousand years seems indicated.
Antler Industry

Introduction

The antler industry forms an important part of the total artifact assemblage. A total of fifty-four pieces is described under the following headings: Digging Stick Handles, Harpoon Heads, Points, Wedges, Clubs, Sap Scraper, Gorget, Haft, Tine Flakers, Handle Carvings, and Miscellaneous.

Wapiti (Cervus canadensis) antler is probably used exclusively; no pieces are definitely of deer antler. Gener­ally, the artifacts exhibiting a flattened cross section are manufactured from the antler cortex, while the objects having a circular or ovoid cross section are fashioned from tines. The antler is worked by sawing, hacking, whittling, incising, drilling, and grinding. Many of the artifacts are embellished with geometric motifs, and some are carved into zoomorphic and anthromorphic shapes.

Digging Stick Handles. Fifteen digging stick handles are made from tines of wapiti antler and are circular to oval in cross section. In every example, a perfectly circular hole is drilled through the center of the handle approximately equidistant from the extremities. The holes average 1.75 cm in diameter on the upper surface and slightly more on the under side. The contracting perforation causes the handle to be jammed onto the tapering proximal end of the digging stick as pressure is applied
from above (Collier et al. 1942:82). A feature common to all specimens is a thumb groove worn into the excurvate edge of the handle, and in some instances, to both sides (Figs. 27, 28).

Open sockets have been cut into the under side of the proximal end of thirteen handles, while one (Fig. 28; B) exhibits a socket in both ends. A slot, 5 cm deep, has been incised into the distal end of one specimen. The carefully made sockets suggest that the handles were dual purpose tools, serving perhaps as knife hafts in addition to their primary function. None of the jade celts is small enough to be inserted into the sockets; however, many of the leaf-shaped chipped points would fit.

All the handles are decorated. A series of long parallel lines, incised at right angles to the long axis of the artifact is the most common motif, closely followed by a ticked line design (long parallel lines with short perpendicular spurs). Cross hatching and an X-motif also occur. One handle (EeQw:1-101; Fig. 27; C) is embellished with a delicately carved head of an unrecognizable creature. It has a bulbous nose and large round eyes connected by two incised lines.

Antler digging stick handles are present in the assemblages of all the major Plateau sites with the exception of The Dalles (Strong et al. 1930). Round to elliptical conically constructed holes are reported from Lytton (Smith 1899a:137) and
TABLE IX

DIMENSIONS OF DIGGING STICK HANDLES

<table>
<thead>
<tr>
<th>Artifact Number</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Diameter of Perforation (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EeQw:1 - 101</td>
<td>28.0</td>
<td>2.5</td>
<td>1.75</td>
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<tr>
<td>EeQw:1 - 65</td>
<td>27.0</td>
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<td>1.75</td>
</tr>
<tr>
<td>EeQw:1 - 66</td>
<td>28.0</td>
<td>2.7</td>
<td>1.75</td>
</tr>
<tr>
<td>--</td>
<td>35.0</td>
<td>3.5</td>
<td>1.75</td>
</tr>
<tr>
<td>--</td>
<td>35.0</td>
<td>3.5</td>
<td>1.75</td>
</tr>
<tr>
<td>A670</td>
<td>10.0</td>
<td>1.5</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Kamloops (Smith 1900:411), while rectangular holes occur on the Upper Columbia specimens (Collier et al. 1942:82-84). The handles from the McNary Reservoir have elliptical holes and are not all associated with female burials (Osborne 1957:84). The open sockets in the under surface of the handles from EeQw:1 appear to be a regional specialization as they are not reported elsewhere.

Harpoons. Of the ten harpoons, five are complete and five are fragmentary. Two distinct types of heads (A and B) are evident. The six Type A examples are non-toggling, unilaterally barbed points with a retrieving-line hole gouged in the lower half of the shaft. The base is rounded. The two barbs are
high and isolated. There are neither lateral line guards nor shoulders on the base. Use of the cortex of antler has produced a flat cross section (Fig. 29). Type B harpoons are long (one specimen measures 35.0 cm), round in cross section, basally notched, and have no visible means of line attachment. The three or four barbs are high, isolated, and unilaterally arranged (Fig. 30; E, F). These appear to resemble the barbed heads used in the composite harpoon illustrated by Teit for the Shuswap (1909:523).

Both harpoon types exhibit similar decorative motifs. Short groups of three and four parallel lines are incised into the under side of the barbs and into the shank. All these lines are perpendicular to the long axis of the implement.

Table X gives the dimensions of Type B harpoons; no measurements are available for the Type A examples.

Harpoons occur only in the northern half of the Plateau. Smith describes examples from Lytton (1899a:137) and Kamloops (1900:435) which are similar to the Type A specimens from EeQw:1. A series of eight harpoons recovered from Upper Columbia sites are divided into three sub-types, with Type C corresponding to Type A from EeQw:1 (Collier et al. 1942:79). Type A heads are also in collections from Lillooet. Nowhere, except in the ethno­graphic literature mentioned above, are Type B harpoons noted.
TABLE X

DIMENSIONS FOR TYPE B HARPOONS

<table>
<thead>
<tr>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.0</td>
<td>1.75</td>
<td>Complete, four barbs</td>
</tr>
<tr>
<td>14.0</td>
<td>1.75</td>
<td>Complete, three barbs</td>
</tr>
<tr>
<td>6.8</td>
<td>1.75</td>
<td>Fragment, two barbs</td>
</tr>
<tr>
<td>15.0</td>
<td>1.75</td>
<td>Fragment, three barbs</td>
</tr>
</tbody>
</table>

Points. There are eleven rather massive non-barbed antler points. They are long, flat in cross section, parallel sided, and taper gently to a sharp point. Three of the eleven points have notched bases and none is decorated (Fig. 31).

The function of these points is not certain; they may have tipped spears or been hand held for use as daggers. Except for a specimen from Lytton illustrated by Smith (1899a: 149), these artifacts have not been noted elsewhere.

Wedges. Three wedges, manufactured from the beam of wapiti antler, are unilaterally bevelled, and have straight shafts. One example (EeQw:1-36; Fig. 31) includes the burr. None of the wedges exhibits extensive use or battering.
### TABLE XI

**DIMENSIONS OF ANTLER POINTS**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Number</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>134</td>
<td>20.0</td>
<td>4.0</td>
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<td>EeQw:1</td>
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</tr>
<tr>
<td>EeQw:1</td>
<td>39</td>
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<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23.5</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27.0</td>
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<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.5</td>
<td>2.7</td>
</tr>
</tbody>
</table>

### TABLE XII

**DIMENSIONS OF ANTLER WEDGES**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Number</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>36</td>
<td>23.0</td>
<td>5.0</td>
</tr>
<tr>
<td>A668</td>
<td></td>
<td>21.0</td>
<td>4.0</td>
</tr>
<tr>
<td>A684</td>
<td></td>
<td>19.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>
Antler wedges are found throughout the Plateau but usually in limited numbers. Of the four wedges described from the Upper Columbia, two are unilaterally bevelled (Collier et al. 1942:86). Fragmentary unilaterally bevelled examples are reported from the McNary Reservoir (Osborne 1957:85). Wedges occur in greater abundance at The Dalles (Strong et al. 1930:70), at Lytton, and at Kamloops (Smith 1899a:141; 1900:414).

Clubs. Two complete antler clubs and a fragment of a third were unearthed. The clubs are made from the beam of wapiti antler and an adjoining tine, which is sharply bevelled to produce a cutting edge. These artifacts are not unlike the Lyngby axe of Europe. Perforations in the handles suggest the use of a wrist thong. On one club (A667b; Fig. 32;A), the hole is square, while a circular hole has been drilled into the other specimen (A679). The striking head is all that remains of the fragmentary club (A681).

All three clubs are elaborately decorated. One club, A679, (Fig. 32;B) is modified to represent a bird by creating a stylized eye with a dotted circle for the iris, and converting the tine into a bill. Along the handle is a series of circle and dot motifs interspersed between short parallel lines in clusters of three and four. Two vertebrae-like designs, carved in relief, extend three-quarters of the way along the back, enclosing alternate crosses, circle and dot, and short parallel
line motifs. A biconically drilled hole through the back of the club, above the tine, may have served as an attachment for a feather decoration.

The second complete club (A667b) has a less intricate design and is more obviously an animal (Fig. 32; A). The figure has large round eyes, an open mouth, and two lines setting off the muzzle. Two sets of encircling zigzag lines have been carved on either side of a wide groove behind the head. A fine encircling line has been incised behind the proximal zigzag line.

The third club (A681) is fragmentary. Only a zoomorphic head and sharpened tine remain. The animal represented has an open mouth, large circle and dot eyes, and small ears (Fig. 33; B). A groove is carved behind the head. Two parallel lines, joined by short perpendicular lines, are incised between the recessed groove and the tine. A few incised lines are visible on the top surface above the tine.

Smith (1899a:149) illustrates one undecorated tine club from Lytton. With this single exception, antler tine clubs are not reported from other Plateau sites.

**Sap Scraper.** A single scraper-like implement associated with Burial 1 is made from the cortex of wapiti antler and measures 33 cm long and 4 cm wide (EeQw:1-102; Fig. 35; A). Both ends indicate use; the pointed end may have been used for prying
away the outer bark while the broad end was used to scrape the edible inner tissue (Teit 1900:233). The pointed end is made into a zoomorphic head by two curving lines representing an eye, and a shallow groove with short perpendicular lines for a mouth. Other decorations consist of long parallel lines extending across the width of the artifact in groups of one, two, and three lines; short parallel lines in groups of three and four, and an area of cross hatching. All the parallel line groups are incised at right angles to the long axis of the scraper.

**Gorget.** A gorget-like ornament made of the cortex of antler beam measures 6.7 cm by 4.0 cm. It is decorated with three vertebrae-like designs which divide the artifact lengthwise (Fig. 30;A).

**Haft.** One antler tine haft could be examined only from a photograph. The possibility of digging stick handles serving also as hafts has been discussed elsewhere (p. 45).
The proximal end of the tine has been slotted to admit a knife or point. It is 11.6 cm long, 1.9 cm wide, and is decorated by a series of ten ticked lines (long parallel lines with short perpendicular spurs), which appear to be encircling the artifact. In addition, the photograph suggests some parallel lines on the under surface.

**Tine Flakers (?).** There are two tips of tines which have been hacked off. The unnaturally blunted distal ends may indicate use as flakers. The larger object, 15.7 cm long and 3.1 cm wide, is not decorated; while the smaller artifact, 13.5 cm long and 3.0 cm wide, is embellished by a series of short parallel lines.

**Handle Carvings.** Two examples of anthropomorphic antler carvings are in the assemblage. Both appear to have been the end of a slender-handled object (Fig. 33;A, Fig. 34).

The more intricate carving (Fig. 33;A) is of two naturalistic heads one above the other carved into death-like expressions. Both faces are similar with closed almond-shaped eyes, high and wide cheek bones, broadly flaring alae, dropping mouths, and a series of pits in the cheeks and forehead suggesting tattoo marks. The second carving is of a single head (Fig. 33;B). It is less realistic and simpler in outline. The eyes are rectangular and in bas-relief with center dots as irises. A line connects the eyes. The alae are indicated, but the remainder of the nose is absent.
Miscellaneous Antler Objects. A peculiar object was associated with Burial 1 (EeQw:1-103; Fig. 35;F). The artifact, formed by a portion of antler beam and a tine, meeting at an angle of twenty degrees, has an overall length of 30 cm. The section of beam is 13.5 cm long, and 2.5 to 3.0 cm deep, and 1.5 to 4.0 cm wide. The tine is 26.0 cm long, 1.6 cm deep, and 2.0 cm wide. A slotted perforation in the distal end of the tine may indicate a wrist lanyard and therefore the handle of a tool, the hafted section of which would be fixed to the short section of beam. The distal end of the implement, assuming the pierced end to be the handle, may have been slotted, and could have functioned as a sleeve. No artifact likely to have been fitted into this puzzling piece was present in the grave. Since no description in regional archaeological reports or ethnographies parallels it, it is impossible to suggest any function for this specimen.

A very thin H-shaped portion of antler was also present in Burial 1 (EeQw:1-104; Fig. 35;B). It is 8.0 cm long, 4.0 cm wide, and 0.2 cm thick.

Another fragment of antler associated with Burial 1 (EeQw:1-106; Fig. 35;C) may be a portion of a carving or an embellished object of which only the suggestion of an eye remains. The fragment is 3.5 cm high and 0.6 cm thick. The width tapers from 3.5 cm to 0.75 cm.
A fourth fragmentary antler object found with Burial 1 (EeQw:1-105; Fig. 35:D) is 2.75 cm long, 1.0 cm wide, and 0.2 cm thick. It is pierced once near the remaining end. The artifact is evidently a fragment of a larger object of unknown function.

A long parallel-sided object, perforated at the base and having a broken tip is in a private collection. It is 20.0 cm long, 2.2 cm wide. This piece, which may have been a point, is not decorated.

The last piece of unknown function is a slender spatulate object of antler tine which has been unilaterally bevelled at one end to produce a thin, sharp edge. The artifact is 21.0 cm long and 1.5 cm wide.

Bone Industry

Introduction

The bone industry of EeQw:1 is represented by sixty-eight artifacts. They will be discussed under the headings: Awls and Points, Leister Points, Needles, Creasers, Scrapers, Chisels or Wedges, Clubs, Drinking Tubes, Pendants, and Miscellaneous.

Wapiti (Cervus canadensis nelsoni) and mule deer (Odocoileus hemionus hemionus) bone provided most of the raw material. Cannon and other leg bones were utilized most
frequently; however, rib, penis bone of bear, and scapula were also used. Manufacturing techniques include splitting, cutting, scraping, sawing, and grinding.

**Awls and Points.** Thirty-seven pieces are included in this broad category. Unfortunately, it is not possible to subdivide the sample satisfactorily because so few of the pieces were actually handled.

Six of the ten awls recognized show traces of an epiphysis. In every instance the epiphysis has been split, and in some cases ground. The type of bone in four of the six awls with attached epiphysis is recognizable; the other two are not, either because too little of the epiphysis remains, or insufficient detail is available in the photograph. The identified examples are cannon bones with three instances of distal, and one instance of proximal epiphysis still remaining on the artifact. Other awls are made from unidentifiable long bones. No ulna or scapula awls are present. The mean length of the sample of ten is 11.9 cm.

Long bone awls are common in most Plateau sites and generally comprise a high percentage of the bone industry. Sites at The Dalles (Strong et al. 1930:55), Lytton (Smith 1899a: 148), and the Upper Columbia (Collier et al. 1942:80, 81), all contain many examples. Ulna awls are scarce, being confined to single examples from Kamloops (Smith 1900:424), the Upper
Columbia (1942:81), and the McNary Reservoir (Osborne 1957:83). Deer ulna awls, however, are common in an assemblage from EdRk:1, a burial site twelve miles south of Lillooet (Map 1).

