

THE ROCK ART OF THE NORTHWEST COAST

by

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B.A., Simon Fraser University, 1969

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in the Department

of

Archaeology

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ABSTRACT

This thesis examines Indian petroglyphs and pictographs (carvings and paintings on rock surfaces) of the Northwest Coast culture area. Although over six hundred archaeological sites of this type have been recorded along the coast, they have never been studied beyond the descriptive level. The primary objectives of this thesis are to collect and organize the existing raw data and to determine their basic characteristics. These data come from publications and articles that describe or briefly mention rock art sites and from a large collection of unpublished information from several museums, including the Museum of Man in Ottawa and the British Columbia Provincial Museum in Victoria. This information is further supplemented by contributions from individuals and by original field research.

The study area follows the Northwest Coast from Yakutat Bay in the Gulf of Alaska south to the Dalles of the Columbia River. This area is, for convenience, divided into the eight traditional linguistic regions; Tlingit, Haida, Tsimpsian, Bella Coola, Kwakiutl, Nootka, Coast Salish and Chinook. Sites are listed for each linguistic region by major coastal features and are identified as to type, that is, whether carved or painted or a combination. Each site is given a number and a note on location. Following this site list, a study of designs examines the individual designs which make up each site and lists them according to whether they are zoomorphic, anthropomorphic or geometric.

The distribution of these designs indicates that some are unique to the coast while others appear to have been "borrowed" from neighbouring cultural areas such as the Interior Plateau. Still others appear to be a part of an even greater distribution involving the Asian and North American continents.

An examination of details of manufacture of paintings and carvings reveals information regarding the type and location of preferred rock surfaces as well as details of tools, pigments and binders used.

There are several distinct styles of rock art to be found on the coast including three of a conventionalized nature, one that is abstract and two which appear to have originated in the Interior Plateau. One of these, the conventionalized Basic Northwest Coast Style is the most frequently encountered and may be considerably older than the others. Functionally, these carvings and paintings were of a commemorative nature, recording events such as important ceremonies, wars or natural disasters. or the presence of wealthy, or influential persons, usually chiefs. They also recorded ownership of inherited or acquired rights and privileges such as economically viable territories.

Finally, the problem of dating this form of primitive art is examined and those dating methods which could be applied to the Northwest Coast are briefly described. Some of these are theoretical and most have not as yet been tried on coastal rock art. Most dating information comes from ethnographic identification and those sites for which dates are known are relatively recent, being no older than two or three hundred years. However, the majority of the sites are as yet undated and there is considerable evidence to suggest that the making of rock carvings and paintings is an old coastal tradition. The results of each of the topics noted above are summarized and the written portion of the thesis is supplemented by line drawings, several tables and a map. It is hoped that this thesis will serve as a framework for other studies into this form of primitive art of the Northwest Coast.

ACKNOWLEDGEMENTS

This thesis would not have been completed without the assistance of numerous individuals and institutions. In particular I would like to thank Mr. Donald Abbott, Curator of Archaeology and his staff at the British Columbia Provincial Museum in Victoria, Mr. Bjorn Simonsen Provincial Archaeologist, Victoria, and Miss Margaret Stott of the National Museum of Man in Ottawa. To these should be added the names of Mrs. Elizabeth Hill of Saltspring Island, Mr. Nelson Oliver of Port Moody, Mr. John Corner of Vernon and all of the other researchers who made available their information and their time. Special thanks are due to Desmond Lundy who prepared the map, Elaine Whitmore who typed the manuscript and to Dr. Roy L. Carlson and Professor Philip M. Hobler of the Archaeology Department of Simon Fraser University and Professor Brian Sagar of the Geography Department all of whom gave aid and encouragement which is greatly appreciated. Much of this work was made possible by a graduate research stipend received from Simon Fraser University. Finally, I would like to acknowledge my debt to all of the earlier rock art researchers, especially the late Harlan I. Smith, Dominion Archaeologist upon whose work so much of this thesis depended.

TABLE OF CONTENTS

Title Page	i
Approval	ii
Abstract	iii
Acknowledgements	v
Table of Contents	vi
List of Tables	vii
List of figures	viii
CHAPTER 1 Introduction	1
CHAPTER 2 Rock Art Sites of the Northwest Coast	5
CHAPTER 3 Designs and Distributions	70
CHAPTER 4 Techniques of Manufacture	242
CHAPTER 5 Stylistic Analysis	256
CHAPTER 6 Function	295
CHAPTER 7 Chronology	318
CHAPTER 8 Summary and Conclusions	339
Appendix A Terminology and Abbreviations Used	344
References	345

LIST OF TABLES

Table I	Distribution of Zoomorphic Design Elements	146
Table II	Distribution of Anthropomorphic Design Elements	183
Table III	Distribution of Geometric Design Elements	229
Table IV	Distribution of Rock Art Sites by Type and Linguistic Area	244
Table V	Distribution of Pigments Used in Pictographs	246
Table VI	Distribution of the Basic Conventionalized Rock Art Style	271
Table VII	Distribution of the Classic Conventionalized Rock Art Style	276
Table VIII	Distribution of the Columbia River Conventionalized Rock Art Style	281
Table IX	Distribution of the Abstract Curvilinear Rock Art Style	287
Table X	Distribution of the Interior Intrusive Rock Art Style	293

LIST OF FIGURES

Figure	Page
1. Map showing main geographic features of the Northwest Coast as mentioned in thesis	8
2. Bear design	75
3. Bison design	(77)
4. Canine designs	80,82
5. Deer and elk designs	85
6. Horse designs	88
7. Mountain goat designs	91
8. Mountain sheep designs	93
9. Crab designs	97
10. Flounder (Halibut) designs	99
11. Salmon designs	101
12. A shark design	104
13. Whale designs	106,108
14. Eagle designs	112
15. Owl designs	114
16. Raven designs	117
17. A sandhill crane design	120
18. A frog design	123
19. Insect designs	125
20. Sea wolf and sea monster designs	128,130
21. Sisiutl designs	133
22. Thunderbird designs	135
23. A snake design	138

Figure

24.	Zoomorphic track design	140
25.	A turtle design	143
26.	Male anthropomorphic designs	155
27.	Female anthropomorphic designs	157
28.	Mythical anthropomorphic designs	160,162
29.	Anthropomorphic designs containing others	164
30.	Undifferentiated anthropomorphic designs	168,170,172
31.	Circle face designs	175,177
32.	"Arrow-like" designs	189
33.	Two-forked line designs	193
34.	Three-forked line designs (bird tracks)	195
35.	"Ladder" and cross-hatch designs	199
36.	Copper designs	201
37.	Connected circle designs	207
38.	Divided circle designs	209
39.	Rayed semi-circle designs (canoes)	215,217
40.	European ship designs	223,225
41.	Stylistic differences in anthropomorphic and copper designs	258
42.	Examples of designs in the Basic Conventionalized Style	269
43.	Examples of designs in the Classic Conventionalized Style	274
44.	Examples of designs in the Columbia River Conventionalized Style	279
45.	Examples of designs in the Abstract Curvilinear Style	285
46.	Examples of designs in the Interior Intrusive Style	291

INTRODUCTION

There are over six hundred rock art sites now known along the Northwest Coast, yet there has not been an attempt to present a comprehensive study of this type of archaeological site. Reports covering the subject have, in the past, been limited to relatively small regions within the greater culture area, or, more commonly have described but not analyzed only one or a few sites. A list of several of the more relevant publications may serve in the first place to underline the secular aspects of Northwest Coast rock art studies and may in the second place serve to provide information regarding the present status of such research.

Sites of the northern Tlingit have been well reported upon by de Laguna in several publications (1934, 1956, 1960). While not directly concerned with rock art de Laguna is one of the few writers who has attempted to relate the pictographs and petroglyphs in her study area with those occurring elsewhere. A few sites of the southern Tlingit are described by Emmons (1908) and Keithahn (1939, 1940, 1945) but there is no attempt made by either writer to relate their material to that of other regions. Work is currently in progress by the Alaska State Museum to gather and verify data on the rock art resources of Alaska. Harlan I. Smith in his various publications describes a number of specific sites in all but the Haida and Chinook linguistic areas but his actual analysis is slight. Similarly, the notebooks of Francis Barrow which form the basis for much of the data in the files of the British Columbia Provincial Museum on the subject are a valuable initial record, but they too are mainly descriptive in nature and are limited to the southern Kwakiutl and Salishan coasts. Gutorm Gjessing's 1958 publication as well was concerned only with the latter area while Marion Smith in 1942 also discussed some

Salishan rock art, concentrating on one Fraser River site, several along Puget Sound and more along the Columbia River. In 1925 Strong and Schenck examined the rock art of Petroglyph Canyon near the Dalles of the Columbia and discussed relationships between sites both up and down the river. The most spatially ambitious works are only four in number and not one attempts to cover both painted and carved art of the entire culture area. For example, Newcombe (1907) published a short report on the petroglyphs of British Columbia in which he described and discussed a few of the then known British Columbia petroglyph sites along with two from Washington state. In 1927 Harlan I. Smith published his list of British Columbia petroglyphs which attempted to list all of the then known carved sites of the province. Accurate then it is now badly out of date. His complementary list of pictographs, partially compiled, was never published. Thirdly, an early work of Gutorm Gjessing (1952) on pictographs and petroglyphs of the B.C. coast attempted a discussion of several carved and painted sites and suggested a chronology of sorts. However, more recent data can refute many of his conclusions. Finally, Edward Meade in 1971 published his book on the Indian rock carvings of the Pacific Northwest which lists and discusses briefly many of the carved sites known from Alaska to the Columbia.¹

From the above it should be clear that there is no lack of available material on Northwest Coast rock art, for there are many additional articles containing isolated comments along with a wealth of unpublished material from both the National Museum of Man in Ottawa and the British Columbia Provincial Museum in Victoria. Yet never has this material been combined into a

¹ A new book awaiting publication by Mr. and Mrs. R.C. Hill of Saltspring Island will provide photographs of rubbings of most of the petroglyphs of the Northwest Coast. It also contains a comprehensive text.

comprehensive, analytical study encompassing the entire coastal culture area and relating this area to those bordering it.