Five long sturdy points averaging 19.4 cm are among the sample. They may be lance heads or daggers, and are similar in form and dimensions to the long antler points (p. 49). A bone point associated with Burial 3 (EeQw:1-131; Fig. 36;B) is manufactured from a hind cannon bone of wapiti. It is 19.5 cm long, 2.5 cm wide, and averages 0.75 cm in thickness.

Three small flat points are connected with Burial 3 (Table XIV) (EeQw:1-135, 142, 113; Fig. 37;B, C, D). They may be arrow heads, although the bifurcated tang of one (Fig. 37;D) seems rather too delicate.

The remaining nineteen bone points range in length from 5.1 cm to 15.9 cm. A number of well finished pieces with notched bases and circular cross section may have armed arrows and spears, while the shorter examples could serve as leister barbs and fish gorges. None of the thirty-seven points and awls are decorated.

Leister Points. Three sharp points (EeQw:1-124-6) are associated with Burial 3 (Fig. 8, lower right; Fig. 37;E, F, G). The longest piece, round in cross section, is 11.0 cm long and 6.5 cm thick; the two smaller points, also circular in cross section, are 5.0 cm long and 0.4 cm thick. All three artifacts
TABLE XIV
DIMENSIONS OF BONE PROJECTILE POINTS

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Number</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Thickness (cm)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>135</td>
<td>6.25</td>
<td>1.2</td>
<td>0.10</td>
</tr>
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<td>EeQw:1</td>
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<td>7.0</td>
<td>1.1</td>
<td>0.15</td>
</tr>
<tr>
<td>EeQw:1</td>
<td>113</td>
<td>7.1</td>
<td>0.75</td>
<td>0.15</td>
</tr>
</tbody>
</table>

are sharply pointed at one end, and bevelled at the other. As Fig. 8 suggests, these pieces are evidently the central point and lateral barbs of a leister or fish spear, the wooden portions having disintegrated (Teit 1900:252, Fig. 232; 1909:525).

**Needles.** Two needles were found. They are long, slender and flat. Both needles have a single eye which has been formed by incisions from both faces. In one example (EeQw:1-127), the eye is proximally located (Fig. 37;A). The needle is 10.0 cm long and 0.25 cm wide. Another needle measures 14.0 cm by 0.5 cm and has an eye length of 1.7 cm. As both extremities are pointed it is not clear whether the eye is located distally or proximally; perhaps the needle was reversible. Neither needle is decorated.

Bone needles are not common in most Plateau sites. They are equally scarce along the Upper Columbia (Collier et al. 1942:81), at the McNary Reservoir (Osborne 1957:86), at The Dalles...
(Strong et al. 1930:62), at Cache Creek (Borden n.d. a), and at Kamloops (Smith 1900:421). Like the needles from EeQw:1, the specimens from the above sites are flat in cross section. Long slender needles, rounded in cross section and elaborately embellished and polished, occur in assemblages from burial sites between Lytton and Lillooet. A needle illustrated by Smith (1899:Fig. 79) from a Lytton site lacks the decoration, but is similar in outline to those found to the north.

**Creasers.** Seven creasers made from wapiti and deer rib bone were found. One example, EeQw:1-32, is shouldered, but the remaining six have parallel sides gently tapering to a point (Fig. 36; C-F). Although these artifacts approximate a modern knife blade in outline, the absence of a keen edge suggests creasers used in the manufacture of basketry. The creasers are not decorated.

**TABLE XV**

**DIMENSIONS OF CREASERS**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Number</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EeQw:1</td>
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<td>20.0</td>
<td>1.5</td>
</tr>
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<td>EeQw:1</td>
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<td>2.0</td>
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<td>EeQw:1</td>
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<tr>
<td></td>
<td></td>
<td>9.6</td>
<td>1.4</td>
</tr>
</tbody>
</table>
Creasers are reported from the Upper Columbia sites where they are made from deer and wapiti rib bone (Collier et al. 1942:87). They are not recorded from other Plateau sites.

**Scrapers.** One bone scraper was found (EeQw:1-35). It is made from deer scapula and shows considerable use.

**Chisels and Wedges.** There are three bone chisels or wedges. One (EeQw:1-38) is made from a split wapiti cannon bone. The bit is straight and asymmetrical and does not show extensive use (Fig. 36;A). Another chisel (A686) is made from a section of wapiti long bone and appears to have been extensively utilized.

**TABLE XVI**

<table>
<thead>
<tr>
<th>Artifacts</th>
<th>Number</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EeQw:1</td>
<td>38</td>
<td>19.0</td>
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<td></td>
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<td>2.2</td>
</tr>
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</table>

**Clubs.** There are two whale rib bone clubs. One complete specimen (667a), 58 cm long and 5 cm wide, narrows slightly at one end to form a handle. A ring, presumably for the attachment of a wrist thong, extends from one side of the handle. The top of the handle is carved on both faces into a head
surmounted by a hat or mask (Fig. 38). The headpiece has been biconically perforated, perhaps for the attachment of another decoration. The blade of the club is undecorated.

The head is probably meant to be anthropomorphic, certainly the profile suggests a nose and a chin (Fig. 38; B). The eye is oval in outline and not unduly large. Three oblique lines are incised between the eye and the "chin". The lowest, and shortest line could be interpreted as a mouth. The headdress or mask is very similar to the Nootkan bird masks seen on the whalebone clubs from the coast (Boas 1904:403-412). A broad band between the eye and the headdress is covered by a zigzag line.

The second club, an undecorated fragment, measures 24.0 cm long and 5.8 cm wide.

Whalebone clubs have a wide Plateau distribution. They are reported from Kamloops (Smith 1900:422), the Upper Columbia (Collier et al. 1942:80) and at The Dalles (Strong et al. 1930:57).

**Drinking Tubes.** There are three bird bone tubes which may be drinking tubes. One complete specimen is 7.5 cm in length, and is square cut at both ends. An incised perforation probably served for suspension. The fragmentary tubes are slightly longer. None of the pieces is decorated or marked.
Drinking tubes, often called whistles, are common in many Plateau sites. They are reported from Lytton (Smith 1899a:154), Kamloops (Smith 1900:412), the Upper Columbia (Collier et al. 1942:87), and the McNary Reservoir (Osborne 1957:87). Strong et al. (1930) do not mention drinking tubes from The Dalles.

**Pendant or Needles.** Two slotted bear (*Uarctos americanus*) penis bones are in the assemblage (Fig. 39). Both specimens have been pierced by incisions from the sides and if suspended would balance horizontally; however, Teit (1909:508) reports that among the Shuswap bear penis bones were used as needles.

The decorative motifs on these objects are similar. One piece (A682; Fig. 39) features a modification of a basic zigzag pattern of two lines along the long axis of the artifact. Instead of a continuous line the pattern is interrupted at the high and low points. Beneath each apex caused by the intersection of a zig and a zag, two parallel vertical lines are incised.

The second specimen is similarly decorated, but more emphasis has been placed on vertical parallel lines. The elaborate embellishment, the precise positioning of the perforation, and the round cross section tend to suggest that these bone pieces are not needles, since the other needles from EeQwil are plain, flat, and have an eye located at one of the extremities.
One pendant (A682) is 13.3 cm long and 1.0 cm wide. No measurements are available for the second specimen.

Bear penis bones have been found in various Plateau sites. Smith (1900:429) illustrates two perforated and embellished penis pendants from Kamloops that are strikingly similar to those from EeQw:l. Undecorated and unpierced bear penis bones are reported from the Upper Columbia sites (Collier et al. 1942:92), and a series of four, identified as awls, are described by Garth (1952:43) from Sheep Island in the McNary Reservoir region.

**Miniature Bows(?).** There are three curved objects, two of which are associated with Burial 4. The pieces are long, slender, thin in cross section, gently curved. One specimen is bi-laterally notched at the extremities while the other has projections (Fig. 40). Dimensions are included in the accompanying table.

The material of which the objects is made has not been definitely determined. It may be antler, but more likely it is long bone of wapiti or deer. A number of naturally pointed bone objects up to 4.0 cm in length are attached by pitch to the under, or concave, surface of the bow. These sharply pointed pieces have been tentatively identified as fish bones.

Two of the bows (EeQw:1-143) and a fragment have a similar decorative motif based on a vertebrae design in bas-relief and short parallel lines. Another specimen (EeQw:1-144)
has six groups of short parallel lines incised at right angles to the long axis (Fig. 40).

The function of these bow-like objects is not definite. The shape of the pieces, combined with the sharp, slender bone points, suggests miniature bows. If this is the case, their association with an infant burial may indicate use as toys.

**TABLE XVII**

**DIMENSIONS OF MINIATURE BOWS**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Number</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Thickness (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EeQw:1</td>
<td>143</td>
<td>19.0</td>
<td>0.75</td>
<td>0.1</td>
</tr>
<tr>
<td>EeQw:1</td>
<td>144</td>
<td>14.25</td>
<td>0.70</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14.0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Miscellaneous Bone Objects.** A long, narrow, split long bone unnaturally curved is in the assemblage. The inner surface is heavily charred. The artifact is 28.0 cm long and is not decorated. Several split but otherwise unshaped mammal bones are associated with Burial 3; they may be artifact blanks.

Among the objects recovered during excavation are three bird beaks and some assorted bird bones. Two of the beaks were associated with Burial 3, and the third with Burial 4. One
of the beaks is too fragmentary for identification, but the second (EeQw:1-158; Fig. 8) may be the bill of the hooded merganser (*Larnhodytes cucullatus*). The mandibular portion of a bill found with Burial 4 may be of the red-breasted merganser (*Mergus serrator*).

**Shell Industry**

*Dentalium*. Seven pieces of cut *Dentalium* were observed in two strands around the neck of Burial 1 (Fig. 3). Gaps between the shells suggest the use of spacers of some more perishable material. Numerous examples of *Dentalium* are in private collections. None of the shells is decorated.

*Dentalium* is by far the most ubiquitous shell, occurring with great frequency in both American and Canadian portions of the Plateau. The shells vary in length from thin disc beads (Osborne 1959:108) to larger fragments up to several centimetres (Strong *et al.* 1930:72). The segments may be absolutely plain as at EeQw:1, or they may be elaborately embellished (Smith 1900:431; Osborne 1957: 108).

*Pecten caurinus*. There are four whole, and many fragmentary pierced *Pecten* shells. The complete shells, perforated below the umbo, suggest use as rattles, while the smaller pierced pieces may be pendants (Fig. 45). Some of the entire shells are up to 15 cm in length.
Pecten caurinus appears to be limited to the Canadian Plateau. None has been reported from American sites. Smith (1899a:157; 1900:428) records perforated Pecten at his sites near Lytton and Kamloops and assumes the shells to be parts of rattles. Pierced Pecten shells are also present in the assemblage from EdRk:3, a burial site twenty-eight miles north of Lytton (Map 1). The discoverer of EdRk:3 reports finding several entire valves nestled one inside the other with the perforations in perfect alignment, lending support to the assumption that the large pierced Pecten caurinus shells were used as rattles.

Haliotis. There are numerous examples of Haliotis shell pendants; however, none of the specimens can be identified as the Californian variety. Two small pieces (EeQw:1-145, 148) are each pierced once, while a larger pendant, measuring 9.5 cm by 6.8 cm is perforated once at each of the two narrow ends.

The distribution of Haliotis is limited. The shell occurs frequently in sites along the Columbia River (Strong et al. 1930:73; Collier et al. 1942:95; Osborne 1957:109). The Canadian distribution is considerably less widespread; Haliotis has been found at Lytton, Spences Bridge, and EeQw:1, but not at Kamloops, or in sites between Lytton and Lillooet (Smith 1899a:153; 1900:426).

Two other shells which occur commonly in other Plateau sites are absent from EeQw:1. Olivella, found at Lytton (Smith 1899a:134) but not at Kamloops, is frequently noted in Columbia
River sites (Strong et al. 1930:72; Osborne 1957:108; Collier et al. 1942:96, 97). The second shell, Glycymeris, is limited to the Columbia River sites (Osborne 1957:109).

Wood Industry

A number of wooden artifacts, including birch bark rolls, a birch bark container, a mask, matting, basket fragments, and a bark matting were found at EeQw:1.

Charred birch bark rolls are fairly common; however, none were found by the field party.

Birch Bark Container. A flattened birch bark container (EeQw:1-155; Fig. 41) was in association with Burial 5. The construction of the ends, plus some upright stone pieces protruding through the top of the pouch, suggest that the artifact was originally cylindrical, and was flattened by the weight of the cranium. The excellent state of preservation is due to the apparently inherent resistance of birch bark to decay, and the cedar (?) bark matting covering the burial.

An X-ray photograph of the container reveals a number of stone artifacts, including a chipped lanceolate point, raw flakes, scrapers, and chipped knives. Also present in the pouch are bones and antler pieces. Unfortunately, a considerable amount of sand has filtered into the pouch, and as sand has a refractive index similar to stone, the outlines of some of the artifacts are obscured (Fig. 42).
The container is 38.0 cm long and 16.0 cm wide. As a cylinder, its diameter would have been approximately 10 cm.

**Basket Fragments(?).** Excavation of Burial 3 revealed small sections of uncharred birch bark (EeQw:1-81). The position of the fragments suggests a basket.

**Mask.** A most unusual discovery at EeQw:1 was two fragments of a wooden mask. Unfortunately, a collector encountered it while digging with a shovel, and possibly portions of the mask were lost.

A piece of plain twined matting, found with the two wooden sections, bears a negative imprint of an eye. The matting is made from a sedge (*cyperaceae* sp.).

Each of the two pieces of mask contains an eye and, on one piece, a portion of the mouth. A partial reconstruction is possible on the basis of these fragments (Fig. 43). The eyes are large and droop slightly at the corners. The pupils are large, round, and peg-like. Eyebrow ridges are pronounced. The mouth is open and the lips are thick. Since no portions of the nose remain, it is not possible to reconstruct its shape. A red stain, probably ochre, is on both fragments.

The fragment including the left eye (Fig. 43;B) measures 11.2 cm long and 6.3 cm wide, and the right side (Fig. 43;A) measures 10.0 cm by 7.0 cm. The piece of matting is 8.5 cm long and 7.5 cm wide.
Identification of the mask is not definite. The "peg eyes" certainly suggest the Sxwaixwe mask of the Coast Salish. Teit (1908:578) discusses the use of masks by the westernmost Shuswap groups who were influenced strongly by the Carrier Indians with their coastally derived ceremonials. The date of acceptance of the Carrier customs is given as the mid-nineteenth century, a date which seems far too recent for EeQw:1 (see Chapter IV).

Tooth Industry

Teeth of bear (*Euarctos americanus*), beaver (*Castor canadensis*), and of a smaller rodent, possibly marmot (*Marmota flaviventris*) are in the assemblage.

**Beaver Incisors.** Two split mandibular incisors of beaver were found with Burial 3 (EeQw:1-129, 130; Fig. 37; H, I). The dimensions of these artifacts are 5.1 cm by 0.4 cm. No beaver tooth dice are present.

**Incisors of a Small Rodent.** Also associated with Burial 3 were two split incisors of a small rodent, possibly marmot (EeQw:1-136; Fig. 37; J, K). One fragment is 4.0 cm long and the other 2.25 cm. Both teeth are 0.2 cm wide.

**Bear Canine.** A black bear canine (EeQw:1-50) still imbedded in the left half of the mandible, has the tip ground down indicating use, possibly as a graver.
The tooth industry is surprisingly limited at EeQw:l. Most conspicuous is the absence of wapiti or deer canine tooth pendants or necklaces. Pendants are reported from Lytton (1899a:152), and from various Columbia River sites (Garth 1952:44; Osborne 1957:89, 90; Collier et al. 1942:89). Wapiti canine necklaces are limited to assemblages from Canadian sites. Necklaces are reported from Kamloops (Smith 1900:426), EeRh:l at Cache Creek (Borden n.d.a), and from EdRk:4, a burial site sixteen miles south of Lillooet.

Metal Industry

Copper is the only metal at EeQw:l. Numerous copper artifacts apparently decomposed to cupric salts, staining all objects with which the salts came into contact. Judging from the locations of the green stains, bracelets, anklets, amulets, and neck pieces were made of copper.

Copper Ornaments. Four solid pieces of copper were obtained from a collector (EeQw:l-77, 78, 79, 80). The largest piece (EeQw:l-80; Fig. 44;D) is a rectangular pendant pierced once at the wider end. Some hair, preserved by the chemical breakdown of the metal, adheres to a second pendant (EeQw:l-79; Fig. 44;C). This ornament is square with a large centrally located hole and a smaller perforation near one edge. A sharp crease in a piece of copper foil (EeQw:l-77; Fig. 44;B) suggests that this specimen may have originally been a tubular bead which was opened by the collector. The smallest copper object
(EeQw:1-78; Fig. 44:A) is a pendant, perforated three times along one edge. The wrinkled appearance suggests that it, too, may once have been a tubular bead.

The evenness to which the larger copper pendants were gauged almost certainly indicates Trade copper. It is possible, however, that the many copper stains observed around burials were produced by ornaments made of native copper, which in recent times was mined extensively at Copper Creek on the western end of Kamloops Lake (Dawson 1877:116).

**TABLE XVIII**

**DIMENSIONS OF COPPER ORNAMENTS**

<table>
<thead>
<tr>
<th>Artifact Number</th>
<th>Description</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Average Thickness (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EeQw:1 - 80</td>
<td>Pendant</td>
<td>11.2</td>
<td>4.2</td>
<td>0.084</td>
</tr>
<tr>
<td>EeQw:1 - 79</td>
<td>Pendant</td>
<td>4.5</td>
<td>3.7</td>
<td>0.051</td>
</tr>
<tr>
<td>EeQw:1 - 77</td>
<td>Bead (?)</td>
<td>5.5</td>
<td>2.9</td>
<td>0.028</td>
</tr>
<tr>
<td>EeQw:1 - 78</td>
<td>Bead (?)</td>
<td>3.8</td>
<td>2.3</td>
<td>0.025</td>
</tr>
</tbody>
</table>

Copper ornaments occur frequently in recent Plateau sites and are often associated with glass and iron. Osborne (1957:96, 97), Kroll (1957:227), and McLeod (1957:232) have the most complete discussion of non-aboriginal metals in the Plateau.
CHAPTER IV

Analysis of EeQw:l Data and Ethnographic comparisons

Age of Burials

The geologic deposits of the site evidently were laid down during the last glacial retreat (Chapter I), an event which presumably occurred more than ten thousand years ago and thus has no bearing on the age of the burials. Ethnographic accounts do not mention the site and the oldest Indian residents apparently knew nothing of its existence until the road was put through the site. Nevertheless, the burials are probably not very old.

The presence of two pieces of non-aboriginal copper, and the absence of iron and glass beads, may provide a means of dating the most recent interments. According to ethnographic evidence iron was introduced to the Shuswap groups around the middle of the eighteenth century (Teit 1900:475). In 1808, Simon Fraser observed great quantities of glass beads, sheet iron, European clothing, and copper in the Plateau (Lamb 1960:85-87). Osborne (1957:92-96) is convinced that glass and metal items were well known in the Plateau by the middle of the eighteenth century. The paucity of trade copper at EeQw:l hints that at least a few of the burials date to 1750; the earliest remains may be a century or two older.
The possibility of horizontal stratification must be considered. The discoveror of EeQw:l, and one of the most active relic collectors, unearthed the two largest pieces of non-aboriginal copper (p. 70 above) at the western extremity of the site. Excavations in September 1960 in the eastern end did not produce any solid copper, although its former presence was suggested by various green stains on the skeletal material. The burials in the eastern portion of EeQw:l may thus be somewhat earlier than those in the western extremity.

The Burial Complex

Burials were placed in the sand deposits on both sides of the road. The exact number of interments could not be determined, but fifty would be a very conservative estimate. In the course of excavations in September 1960, five complete skeletons were recovered as well as assorted remains of fourteen other individuals.

The five excavated skeletons were flexed primary pit burials. One body lay on its back and the other four on their sides. Three individuals were flexed to the left, two to the right. The degree of flexure varied between loose and very tight, the child burials being the most tightly flexed. While no traces of hide or fabric cord were found, very tightly flexed positions suggest the body was bound. Only one bark-covered or wrapped burial was unearthed, although scattered long bones had pieces of bark adhering to them. Depth of burial was between twelve and twenty inches.
Four of the five burials were oriented east/west with the crania of three to the east. A fifth burial lay with the cranium to the north and the legs to the south. Two skeletons faced south, two west, and one north. The long axis of the site is oriented approximately east/west and the South Thompson River flows downstream to the west past Eeqw:1. Therefore, the four burials oriented east/west lay parallel to the long axis of the ridge and the flow of the river; however, only one cranium pointed downstream.

Grave additions accompanied every burial but one. The inclusions with two burials lay beside the corpse, while with another interment the artifacts were placed above and below the cranium. The additions with Burial 3 were found in two locations: a jade celt, beside the knees, and the remaining artifacts in a compact group at the feet. None of the artifacts from the site appeared to have been "killed" or deliberately broken as at the McNary Reservoir (Osborne 1957:148).

During excavation some chipped knives, scrapers and three digging stick handles were uncovered. These artifacts were not associated with any specific burial and may have been suspended on poles above a grave; when the poles decayed and toppled over, the artifacts would be scattered (Teit 1900:328).

Small isolated pieces of charcoal were frequently encountered in excavations; however, when the distribution of these pieces was charted, no pattern became apparent. Possibly
they represent the residue from fires made in the winter to thaw the sand prior to burial (Teit 1900:328).

Artifact Analysis

The artifact assemblage from Eeqw:l offers information about various aspects of the culture. Many items associated with hunting are present. There are small chipped points suitable for arming arrows, and large points for spears, lances, and knives. There are also points of bone and antler. Antler harpoons for hunting aquatic mammals are present in the assemblage. Naturally, a burial site does not yield faunal remains to the same degree as midden deposits; nevertheless, faunal and cultural evidence at Eeqw:l indicate the hunting of wapiti, deer, beaver, bear, marmot, assorted waterbirds, and fish. Numerous antler digging stick handles suggest the importance of root digging.

Weapons of war and of the chase are often similar. Arrows and spears, the antler and whalebone clubs, as well as the long antler and bone points can be regarded as such dual purpose implements.

Woodworking is suggested by adze blades, stone hand mauls, chisels and wedges, shaft smoothers, and rodent incisor knives. The wooden mask, if manufactured locally, is the only remaining example of this industry.
Work in stone ranges from the finely pressure flaked points to the sawing, grinding, and polishing techniques of celt manufacture. Mastery in working this medium is evidenced in the skilfully executed steatite sculpture.

Personal adornment is suggested by the use of red ochre, and pendants of shell, copper, antler, bone, and possibly stone. The dots arranged in definite patterns on the two anthropomorphic antler faces (Fig. 33; A) suggest facial tattoos.

Trade with other Indian groups is indicated by the presence of a number of items not occurring locally; they are _Dentalium_ shells, _Haliotis_ shells, _Pecten_ shells, and whalebone clubs. Much of the jade and steatite probably originated in the Lytton region.

Art

General Comments

A discussion of art could embrace all evidence of workmanship that exceeds the most basic utilitarian requirements; for example, the seemingly non-functional multiple notches on chipped points. For the purposes of this study, however, only decorative design and sculpture will be considered.

It is convenient to divide the art forms into two categories: geometric and non-geometric. Non-geometric, or
representative carving can be subdivided into three classifications: (1) carving in the round, (2) carving in bas-relief, and (3) carving by incision. Carvings in the round may comprise the complete artifact or they may embellish only part of an implement. Examples of the former are: the zoomorphic bird bowl (Fig. 23), the human figure bowl (Figs. 25, 26), the stone serpent (Fig. 24; A), the wooden mask (Fig. 43), and the antler tine clubs (Fig. 32). Carvings which decorate portions of artifacts are found on: the zoomorphic hand-mauls, the zoomorphic digging stick handle (Fig. 27; C), and the antler tine clubs (Fig. 32). There are several examples of non-geometric bas-relief sculpture: the eye on an antler tine club (Fig. 32; B), the anthropomorphic antler heads (Fig. 33), and the whalebone club (Fig. 38). The eye and mouth engraved in the sap scraper (Fig. 35; A) are the only examples of non-geometric incised representation.

Eight geometric motifs can be discerned: (1) long parallel lines (Fig. 36; A), (2) circle and dot (Fig. 46; B), (3) vertebrae (Fig. 46; C), (4) groups of short parallel lines (Fig. 46; D), (5) ticked lines (Fig. 46; E), (6) crosses and X's (Fig. 46; F), (7) zig-zag (Fig. 46; G) and (8) cross-hatching (Fig. 46; H). All but the vertebrae pattern are incised; the vertebrae motif stands out from the object in bas-relief, and is seen on the bone bows (Fig. 40), the antler tine club (Fig. 32; B), and the gorget (Fig. 30; A).
The "principle of decorative art", according to Boas (in Teit 1900:377) is the "conception of animals adapting themselves to the use of men, and assuming the form of implements". The artifacts conforming with this "principle" at EeQw:l are: the zoomorphic hand mauls, the steatite bird bowl (Fig. 23), the sap scraper (Fig. 35;A), the antler and whalebone clubs (Figs. 32, 38), and one digging stick handle (Fig. 27;C). The non-geometric art forms which transcend the principle of decorative art are: the steatite bears (Fig. 22), the steatite serpent (Fig. 24), and steatite human faces (Fig. 36).

**Geometric Designs.** According to Boas (in Teit 1900: 377), the various geometric designs are highly conventionalized symbols. Similar statements are made by Smith (1899a:156). The geometric motifs from EeQw:l that can be interpreted in this manner are: ticked line (trench with earth to one side); long parallel lines (trench); crosses and X's (meeting of trails); double zigzag lines (mountains and valleys or snake tracks); and circle and dot (eye).

The relationship between the symbolic concept expressed by Boas and the artifacts from EeQw:l is seen in the long parallel lines incised into all the digging-stick handles. According to Boas (in Teit 1900:378), this motif represents a trench. The digging of trenches during female puberty rites is attested by Teit (1900:312, 313). A connection
between the ritual trench digging and the conventionalized geometric symbols incised on digging-stick handles seems plausible.

Table XIX lists the objects decorated by geometric designs.

On the basis of the thirty-eight artifacts listed in Table XIX, a few conclusions can be reached. Long parallel lines, ticked lines, and cross-hatching appear only on the sap scraper, and digging stick handles. Both these objects might be considered women's tools primarily. Short parallel lines are engraved on harpoons, clubs, flakers, bear penis pendants, miniature bows(?), and the sap scraper. Many of these objects, particularly harpoons, clubs, flakers and penis pendants, might be considered male implements. It must be remembered, however, that most of the artifacts are dissociated from specific burials owing to the haphazard digging of the relic hunters. Much potentially valuable data concerning the sexual division of artifacts has been lost. The danger in assigning sex to a burial on the basis of inclusions is demonstrated by Osborne (1957:84) who records digging-stick handles with male interments.

Five artifacts, an antler digging-stick handle (Fig. 27;C), the antler tine clubs, and the sap scraper are embellished with both geometric and realistic carving.
<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Number in Sample</th>
<th>Material</th>
<th>Motif</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digging stick handles</td>
<td>15</td>
<td>antler</td>
<td>ticked lines; long parallel lines; crossed lines;</td>
<td>ticked lines and long parallel lines most common (Figs. 27, 28)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>cross-hatching</td>
<td></td>
</tr>
<tr>
<td>Harpoons</td>
<td>10</td>
<td>antler</td>
<td>short parallel lines</td>
<td>(Fig. 29)</td>
</tr>
<tr>
<td>Clubs</td>
<td>3</td>
<td>antler</td>
<td>circle and dot; short parallel lines; crossed lines;</td>
<td>also carved zoomorphically (Figs. 32, 34)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>zigzag, vertebrae</td>
<td></td>
</tr>
<tr>
<td>Sap scraper</td>
<td>1</td>
<td>antler</td>
<td>short parallel lines</td>
<td>also zoomorphic head (Fig. 35; A)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>long parallel lines; cross-hatching</td>
<td></td>
</tr>
<tr>
<td>Gorget</td>
<td>1</td>
<td>antler</td>
<td>vertebral lines</td>
<td>(Fig. 30; A)</td>
</tr>
<tr>
<td>Unknown (EeQw:1-103)</td>
<td>1</td>
<td>antler</td>
<td>short parallel lines</td>
<td>(Fig. 35; F)</td>
</tr>
<tr>
<td>Tine flakers (?)</td>
<td>2</td>
<td>antler</td>
<td>short parallel lines</td>
<td></td>
</tr>
<tr>
<td>Bear penis pendants (?)</td>
<td>2</td>
<td>bone</td>
<td>double zigzag; short parallel lines</td>
<td>(Fig. 39)</td>
</tr>
<tr>
<td>Miniature Bows (?)</td>
<td>3</td>
<td>bone</td>
<td>short parallel lines; vertebrae</td>
<td>(Fig. 40)</td>
</tr>
</tbody>
</table>
The orientation of some geometric motifs with the long axis of the artifact is constant. In every example, ticked lines, long parallel lines, short parallel lines, and zigzags are incised at right angles to the long axis.