That such an analysis is long overdue becomes clear when one realizes that most of these neighbouring areas have been studied and reported upon in some depth. To the south, Julian Steward (1936) laid the foundations for rock art research in California. His initial surveys and conclusions have since been expanded by several researchers, notably Campbell Grant (1956, 1967) and Heizer and Clewlow (1973) and extended into the Great Basin area by Heizer and Baumhoff in 1962. In 1937, Luther Cressman reported on the rock art of Oregon state omitting only the Columbia River region. Thomas Cain (1950) published a similar report on the rock art of Washington state, omitting only the Lower Columbia River region and Puget Sound as both fall within the Northwest Coast sphere of influence. In 1967 John Corner published a comprehensive account listing and describing the pictographs of the southern British Columbia interior. Carved art of this region remains to be examined. The northern portions of the province, the Yukon and much of Alaska remain in the survey stage.

Research procedures for this thesis involved an exhaustive search for all relevant material from a wide variety of sources. The site files and other records of the Archaeology Division of the British Columbia Provincial Museum in Victoria were thoroughly utilized since they contain all information presently known about the rock art sites of the province. The files of the National Museum of Man in Ottawa also proved invaluable as they included notes and reports compiled by earlier rock art researchers, notably Harlan Smith. The Oregon Museum of Science and Industry in Portland provided information on carvings of the Columbia River while the National Park Service of the United States made available their survey of Petroglyph Canyon. The collections of the British Columbia Provincial Museum, Simon Fraser Univer-

sity, and the University of British Columbia were examined to gain familiarity with prehistoric artifacts and art styles. Numerous individuals were contacted who had visited, reported upon or photographed particular rock art sites and the available literature on the subject including books, manuscripts, journal and newspaper articles was closely examined. Finally, observations and original field work involving the visiting and recording of pictographs and petroglyphs was invaluable in organizing and interpreting the data.

It is the purpose of this thesis to gather together as much as is feasible of the available data on the rock art of the Northwest Coast and then to organize it by determination of its inherent characteristics regarding designs and distribution patterns, techniques of manufacture, styles, function and chronology and to relate this art to that of neighbouring areas. Detailed studies of its components will likely have to await future research, but it is hoped that this thesis will provide much useful material for such studies.

CHAPTER TWO

ROCK ART SITES OF THE NORTHWEST COAST

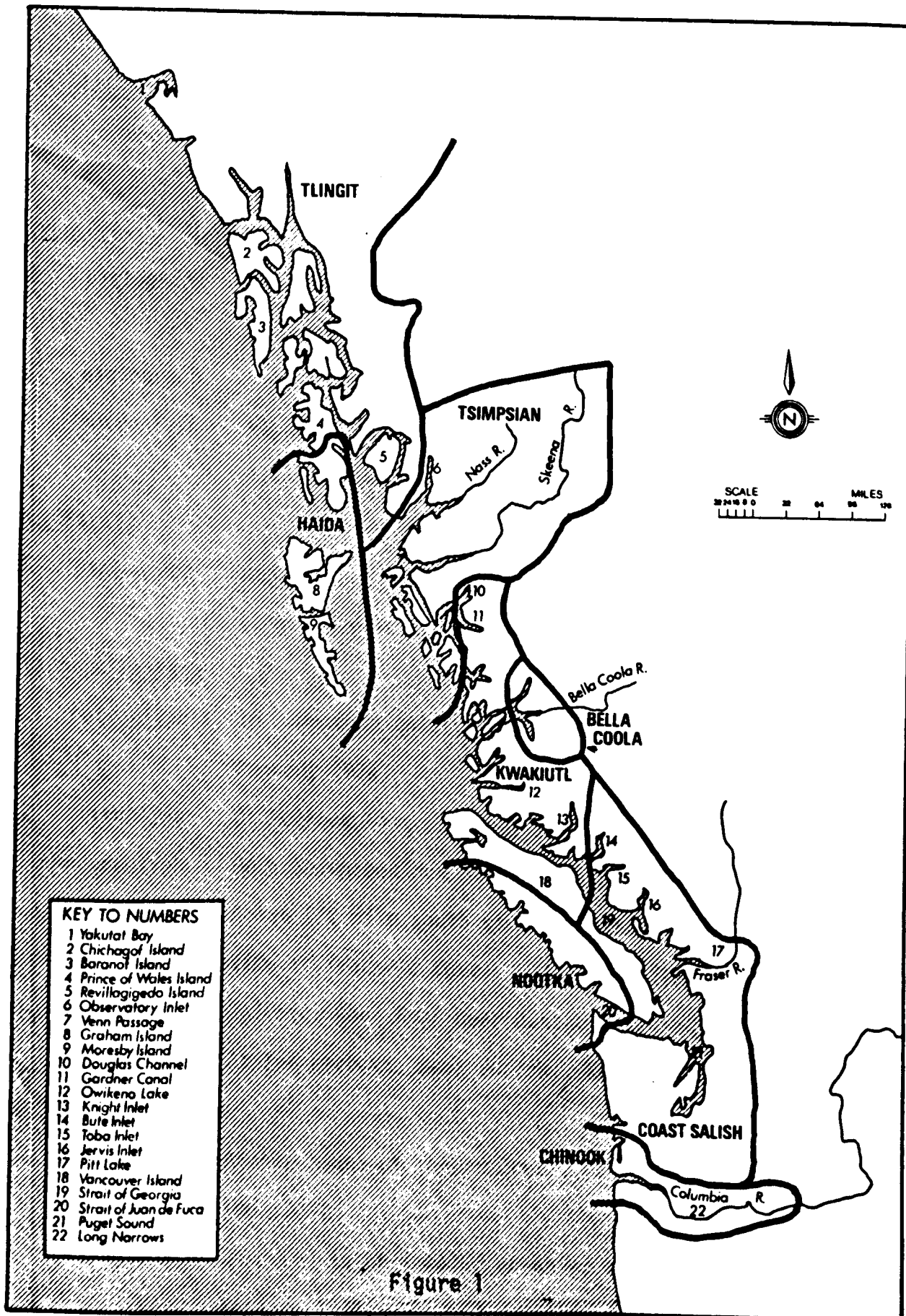
This chapter attempts to list all of the recorded or reported rock art sites of the Northwest Coast. It is therefore the raw data on which the thesis is built. It is divided, for convenience, into the major linguistic categories of Tlingit, Haida, Tsimpian, Bella Coola, Kwakiutl, Nootka, Coast Salish and Chinook and conforms with the linguistic boundaries of Drucker (1955). Therefore, the area dealt with includes the coastline from Yakutat Bay to the Columbia River, (omitting groups south of the Columbia), and continues inland along the major rivers in so far as Northwest Coast influences can be said to occur (to the Kispiox area on the Skeena, to Yale on the Fraser and to the Dalles on the Columbia).

Each linguistic area list of sites is treated as a separate category. It was decided not to make a single, continuous list for the entire coast in order to make it more flexible should new sites need to be added in time. The linguistic divisions are further divided into major coastal features (inlets, islands, etc.) which should be read as "in the area of" Belize Inlet, or "in the area of" Cortes Island, and which should make searching for a particular site easier.

Each site notation contains the following information: a number (for reference in the body of the thesis), a note regarding technique (pictograph, petroglyph, a combination of these techniques, etc.), a comment about location which is not intended to be specific, rather to differentiate between similarly located sites, and finally, a note stating the major or most useful reference or references. Site designations are given when possible. Any reference requiring additional explanation contains a number in parenthesis. This

number refers to a section at the end of the chapter, where such explanations are provided. The following map, (figure 1) indicates major geographical features of the coast as well as the linguistic divisions.

Figure 1
Map showing major geographical features
of the Northwest Coast along with the
linguistic divisions mentioned in the
thesis.



ROCK ART SITES LOCATED IN TLINGIT TERRITORY

Yakutat Bay

1. petroglyph Original location unknown. Now located on the southern shore of the bay. de Laguna 1964:23.

Lynn Canal

2. pictograph On Lutak Inlet at the northern end of Chilkoot Inlet. Kennedy 1974.
3. pictograph Near Klukwan on the Chilcat River. de Laguna 1960:72.
4. petroglyph Reported at Berner's Bay on the western fork of the Lacey River. Kennedy 1974.

Icy Strait

5. pictograph Reported on the eastern shore of Willoughby Cove on Lemesurier Island. Kennedy 1974.

Stephens Passage

6. petroglyph In Limestone Inlet, in a bay near the Taku River. Kennedy 1974.
7. petroglyph At Holkham Bay. Kennedy 1974.
8. petroglyph On a beach boulder at Port Houghton. Keithahn 1940:130.
9. petroglyph About 1/2 mile south of Taku Harbour near the village site at Trader's Cove. Walker 1954:20.
10. petroglyph On Fritz Cove Road near Juneau. Kennedy 1974.
11. petroglyph At Tee Harbour, near Juneau. Kennedy 1974.

Admiralty Island

12. Unknown At the mouth of Thayer Creek, north of Angoon. de Laguna 1960:70-1.
13. petroglyph Reported to be located on point of land near Gambier Bay. Kennedy 1974.

14. petroglyph On the west beach in front of the lineage houses at Angoon. de Laguna 1960:71.
15. pictograph At Magpie Point, about 1/2 mile south of Angoon Isthmus. de Laguna 1960:71, 73-4.
16. petroglyph Located at Hood Bay. de Laguna 1960:71.
17. petroglyph Reported at Chaik Bay. de Laguna 1960:71.
18. petroglyph Reported at Head Island in Whitewater Bay. de Laguna 1960:71.
19. petroglyph Reported at Mole Harbour. Kennedy 1974.
20. pictograph North of the village site in Whitewater Bay. de Laguna 1960:71.
21. petroglyph At the southeast corner of Tiedman Island. Kennedy 1974.
22. pictograph About 4 miles south of Whitewater Bay. de Laguna 1960:75.

Chichagof Island

23. pictograph On cliffs near the village site of Hoonah. Kennedy 1974.
24. unknown Reported to be located near the cannery at Tenakee. de Laguna 1960:71.
25. petroglyph Near Chatham in Sitkoh Bay. de Laguna 1960:71,76-8.
26. petroglyph At Basket Bay, off Chatham Strait. Kennedy 1974.