**Steatite Carving.** The stone sculpture of Eeqw:1 is obviously part of the steatite carving complex described by Duff (1956). The uptilt of the head, the disproportionately large eye, the treatment of the nose, and the shape of the mouth, are diagnostic features occurring on many of the specimens from southern British Columbia and northern Washington State. The bowls and human head carvings can be duplicated from other sites (Duff 1956:61, 66), but individual sculptures of animals are not reported.

Three distinct, yet highly conventionalized eye styles can be recognized: an almond-shaped eye with a bulging round pupil, and a longer narrower form, with a correspondingly more lenticular pupil, and another elongate form in which the lower lid is flat while the upper lid rises steeply and then slopes gradually to meet the lower portion. The first style is seen on the larger bear (Fig. 22;A) and the small anthropomorphic heads (Fig. 26), the elongate eye is on the smaller bear (Fig. 22;B) and the third form is seen on the human figure bowl (Fig. 25). Although the almond-shaped eye has persisted into modern wood carving, there is no evidence to suggest that one of the three styles is the older. Moreover, the sample from
EeQw:i is too limited to discern whether the nature of the object portrayed influenced the choice of eye style.

**Antler Carving.** The antler sculpture is very different from the stone carving. Generally, it tends to be less stylized with more realistic body proportions. The eye, so highly conventionalized in the stone sculptures, is extremely simple in the antler representations. On the zoomorphic heads of the antler clubs (Figs. 32, 34) and the digging-stick handle (Fig. 27;C) the eyes are either incised circles, circles with center dots, or two recurving lines as the eye on the sap scraper (Fig. 35;A). The eye of the human heads are more complex. On the handle with two heads (Fig. 33;A) the eyes are ovoid with a line incised laterally along the major axis of the ellipse. The single antler head has more rectangular eyes and is less realistic (Fig. 33;B).

The mouths of the zoomorphic antler carvings are fairly similar to the open-mouthed steatite figures, while the human figures in antler have thin, tightly closed lips. A feature common to anthropomorphic representations in stone and antler is the high nasal root and the widely flaring alae.

**Bone and Wood Decoration.** Evidence for the embellishment of bone and wood is scanty. The usually rapid decay of wood no doubt is responsible for the scarcity of wooden objects, but the amount of undecorated bone is surprising. Less than one-tenth of the bone items are embellished, while over three-quarters of
the antler pieces are decorated. It may be that bone is harder to work with than antler. The few engraved bone pieces (excluding the whalebone clubs) are seemingly non-utilitarian artifacts such as bone pendants and the miniature bows, although the latter may also be antler. The needles and drinking tubes are not embellished.

**Summary.** The art of EeQwi1 consists of the decoration of stone, bone, antler, and wooden objects. Two basic styles of artwork are recognized—geometric and representative. The former is represented for the most part by incised symbolic designs, while the latter consists of zoomorphic and anthropomorphic figures carved in the round and in bas-relief. A scarcity of carved bone is noted; a remarkable fact considering the high proportion of bone in the assemblage and the amount of carved antler. Finally, a difference between the carving in stone and antler is observed; the former tends to highly stylized figures, while the latter is less conventionalized.

**Ethnography of the Shuswap**

In recent times, most of central British Columbia was occupied by groups speaking various languages of the Interior Salish division of the Salishan linguistic stock (Swadesh 1950: 163). One of these languages, Shuswap, was spoken by a population who recognized seven subdivisions of themselves, based upon territorial claims and dialectic differences (Teit 1909:453; Map 2). James Teit's massive monograph (1909) is the only
comprehensive ethnography on these people. As Teit also published a complete work on the neighbouring Thompson Indians (1900) prior to the Shuswap report, he frequently refers the reader to the earlier publication for many details. The less complete reports by Boas (1890) and Dawson (1891) are less useful, since many of their observations were recorded in greater detail by Teit. Isolated remarks concerning the Shuswap are contained in the journals of the explorers Mackenzie (1801) and Fraser (Lamb 1960).

The environment and climate of the Chase area have been discussed in some detail in Chapter I. Short cold winters and long hot summers are the rule. An ample food supply was assured by the abundance of wapiti, deer, and salmon.

**Utilization Patterns.** Bows and arrows were supplemented by deadfalls, snares, and fences to capture game (Teit, 1909:521). Beaver were taken with large composite unilaterally barked harpoons. These were fitted to a shaft by means of two grooved hemi-cylinders of hardwood lashed together to form a socket. The retrieving line was attached to the wooden section (Teit 1909: 523). Fishing techniques included the use of spears, leisters, hooks, and nets. The latter were weighted down by naturally rounded pebbles rather than notched sinkers (Teit 1900:231). At certain times of the year berrying was an important occupation; rooting and digging and berrying were carried out by the women (Dawson 1891:19, 21). Food supplies,
such as dried meat, roots, and berries, were stored in shallow storage pits, often lined with bark (Teit 1909:495).

Woodworking tools included adzes fitted with jade blades, wooden and antler wedges, stone hand mauls, and beaver incisor gravers (Teit 1909:474). Mortars were rarely used, and when manufactured, were usually made of wood (Teit 1909:500).

Habitations. Most of the Shuswap bands preferred the circular semi-subterranean house for a winter dwelling (Boas 1890:83); only the Lakes and Empire Valley divisions used a rectangular bark lodge (Teit 1909:492). Summer dwellings for all Shuswap groups were mat or bark covered frame huts (Teit 1909:493).

Ornaments. Personal adornment was common. Dentalium shell, wapiti-tooth pendants, woodpecker scalps, glass beads, and copper pendants were most often used. Disc bone beads were not common. Haliotis pendants are not mentioned in the literature (Teit 1909:508-510). A few individuals were tattooed, especially on the wrists and face (Teit 1909:511).

Trade. The Shuswap were active traders. Trade with the Lillooet and Thompson Indians took place during the summer months when the groups met for the salmon season just north of the town of Lillooet. In the very important Dentalium trade, the Canyon Division of the Shuswap, served as middle-men between other Salish speaking groups and their Athapaskan neighbours who
procured these shells from coastal groups (Teit 1906:231, 232; 1909:535). Trade to the south and east, via the Shuswap lakes and the Okanagan River, resulted in contact with the Okanagan groups (Teit 1909:536; 1928:250, 252). Fraser remarked in 1808 that some of the Shuswap ventured beyond the Rocky Mountains for buffalo (Lamb 1960:71).

**Social Organization.** Social organization was relatively uncomplicated. Concepts of tribal organization, mythical clan origin, or ranking based upon wealth were unknown. Village autonomy was general, although a concept of unity, fostered by common hunting areas and intermarriage, often existed between neighbouring villages (Teit 1909:569; Ray 1939:13). The position of chief was often inherited; however, no special prerogatives accompanied the title, and leaders of hunting and war parties were elected (Teit 1909:569, 570). Land and fishing rocks were communal property (Teit 1909:572, 573). Prisoners of war were enslaved, but their children became free-men (Teit 1900:570). In the mid-nineteenth century the Canyon and Fraser River divisions adopted briefly the Carrier version of ranked coastal society. The experiment was short-lived, perhaps due to increasing pressure of European contact (Teit 1909:575).

**Burial Practices.** When discussing Shuswap burial practices Teit (1909:592) refers to his more complete notes on the Upper Thompson methods (Teit 1900:327-335). Burial took place the day after death. The corpse was not washed, and usually
not painted with ochre unless the deceased was a warrior. The body was dressed, flexed into a tight position, tied with bark twine, and wrapped in skins or mats. Family graveyards were located near villages and usually in sandy soil. The grave was circular, shallow, and often lined with grass and bark. Two different positions of burial were employed; the body could be interred sitting in which case it faced east, or the corpse could be placed lying on the left side and facing south. Weapons and tools were buried with the deceased and other articles were hung on poles above the grave. The latter possessions were "killed" or intentionally damaged. Graves were marked by small conical brush tents, by small boulder cairns, or by both tents and cairns. Boas (1890:91) and Fraser (Lamb 1960:72) reported rough conical structures up to twenty feet in diameter at the base covering graves. Unlike the Thompson (Teit 1900:329), the Shuswap did not utilize canoes as grave shelters (Teit 1909:593).

Cremation was resorted to only when a band was away from home or a man died in war. It was not a common practice and served only to facilitate the transport of the bones to the home cemetery (Teit 1900:330).

After a period of several years a grave was sometimes uncovered by the occupant's relatives and the bones wrapped in a new blanket (1900:330).
Recent and Prehistoric Culture

Many ethnographically reported traits are present in the assemblage from EeQw:l, although some elements have not been recorded. Especially noteworthy among the previously unreported items are: the open socketed digging-stick handles, the wooden mask, the whalebone clubs, the steatite carvings, and the Pecten shells. Listed in ethnographic accounts but absent at EeQw:l are: wapiti-tooth pendants, beaver tooth dice, and many metal and glass trade items.

Two historically noted features may be significant. The composite harpoon, listed specifically for the Shuswap and for no other groups (Teit 1909:523), is probably present at EeQw:l, while the scarcity of stone mortars tends to validate Teit's observation that these utensils were made of wood rather than of stone (1909:500).

The burials at EeQw:l confirm ethnographic reports of primary flexed inhumation in sand. No evidence of secondary, seated, or cremation burials was observed. Tents, cairns, or similar structures over the graves were not evident, although wooden markers could have decayed.

The most complete list of ethnographic traits for Plateau groups has been compiled by Ray (1942). Several traits indicated by him as "absent" were present at EeQw:l, as shown in the accompanying table.
### TABLE XX

**ITEMS PRESENT AT EeQw:1 NOT INCLUDED IN RAY'S LIST**

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Trait Number</th>
<th>Listed As</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone mortar</td>
<td>1971, 2</td>
<td>Absent</td>
</tr>
<tr>
<td>Unilaterally bevelled elk antler wedge</td>
<td>2104</td>
<td>Absent</td>
</tr>
<tr>
<td>Zoomorphic hand maul</td>
<td>2121</td>
<td>Absent</td>
</tr>
<tr>
<td>Adze</td>
<td>2136-2142</td>
<td>Absent</td>
</tr>
<tr>
<td>Flint knives (Chalcedony, chert)</td>
<td>2165</td>
<td>Absent</td>
</tr>
<tr>
<td>Beaver tooth engravers</td>
<td>2176</td>
<td>No data</td>
</tr>
<tr>
<td>Sandstone shaft smoothers</td>
<td>2330, 2331</td>
<td>Absent</td>
</tr>
<tr>
<td>Whalebone clubs</td>
<td>2439</td>
<td>Absent</td>
</tr>
<tr>
<td>Multiple <em>Dentalia</em> rows</td>
<td>3418</td>
<td>Absent</td>
</tr>
<tr>
<td><em>Pecten caurinus</em> shell</td>
<td>4187</td>
<td>Absent</td>
</tr>
<tr>
<td>Stone sculpture</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Wooden mask</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Some of the above elements are recorded by Teit (1909:473, 4) in his ethnography of the Shuswap; they include: adze blades, mortars, flint knives, sandstone shaft smoothers, and beaver teeth engravers.
Summary

The paucity of trade copper and the absence of iron implements and glass beads suggest that the most recent burials at EeQw:l are at least two hundred years old. The earliest interments may be considerably older.

Primary flexed pit burials, with an east/west orientation in four of the five examples, were encountered at an average depth of sixteen inches. The site probably contained more than fifty graves. No cists, cairns, or burial cremations were observed.

The associated artifacts included a wide range of weapons, tools, and ornaments. Many objects were decorated with geometric and/or realistic carving. Especially significant are several examples of fine steatite sculpture. The presence of a variety of materials not available in the study area attests to a vigorous trade with neighbouring groups.

A comparison between the ethnographic culture of the Shuswap with the traits represented in the assemblage from EeQw:l reveals many parallels and a few perhaps significant disparities. Eleven traits listed by Ray as ethnographically "absent" were observed in the assemblage.
CHAPTER V

Plateau Burial Patterns

Data on other Plateau burial sites, especially in its Canadian portion, will contribute to an understanding of the temporal and cultural position of the EeQw:l material. For the moment, the purpose is not to discuss the significance of these data, but simply to assemble them for analysis in the following chapters.

Chronological Criteria and Terminology

The paucity of absolute dates, such as those derived from C-14 analyses, has led Plateau workers to use a system of relative dating for sites less than five hundred years old. To date, no one set of terms has been universally employed; for example, Strong et al. (1930) refer to their sites as "pre-Caucasian" or "post-Caucasian". Osborne (1957) uses the terms "historic" and "contact" interchangeably, and Collier et al. (1942:113) refer to sites after or before "White contact". All these authors use as their criterion the absence or presence of non-aboriginal artifacts, and although they recognize that varying amounts of these traded items may indicate age differences, they make no attempt to integrate this knowledge into their terminology. The simple dichotomy between sites having trade goods and those that do not may obscure the very significant changes
that occurred as a result of the expanding European populations beyond the Rocky Mountains. The terminology outlined below is specifically designed to cover the last few hundred years of Plateau prehistory, especially those vital years preceding the actual arrival of White man in the Plateau.

The presence or absence of artifacts of non-Indian origin and manufacture is of great assistance in dating sites. Objects of European, American, or Asian manufacture will be called "Trade goods". In the Plateau, Trade goods include even-gauged, machine-rolled copper, all iron and steel, glass, china, and porcelain. Some artifacts such as sea shells and whalebone are not native to the Plateau; however, as they were traded into the area by other Indian groups, these items will be termed "aboriginal trade goods".

Sites with an absence of Trade goods will be called "Pre-contact". "Contact" sites are those having some Trade goods which were acquired through trade relations with neighbouring Indian groups, and not by direct dealings with European or American traders.

Two divisions within the Contact period may be recognized: (1) "Early Contact" sites with very few trade goods, and usually limited quantities of copper, and (2) "Late Contact" sites with many Trade goods including iron, glass, and much copper. "Historic" sites are those with an abundance of Trade goods received from direct contact with European and American traders and explorers. This era coincides with the ethnographic
period. It should be emphasized that the term "Contact" as it is used here to describe the relative amount of Trade goods in a site, does not imply physical contact with non-Indian groups; rather it refers to a period of time when aboriginal groups were exposed to the culture of Western society in the form of copper, iron and glass. The evidence from the accounts of the earliest explorers (Lamb, 1960:84, 86) indicates that the appearance of these items pre-dated the arrival of explorers and traders.

Canadian Plateau Burials

Although burials have been found throughout the Canadian Plateau, only a few have been systematically excavated. The only published reports are by H. I. Smith (1899a; 1900) who investigated burials at Lytton, Kamloops, and in the Nicola Valley, and by Caldwell (1954) who gained some data on burials from relic collectors in the Okanagan and Similkameen Valleys. Several burials were excavated by Borden (n.d.a) near Cache Creek on the Bonaparte River, and at EdRk:3 between Lytton and Lillooet. Some data from these sites are utilized here. Other were acquired from various relic collectors and local residents. During the summer of 1961 a Burial Site Survey of the Lytton to Lillooet area, sponsored by the National Museum of Canada and the University of British Columbia, was carried out by the writer. Information gained on this survey will also be incorporated in the discussion.
EeRh:1 near Cache Creek. Several burials were excavated near the town of Cache Creek in 1954 and 1956 (Borden n.d. a). This site, designated EeRh:1, consisted of several boulder cairns on a hill, one mile north of the town. Three of the boulder cairns were investigated, and in the well compacted ground beneath them four inhumations were found.

Beneath the first cairn a flexed burial was discovered surrounded by a cedar (?) stake cist which extended from near the surface to a depth of thirty inches. The tops of the stakes were not charred. A fragmented rush matting covered the burial which was lying loosely flexed on the left side with the cranium pointing to the northwest. Among the grave additions were one chipped knife and five side-notched triangular points.

A second interment was beneath "Cairn VI". This burial was surrounded by an aspen stake cist which extended nearly to the surface. A piece of poplar bark was placed over the cranium, and the entire body was originally covered with matting. The burial was loosely flexed on the right side with the head to the east. A large non-stemmed chipped knife was in the lap.

Two burials were encountered beneath "Cairn VIII". The first interment was surrounded by a charred cedar (?) slab cist which extended almost to the surface. The cranium was pointing towards the west. The body was that of a young female
lying on its back with legs flexed to the right. Numerous grave additions were placed with this burial including: two empty and broken birch bark pouches (?), a decorated wing-bone with a worked mammal bone inserted, a highly polished needle with a proximal eye, and a necklace of seventeen wapiti canine teeth arranged around the neck in three rows.

The second burial under "Cairn VIII" was surrounded by a cedar stake cist. This young infant burial lay flexed on its back with the cranium to the west.

Four other burials were removed by members of the South Cariboo Museum Association. All lay flexed, encased in wood cists, and covered by stone cairns. At least one of this group lay on the left side and was surrounded by a charred cedar slab cist.

All the interments at EeRh:l were located at depths of about thirty inches beneath cairns (two apparently shared "Cairn VII") in pits that were lined with stakes. Four of the cists were possibly of cedar and one was of aspen. At least three of the burials were covered with matting or bark. Two bodies were flexed left, the crania pointing west, and three were flexed right with the head to the east. No Trade goods were included in this Pre-contact site.

**Spences Bridge.** A cairn marked grave was excavated by Teit near Spences Bridge, twenty miles south of Cache Creek
(Smith 1900:434). The interment was of an adult male, lying face down and loosely flexed in a charred wood stake cist. The presence of a copper tube among the inclusions may indicate an Early Contact date for the site; however, the copper may have been of aboriginal origin, in which case the burial may be of Pre-contact age.

Middle Fraser River. The Middle Fraser River is considered here to include a one hundred sixty-five mile section of the river from Yale to Kelly Creek (Map 1). Ethnographically the area was inhabited chiefly by various bands of the Lower and Upper Thompson, with some Lillocet and Shuswap Indians in the northernmost thirty miles (Map 2). This stretch of the Fraser River has been occupied by non-Indian groups for over one hundred years, and mining, agriculture, highway and railroad construction have destroyed many burial sites.

DjRi:3 near Yale. A series of flexed inhumations were excavated in the most recent horizons of DjRi:3 near Yale. No Trade goods were associated with these remains.

Spuzzum. Twenty burials were placed in seated positions around a campfire near the village of Spuzzum, eleven miles north of Yale. Some of the bodies were fifteen feet deep in the sand. Grave additions included hand mauls, adze blades, longitudinal whetstones, Dentalium, and an eighteen-inch solid copper club (Teit 1900:336).
Lytton. Late in the nineteenth century Smith (1899a) unearthed a number of burials at several sites around Lytton. From his report it is apparent that many museums have materials from this area. Although Smith did not describe each interment he excavated, he cited six examples and drew some general conclusions regarding the method of burial (1899a:159, 160). Flexed inhumation both on the left and on the right side was apparently the rule. No cairns or cists were encountered.

Seven burial sites were discovered between Lytton and Lillooet during a survey in 1961 (Sanger n.d. b). The sites were all located on sandy terraces or promontories on the west or right bank of the Fraser. Since no excavations were carried out, the methods of burial cannot be described.

**EdRk:1, Cook Ranch.** During the winter of 1961, logging operations partially destroyed the burial site at EdRk:1, located approximately twelve miles south of Lillooet on the west bank of the Fraser River (Map 1). Information pertaining to the method of burial was lost, but a later examination of the area revealed no traces of cairns or of wooden cists. The Pre-contact age graves were interred on a steep, sandy, heavily overgrown slope.

**EdRk:3, Eighteen Mile Ranch.** In May of 1961, a disturbed burial ground was investigated and two graves were excavated by Borden and Sanger (Sanger n.d. a). An unknown
number of graves, possibly twelve, were placed two feet deep in a sandy terrace approximately one hundred feet above the Fraser. The site, which is on the east bank of the river, twenty-eight miles north of Lytton, was designated EdRk:3 (Map 1).

The two excavated interments were primary and flexed. Burial 1 was an adult male of approximately sixty years, flexed left with the cranium to the north and facing east. Burial 2, a young infant, was flexed on the right side. The skull pointed almost due west and faced to the south. There was no evidence of stone cairns or wood cists. Lack of Trade goods indicates a Pre-contact age for the site.

**Lillooet.** The geologist Dawson reported some burials from Lillooet (1891:12). Above some of the graves he saw quantities of charcoal, but he noted that none of the bones or artifacts had come into contact with fire. Oxidized iron fragments suggest a Late Contact to Historic age for the site.

While many other burial sites are known to have been disturbed in the Lillooet area, no reliable data concerning the method of interment are available.

**Kelly Creek.** In the talus slopes flanking the south bank of Kelly Creek, about thirty miles north of Lillooet, a Pacific Great Eastern Railway cut exposed a number of interments. Other burials were uncovered by highway construction
in the talus on the north side of Kelly Lake. No Trade goods were reported from these sites.

**GaSf:2, Fraser Lake.** Pre-contact talus slope burials have been reported from the west end of Fraser Lake (Daugherty and Borden 1955:308. For location see Map 1, site GaSf:2).

**GbSk:1, Burns Lake.** A single non-cremated pit inhumation was discovered at Burns Lake (Map 1). The grave additions with this pre-contact burial included: a jade celt, an antler wedge, an antler spatulate object, and several chipped points and scrapers (Borden, Personal communication).

**Nicola Valley.** A number of cemeteries in the Nicola Valley were excavated by Smith (1900:405, 437). The Nicola River empties into the Thompson at Spences Bridge, twenty-three miles northeast of Lytton (Map 1). Talus burials were encountered in two sites, nine and thirteen miles from the confluence of the Nicola and Thompson rivers. The bodies were placed in the toe of the slope and covered with rock. Occasionally, a pole was noted inserted into the pile of rocks to mark the grave. No Trade items were found among the inclusions.

Nine inhumations were unearthed at Nicola Lake (Smith 1900:438-440). Some of the talus burials were flexed on the left side and others on the back. All were covered with twelve to twenty-four inches of rock, and marked with a pole. Two of the graves included dog skeletons and two
contained copper ornaments which may have been Trade items. The site is either Pre-contact or Early Contact in age.

Kamloops. Four sites were investigated by Smith in the 1890's (1900). A discussion of these sites is presented in Chapter VI.

Okanagan and Similkameen Valleys. During a survey of the Okanagan and Similkameen valleys Caldwell (1954) obtained some data on burial practices from local residents. Four forms of burial were reported: simple pit, cedar cist, cairn, and talus, the latter in the Similkameen Valley only (Caldwell 1954:16, 17). The presence of copper tubing and ornaments suggested to Caldwell that most of the burials were relatively recent. They probably date from Contact to Historic times.

American Plateau Burials

Unlike the Canadian Plateau, the American sector has received considerable attention, although, unfortunately, few of the results have been published. Many data are contained in various M.A. and Ph.D. theses, while other information is either in note form or irretrievably lost owing to the activities of relic collectors. It is beyond the scope of this study to attempt to assemble all the scattered data. For comparative purposes, however, a review of the larger, better known sites is imperative.
The Dalles. Three forms of interment were encountered by Strong, Schenck and Steward in the Dalles-Deschutes region of the Columbia River (Strong et al. 1930; cf. also Map 1). Ten isolated talus burials of both Pre-contact and Contact age were found. As a rule, these burials were protected by cedar slabs (Strong et al. 1930:43, 44). Twenty deep pit burials with mat or board grave linings dated from Pre-contact to Contact times (Strong et al. 1930:46). Late Contact or Historic group cremations were also found; however, neither cremation pits nor surrounding rings of rock were encountered (Strong et al. 1930:48).

A series of cremation pits, almost totally destroyed by relic collectors, was investigated by Butler (1958). The site, designated 45KL27, consisted of four areas—A, B, C, and D. A pit measuring eight by ten feet and lined with basalt fragments was found in Area A. Butler (1958:76-80) suggests that the pit served as a crematory for a family or lineage. A pit in Area B measured twenty by six feet and was two feet deep (Ibid.:81). A series of cremated remains was recorded in the pit of Area C, with the lowest remains in a bark-lined cist of charred upright planks (Ibid.:85). Area D consisted of the remnants of a cist containing cremated bones and basalt fragments (Ibid.:86). The cremations appear to be Pre-contact.

Three other sites in The Dalles region, Over, Lucy and Congdon, have also been destroyed by relic collectors.
These sites contained cremated skeletal material of definitely Pre-contact age. In the Congdon site, a mass grave containing thirty complete, and many more fragmentary crania, was found and examined by J. Garner (Personal communication).

Middle Columbia River. Many burial sites have been reported along the Columbia River between Wenatchee and the John Day River (Map 1; Crabtree 1957; Garth 1952; Krieger 1928; Osborne 1957).

At Sundale, near the town of Arlington, Garth (1952:44) exposed a Historic burial site containing mass or group cremations. These were placed in a box and were associated with Trade items, some of which post-dated 1840.

Garth (1952:41) also excavated cremations at Sheep Island (45BN55), twenty miles downstream from the confluence of the Snake and Columbia rivers. Here he unearthed two Pre-contact mass cremations each surrounded by a circle of rocks. Baked nests of mud wasps still adhering to charred planks induced Garth to postulate that a depository shed had been fired (1952:41). Beneath one cremation pit there were nine extended primary inhumations definitely pre-dating the cremated remains.

Osborne (1957) excavated thirty-seven primary flexed burials from a Late Contact to Historic site on Berrian Island (45BN3), several miles downstream from Sheep Island. One third
of the inhumations were encased in charred wood cists. An east-west orientation of the body was the rule, while the degree of flexure varied from loose to tight (Osborne 1957: 145). The site was investigated in conjunction with the construction of the McNary Dam and Reservoir.

Crabtree (1957:7, 8) has reported on thirty-seven burials from Rabbit Island (45WW15) near the town of Kennewick. Twenty-six of the Pre-contact and Contact interments were primary and flexed, while eleven earlier burials (totally Pre-contact) were lying extended on the back. A mass cremation pit, apparently more recent than the extended inhumations, was also discovered on Rabbit Island (Garth 1952: 44).

From Wahluke, forty miles north of the mouth of the Snake River, mass pit and individual cist cremations have been reported (Krieger 1928:10). Garth (1952:45) concludes that the group remains pre-date the individual cist cremations.

Seventy-seven flexed primary inhumations, a few partially charred, were unearthed at the Pot Holes site near Trinidad, Washington. The burials, which were marked by posts, dated to the Early Contact Period (Crabtree 1957:65, 66).

Yakima Valley. Investigations in the Yakima Valley revealed three forms of burial: Pre-contact interments in
volcanic ash; Pre-contact and Contact burials in talus slopes; and Pre-contact mass pit cremations (Smith 1910:138-142).

**Snake River.** Canoe burials and wood coffin inhumations were found on Burial Island in the Snake River. These burials, investigated by a party from the Washington State University, were Early Contact (Borden 1961:583).

A series of twenty-four inhumations was unearthed near Asotin, Washington (Sprague 1959:43, 73, 74). Three forms of burial were reported: Pre-contact extended interments; Late Contact, semi-flexed prone burials, encased in cedar stake cists; and Historic extended plank coffin inhumations.

**Nespelem.** Thirty graves were unearthed by Garner near Nespelem, Washington (Map 1; Garner: personal communication). Four variations of the primary flexed pit burial were encountered; they were, in order of decreasing frequency of occurrence: cedar cist with boulder cairn; cist without cairn; cairn without cist; and pit interment without cairn or cist. Twenty burials were flexed on the right side, the remainder on the left. The majority of crania were to the west and pointing downstream. The site dated from the late Pre-contact to the Early Contact Period.

Garner was able to reconstruct the "cist with cairn" burial technique. A pit roughly three feet across was
excavated to a depth of thirty inches. The flexed body was placed in the grave and covered with grass or matting, which was in turn covered by a thin layer of sand. Cedar shakes between twenty and twenty-four inches long, and two to four inches wide, were set in the thin sand layer in an oval around and above the body. The shakes were fired at the top, and while they burned, sand and basketry was thrown in to fill the grave. The heat-cracked under-surfaces of the cairn boulders suggested they were immediately placed above the grave.

**Upper Columbia River.** One hundred and thirty-four primary pit and sixteen talus slope burials were recorded during a site survey of the Upper Columbia River, between Grand Coulee and the International Boundary. The cemeteries were located beside the river and most burials were oriented parallel to the river with the heads downstream (Collier et al. 1942:39-42).

Wood cist interments with stone cairn markers were not noted east of the confluence of the Spokane and Columbia rivers, and the sites containing this mode of burial were all Late-Contact and Historic (Collier et al. 1942:40). The apparent recentcy and limited distribution of the wood cist interment in Washington is important to the problem of the trait's origin.
Summary

More is known about burial practices in the American than in the Canadian Plateau. A greater awareness of the aboriginal society, reinforced by salvage investigations in connection with extensive hydro developments, have been responsible.

In the Canadian Plateau, primary pit inhumations without cist or cairn have proved the predominant form, although a few cist and talus slope interments, and one cremation burial site (discussed in Chapter VI) have been reported. While the spatial distribution of these practices by itself is not overly significant, a correlation with chronological data may illuminate cultural development in the Plateau.