Peril Strait

27. petroglyph Reported to be located in Dead Man Reach. Kennedy 1974.
28. petroglyph Reported to be located at Deep Bay. Kennedy 1974.
29. petroglyph Reported to be located at Point Siroi. Kennedy 1974.
30. petroglyph At the northern end of Kruzof Island, at Sinitsin Cove, on both sides of the cove. Kennedy 1974.
31. petroglyph At Kalinin Bay, on Kruzof Island, north of the cannery, on both sides of stream draining Surprise Lake. Kennedy 1974.

Baranof Island

32. petroglyph Reported to be located on the western shore of the island, at Redoubt Bay. Kennedy 1974.
33. petroglyph Reported to be located on the northern shore of West Crawfish Inlet. Kennedy 1974.
34. petroglyph At Middle Island on the south cove to the northwest of Sitka. Kennedy 1974.
35. petroglyph At Katlian Bay, (in the mouth of the bay) north of Sitka. Kennedy 1974.
36. petroglyph At the village of Sitka, in Kalinin Bay. Emmons 1908:222.
37. petroglyph At Lisiansky Bay on the western side of Baranof Island. Emmons 1908:223.
38. petroglyph At Whale Bay on the western shore of the island. Reported. Kennedy 1974.
39. petroglyph Reported at Krugloi Point on Halleck Island. Kennedy 1974.

Frederic Sound

40. pictograph At Farragut Bay, Entrance Island on a bluff "near Otto Wildes' place". Kennedy 1974.
41. petroglyph Reported to be located at Point Agassiz. Kennedy 1974.

Kadin Island

42. petroglyph Reported to be located on Kadin (High) Island. Kennedy 1974.

Kupreanof Island

43. petroglyph At the old village site of Kake on the western shore of the island. Kennedy 1974.

Kuiu Island

44. petroglyph Reported to be located on a rock wall near the cannery in Piledriver Cove. Kennedy 1974.
45. petroglyph Reported to be located in Tebenkoff Bay. Kennedy 1974.

Mitkof Island

46. petroglyph Reported to be located near Sandy Beach, Petersburg, to the left of where a trail crossing the muskeg comes to the beach. Kennedy 1974.
47. petroglyph Reported at Five-Mile Creek, near Petersburg and opposite Sukoi Island. Kennedy 1974.
48. petroglyph Reported to be located at Ideal Cove, about 1/2 mile from "the old saltery site". Kennedy 1974.

Stikine River

49. pictograph HgTw 1. At Painted Point near the mouth of the Anuk River. de Laguna 1956:108.
50. petroglyph HkTu 1. South of the mouth of Little Shakes Creek and near the mouth of Shakes Creek. BCPM.
51. petroglyph HITt 1. About 6 miles downstream from Telegraph Creek. BCPM.
52. petroglyph Reported to be located at the mouth of the Stikine River. Kennedy 1974.

Wrangell Area

53. petroglyph Across from Berg Bay on Blake Channel, Wrangell Island. Reported. Kennedy 1974.
54. petroglyph At the northern tip of Wrangell Island near the Wrangell Institute. Smith 1909:598, Keithahn 1940, Kennedy 1974.
55. petroglyph Reported to be located near the Wrangell cemetery. Kennedy 1974.
56. petroglyph At Shoemaker Bay near the Wrangell Institute, at the northern tip of Wrangell Island. Reported. Kennedy 1974.

57. petroglyph Reported to be located "at Mack Dunn's place, 10-15 miles south of the town". Kennedy 1974.
58. petroglyph Reported to be located at Southeast Cove on Wrangell Island. Kennedy 1974.
59. petroglyph Reported to be located on Anan Creek in the Wrangell District. Keithahn 1940.
60. petroglyph At Mill Creek, which empties Virginia Lake. Kennedy 1974.
61. petroglyph At Point Warde, opposite Anan Creek. Kennedy 1974.
- Etoline Island
62. petroglyph Reported to be located on the northwest extremity of the island on a sandy beach between two rocky points. Emmons 1908:225.
63. petroglyph Reported to be located at Olive Cove on the eastern shore of the island. Kennedy 1974.
- Kosciusko Island
64. petroglyph Reported to be located at Ruins Point on the Northwest shore of the island. Kennedy 1974.
65. petroglyph Reported to be located in Cosmos Pass, in Straw Pass, Craig District, on the southern shore of the island. Kennedy 1974.
66. petroglyph Reported located at Craig Boat Harbour, Kennedy 1974.
67. petroglyph At Shelter Cove. Kennedy 1974.
68. petroglyph Reported to be located near the head of Shipley Bay. Kennedy 1974.
69. petroglyph Reported to be located at Shaken on the western shore of the island. Kennedy 1974.
70. petroglyph Reported to be located at Devilfish Bay. Kennedy 1974.

Northern Prince of Wales Island

71. petroglyph Reported to be located at old village site of Karheen on the southwestern shore of Tuxekan Island. Kennedy 1974.
72. petroglyph Located at the north end of Heceta Island, at Port Alice. Kennedy 1974.
73. petroglyph Reported to be located at Tonowek on the eastern shore of Heceta Island. Kennedy 1974.
74. petroglyph Reported to be located at Trocadero Bay, south of Craig. Kennedy 1974.
75. petroglyph Reported to be located at the old village site of Tuxekan, opposite Tuxekan Island. Kennedy 1974.
76. petroglyph Reported to be located on Warm Chuck Inlet, on Heceta Island. Kennedy 1974.
77. petroglyph Located at the western end of Dry Pass. Kennedy 1974.

Revillagigedo Island

78. petroglyph Reported to be located in Rudyard Bay on the mainland opposite the eastern side of the island. Kennedy 1974.
79. petroglyph Reported to be located at Mop(Pop?) Point, in Thorne Arm. Kennedy 1974.
80. petroglyph Located in Carrol Inlet, Shelter Cove. Kennedy 1974.
81. petroglyph At the site of Saxman village. Reported removed about 1939. Kennedy 1974.
82. petroglyph Reported located near George's Inlet on the southern shore of the island. Kennedy 1974.
83. petroglyph Reported to be located in Leask Cove, off George's Inlet. Kennedy 1974.

Behm Channel

84. petroglyph Reported to be located on the mainland opposite Revillagigedo Island. Kennedy 1974.

Gravina Island

85. petroglyph Reported to be located at Seal Cove. Kennedy 1974.

86. petroglyph Reported to be located at Dall Bay. Kennedy 1974.

Annette Island

87. petroglyph Located on boulders near the stream which drains Tamgas Lake. Kennedy 1974.

ROCK ART SITES LOCATED IN HAIDA TERRITORY

Southern Prince of Wales Island

1. petroglyph At Thorne Bay, at the northern end of the Kasaan Peninsula. Kennedy 1974.
2. petroglyph At Karta Bay, in Kasaan Bay. Keithahn 1940:130, Kennedy 1974.
3. petroglyph In the streambed and nearby beach near Hydaburg Creek. Keithahn 1940:128, Kennedy 1974.
4. pictograph On the shore of Eek Inlet, off Hetta Inlet. Keithahn 1943:74, Kennedy 1974.
5. pictograph At Hetta Inlet. Kennedy 1974.
6. petroglyph At Hetta Inlet. Keithahn 1940:128, 1943:74, Kennedy 1974.
7. petroglyph Near the old village site of Klakas. Reported. Kennedy 1974.
8. petroglyph "Near Charlie Wong's cabin, at Saltchuck in Kasaan Bay". Kennedy 1974.
9. petroglyph Reported as being located on the western shore of the island, "below Copper Mountain". Newcombe 1907.
10. petroglyph Reported to be located at Cape Chacon. Kennedy 1974.
11. petroglyph Reported to be located at "No-Name Cove" east of the Haystack, at the southern tip of the island. Kennedy 1974.
12. petroglyph Located at Saltery Point, east of Hydaburg. Kennedy 1974.

Dall Island

13. petroglyph Reported to be located at Gooseneck Harbour on the western side of the island. Kennedy 1974.
14. petroglyph Pond Bay on the eastern side of the island. Kennedy 1974.
15. petroglyph Located at Ham Cove, on the eastern side of Dall Island.

Tozer 1953, Kennedy 1974.

16. petroglyph Reported to be located near Kaigani village at Cape Muzon. Kennedy 1974.

Jackson Island

17. petroglyph Reported to be located on Jackson Island just north of Long Island. Kennedy 1974.

Long Island

18. petroglyph Reported to be located near Howkan on the western shore of the island. Kennedy 1974.
19. petroglyph Reported to be located near Koinglas on the western shore of the island. Kennedy 1974.

Graham Island

20. petroglyph GbUg 5. On the beach at Kiusta at the northern end of the island. BCPM.
21. petroglyph FhTx 1. About a mile northeast of Skidegate. Newcombe 1907.

Lina Island

22. petroglyph FhUa 17. Southeast of Dyer Point, about 9 miles from Skidegate. BCPM.

ADDITIONAL TLINGIT OR HAIDA SITES

1. pictograph Near a salmon stream called Wankut-et flowing into Takihanus Bay. Olsen 1967:56.
- "pictograph" At Stone Island in Kanalku Bay, Kootziahoo Inlet. Made by local coal miners as navigation aids. de Laguna 1960.
2. petroglyph Located on Babbler Point. Kennedy 1974.
3. petroglyph Reported to be located between Babbler and Green Points. Kennedy 1974.
4. petroglyph Reported to be located on Douglas Island on beach adjacent to Marmion Island. Kennedy 1974.
5. pictograph Reported to be located near the entrance to the salt chuck near Dundas Bay. Kennedy 1974.
6. petroglyph Reported to be located on the beach at the last house beyond the point at Dupont Point. Kennedy 1974.
7. petroglyph Reported to be located at old village site of Kassa. Kennedy 1974.
8. petroglyph Reported to be located at old village site of Klinkwan. Kennedy 1974.
9. petroglyph Reported to be located on Portland Island, west of Fritz Cove. Kennedy 1974.
10. petroglyph Reported to be located at Scenery Cove, in Thomas Bay. Kennedy 1974.
11. petroglyph Reported to be located on Turnabout Island. Kennedy 1974.

ROCK ART SITES LOCATED IN TSIMSHIAN TERRITORY

Observatory Inlet

1. petroglyph GgT1 1. Originally located near Angaish River and removed to Prince Rupert Museum. NMC, Drew 1969:17.

Nass River

2. petroglyph GhTg 1. Near the boat landing at Canyon City. NMC.
3. pictograph Opposite Gitiks and below Greenville. Barbeau 1955: 216-17.(1)

Tsimpsean Peninsula

4. pictograph GbTm 1. About 19.7 miles east of Prince Rupert, near the highway. BCPM.
5. petroglyph GcTo 7. At Bencke Point at the western end of Venn Passage. BCPM.
6. petroglyph GcTo 9. At the western end of Venn Passage due west of Metlakatla. NMC, BCPM.
7. petroglyph GcTo 8. At the village of Metlakatla, Venn Passage. NMC, BCPM.
8. petroglyph GcTo 11. At the western end of Carolina Island in the northern part of Venn Passage. BCPM.
9. petroglyph GcTo 10. At the eastern end of Carolina Island, in Venn Passage. BCPM.
10. petroglyph GbTo 38. On both sides of a small cove on the western shore of Wilgiapshi Island. NMC.
11. petroglyph GbTo 39. On the western tip of Roberson Point. Smith 1927, 1936:309-312.
12. combination GbTo 39. At Roberson Point. Personal Communication E. Hill, 1973.

13. pictograph GbTo 39. At Roberson Point. Personal communication E. Hill, 1973.
14. petroglyph GbTo 40. On point of land in Venn Passage. BCPM.
15. petroglyph GbTo 41. At Grindstone Point on the eastern shore of Crippen Cove, southeastern Venn Passage. BCPM.
16. petroglyph GbTo 42. On Pike Island in Metlakatla Bay at the western end of Venn Passage. BCPM.
17. petroglyph GbTo 43. Below old village site south of Bencke Point, east of Ritchie Island. BCPM.
18. petroglyph Reported to have been located at "government wharf or CNR work dock at Prince Rupert". NMC.
19. petroglyph Original location unknown. Removed to Prince Rupert Museum. Personal communication, E. Hill, 1973.

Skeena River

20. pictograph GbT1 1. About 1 1/2 miles east of Tye on the northern shore of the river. Smith 1927. (b).
21. pictograph GbT1 2. A short distance below Aberdeen on the northern shore of the river, (about 1 mile upstream from site # 140) Smith 1927 (b).
22. pictograph GfTg 1. On the southeastern shore of Lava Lake. BCPM.
23. petroglyph Reported on Gold (Kleanza) Creek. Smith 1927 (a).
24. petroglyph GdTc 6. On the eastern side of the head of Kitselas Canyon, at Ringbolt Island. Cast in BCPM. Smith 1927, (a), BCPM.
25. petroglyph Reported as being located 1/2 mile from the Skeena on the eastern side of the head of Kitselas Canyon. Smith 1927(a).
26. petroglyph Reported as being located at the head of Kitselas Canyon

on the eastern side. NMC.

27. petroglyph Reported as being located on the eastern shore of the river below Glen Vowell Bridge. Smith 1927 (a).
28. petroglyph No specific designation. Found on river bank near Kispiox, relocated twice, now assumed lost. Cast in National Museum. NMC, Smith 1927 (a).
29. petroglyph No specific designation. Found along road near Kispiox, relocated, now assumed lost. Cast in National Museum and duplicate at Prince Rupert Museum and BCPM. NMC, Smith 1927

Pitt Island

30. petroglyph Reported to be located "on the left-hand side of the mouth of the Salmon River". NMC.

Porcher Island

31. petroglyph FlTp 1. About 1/3 of the way up Kitkatia Creek. BCPM.

Goschen Island

32. petroglyph Reported on the eastern shore of the island. BCPM.

Banks Island

33. petroglyph FhTk 1. At Keecha Point, on creek below the cabin. BCPM.

Grenville Channel

34. petroglyph Reported as being located "on a large slab under the eastern end of the store at Lowe Inlet Cannery". NMC.

Douglas Channel

35. petroglyph FjTh 1. At "old town" some 15 miles north of Hartley Bay, on Kitkiata Inlet. Drucker 1943. Three boulders removed from this site have been traced to the Kitimat Museum, the Crest Motel in Victoria, and a private home

in Comox. Cast in BCPM. NMC, BCPM, personal Communication E. Hill, 1973.

Gribbell Island

36. pictograph FiTg 1. About 200 yards north of mouth of stream which empties from the largest lake on the western shore on the island. BCPM.

Moore Islands

37. petroglyph FeTi 1. On the eastern shore of the largest of the islands. Personal communication E. Hill, 1973.

Princess Royal Island

38. pictograph FeTe 2. North of Alston Cove about 1/2 mile to the northeast of Kamino Creek. BCPM.

39. pictograph FdTd 3. About 1 mile south of Jorgenson Harbour at the northeastern end of Meyers Passage on a point of land in a cove. BCPM.

40. petroglyph FdTd 5. South of Cullum Point near the eastern end of Meyers Passage. Smith 1927.

41. pictograph FdTd 6. On the southern shore of the island about midway along Meyers Passage. BCPM.

Swindle Island

42. pictograph FcTc 1. About 2 1/2 miles east of Wingate Point on the northern shore of the island. BCPM.

43. pictograph FcTc 4. On the southern shore of a point of land between Cann and Osment Inlets, overlooking Kitasu Bay. BCPM.

ROCK ART SITES LOCATED IN BELLA COOLA TERRITORY

Dean Channel

1. petroglyph FeSr 11. On the northern shore of the canyon of the Dean River. Smith 1927. (a).
2. petroglyph FcSr 1. At the mouth of Jump-Across-Creek, on the eastern shore of Dean Channel. Casts in BCPM. Smith 1927 (a), Gjessing 1952:68.
3. petroglyph Reported as being located on the eastern shore of the channel, 5 miles below Humpback Bay. NMC.
4. pictograph Reported as being located "just up from the tidal area" on the Skowquiltz River. Personal Communication, P.M. Hobler, 1970.
5. pictograph Reported "all around the island" in Nascall Lake. NMC.

Labouchere Channel

6. pictograph Reported as being located "near where Nascall Lake empties into the channel from the west"...a little north of Labouchere Channel. BCPM.
7. pictograph Reported to be located on the eastern shore of the channel, one mile north of Mesachite Head, or near Deas Point. BCPM.
8. pictograph FcSt 4. Site located on the eastern shore of the Channel, about 1/2 mile north of Mesachite Head. BCPM.
9. pictograph FcSs 1. At Mesachite Head, near the entrance to Burke Channel. BCPM.

Burke Channel

10. pictograph Reported to be located at Tailleo Point near a ruined pier close to the entrance to South Bentinck Arm. BCPM.

North Bentinck Arm

11. petroglyph FcSq 2. On Tastsquam Creek, about 2 miles south of Bella Coola. Smith 1927 (a). Site is now totally destroyed and National Museum cast also.
12. petroglyph FcSq 1. On the western shore of Thorsen Creek, about 1 mile south of the Bella Coola River. Cast in BCPM. Smith 1927. (a).
13. petroglyph FcSo 2. On the northern shore of the Bella Coola River, opposite the mouth of Noosatsum Creek. Cast in BCPM. Smith 1925, 1927 (a).

South Bentinck Arm

14. pictograph FbSr 3. On the eastern shore of the arm near Bensin's Island. Personal Communication, P.M. Hobler, 1970.
15. petroglyph Reported as located on the eastern shore of the arm near Qankilst (Bensin's) Island. Supposedly destroyed in landslide. NMC.
16. petroglyph FaSq 1. On the south side of the Noeick River which empties into the eastern shore of the arm. Smith 1925.

ROCK ART SITES LOCATED IN KWAKIUTL TERRITORY

Kitimat Arm

1. pictograph FkTk 2. On the western shore, 1 1/2 miles north of Point Ashton. BCPM.
 2. pictograph FkTf 3. On the western shore 1 mile north of Point Ashton. BCPM.
 3. pictograph FkTf 4. On the eastern shore of Point Ashton. BCPM.
 4. pictograph FkTf 1. Behind an islet at the mouth of a small cove on the southern shore of Hilton Point. BCPM.
 5. pictograph FlTe 1. On the eastern side of Markland Point, about 1/4 mile from the point. BCPM.
 6. pictograph FlTe 5. About 1/4 mile north of the mouth of Bish Creek. BCPM.
 7. pictograph FlTe 2. On the eastern shore of the arm, about 1/2 mile north of the Raley Point entrance to Clio Bay. BCPM.
 8. petroglyph Two petroglyphs are reported to be located in the Kitimat area. Meade 1971:19.
- petroglyph Originally located at Hartley Bay (FjTh 1), site number 155, later removed to private home and now donated to Kitimat Museum.

Kildala Arm

9. pictograph FlTe 3. On the northern shore at the entrance to the arm, about 150 yards west of the western boundary of I.R. 8. BCPM.
10. pictograph FlTd 2. On the northern shore of the arm, on a prominent point about 3 miles west of Atkins Bay. BCPM.
11. pictograph FlTd 3. About 1/2 mile west of the entrance to Atkins Bay. BCPM.

Gardner Canal

12. pictograph FiTc 1. On the northeastern shore of Bare Point. BCPM.
13. pictograph FlSx 1. Two miles to the southeast of Courageux Point, on the northern shore of Whidbey Reach. BCPM.
14. pictograph FhSx 1. On the western shore of Egeria Reach about 3/4 mile south of Queen Point. BCPM.

Sheep Passage

15. pictograph FeTb 2. Due north of the western edge of the entrance to Windy Bay. BCPM.

Kynoch Inlet

16. pictograph FeSx 4. On the eastern shore of Desbrisay Bay. BCPM.
17. pictograph FeSx 3. On the northern shore about .5 of a sea mile east of the eastern entrance to Desbrisay Bay. BCPM.
18. pictograph FeTa 2. On the northern shore of the inlet, northeast of site #198 between conspicuous waterfall and entrance to Desbrisay Bay. BCPM.
19. pictograph FeTa 1. On the southern shore of the inlet, about halfway between conspicuous waterfall and entrance to Desbrisay Bay. BCPM.
20. pictograph FeSx 2. On the northern shore of the inlet, 1.4 sea miles southeast of the entrance to Desbrisay Bay. BCPM.
21. pictograph FeSx 1. At the entrance to Culpepper Lagoon. BCPM.

Mathieson Channel

22. pictograph FeTa 3. On the eastern shore of the channel just south of a shallow bay about 2 miles south of Mathieson Narrows. BCPM.
23. pictograph FdTb 3. On the eastern shore of the channel, about 7/8 mile south of McPherson Creek. BCPM.