The situation along the Columbia River is complex. Primary pit burials, with and without cists and cairns, occur from the International Boundary to The Dalles; the majority, however, are located on the Upper Columbia. Along the Middle Columbia, Pre-contact primary pit extended interments were followed by a mass and an individual cremation complex, and then by primary wood cist pit burials. Finally, a Historic depository shed complex was noted. At The Dalles, very early cremations followed by talus, pit, and depository shed burials were recorded.
This review has shown the wide diversification of burial patterns both in time and space. Most of these complexes appear to have arisen from a few basic concepts. If these developments could be traced it should shed light on the three major problems outlined in the Introduction.
CHAPTER VI

Archaeology of the Kamloops-Chase Area

Introduction

The purpose of this chapter is to review in detail archaeological investigations of the Kamloops-Chase Area. Following the recapitulation, it will be possible to point out several important cultural changes and arrange them in a temporal sequence. Only readily accessible data will be incorporated. The work of H. I. Smith (1900) provides the information for the Kamloops area, while the site report on EeQwil, found in Chapters I to IV, is the source for the Chase region. Undocumented data from the many uncontrolled excavations of relic collectors will not be used.

Smith (1900) undertook his investigations late in the nineteenth century. At that time, archaeological methodology and field techniques were still in their infancy. Hence, it is only with a considerable amount of piecing together that useful data can be gleaned from Smith's early publications. Burial patterns are described briefly but adequately, but artifact descriptions are almost wholly inadequate.

Smith (1900) reports only those objects he considered interesting and, consequently, he overemphasizes the non-utilitarian decorative aspects of the cultures. Very few items
are discussed with reference to a particular site. Moreover, the spatial distribution of traits is considered foremost, while their temporal sequence is neglected. His disinterest in ordinary artifacts is illustrated by the following statement: "Twenty-five pieces of glassy basalt, including arrow-points, etc." (Smith 1900:435). Nevertheless, a considerable amount of very useful data is contained in Smith's Appendix I (1900:434-440), where each excavated burial is listed with the associated artifacts.

Since the finely fashioned objects are discussed in detail and often illustrated, they must constitute here the bulk of artifact traits used in comparison of sites. Fortunately, art forms and decorative motifs can be sensitive indicators in comparative studies. To some extent, raw material and function may be the vital factors that determine the size and shape of basic utilitarian objects, such as chipped points and scrapers. Certain types of points, for example the multi-notched triangular points, may be indicative of cultural trends in an area though possibly not to the same degree as ornaments and other highly specialized artifacts.

Less than forty miles separate Kamloops and Chase. The meandering South Thompson River, free of rapids and easily navigable, connects the two towns. Ethnographically both areas were inhabited by Shuswap speaking peoples. There is, therefore, good reason to suspect that recent sites of equal age at Kamloops and Chase should exhibit a considerable degree of cultural similarity.
The conclusions of this chapter must remain tentative until they are verified or refuted by future field investigation.

**Burial Sites near Kamloops.** Smith (1900) reports on four cemeteries in the Kamloops region: (a) extended burials in wood coffins held together by iron nails were exhumed near the original Hudson's Bay Fort (Smith 1900:404). This locality will be called the "Fort Site"; (b) two flexed interments, wrapped in woven fibre blankets and surrounded by charred cedar slab cists were excavated at the "Government Hill Site". Above one of the graves were fragments of a dugout canoe, possibly forming a tent (Smith 1900:436, 437). The site will be referred to as the "Hill Site"; (c) in a third area, the "Government Site", four clusters of cremated human skeletal material were unearthed (Smith 1900:436); (d) finally, thirteen burials were located at the "Large Burial Place" (Smith 1900:434-436). The highly fragmentary remains at the "Large Site" were flexed.

**Age of Sites.** The four sites can be dated only through artifact association. The Christian-influenced casket burials interred near the Hudson's Bay Fort, were recognized by Indians as their immediate ancestors (Smith 1900:404). A Historic date for the Fort Site seems obvious. Among the grave additions at the "Hill Site" was an iron awl and some copper beads (Smith 1900:437). The presence of copper and iron suggests a Late Contact date. The Large Site contained no indubitable Trade goods,
although some associated copper pendants may belong in this
category (Smith 1900:424, 435). A late Pre-contact or Early
Contact date is likely.

The chronological data for the cremated remains at
the Government Site are somewhat contradictory. The absence of
obvious Trade goods and the paucity of copper seems to indicate
a Pre-contact age; but other evidence suggests that these
burials may be more recent than those at the Large Site. Smith
(1900:436) records finding quantities of flat rectangular bone
beads with the cremations. Although such beads are not directly
associated with burials at any of the other sites from the
Kamloops-Chase area, Smith (1900:426) did find them on the
surface of the Large Site. This semi-stratigraphic evidence,
however, is less persuasive than the absence of Trade items
at the Government Site, and until contrary evidence is produced
by future work, a Pre-contact date may be assumed for the burials
from this locality.

Artifact Comparisons. A close affinity between the
assemblage from EeQw:1 and that of the Large Site is evident
from Table XXI. The trumpet-shaped steatite pipes with encircling
bands at the junction of the bowl and stem are strikingly
similar (Fig. 20; Smith 1900:429). Other artifacts common to
both sites are: large perforated Pecten caurinus shells, decorated
and pierced bear penis bones, elongated copper pendants, and
whalebone items. Common negative traits include: wapiti teeth,
<table>
<thead>
<tr>
<th>Number</th>
<th>Artifact Type</th>
<th>Hill Site</th>
<th>Government Site</th>
<th>Large Site</th>
<th>EeQw:l</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Steatite pipes</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2</td>
<td>Long copper beads</td>
<td>x</td>
<td></td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Copper Pendants</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Copper stains</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Animal claw pendants</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Wapiti tooth necklaces</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Bear penis bone pendants</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><em>Pecten caurinus</em> pendants</td>
<td>?</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Haliotis pendants</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>10</td>
<td>Dentalium</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>11</td>
<td>Flat bone beads</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Pierced whole <em>Pecten caurinus</em> shells (possibly rattles)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>13</td>
<td>Beaver tooth dice</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Whalebone</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Stone Sculpture</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>16</td>
<td>Iron</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Beaver tooth knives</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>18</td>
<td>Antler harpoons</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>19</td>
<td>Bone harpoons</td>
<td>x</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
beaver tooth dice, and flat bone beads. *Dentalium* shells are reported from both sites but those from the Large Site are decorated while the shells from EeQw:l are not. *Haliotis* shell occurs only at EeQw:l.

Associated with the cremated remains at the Government site are: one wapiti tooth, many claw pendants, and flat bone beads. The following artifacts are not reported: copper pendants, *Pecten* shells, bear penis bones, beaver tooth dice, and *Haliotis* shell. The presence of a bone harpoon may be significant.

The Hill Site is distinguished from the others by the presence of iron, beaver tooth dice, a necklace of wapiti teeth, and copper beads. The assemblage does not contain *Pecten caurinus*, steatite pipes, or flat bone beads.

Conclusions

In comparing the sites from the Kamloops-Chase area three points of reference are significant: (1) the age of the site based upon the incidence of Trade goods, (2) the method of burial, (3) the artifacts shown in Table XXI. When determining cultural relationships by means of artifacts positive traits must be given greater weight than negative evidence.

The Large Site and EeQw:l represent two similar cultures. The two sites are nearly contemporaneous though it is doubtful whether any of the burials from the Large Site are as
recent as the Early Contact examples from EeQw:l. Flexed primary pit interments are the rule; there is no evidence of wood cists or cremation. Ornamental elements from both sites are similar, except that "embellished" Dentalium shells are present only at the Large Site, and Haliotis only at EeQw:l.

The cremated skeletal material from the Government Site is considered to be Pre-contact. The associated decorative artifacts, the bone beads, and the bone harpoons show few affinities with other Kamloops-Chase Area sites, although an otherwise normal Plateau site inventory of chipped points, celts, wedges, beaver teeth, awls, ochre, and digging-stick handles is recorded (Smith 1900:436). The only other reported Canadian Plateau burial site containing flat rectangular bone beads is near Lillooet; however, the skeletal remains were not cremated (Dawson 1891:12).

The wood cist interments from the Late Contact Hill Site are more recent than the interments from the Large Site and EeQw:l and thus indicate a change in burial custom. Wood cist burials, as we have seen (Chapter V), are found also west of Kamloops at Spences Bridge and at EeRh:l near Cache Creek. EeRh:l is definitely Pre-contact, and the Spences Bridge site Pre-contact or Early Contact. Thus, primary pit interment appears to have been still practised in the Kamloops-Chase Area at a time when wood cist burial was already in vogue to the west. The Hill Site attests the introduction of the wood cist to the Kamloops-Chase Area in the Late Contact era.
Two traits, occurring in the Hill Site but not in the Large Site or EeRk:1, are wapiti tooth necklaces and beaver tooth dice. The distribution hints at a Late Contact arrival of these elements in the Kamloops-Chase Area. A wapiti tooth necklace is among the grave additions from the Pre-contact site EeRh:1, near Cache Creek (Borden n.d.a) and wapiti teeth are reported also from apparently Pre-contact burials at Lytton (Smith 1899a:152).

Marmot incisor tooth dice, with markings identical to those on the beaver tooth dice of the Hill Site, are recorded by Smith (1899a:153) from a Pre-contact burial at Lytton. Rodent incisor dice, possibly marmot, are also present in the assemblage from EdRk:1, the Pre-contact site twelve miles south of Lillooet. When present in Columbia River sites, beaver incisor dice are always associated with Contact-aged assemblages (Butler 1959:67).

The significance of the spatial and temporal distribution of the wood cist inhumation and rodent incisor dice is considered in the following chapter.

Summary

Four distinct forms of burial can be discerned in the Kamloops-Chase Area: (1) cremation, (2) primary pit, (3) wood cist, and (4) coffin. The cremated remains appear to be Pre-contact, and the primary pit burials are Pre-contact and
Early Contact. In the Late Contact Period, charred wood cist inhumations were introduced from the west accompanied by wapiti tooth necklaces and beaver tooth dice. The most recent burial method is the Historic extended coffin interment.
CHAPTER VII

New Light on Recent Culture History in the Plateau

The data presented in the preceding chapters permit us to illuminate the three important problems bearing on recent Plateau prehistory that were outlined in the Introduction: (1) the problem of Coastal influences on Plateau cultures; (2) the origin and spread of crematory practices; and (3) Ray's ethnographic subdivisions in the Plateau. Though some conclusions can be presented with confidence others are still tentative and must be tested by future field work. As stated at the outset, the main concern is with recent Plateau prehistory; that is, the period embracing approximately the last five hundred years.

Coastal Influences on Interior Cultures

Chinook Depository Shed. The diffusion of the Chinook-type depository shed up the Columbia River is well documented both archaeologically and ethnographically (Coues 1905:139; Strong et al. 1930:42; Osborne 1957:151). The depository shed, as used by the Chinook, was a shed-roofed structure about ten feet square and six feet high erected over a shallow pit. Wrapped corpses were piled in, one above the other (Spier and Sapir 1930:271). At Blalock Island, half way between the McNary Reservoir and The Dalles, Lewis and Clark noted a huge depository shed, sixty feet long and twelve feet wide
(Coues 1905:139). Utilizing ethnographic sources, Osborne (1957:157) has traced the influence of the shed complex as far east as the Nez Percé groups. Archaeological evidence indicates that the depository shed extended in Pre-contact times as far upstream as Sheep Island in the McNary Reservoir region (cf. Chapter V above). According to Osborne (1957:149), Chinook influence, rather than a Chinook population movement, was responsible for the upriver diffusion of the concept. The idea was apparently dying out when Lewis and Clark descended the Columbia River in 1805 (Strong et al. 1930:42).

Coast Salish Mortuary House. Relying solely on ethnographic reports, Ray (1939:67) considers the Coast Salish mortuary house as the immediate stimulus for the mortuary houses among the Lower Thompson and the Lower Lillooet. This influence may actually have extended far to the east and north of these groups, although it was manifested in varying forms.

Variations of the Coast Salish mortuary house may have been observed as far north as the confluence of the Fraser and Chilcotin rivers where, in 1808, Fraser saw conical structures of poles erected over earth burials. Some of the teepee-like frames were twenty feet across at the base (Lamb 1960:72). Farther downstream in Upper Lillooet and in Upper Thompson territory, smaller conical "tents" were built over interments (Teit 1906:269; 1900:328). Fraser saw a four-foot square
burial box at the northernmost Lower Thompson village of Siska, while at Spuzzum the southernmost Lower Thompson village he examined a large mortuary house—fifteen feet long and "of the form of a chest of drawers" (Lamb 1960:94, 98). Zoomorphic figures were carved and painted on the plank sides. Similar mortuary houses with anthropomorphic figures were made by the Lower Lillooet (Teit 1906:272).

Two anomalies must be explained if the "tents" and conical structures reported by Teit and Fraser are to be considered related to the Coast Salish mortuary house. In the Coast Salish version, the corpses were placed in the house and not interred (Duff 1952:94). While the Lower Thompson (Teit 1900:335) and Lower Lillooet (Teit 1906:272) wholly accepted this idea, the more inland Salish apparently clung to their ancient practice of inhumation but erected grave markers. The second deviance from the original, the token "tents" rather than the elaborate house, would be expected in the arid Fraser Valley north of Lytton where wood suitable for the construction of plank mortuary houses was very scarce.

The concept of the mortuary house probably ascended the Fraser River in Contact times and continued well into the nineteenth century. Some Christian cemeteries along the Fraser River between Lytton and Lillooet contain burials covered by elevated gable roofs. The most recent tombstone is dated 1882.
Re-wrapping the Corpse. Accompanying the mortuary house concept to the Interior was the practice of re-wrapping the corpse in new blankets after the initial interment. The custom reported by Teit (1900:330) for the Thompson and the Lillooet (1906:270) was common among the Coast Salish (Duff 1952:94, 95). Re-wrapping a corpse after several years of inhumation would cause the bones to lose their natural anatomical position. Smith did not find any evidence of this practice at Lytton (1899a), and there was no indication of it in the Pre-contact sites EeRh:1 and EdRk:3 (Chapter V above). The practice was apparently introduced to the Plateau in Contact and Historic times.

Wood Sculpture. A third practice accompanied the mortuary house and the re-wrapping concepts upstream. In the nineteenth century, wooden anthropomorphic sculptures were placed around burials by the Thompson and Lillooet (Teit 1900:329; 1906:272). The carvings were similar to those made by the Stalo, or Fraser River Coast Salish, and were used mainly by the Lower Thompson (Teit 1900:329; 1906:273).