Roderic Island

24. pictograph FdTc 1. On the western shore of the island, due east of Jane Island. BCPM.
25. pictograph FdTc 3. On the western shore of the island east of the southern portion of Cone Island. BCPM.

Susan Island

26. pictograph FcTc 1. On the northern shore of Oscar Passage about 2.75 miles east of Legace Point. BCPM.
27. pictograph FcTb 1. On the northern shore of Oscar Passage north of the western edge of Buckley Head. BCPM.
28. petroglyph FcTc 8. At the southern end of a small cove on the western shore of Nowish Island. Personal communication, E. Hill, 1973.

Price Island

29. petroglyph FbTd 1. On the southeastern shore of the island north of Muir Cove, facing Milbank Sound. BCPM.

Spiller Channel

30. petroglyph FbTb 3. Reported to be located on a small island off the eastern side of the Don Peninsula in the middle of the channel. BCPM.
31. petroglyph FbTa 3. At the head of a small islet just west of McArthur Point in the channel. Casts in BCPM. BCPM.
32. petroglyph FbTb 15. On a small promontory at the southwestern end of Yeo Island at the junction of Spiller and Return Channels. BCPM.
33. petroglyph FbTb 13. Reported to be located on the eastern shore of the channel where Dove Point forms the northern portion of the mouth. BCPM.

34. petroglyph FbTb 2. Reported to be located on a small island south of the anchorage outside Yeo Bay at Dove Point, on the southern most of three small islets north of Grief Island. BCPM.
35. pictograph FdTa 1. On the western shore of the channel slightly southwest across the channel from point I.P. 1975M. BCPM.
36. pictograph FcTa 3. On the eastern shore of the channel, slightly southwest across it from point I.P. 1975M. BCPM.
37. pictograph FcTa 4. In the narrows at the head of the channel on the eastern shore. BCPM.
38. pictograph FdSx 4. In the eastern bay at the head of the channel. BCPM.

Ellerslie Lake

39. pictograph FdSx 1. On a large promontory on the northern shore of the lake, west and across the lake from Grady Creek. BCPM.
40. pictograph FdSx 2. On the eastern shore of the lake on the north side of the first promontory south of Ruth Creek. BCPM.
41. pictograph FdSx 3. On the eastern shore of the lake, on the north side of a cove just above the mouth of Grady Creek. BCPM.

Return Channel

42. petroglyph FbSx 10. On the western shore of a small bay on the north side of Return Channel. BCPM.
43. pictograph FbSx 8. In western side of a small bay on the northern side of Return Channel. BCPM.
44. pictograph FbSx 5. On the western shore of point located on the northern shore of the channel. BCPM.

45. pictograph FbTa 4. On the western shore of Deer Pass between Return Channel and Troup Passage. BCPM, Drucker 1943.

Roscoe Inlet

46. pictograph FcSx 11. On the western shore of the inlet, slightly south of Keyes Point. BCPM.

47. pictograph FcSx 10. On the eastern bank of the inlet at Keyes Point. BCPM.

48. pictograph FcSx 9. On the eastern shore of the inlet on Holm Point at the mouth of Roscoe Narrows. BCPM.

49. pictograph FcSx 12. On the eastern shore of the inlet just north of Ripley Bay. BCPM.

50. pictograph FcSx 13. On the western shore of the inlet just north of Broken Bluff. BCPM.

51. pictograph FdSx 8. On the western shore of the mouth of Quartcha Bay. BCPM.

52. pictograph FdSx 9. On the western shore of Quartcha Bay. BCPM.

53. pictograph FdSx 10. On the western shore of Quartcha Bay, near the mouth of the bay. BCPM.

54. pictograph FcSx 7. On the southern shore of the inlet west of Hansen Point. BCPM.

55. pictograph FcSx 8. On the southern shore of the inlet just west of Hansen Point. BCPM.

56. pictograph FdSx 7. On the northern shore of the inlet directly north from Hansen Point. BCPM.

57. pictograph FcSw 3. On the northeastern shore of the inlet just before Thumb Point. BCPM.

58. pictograph FcSw 2. On the northeastern shore of the inlet just before Thumb Point. BCPM.

59. pictograph FcSw 4. On the northeastern shore of the inlet just before Thumb Point and about 40 feet east of FcSw 3. BCPM.
60. pictograph FcSx 5. On the southern shore of the inlet to the east of the mouth of Clatse Bay. BCPM.
61. pictograph FcSw 7. On the southern shore of the inlet about half-way between Latch Point and Roscoe Creek mouth. BCPM.
62. pictograph FcSw 8. On the southern shore of the inlet about halfway between Latch Point and Roscoe Creek mouth. BCPM.
63. pictograph FcSw 5. On the northern shore of the inlet several hundred yards west of the mouth of Roscoe Creek. BCPM.
64. pictograph FcSw 6. On the northern shore of the inlet, several hundred yards west of the mouth of Roscoe Creek. BCPM.

Johnson Channel

65. petroglyph FbSx 1. On a small island lying between Beaumont Point and King Point at the northern end of Cunningham Island. Casts in BCPM. BCPM.
66. pictograph FbSx 8. On the eastern shore of the channel, north of the junction with Return Channel. BCPM.
67. pictograph FbSx 7. On the eastern shore of the channel at the junction with Return Channel, and to the northeast of Nicholson Island. BCPM.

Gunboat Passage

68. unknown FaSx 2. Reported as being located on Picture Island off the southern shore of Cunningham Island. BCPM.

Denny Island

69. petroglyph FbTa 2. Close to Bella Bella, on Meadow Island. Drucker 1943.

70. petroglyph Reported to be located on the shoreward side of a rock on Denny Island. NMC.

Fisher Channel

71. pictograph FaSx 9. On the northwest side of Codville Island in Codville Lagoon. BCPM.
72. pictograph FaSx 4. On the northern shore of Port John. BCPM, Newcombe 1907.
73. pictograph FbSw 5. On the eastern shore of the channel across from Gunboat Passage. BCPM.
74. pictograph FbSw 4. On the western shore of the channel on a point of land immediately opposite Rattenbury Point. BCPM.
75. petroglyph FbSw 7. At Wallace Bay near Benn Point on Cousins Inlet. Personal communication, P.M. Hobler, Simon Fraser University, 1970.
76. petroglyph FbSw 2. At Benn Point on Cousins Inlet. Personal communication, P.M. Hobler, Simon Fraser University 1970.

Link Lake

77. pictograph FcSv 5. One mile north of the halfway slide on the eastern shore of the lake. BCPM.

Dean Channel

78. pictograph FbSv 1. On the northern shore of the channel, opposite the mouth of Jenny Inlet at Borg Point. Personal communication, P. M. Hobler, Simon Fraser University, 1970.
79. pictograph FcSv 3. On the northern shore of the channel, south of Hokonson Point and east of Thorenson Point about halfway between the two. Personal communication, P.M. Hobler, Simon Fraser University 1970.

80. pictograph FcSu 6. On the eastern shore of the channel directly across from Hokonson Point. BCPM.
81. petroglyph FcSu 2. At Elcho Harbour in a small bay between a rocky promontory and the eastern shore of the harbour. Smith 1924, BCPM.
82. pictograph FcSw 7. On the eastern shore of the channel, directly across from Elcho Harbour, BCPM.
83. pictograph FcSu 3. On the northern shore of the channel, about 1 mile west of Elcho Harbour. BCPM.

Cascade Inlet

84. pictograph Reported to be located on the eastern shore of the inlet about 2 miles above its mouth. BCPM.

Kwatna Inlet

85. pictograph FaSu 20. On the shores of Kwatna Inlet near FaSu 11. Personal communication, P.M. Hobler, Simon Fraser University, 1970.
86. pictograph FaSu 11. On bluffs, opposite the mouth of Kwatna Bay. Personal communication, P.M. Hobler, Simon Fraser University, 1970.
87. pictograph FaSu 12. On the northern shore of the Kwatna River just upstream from the mudflats. Personal communication, P.M. Hobler, Simon Fraser University 1970.
88. pictograph FaSu 4. Near the mouth of the Kwatna River on its northern shore just south of FaSu 12. Personal communication, P.M. Hobler, Simon Fraser University, 1970.
89. pictograph FaSu 13. On the northern shore of the Kwatna River just above the mudflats and south of site FaSu 4. Personal communication, P.M. Hobler, Simon Fraser University, 1970.

90. pictograph FaSu 8. North of the mouth of the Kwatna River, overlooking Kwatna Inlet on the first point north of the old farmstead. Personal communication, P.M. Hobler, Simon Fraser University 1970.

Namu Lake

91. pictograph EISx 12. At the northern end of the lake. BCPM. (2).
 92. petroglyph EISx 11. Reported to be located on Strawberry Island, but never verified despite several examinations of the area. BCPM.

Fish Egg Inlet

93. pictograph EjSw 2. On a cliff at the entrance to the inlet. BCPM.
 94. pictograph EjSw 3. On a small island in the mouth of Illahie Arm. BCPM.
 95. pictograph EjSw 17. On the northern shore of the inlet at a point of land between the entrance to Elizabeth Lagoon and an inlet to the west. BCPM.

Salvage Island

96. pictograph EjSw 19. On the western most point on the western shore of the island. BCPM.

Rivers Inlet

97. pictograph EkSu 1. On the northern shore of Hardy Inlet to the west of Owikeno Point and northwest of Ralph Point. BCPM.
 98. pictograph EjSu 1. On the northern shore of the inlet in a small bay north of McAllister Point. BCPM.
 99. pictograph EkSt 3. On the northern shore of the inlet near the mouth of the Whonnock River and west of Rivers Inlet townsite. BCPM.

100. pictograph EkSt 4. On the northern shore of the inlet near the mouth of the Whonnock River but farther west from Rivers Inlet townsite. BCPM.
101. pictograph EkSt 7. On the northern shore of the inlet near the mouth of the Whonnock River and opposite the mouth of McTavish Creek. BCPM.
102. pictograph EkSt 8. On the northern shore of the inlet, near the mouth of the Whonnock River and about 3 1/2 miles west of Rivers Inlet head. BCPM.
103. pictograph EkSt 9. On the northern shore of the inlet about 4 miles west of the head of the inlet. BCPM.

Owikeno Lake

104. pictograph EkSs 5. At the lower end of the lake, on the southern shore just before the Whonnock River. BCPM.
105. pictograph EkSs 2. On the northern shore of the lake farther west that site EkSs 3 and opposite the mouth of Dallery Creek. BCPM.
107. pictograph EkSs 4. On the northern shore of the lake farther west that site EkSs 2 and about two miles west of the mouth of Amback Creek. BCPM.
108. pictograph EkSr 5. On the northern shore of the lake 1 1/2 mile east of the mouth of Ashlulm Creek and about opposite the mouth of Doos Creek. BCPM.
110. pictograph EkSr 3. On the northern shore of the lake, at the mouth of Ashlulm Creek and opposite the mouth of Doos Creek. BCPM.
111. pictograph EkSr 2. On the northern shore of the lake 3/4 mile west of Ashlulm Creek. BCPM.

112. pictograph EkSr 1. On the northern shore of the lake, about 1 mile west of Ashlulm Creek. BCPM.
113. pictograph EjSq 2. In a small bay just west of the First Narrows on the northern shore of the lake. BCPM.
114. pictograph EjSq 1. On the northern shore of the lake one mile west of the First Narrows. BCPM.
115. pictograph EkSq 1. On the northern shore of the lake 2 1/2 miles west of the First Narrows. BCPM.
116. pictograph EkSr 6. On the northern shore of the lake 2 miles east of Ashlulm Creek. BCPM.
117. pictograph EkSr 8. On the northern shore of the lake opposite Loquaist Creek. BCPM.
118. pictograph EkSp 3. On the western shore of the lake facing the Third Narrows but about 1 mile south. BCPM.
119. pictograph EkSp 2. On the western shore of the lake about 1 1/2 miles south of the Second Narrows. BCPM.
120. pictograph EkSp 1. On the northern shore of the lake about 2 1/4 miles north of the First Narrows. BCPM.
121. pictograph ElSq 4. On the eastern side of the Tzeo River about 5.4 miles along a forest survey line from South Bentinck Arm. NMC, BCPM.

Calvert Island

122. pictograph EkTa 4. Just southwest of Adams Harbour at the northern end of Calvert Island. BCPM.
123. pictograph EjTa 3. About 1 1/2 miles east of Keith Anchorage on the south side of Kwaksua Channel. BCPM.

Smith Inlet

124. pictograph EhSu 2. On the northern shore of the inlet, south of Margaret Bay and 2 miles east of Ripon Point. BCPM.
125. unknown Reported as being located on the western shore of the inlet, near Rivers Inlet. NMC. (3)
126. pictograph EhSu 5. On the southeast shore of Greaves Island, about 1 1/2 miles from Cape Anne on the inlet. BCPM.

Long Lake

127. pictograph EhSu 2. On the northern shore of the lake, 2 miles east of the second narrows of the lake. BCPM.

Mereworth Sound

128. pictograph EgSu 4. On the eastern shore of the sound. BCPM.

Allison Sound

129. pictograph EgSs 8. On the western shore of the entrance to the sound, a little way south of a small island in the channel. BCPM.
130. pictograph EgSs 7. On the eastern shore at the entrance to the sound, in the second bay south of I.R. 14. BCPM.
131. pictograph EhSs 1. On the northern shore of the sound beyond Summer Bay. BCPM.
132. pictograph EhSs 3. About 1.5 miles east of Chief Nollis Bay on the north side of the sound. BCPM.
133. pictograph EhSr 1. On the northern shore of Allison Sound about midway between EgSs 3 and the head of the sound. BCPM.
134. pictograph EhSr 2. On the northern shore of the sound about midway between site EhSr 1 and the mouth of Waump Creek at the head of the sound. BCPM.

135. pictograph EhSr 3. On the northern shore of the sound near the mouth of Waump Creek at the head of the sound. BCPM.
136. pictograph EgSs 1. On the northern shore of the sound in a bay to the east of Summer Bay. BCPM.
137. pictograph EgSs 3. On a point just south of Summer Bay on the northern shore of the sound. BCPM.

Belize Inlet

138. pictograph EgSs 4. On the northern shore of the inlet about 1/2 mile east of Allison Sound. BCPM.
139. pictograph EgSs 5. On the northern shore of the inlet about 1/2 mile east of the mouth of Allison Sound. BCPM.
140. pictograph EgSs 6. On the northern shore of the inlet near the entrance to Allison Sound BCPM, NMC.

Nugent Sound

141. pictograph EgSu 7. On the northern shore of the sound near the head of the sound. BCPM.
142. pictograph EgSu 9. On the northern shore of the sound, farther west than site EgSu 7. BCPM.

Seymour Inlet

143. pictograph EgSq 1. On the Brew Peninsula along the northern shore of the inlet. BCPM.
144. pictograph EgSq 2. On the northern shore of the inlet on the Brew Peninsula farther north than site EgSq 1. BCPM.
145. pictograph EgSt 1. On the northern shore of the inlet opposite and to the east of Henry Point. BCPM.

Northern Vancouver Island

146. pictograph EfSx 2. In the area of Bull Harbour.

147. petroglyph EfTa 1. At Cape Sutil. Gjessing 1958, BCPM.
148. petroglyph Reported as being located outside the river mouth at the head of San Josef Bay. Personal communication E. Hill, 1973.
- petroglyph Erroneously reported by W. Gold (Province 1953) as being located near Port Hardy. Mr. Gold now believes he was mistaken. Personal communication, E. Hill, 1973.
149. petroglyph EeSu 1. About 3/4 mile west of Fort Rupert. Boas 1895:439-441, Smith 1923, BCPM.

Drury Inlet

150. pictograph EfSr 26. On the northern shore of the eastern entrance to the inlet. BCPM.
151. pictograph EfSs 4. At Bedwell Point on Drury Inlet. BCPM.

MacKenzie Sound

152. pictograph EfSr 41. At the northern entrance to MacKenzie Sound, below Mound Eliza. BCPM.
- petroglyph EfSp 4. Fake petroglyph carved at head of the sound, 9 miles northeast of Sullivan Bay. BCPM.

Grappler Sound

153. pictograph EfSr 42. On bluff at the western extremity of Watson Island almost due east of Hope Point on the sound. BCPM.

Nepah Lagoon

154. pictograph EfSq 5. On the eastern shore of the lagoon about 1/4 of the way from the southern end. BCPM.

Dunsany Passage

155. pictograph EfSq 5. At Codrington Point. BCPM.

Sutlej Channel

156. pictograph EfSq 13. At Boyer Point. BCPM.

Broughton Island

157. pictograph EfSp 115. Due north of Nickless Island on Broughton Island. BCPM.

Kingcome Inlet

158. pictograph EfSp 3. On the eastern shore of the inlet at the entrance to Moore Bay about 1/2 mile southwest of Thomas Bluff. BCPM.
159. pictograph EfSo 1. On Philadelphia Point, Wakeman Sound. BCPM.
160. pictograph EfSn 9. At Petley Point. BCPM.
161. petroglyph EfSn 10. At Kingcome Village at the head of the inlet. BCPM.
162. pictograph Reported located at the head of the inlet but not verified. NMC.

Nimpkish Lake

163. pictograph EcSr 1. On the eastern shore of the lake about 4 miles north of Halfway Islands. BCPM.
164. pictograph EcSr 2. On the eastern shore of the lake about 1/4 mile south of Numas Creek. BCPM.
166. pictograph EbSp 1. On the western shore of Woss Lake about 400 yards south of boat ramp. BCPM.

Broughton Strait

- "petroglyph" Carved stone recovered from sea off mouth of Cluxwe River considered a petroglyph by some sources but has been altered by present owners. BCPM.
167. petroglyph Reported as being located opposite Pultney Point and near Port McNeill, Ledge Point and Lady Ellen Point. Personal communication, E. Hill, 1973.

168. petroglyph Reported as being located "on the beach at Alert Bay".
Smith 1927. Removed to unknown location in Chicago.
Personal communication, Edward Meade, 1973.
169. petroglyph EdSr 1. At Lizard Point on Malcolm Island. Personal
communication, E. Hill, 1973.
170. petroglyph Reported as being located at Port Progress, near Alert
Bay. Centennial Museum.

Village Channel

171. pictograph EdSp 51. At the eastern end of point which defines a
bight on the northern shore of Berry Island. BCPM.

Cramer Passage

172. pictograph EeSo 27. At the northern end of Echo Bay. BCPM.
173. pictograph EeSo 28. At Shoal Harbour near Echo Bay, and south of
Simoon Sound. BCPM.

Tribune Channel

174. pictograph EfSn 5. At Miller Point between Kwatsi Bay and Bond
Sound. BCPM.
175. pictograph EfSn 4. About 100' west of site EfSn 3 and 1 mile west
of point at the northern side of the entrance to Bond
Sound. BCPM.
176. pictograph EfSn 3. On point of land due north of Irvine Point,
on the channel, about 3/4 mile west of the point at
the entrance to Bond Sound. BCPM.

Turnour Island

177. pictograph EdSo 5. Near Karlukwee village on the island in Beware
Passage at Nicholas Point. BCPM.

Cracroft Island

178. pictograph EdSn 48. On the western shore of Port Harvey, one mile from the entrance and on a large islet opposite Misty Bluff. BCPM.
179. pictograph EdSn 2. About 3/10 of a sea mile east of Harvey Point on Havannah Channel. BCPM.
180. pictograph EdSn 5. On the western shore of Mist Island, near Port Harvey. BCPM.

Knight Inlet

181. pictograph EdSn 12. On the mainland near the entrance to the inlet about 1/3 of a sea mile south of Littleton Point at the northwestern end of Chatham Channel facing Minstrel Island. BCPM.
182. pictograph EeS1 2. Near Hoeya Head on the inlet. BCPM, Mitchell, 1969.
183. pictograph EeSk 5. On the northern shore of the inlet opposite the eastern end of Siwash Bay. BCPM.
184. pictograph EeSk 6. At Naena Point on the western shore of the inlet. BCPM.
185. pictograph EeSk 7. About 100 yards southwest of site EeSk 6 on the eastern shore of the inlet near Naena Point. BCPM.
186. pictograph EeSj 1. About 1/2 mile northwest of Kwalate Point on the western shore of the inlet. BCPM.
187. pictograph EeSj 3. About 1 mile north of Herries Point on the eastern shore of the inlet. BCPM.
188. pictograph EeSj 4. About 1/2 mile south of Herries Point on the western shore of the inlet. BCPM.