Artifacts of Coastal Origin. Preceding the Contact and Historic up-river diffusion of the mortuary house, wood sculpture and the re-wrapping ceremony, was an older cluster of traits, all but a few of which were extinct by ethnographic times. Some of these elements, for example, whalebone objects, *Pecten caurinus*, *Olivella*, *Haliotis*, and *Dentalium* shell,
obviously originated on the coast and were traded inland. Others, such as beaver incisor dice, ground slate knives, and the wooden mask, may have reached the Plateau through the process of concept or stimulus diffusion.

**Ground Slate Knives.** Ground slate knives have been associated with cultures in the Fraser Delta since the First Millennium B.C. (Borden 1950:15-16, 18, 20; 1960:117), and are found in sites of similar antiquity at Hope and Yale (Borden 1961a:584; 1961b:1). Archaeologic and ethnographic evidence indicates that with the exception of the Fraser Canyon from Hope to Lytton, ground slate knives are never common in Plateau assemblages. Smith (1899a:140; 1900:414) found considerable ground slate at Lytton, but very little at Kamloops. At EeQw:1 only two examples of ground slate were observed, and surface collections from sites between Lytton and Kelly Creek contain only two fragments of slate from a total of well over one thousand stone artifacts. Ground slate knives are not present in American Plateau sites (Borden n.d. b).

The very limited Plateau distribution of ground slate knives and the widespread and ancient coastal distribution suggest that the trait diffused inland relatively recently, the Fraser River being one of several possible diffusion routes.

**Rodent-tooth Dice.** Rodent-tooth dice have a wide Plateau distribution (Ray 1942:183). Their presence in Canadian Plateau sites has been discussed (Chapter VI above) and shown to
be Pre-contact at Lytton and EdRk:1, and Late Contact at Kamloops. In Columbia River sites, beaver tooth dice have been found only in Late Contact to Historic Age sites (Butler 1959:67). The trait appears to be recent in the Plateau.

Rodent tooth dice may be older on the coast than on the Plateau. A collector dug up four beaver incisors from the base of a wholly Pre-contact midden near Victoria, British Columbia (Sendey: Personal communication). A photograph indicates two teeth carved with a circle and dot motif, one with zigzags, and the fourth with eight vertical lines arranged in pairs and incised at right angles to the long axis of the tooth.

If the Victoria site is truly Pre-contact, and the association valid, then the earliest recorded occurrence of rodent tooth dice may be on the coast. From there the concept possibly diffused to the western Canadian Plateau, east to Kamloops and south to the Columbia River.

Despite extensive excavations, no beaver tooth dice have been found at Stelax, a recent Coast Salish village at the mouth of the Fraser River whose beginnings go back to around A.D. 1300 (Borden: Personal communication; cf. also McCallum and Dyck 1960:77f). Assuming that the Stelax Village deposits represent uninterrupted habitation, it seems unlikely the concept of dice diffused up the Fraser River, unless a Vancouver Island group brought the dice with them on their annual journey
up the Fraser for salmon (Duff 1952:25). An alternate route of diffusion to the Plateau could by-pass the Fraser River, and enter the Plateau via the more northerly Coast Salish groups. Clearly, more excavations and absolute dates will be needed before we are in a position to determine with certainty the origin of incisor tooth dice in the Northwest.

**Olivella and Haliotis.** These two sea shells occur with the greatest frequency in American Plateau sites. The occasional presence of these shells in Canadian sites probably indicates trade with Columbia River groups.

**Dentalium.** The widespread occurrence of *Dentalium* is indicative of the extensive trade throughout the Plateau. In ethnographic times the Chilcotin were middle-men in supplying most of the shell (Teit 1909:535), but some *Dentalium* also ascended the Columbia River (Osborne 1957:72).

**Whalebone Clubs.** Whalebone clubs are usually associated with coastal groups, especially the Nootka and Kwakiutl (Drucker 1955:94). It is pertinent to compare the club from *EeQw:l* with a series of forty-six Nootkan clubs illustrated by Boas (1904:403-412) and to note certain dissimilarities. A head surmounted by a mask is carved on the handles of all the clubs, but while the one from *EeQw:l* is probably meant to be anthropomorphic, the heads on the Nootkan clubs are generally zoomorphic and only rarely anthropomorphic.
The animal heads have large almond-shaped eyes; the human head from EeQw:l small nearly rectangular eyes. The Nootkan clubs have a perforation for a wrist lanyard; the example from EeQw:l has a carved ring.

Some whalebone clubs found in Plateau sites are like the Nootkan examples while others are similar to the club from EeQw:l. Smith (1900:422) illustrates two clubs from Kamloops which have human heads and rectangular eyes resembling the club from EeQw:l. A club combining the rectangular eye with zoomorphic carving is reported by Collier et al. (1942:80) from the Upper Columbia. Boas (1904:404, 405) illustrates whalebone clubs from various Columbia River sites; these are identical with the Nootkan examples.

The differences between the Kamloops-Chase Area clubs and those made by the Nootka suggests that another coastal group manufactured the clubs which were traded inland to the Kamloops region. Despite considerable digging, Smith did not report any whalebone from Lytton, and none was observed in the assemblage from EdRk:1 and EdRk:3. It may be that the clubs reached the Interior from the Kwakiutl; an examination of clubs known to have originated from this group may prove revealing (Drucker 1950:187; 1955:94).

**Pecten caurinus.** Pecten caurinus is limited to sites in the Canadian Plateau (p.66 above). Two uses for these shells have been suggested (p.65 above): the large complete shells pierced below the umbo were parts of rattles, while the
perforated fragments were evidently used as pendants. *Pecten* shell rattles were not used by the Bella Coola or any of the northern groups (Drucker 1950:198), but were common among the Coast Salish (Drucker 1956:102). This coastal distribution suggests that the rattles were traded from the Coast Salish to the Plateau groups. *Pecten caurinus* shell rattles are not reported for the Plateau groups in ethnographies.

**Wooden Mask.** The presence of the wooden mask at EeQw:l is not explained by any ethnographic accounts. Teit (1909:575) mentions the adoption of Carrier social structure, ceremonials, and masks, by some of the western Shuswap groups in the 1850's, a date too recent for EeQw:l.

Although the mask cannot be positively identified, it certainly does resemble the Coast Salish sxwaixwe (p. 68 above). Scallop-shell rattles were intimately associated with the sxwaixwe masks among the Coast Salish (Barnett 1955:158), and the combination of a mask and *Pecten* rattles at EeQw:l suggests the presence of the sxwaixwe dance complex. Among the Coast Salish the sxwaixwe dancers were hired to perform at purification ceremonies following puberty rites and funerals, and at almost any other occasion of note in an individual's life cycle (Suttles:personal communication). According to Suttles, the hiring of sxwaixwe dancers at these functions does not necessarily imply prestige, as in its purest form the dance was probably ritualistic.
It may be significant that steatite bowls, also possibly associated with ritualistic purification (Duff 1956: 23, 56), were found at EeQw:1. Ethnographically, nothing comparable to the sxwaixwe dance is reported for the Shuswap, but ritualistic purification was common after funerals and puberty rites (Teit 1900:319, 327; Ray 1942:220).

**Origin of the wood cist burial.** Wood cist burials have been considered Canadian Salish in origin (Osborne 1957:155). The conclusion is based on three points: (1) that cists are Pre-contact in the Canadian Plateau; (2) that no cists are reported east of the confluence of the Spokane and Columbia rivers (Collier, et al. 1942:40); and (3) that cist burials date from the Contact and Historic periods along the Columbia River. The Pre-contact cist burials at EeRh:1 (Cache Creek) strengthen this argument as they are the earliest wood cist interments reported from the Plateau. These inhumations consisted of a flexed primary pit burial surrounded by upright slabs or stakes which may have extended above the ground. The tops of the stakes appear sometimes to have been burned down to ground level, and a spread of rocks was always placed over the filled-in grave.

As an alternative to the unlikely assumption that the cist and rock cairn represent a natural evolution from the primary pit burial an extra-areal influence should be considered, especially since the earliest known cist burials, those of EeRh:1, are located on the western edge of the Plateau. In ethnographic times, the Tait, the easternmost Division of the
Coast Salish, utilized the large mortuary house (Duff 1952:49), while the remaining Coast Salish groups of the Fraser River used smaller boxes to dispose of the dead (Hill-Tout 1902:13, 52,63). The limited use of the mortuary house suggests that it may be a fairly recent development from the more universal box; as Duff (1952:50) says, "They [mortuary houses] were essentially large, elevated, roofed boxes." Possibly, in Pre-contact times, the box burial concept ascended the Fraser River, amalgamated with the primary pit interment, and produced the primary pit burial encased in cedar slabs. Two other aspects of the cist, common to most cist burials throughout the Plateau, are the charred upper ends of the slabs, and the spread of rocks. The charring has been interpreted in the preceding paragraph as a means of levelling the wood slabs, while the rocks may be traced to a practice, reported by Fraser, in Thompson territory mid-way between Yale and Lytton: "It [a burial box] was built of boards sewed together, and was about four feet square. The top was covered with Cedar bark and loaded with stones" (Lamb 1960:94).

The absence of C-14 dates from the Canadian Plateau makes it impossible to assign absolute dates for the suggested entry of the various coastal elements into the Interior. It is safe to conclude that the concepts of box burial, the mask and rattle complex, ground slate knives, and beaver tooth dice are Pre-contact in the Plateau. On the basis of present evidence, the mortuary house-tent complex, the concept of re-wrapping the corpse, and wood grave marker sculptures, seem to be traits introduced to the Canadian Plateau during the Contact and Historic
periods. For the present, these conclusions must remain tentative. As more evidence becomes available from the Canadian Plateau and the British Columbia coast, it will be possible to re-examine these theories and offer concrete evidence to validate or refute them.

The Origin and Spread of Cremation Burials

Cremated remains have been found archaeologically at The Dalles (p. 101 above), upstream along the Columbia River at least to Wahluke (p. 103 above), and possibly to Trinidad (p. 103 above). Cremation burials are also reported in the rock cairns of the southern British Columbia and northern Washington coasts (Smith and Fowke 1901), and from the Government Site at Kamloops (p. 110 above). Ethnographically, cremation burial was practiced by the northern Coastal groups — the Haisla, Haida, Tlingit, Tsimshian, and Bella Coola (Drucker 1955:169). In the northern Interior of British Columbia the Carrier, Chilcotin, and Sekani cremated their dead, while among the Canadian Interior Salish, the practice occurred occasionally (Ray 1939:63,64).

Attempting to locate the source for the Columbia River cremation practice, several authors have postulated a diffusion of the trait from the Carrier south through the Canadian Plateau, and thence to the Columbia River groups (Strong et al. 1930:49, 50; Ray 1939:65; Osborne 1957:157). Strong et al. and Osborne point to the cremated remains from Kamloops, and all three workers suggest the ethnographic reports of cremation among the
Canadian Plateau Salish indicate the spread of a cremation complex from the Carrier to the Columbia River.

The hypothesis that the Carrier adopted the concept of cremation from the neighbouring Tsimshian was advanced long ago. Ray (1939:63, 64) quotes Morice, who wrote in 1906, "But the Babines and Carriers had no sooner come in contact with the Skeena representatives of the Tsimshian stock, among whom the dead were cremated, than forsooth they commenced to burn the remains of those who fell out from among them." Ray concludes, "cremation is fairly well established as a recent importation from the Coast." He does add, however, that cremation in the Canadian Plateau could be the remnants of an ancient custom, although the Tsimshian - Carrier explanation is preferred (Ray 1939:65).

The remarkable similarities between the Tsimshian cremation ceremony described by Boas (1916:534-536), and the first-hand accounts of Carrier and Sekani cremations by Harman (1911:163, 180) leave no doubt of the very close relationship between the Coastal and Interior ceremonies. Morice's observation about the Babines and Carriers coupled with Harman's (1911:266) report of cremation spreading from the Carrier to the Sekani and Chilcotin, seems conclusive enough evidence to support the theory of Coast to Interior diffusion of cremation burial.

The date of "importation" of cremation is not clear, however, because of conflicting ethnographic evidence.

1 Original source unobtainable.
According to one of Drucker's Tsimshian informants (1950: 287), cremation began only after the advent of the Cannibal society which utilized corpses for ceremonies. The introduction of this society says Boas (1897:664), took place after 1825; yet, Fraser wrote of Athapascan cremation burials in 1808 (Lamb 1960: 146) and Mackenzie recorded them in 1793 (Mackenzie 1801:229,30). Assuming the cremation concept was diffused inland to the Carrier, the date must have been pre-1793, although exactly how much earlier cannot be determined.

Cremation burial has a long history along the Columbia River. The mass graves at the Over, Lucy, and Congdon sites appear very old (pp. 101,102 above). The cremated remains from the Yakima Valley (p. 104 above), Wahluke (p. 103 above), and Sheep Island (p. 102 above) may not be so old, although they are all Pre-contact. At The Dalles, mass cremations continue into the Historic Period (p. 101 above), and as late as the mid-nineteenth century at Sundale (p. 102 above). Individual cremation has been reported from the McNary Reservoir region and Wahluke (p.103 above) These burials were flexed, primary, and burned in a wood cist. They probably date from the Contact Period.

Cremated remains in rock cairns have been found on the southern coast of British Columbia and along Puget Sound (Smith and Fowke 1901; Smith 1903). These may be fairly old despite claims to the contrary by Drucker (1943:117) and King (1950:77). Not only do the Coast Salish groups residing in the area deny ever having buried in cairns (Smith and Fowke 1901:55), but a
fir tree four feet in diameter is reported growing through a cairn burial and into the midden below \(^1\) (Smith and Fowke 1901: 64). Drucker (1943:117) notes that in one cairn some white porcelain beads were found; however, the beads were inside the skull, a situation which suggests that they were dropped into the skull after the skin had deteriorated. Archaeological evidence for cremation north of Vancouver Island has not been reported, and the survey by Drucker (1943:107-109) disclosed only non-cremated remains.

In the Interior of British Columbia, archaeological evidence for cremation is limited to the puzzling remains at Kamloops (p. 111 above) which are apparently Pre-contact. As we have seen, the ethnographic record to the north is more complete and suggests an Early Contact diffusion from the Tsimshian to the Carrier and thence to the Sekani and Chilcotin.

Considering the archaeological evidence of ancient and widespread cremation in the Northwest, attempts to trace the concept to the Carrier and Tsimshian may be over-simplifying the problem. There are two distinct forms: mass cremation and individual cremation. The group burnings at Congdon, Over, and Lucy, are apparently the earliest cremated remains known on the Columbia River. Indeed, their antiquity may be greater than

\(^1\) The presence of coniferous growth on a shell midden indicates some antiquity, as the excessive alkali in the midden must leach out before coniferous trees can become established (Drucker 1943:113,115).
the enigmatic rock cairns of the British Columbia coast. The Contact-aged individual cist incinerations of the McNary Reservoir and Wahluke may represent the fusion of the Canadian Plateau wood cist burial with the earlier Columbia River cremations. A mingling of traits may also be reflected in the Historic burning of depository sheds at The Dalles, and the Pre-contact shed cremations of Sheep Island, Yakima, and Wahluke. To the north, among the Carrier, individual cremations are again evident and any diffusion of this trait to the Plateau would almost certainly be too recent to be the source for the mass burnings in the Columbia River sites.

Plateau Burial Patterns

Most of the Plateau burial practices are probably variations of three main forms: (1) primary pit interments; (2) wood cist; and (3) cremation. There are two types of pit burials: extended, and flexed. The extended inhumations from Rabbit and Sheep islands (p. above) seem to be the oldest primary pit remains reported from the Interior. More recent are the flexed pit burials, which in Late Contact and Historic sites are often covered with a tent-like arrangement of sticks. Burial in talus slopes should perhaps be considered a form of primary pit burial.

Wood cist burials can be divided into several subtypes. The bodies may be non-cremated or partially burned, but they are always flexed. The surrounding stakes or slabs may form a solid casing around the burial, or only a few sticks may be
placed above the body. With few exceptions, the tops of the stakes are burned flush with the ground level, and often a small cairn of rocks is erected. Cist burials are Contact and Historic on the Columbia River and Pre-contact and Contact in the Canadian Plateau.

There are two types of cremation: mass burnings, and individual cremation. Group burnings from the Congdon site at The Dalles may be the oldest burial form known in the Plateau, while individual cremation is ethnographic in the north.

The absence of Carbon-14 dates from Plateau burial sites necessarily limits the scope of chronological discussion. By using as an alternative stratigraphic evidence and artifact analysis it is possible to suggest some temporal sequences. In the McNary Reservoir (p.102 above) extended primary pit burials were followed in turn by mass cremation in depository sheds, individual cremations in wood cists, and non-cremated flexed primary burial in wood cists. At Asotin (p.104 above), extended primary pit interment preceded flexed primary wood cist burials, and Historic-aged extended plank coffin inhumations. In the Kamloops-Chase Area (pp. 115, 116 above), cremation may have been the earliest form, followed by flexed pit interment, Late Contact wood cists, and Historic coffins.

Population Movements Within the Plateau

Most of the evidence for population movements within the Plateau is from linguistic and ethnographic studies. Only
occasionally have archaeological manifestations been noted. Osborne (1957:195) mentions the apparent compression of the northern Sahaptins by their Salish neighbours, but points out the difficulties in detecting population shifts from archaeological evidence when groups move through peaceful means such as inter-marriage.

In the Canadian Plateau, the spread of the Athapascans appears to have been a major disruptive force. Swadesh (1949:161,166) discusses the linguistic evidence for the intrusion of the Carrier and Chilcotin into Interior Salish territory, forcing the Kutenai to the east, and separating Bella Coola from the Shuswap and Lillooet, although in a later paper Swadesh (1950) favours gradual rather than rapid movements.

During the nineteenth century a small group of Shuswap known as the Kenbaskets moved into Kutenai territory around Lake Windermere (Teit 1909:460). A site survey of the Columbia-Windermere lakes area revealed a number of small triangular side-notched points and circular semi-subterranean house pits. These points and house pits have been tentatively attributed to the migration of the Kenbasket Shuswap (Borden 1956:97).

Ethnographic Sub-divisions in the Plateau

Analysis of ethnographic data has caused Ray (1939) to suggest lateral (east/west) and longitudinal (north/south) divisions in the Plateau. Three lateral sub-areas are suggested: a northern sub-area comprising the Athapaskan groups; a central
division, the Canadian Plateau, terminating just south of the International Boundary; and the American Plateau (Ray 1939: 147). While the Athapascan - Salishan linguistic boundary is at the same time the sub-area division, the boundary between the Salishan and Sahaptin languages is over one hundred and fifty miles south of the sub-area divide.

Intersecting the lateral portions of the Plateau at right-angles are three longitudinal divisions. There is an eastern section comprising the Kutenai and the Nez Percé, a central division including the Shuswap and the Columbia River groups to the Wishram, and a western sub-area comprised of the Athapascan, Lillooet, Thompson, and Wishram groups (Ray 1939: 146,147). The eastern section displays the influence of the Plains groups, while the western sub-area reflects the inland diffusion of Coastal traits. In the center of the Plateau, the Southern Okanagan, Colville, Sanpoil, Lower Spokane, and Columbia, according to Ray (1939:149), are the cultures least affected by extra-areal influences and the "most representative of older levels and fundamental aspects of Plateau culture."

Evidence for the sub-area divisions is provided by material and non-material traits (Ray 1939:148). Non-material elements of culture (for example, social attitudes, religious dances and spirit quests) cannot usually be determined from archaeological remains. Of the material traits considered by Ray - house and canoe types - only house pits are likely to be
sufficiently preserved for comparative analysis. The meager data on house types from the Canadian Plateau prohibit any comparison. Although Ray's elements cannot as yet be examined archaeologically, other traits may provide a substitute. It should be pointed out, however, that to date the archaeological evidence is scanty compared with the bulk of ethnographic literature available. Furthermore, it is quite impossible to state that so many archaeological traits are equal to a single ethnographic element, or vice versa.

Archaeological sites in the Plateau can be located within the sub-areas outlined by Ray. Information on sites in the Athapaskan sub-area is so scanty that it cannot figure in the discussion. The Kamloops-Chase Area, EeRh:1, the Nicola Valley, and the Middle Fraser River sites are within the Canadian Plateau. The sites on the Upper Columbia as far south as Kettle Falls are not definitely within the American or Canadian Plateau, since the Lakes (Map 2) according to Ray (1939:147) are affiliated more with the southern sub-area. In the American Plateau are the remainder of the sites along the Columbia River and its tributaries.

The Kamloops-Chase Area sites and those along the Columbia River to The Dalles are within the central longitudinal sub-area. In the western section are the Fraser River sites and The Dalles region. EeRh:1 at Cache Creek straddles the two sub-areas.
Some artifacts are more typical of the Canadian Plateau and a few are unique to this sub-area. Ground slate knives are confined to the Canadian Plateau, as are *Pecten caurinus* shells. Whetstones, plentiful in the north but scarce in the American sector, parallel the higher incidence of bone and antler implements in the Canadian sites. Although the distinctive steatite carving complex is reported from the American Plateau, it occurs with far greater frequency to the north (Duff 1956). Antler harpoons are typical of the Canadian sector, although eight are recorded from Upper Columbia sites (p. 47 above). Seven of the eight came from sites between Kettle Falls and the International Boundary. Two artifact types are more plentiful in American Plateau sites; they are *Olivella* and *Haliotis* shell.

Differences between the longitudinal sub-areas are also evident. The eastern division is poorly represented; however, Borden (1956) found grooved mauls and notched sinkers more common in the East Kootenay region than in the central sub-area, and noted definite differences in projectile point forms. A high percentage of non-stemmed chipped points in the central division is coupled with an increase in the length of jade celts. Tubular pipe bowls from the central sub-area are fuller, and flare more sharply than the gently-expanding specimens from the western sites. Absent or very scarce in the central division, but plentiful in the western sub-area, are stone mortars. Long, slender, highly polished and intricately decorated bone needles
are found only in the western section of the Canadian Plateau. Elsewhere needles are scarce, and when present are usually flat and undecorated.

Most obvious of the sub-areas, as reflected by the archaeology, are the lateral divisions of the Plateau. The longitudinal sub-areas may stand out with equal prominence after archaeological research in the western Canadian Plateau is more advanced.

The possible significance of the distribution of several artifact types has already been considered. They are: Pecten caurinus shells, whalebone clubs, beaver tooth dice, wapiti canine necklaces, ground slate knives, and a wooden mask. An examination of the distribution of chipped point forms and jade celts reveals two unexplained trends. There appears to be no reason why there should be a well defined increase in the relative incidence of non-stemmed points in the central sub-area. Equally enigmatic is the increase in celt size, especially as the largest celts occur in sites (EeQw:1 and the Upper Columbia) farthest removed from the source of the raw material (p. 32 above).

Evidence from the archaeological data hints at several recognizable sub-areas within the Plateau. Although more information is needed, the archaeological sub-areas conform quite closely to Ray's ethnographic divisions. This is not surprising considering the excavated material is nearly all
less than five centuries old. Ray's theory that the longitudinal divisions are the result of very recent Coastal influence in the west, and very recent Plains pressures to the east, is not entirely in agreement with the archaeological evidence of possibly older contacts in the form of certain artifact types. It is curious that the lateral divisions which Ray has delineated on the basis of "fundamental" Plateau traits, also show up in the archaeological record, but as differences brought about by elements of Coastal origin. The traits unique to the Canadian Plateau — slate knives, *Pecten caurinus*, and the wooden mask — are the result of contact with Coastal groups. The two elements distinctive of the American Plateau — *Olivella* and *Haliotis* — are also derived from the Coast.

Conclusion

The analysis of the interments and the artifacts from EeQw:l represents only a start on the problem of unravelling the recent prehistory of the Canadian Plateau. The material from EeQw:l and its close affinities with the assemblages of previously excavated but incompletely documented sites, permits a partial reconstruction of the recent Kamloops-Chase Area prehistory. Furthermore, the similarities and differences between this area and that of the Middle Fraser River sites enable us to pose a number of problems. Since the sites in question are recent, the excellent ethnographies of the Plateau cultures can be combined effectively with the archaeological record. By utilizing this ethno-historical approach, the Prehistorian is
in a position to discuss the evolution of non-material as well as material cultural elements.

The archaeology of the late Canadian sites emphasizes the significant impact of the coastal cultures; especially that of the Coast Salish. While the spread of ethnographically recorded concepts such as the mortuary house, corpse re-wrapping, and wooden sculptures, are well documented, the suggested pre-historic influences are not. Obviously, more systematic and problem oriented field archaeology is necessary. Three areas loom as potentially strategic: (1) the Lytton to Lillooet stretch of the Fraser River; (2) the Kamloops-Chase Area; and (3) the Chilcotin territory.

The importance of the Lytton-Lillooet region to the problem of understanding the extent of Coastal influences can hardly be overemphasized. Ideas and artifacts introduced to the Plateau by the Coast Salish must have entered the Plateau via the Fraser River or via the Anderson-Seton lakes route. Concepts passing through the Fraser Canyon must pass Lytton, while ideas diffusing through the Anderson-Seton lakes chain emerge in the Plateau at Lillooet. In either area the concepts could be altered to harmonize with existing Plateau traditions. Unfortunately, mining, construction, and agricultural activities have destroyed many of the sites in the immediate vicinity of Lillooet. The sites of the Lytton area have also suffered heavily; however, at the confluence of the Stein and Fraser rivers, five miles north of Lytton, there exists an almost
undisturbed complex of habitation and burial sites, situated in an ideal ecological setting.

The Kamloops Lake area, and the South Thompson River to the Shuswap Lakes, were undoubtedly great centres of aboriginal culture. Assemblages from sites here indicate contact not only with Coastal ideas, but also with the Columbia River cultures. More controlled field work at sites such as EeQw:l is necessary before a full appreciation of the area's importance can be realized.

The Chilcotin territory is the least understood archaeologically and ethnographically. So far nothing definite is known of the origin of the Chilcotin, of the date of their arrival, of the groups they displaced, and of the effect of the apparent Athapascan wedge on relations between the Salish-speaking Bella Coola and the Interior Salish.

In all, or any one of these areas, a carefully organized programme of field research, supplemented by Carbon-14 dates, would contribute significantly to a more complete understanding of recent Canadian Plateau prehistory.
BIBLIOGRAPHY

The following abbreviations are used:

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<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>ABC</td>
<td>Anthropology in British Columbia</td>
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<tr>
<td>AMNH</td>
<td>American Museum of Natural History</td>
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<td>BAE</td>
<td>Bureau of American Ethnology</td>
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<td>RBAAS</td>
<td>Report for the British Association for the Advancement of Science</td>
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<td>BCPM</td>
<td>British Columbia Provincial Museum</td>
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<td>UCPAAE</td>
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<td>UWPA</td>
<td>University of Washington Publications in Anthropology</td>
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EXPLANATION OF FIGURES

Figure

1. Burial site EeQw:l looking east.
2. Profile of road cut looking west. The varved white silts are on the left and the sands on the right.
3. Burial 1 looking north.
5. General view of excavation looking east.
6. Profile of north wall and intrusive pit of Burial 3 on the right. Burial 2 in foreground
7. Burial 3 and additions, looking east.
8. Main unit of inclusions with Burial 3.
10. Burial 5 looking west. Head and shoulders are beneath bark covering.
12. Chipped projectile points.
13. Chipped point and drill outlines.
14. Chipped points (knives)
15. Chipped flake knives.
17. Mortar and hand maul or possibly pestle.
18. Whetstones
19. Steatite trumpet pipes (From a colour transparency by W. Duff).
20. Celts.
21. Steatite gaming piece (?).
Figure

22 Steatite bears or possibly coyotes (approximately natural size).

23 Steatite bird bowl (approximately natural size. From a colour transparency by W. Duff).

24 Steatite sculptures.

25 Steatite human figure bowl, ventral side. (From a colour transparency by W. Duff.)

26 Steatite human figure bowl, dorsal view. (From a colour transparency by W. Duff.)

27 Antler digging stick handles, from above.

28 Antler digging stick handles, from below.

29 Type A harpoons (from a colour transparency by W. Duff).

30 Antler and bone implements (From a colour transparency by W. Duff.)

31 Antler points and wedge.

32 Antler clubs.

33 Antler carving:
   (a) Anthropomorphic heads
   (b) Zoomorphic head on antler tine club

34 Anthropomorphic antler head.

35 Antler artifacts associated with Burial 1.

36 Bone creasers.

37 Artifacts associated with Burial 3:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A</td>
<td>Bone needle</td>
</tr>
<tr>
<td>B,C,D</td>
<td>Bone projectile points</td>
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<tr>
<td>E,F,G</td>
<td>Bone points from leister</td>
</tr>
<tr>
<td>H,I</td>
<td>Split beaver incisor</td>
</tr>
<tr>
<td>K,L</td>
<td>Split marmot (?) incisor</td>
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38 Handle of whalebone club.

39 Bear penis bone pendant.

40 Miniature bone bows.
Figure

41 Birch bark container (approximately half size).
42 X-ray photograph of bark container.
43 Wooden mask.
44 Copper pendants.
45 Perforated *Pecten caurinus* shells (from a colour transparency by W. Duff).
46 Geometric motifs found on embellished artifacts from EeQw1.
POINT TYPES

A  B  C  D

E  F  G  H

I  J  K  L

M  N  O

Type A  Type B  Type C

Fig. 13