189. pictograph EgSj 2. At Rubble Point. BCPM.
 190. pictograph EgSj 3. About 1/3 sea mile north of Hatchet (Axe?)
 Point. BCPM.

Johnstone Strait

191. petroglyph EdSm 1. Near Robber's Nob at Port Neville. BCPM.
 192. petroglyph EdSl 1. In Port Neville Narrows near Port Neville. BCPM.
 193. petroglyph Reported to be located near sites EdSm 1 and EdSl 1,
 in the vicinity of Port Neville. NMC.
 194. pictograph EdSl 8. In Port Neville Narrows northeast of Hanatsa
 Point near Port Neville. Mitchell 1969, BCPM.
 195. pictograph EcSl 4. At the southeast corner of Hardwicke Island,
 facing Current Passage. BCPM.
 196. petroglyph EcSl 2. At the base of Earl Lodge, Hardwicke Island
 Settlement. BCPM.
 197. pictograph EcSj 2. On Mayne Passage, West Thurlow Island to the
 east of Butterfly Bay. BCPM.
 198. pictograph EcSj 3. On Thurlow Island near the eastern entrance
 to Knox Bay on the southern shore at Needham Point.
 Mitchell 1969:204, BCPM.

Sunderland Channel

199. pictograph EcSl 10. Just west of Shaw Point on the northern shore
 of the channel, close to Johnstone Strait. BCPM.
 200. pictograph EdSk 1. On the southern shore of Topaze Harbour 1/2 sea
 mile from Murray Island. BCPM.
 201. pictograph Reported as being located on the shore of Haydon Lake
 between Forward Harbour and Loughborough Inlet. BCPM.

202. petroglyph EcSk 1. At Forward Harbour between Loughborough and Topaze Inlets. BCPM.

Loughborough Inlet

203. petroglyph EdSj 8. On the northeastern side of Grey Creek 7 1/2 miles east on Loughborough Inlet. BCPM.
204. pictograph EdSj 2. In the vicinity of MacDonald Point midway between Heydon Bay and Mitchell Point on the western shore of the inlet. BCPM.
205. pictograph EdSj 3. Near MacDonald Point on the western shore of the inlet opposite the mouth of Shamrock Creek. BCPM.
206. pictograph EcSi 1. On the northwest shore of Cooper Reach due west of Wickson Creek. BCPM.

Cordero Channel

207. pictograph EcSi 11. At Green Point Rapids just northwest of Erasmus Island west of the entrance to Tallac Bay. BCPM.
208. pictograph EcSi 2. About 1 sea mile south of Picton Point on the northern shore of the channel facing Bickley Bay on Thurlow Island. BCPM.
209. pictograph EcSi 9. On Thurlow Island 1/4 sea mile north of Shell Point in Blind Channel (Mayne Passage). BCPM.
210. pictograph EcSh 3. Opposite the eastern side of Gomer Island at the mouth of Frederick Arm. BCPM.

Nodales Channel

211. pictograph EcSi 7. On Sonora Island near the entrance to Young passage. BCPM.
212. pictograph EcSi 1. At the southern entrance to the channel, and opposite Chatham Point on South Howe Island. BCPM.

Discovery Passage

213. pictograph Reported as being located north of the Salmon River.
Not verified. BCPM.
214. pictograph EcSi 6. In a small bay behind Howe Inlet on Discovery
Passage on the northwestern beach of Sonora Island. BCPM.
215. pictograph EbSh 26. At Owen Bay on Sonora Island.
216. pictograph EcSi 5. At Chatham Point 1 1/4 miles from Rock Bay.
BCPM.
217. petroglyph Reported as being located at Rock Bay but never verified.
NMC.
218. pictograph Reported as being located at Rock Bay. BCPM.
219. petroglyph EaSi 2. Originally located in a small bay north of
Brown's Bay in Seymour Narrows. Now moved to loading
dump nearby. Personal communication, E. Hill, 1973.
- "petroglyph" Carved stone in form of rectangle with thunderbird
design. Regarded as petroglyph by some sources. No data
regarding original provenience, now in private collection
of Miss Dennis, Courtenay, B.C. NMC.
220. petroglyph EaSh 37. Found on beach below Pine Grove Motel at
Campbell River. Now in Campbell River Museum. Personal
communication, E. Hill, 1973.

Quadra Island

221. pictograph EbSh 31. On the southeastern shore of Main Lake close to
the narrows between Main and Village Lakes. BCPM.
222. pictograph EbSi 6. At Granite Point facing Discovery Passage.
Mitchell 1969, BCPM.
223. petroglyph Reported to be located at Quathiaski Cove opposite
Campbell River. NMC.

224. petroglyph EaSh 33. About 200 yards north of Yaculta Village. Now relocated to park in Yaculta Village. BCPM.
225. petroglyph EaSq 22. At Fransisco Point near Cape Mudge. BCPM.
226. petroglyph D1Sh 1. Cape Mudge at the southern tip of the island. Several carvings from this site have been removed to a park at Yaculta Village and one carving was removed to the private collection of Mrs. Kirk, Comox. Casts in BCPM. BCPM.
- petroglyph Many carvings now located at Yaculta Village Park came originally from Cape Mudge (D1Sh 1), and one came from the village area (EaSh 33).
- "petroglyph" EaSh 35. Probably fake petroglyph which may have been recently made by a local inhabitant. BCPM.
227. petroglyph EaSq 21. At Dogfish Bay about 1/2 mile north of Francisco Point. Cast at BCPM. BCPM.

ROCK ART SITES LOCATED IN NOOTKA TERRITORY

Kyoquot Sound

1. pictograph Specific location unknown. Reported as being located "near Kyoquot". BCPM.
2. pictograph EaSs 3. At the eastern entrance to Yaku Bay, Tahsis Inlet. BCPM.

Nootka Island

3. petroglyph Reported as being located at Wreck Bay. McMillan, 1973.

Nootka Sound

4. pictograph DkSp 1. On the eastern shore of Hisnit Inlet. BCPM.
5. pictograph DjSn 1. In Muchalet Inlet opposite the mouth of the Houston River. BCPM.
6. pictograph DjSm 1. At the mouth of the Burman River which flows into the head of Muchalet Inlet. BCPM.
7. pictograph DkSm 1. In the area of Gold River. BCPM.

Zeballos Inlet

8. pictograph D1Sr 6. On the eastern shore of the inlet just south of the light. BCPM.

Hanna Channel

9. pictograph DjSo 1. About 9 miles northwest of the navigational marker at Atrevida Point. BCPM.
10. petroglyph DiSp 6. Located on the reserve at Hesquiat. BCPM.

Clayoquot Sound

11. petroglyph Reported as being located "near Tofino". Gold 1969.

Barkley Sound

12. petroglyph DfSj 2. At Quisitis Point on the northern end of Wreck Bay. BCPM.

- "petroglyph" Reported as being located near Ucluelet but is a natural formation. NMC.
13. petroglyph DeSg 7. About 3/4 mile east of Pachena Point near the West Coast Trail. NMC, BCPM.
14. petroglyph DeSg 8. About 50' from site DeSg 7 on the West Coast Trail. NMC, BCPM.

Great Central Lake

15. petroglyph DiSg 1. On the northern shore of the lake about three miles from the head of the lake. Bolton and Laing 1897:387. NMC, BCPM.

Sproat Lake

16. petroglyph DhSf 1. On the eastern end of the lake, on the northern shore. Casts in BCPM. Newcombe 1907, Smith 1927, BCPM.

Nitinat Lake

17. petroglyph Reported as being located on the lakeshore a mile or more inland from the mouth of Nitinat Bar. Gold 1969.

Juan de Fuca Strait

18. petroglyph DdSf 1. At Blowhole Beach about halfway between Clo-oose and Wyac on the West Coast Trail. Casts in BCPM. BCPM.
19. petroglyph DdSf 2. About 350 yards east of site DdSf 1 on the West Coast Trail. Cast in BCPM. BCPM.
20. petroglyph DdSe 2. About 5 miles east of the Cheewhat River near an old Department of Transport cabin. BCPM.
21. petroglyph Near Carmanah Point and close to DdSe 2 on the West Coast Trail. BCPM.

Olympic Peninsula

22. petroglyph 45-CA-31. At Wedding Rocks on the northwest shore near the village site of Ozette. Stallard 1958:47, Personal communication, R. Daugherty, University of Washington, 1970.
23. petroglyph At Cape Alava near the old village site of Ozette. Personal communication K. MacKenzie, University of Calgary 1971.
24. petroglyph Reported to be located on the eastern shore of Cannonball Island near Cape Alava. Personal communication, L. Harper, University of Victoria, 1973.

ROCK ART SITES LOCATED IN COAST SALISH TERRITORY

Estero Basin

1. pictograph EdSh 1. About 1 mile from the head of the basin, on the northern shore and nearly opposite a small island. BCPM.

Bute Inlet

2. pictograph EcSg 13. Opposite Stuart Island and about 500 yards south of the second outstanding point south of Fawn Bluff. BCPM.
3. pictograph EcSg 2. About 2 1/2 miles above Johnstone Bluff on the eastern shore of the inlet, near its mouth. BCPM.
4. pictograph EdSf 1. At Orford Bay on the southern shore of the inlet, south of the mouth of the Orford River. BCPM.

Maurelle Island

5. pictograph EbSg 13. On the island, in White Rock Pass, about 1 1/4 miles from Calm Channel. BCPM.
6. pictograph EbSg. About 1/5 sea mile northeast of Antonio Point which is at the southernmost tip of the island. BCPM.

Ramsay Arm

7. pictograph At the northern entrance to the Quatam River which empties into the arm. BCPM.

Toba Inlet

8. pictograph EcSe 2. At the southern entrance to Salmon Bay. BCPM.
9. pictograph One mile west of point of land opposite the waterfall below Hat Mountain on the north shore of the inlet. BCPM.
10. pictograph About 100 yards north of point opposite the waterfall below Hat Mountain on the northern shore of the inlet. BCPM.

11. pictograph About 2 miles northeast of point opposite the waterfall below Hat Mountain on the northern shore of the inlet. BCPM.
12. pictograph About 3 miles northeast of point opposite the waterfall below Hat Mountain on the northern shore of the inlet. BCPM.
13. pictograph Reported to be located at the head of Toba Inlet. BCPM.

Homfray Channel

14. pictograph EbSd 2. On the first point north of Foster Point near Forbes Bay. BCPM, Barrow 1942.

East Redonda Island

15. pictograph EbSe 3. At the head of Pendrell Sound. BCPM.
16. pictograph EbSe 5. In the vicinity of Walsh Cove. BCPM.
17. pictograph EbSd 1. At Booker Point. BCPM.
18. pictograph EbSc 2. At Durham Point at the southeast entrance to Pendrell Sound. BCPM.

West Rodonda Island

19. pictograph EaSf 26. On the western shore of the island, at Poverty Bluff. BCPM.
20. pictograph EaSe 20. At the southern end of the island, facing Tory Island. BCPM.

Cortes Island

21. pictograph EaSf 4. Opposite the northern end of Mary Island close to the beacon off Shark Spit. BCPM.
22. pictograph EaSg 7. On the west side of the Gorge, Gorge Harbour. BCPM.
23. petroglyph EaSf 10. North of Smelt Bay, near Hansen's Landing. BCPM.
24. petroglyph Reported to be located on the western shore of Mary

Island, near Cortes Island. BCPM.

25. petroglyph Reported to be located at Gorge Harbour on the western side of the entrance bluffs. BCPM.

26. pictograph On Cortes Island at the northern end of Lewis Channel on the eastern shore. BCPM.

27. pictograph On Cortes Island at the southern end of Lewis Channel on the eastern shore. BCPM.

Theodosia Inlet

28. pictograph EaSe 16. On the eastern point of a small island at the northwest entrance to the inlet. BCPM.

29. petroglyph EaSd 4. At head of the inlet. Relocated to private home of R. Bissett, Malahat B.C. Daily Colonist, p. 12, December 1950.

Malaspina Inlet

30. pictograph About 2 miles from Freke Anchorage at the head of Oke Over Arm. BCPM.

Comox Harbour Area

31. petroglyph Originally from the west bank of the Courtenay River, relocated to private collection of Miss Bateman, Courtenay, B.C. NMC.

32. petroglyph DkSf 14. Originally located on beach below present Comox Hospital, relocated to private home of R.J. Filberg, Comox, B.C. and cemented into Fireplace. NMC, Gjessing, 1952. X

33. petroglyph DjSf 8. Originally located on beach below cabins just south of Royston, relocated higher on beach. Personal communication, E. Hill, 1972.

Hornby Island

34. petroglyph DfSd 3. At Galleon Beach. NMC, BCPM.
35. petroglyph DjSd 4. West of Tralee Point. NMC, BCPM.
36. petroglyph DjSd 1. On the western shore of Whaling Station Bay. NMC, BCPM. (4)
37. petroglyph DjSd 2. On the eastern shore of Whaling Station Bay. NMC, BCPM, Gjessing 1958. (4,5)
38. petroglyph DjSd 5. East of Downes Point, Hornby Island. NMC, BCPM.
39. petroglyph DjSd 6. Near Ford Creek, Hornby Island. NMC, BCPM.

Denman Island

40. petroglyph DiSe 3. Just north of Repulse Point on the southeast shore of the island. Personal communication, E. Hill, 1972.
41. petroglyph DiSe 9. At Yellow Island (Chrome Island) just off the southern tip of Denman Island. Smith 1923.

Horn Lake

42. petroglyph Reported to be located on the eastern shore of the lake. Specific location unknown. NMC.

Cameron Lake

43. petroglyph Reported to be located on the shore of the lake, specific location unknown. Centennial Museum (letter of July 1926).

Englishman's River

44. petroglyph DhSb 5. On the riverbank, near Craig's Crossing. BCPM.

Departure Bay

45. petroglyph DhRx 31. Reported to be located in the area of the bay and likely the same as the Millstone River site which was Reported covered with fill during construction of the

Millstone River bridge. NMC, Personal communication, E. Hill, 1972.

Jervis Inlet

46. pictograph DkSa 11. About 100 yards from a point at the northeast entrance to Saltery Bay. BCPM.
47. pictograph DkSa 10. About 12 feet west of site DkSa 11, and 100 yards northeast of point at the entrance to Saltery Bay. BCPM.
48. pictograph DkSa 12. At the northeastern entrance to the second large bay southwest of Culloden Point at the southern end of St. Vincent Bay. BCPM.
49. pictograph DkSa 13. About 25 feet northeast of site DkSa 12 at the northeast entrance to second large bay southwest of Culloden Point. BCPM.
50. pictograph D1Rx 2. One mile below the southern entrance to Vancouver Bay, Prince of Wales Reach. BCPM.
51. pictograph D1Rx 3. On the eastern point at the entrance to Vancouver Bay, Prince of Wales Reach. BCPM.
52. pictograph D1Rx 4. At the western entrance to Vancouver Bay, Prince of Wales Reach. BCPM.
53. pictograph D1Rx 1. About 4 miles southeast of Britain River on the western shore of Prince of Wales Reach. BCPM.
54. pictograph EaRx 1. About 3 miles southwest of Patrick Point. BCPM.
55. pictograph EaRx 2. About 3/4 mile south of site EaRx 1, which is 3 miles southwest of Patrick Point. BCPM.
56. pictograph EaRx 3. On the southwest shore of Queen's Reach, 3 1/2 miles up from Patrick Point. BCPM.

57. pictograph EbRx 1. Opposite Ruby Creek in Queen's Reach. BCPM.
58. pictograph EbRx 4. About 75 yards east of site EbRx 1, opposite Ruby Creek in Queen's Reach. BCPM.
59. pictograph EbRx 5. About 175 yards east of site EbRx 1, opposite Queen's Reach. BCPM.
60. pictograph EbRx 3. About 120 yards east of the entrance to a bay into which Ruby Creek flows on the southern shore of Queen's Reach. BCPM.
61. pictograph EbRx 2. About 150 yards east of the entrance to a bay into which Ruby Creek flows on the southern shore of Queen's Reach. BCPM.
62. pictograph EbRx 6. About 1/2 mile southeast of site EbRx 1, opposite Ruby Creek on the shore of Queen's Reach. BCPM.

Nelson Island

63. pictograph DkRx 6. On Captain Island which faces east to Skookumchuck Narrows at the entrance to Sechelt Inlet. BCPM.
64. pictograph DkSa 1. About 150 yards from the northeastern entrance to Blind Bay. BCPM.
65. pictograph On the left-hand side when entering Quarry Bay. BCPM.

Sechelt Peninsula

66. pictograph DkSa 7. At the northern end of the peninsula about 1/4 mile south of the ferry landing at Earl's Bay. BCPM.
67. pictograph DkSa 8. About 40 feet south of site DkSa 7, close to Earl's Bay at the northern end of Agamemnon Channel. BCPM.
68. pictograph DkSa 6. About 4 miles north of Pearson Island, in Agamemnon Channel. BCPM.
69. pictograph DkSa 9. In a small cave near site DkSa 6 north of

- Pearson Island in Agamemnon Channel. BCPM.
70. pictograph DkRx 4. At the narrows at the upper end of Sakinaw Lake. BCPM.
71. pictograph DjSa 5. About 400 yards from the southwestern end of Sakinaw Lake. BCPM.
72. pictograph DjSa 6. Near the outlet of Sakinaw Lake where Agamemnon Channel joins the sea. BCPM.
73. pictograph DkRw 1. On the northern side of Narrows Arm 1/2 mile from the northwest entrance. BCPM.
74. pictograph DjRw 8. On the eastern side of Sechelt Peninsula 3/4 sea mile south of a small island opposite the entrance to Salmon Arm. BCPM.
75. pictograph DjRw 9. Just over 1 sea mile northwest of the northern entrance to Salmon Arm. BCPM.
76. pictograph DkRv 1. In northwestern Salmon Arm 1/2 mile from the head of the arm. BCPM.
77. pictograph DjRw 5. On the eastern shore of the inlet 1 1/4 sea miles from the southeastern entrance to Salmon Arm. BCPM.
78. pictograph DjRw 6. On the eastern side of Sechelt Inlet, 1 1/4 sea miles from the southeast entrance to Salmon Arm, 50' south of DjRw 5. BCPM.
79. pictograph DkRx 3. About 1/2 sea mile from the southern end of Sechelt Rapids on the eastern shore of the Sechelt Peninsula, and facing Boulder Island. BCPM.
80. pictograph DkRx 5. About 200 yards south of site DkRx 3, which is 1/2 mile from the south entrance of Sechelt Rapids.
81. petroglyph DjRw 7. On the eastern side of the inlet 2 1/2 sea

miles from the head of Porpoise Bay. BCPM.

Howe Sound

82. pictograph D1Rt 1. About 20 miles north of Squamish in the Squamish Valley. Centennial Museum, BCPM.
83. petroglyph Reported as being located "in Paradise Valley, near the Cheakamus River". NMC.
84. pictograph Reported as being located "in Paradise Valley, near the Cheakamus River." NMC. (6)
85. pictograph Reported to be located near Stamus at the mouth of the Squamish River, on the eastern shore. NMC.
86. pictograph Reported to be located "near Squamish". NMC.
87. pictograph Reported to be located "on the left, going by boat from Squamish to Bowen Island". NMC.
88. pictograph Reported as being located on the northwestern shore of the sound west of Mill Creek and about 4 miles from its head. NMC.
89. pictograph Reported as being located on the northern shore of the south between Britannia Beach and Schooner Harbour. NMC.
90. pictograph DjRt 2. About 2 miles south of Britannia Beach, near the mouth of Furry Creek. NMC, BCPM.
91. petroglyph Reported as being located on a small island southwest of Bowen Island. NMC.

Burrard Inlet

petroglyph Originally from Lone Creek Cabin area on the Fraser River and relocated to Totem Park in Stanley Park, Vancouver. NMC.

"petroglyph" Fake carving in seawall near Siwash Rock, Stanley Park, Vancouver. BCPM.

92. petroglyph Reported to be located 200 feet west of the North Vancouver Ferry Slip. Believed buried under construction debris. Centennial Museum.
- petroglyph Original location unknown, assumed to be from the coast. Removed to Hastings Mill Museum Vancouver, B.C.

Indian Arm

93. pictograph DiRr 6. On the western shore of the arm, about 275 meters north of site DiRr 7. Lundy/Oliver unpublished survey, 1972.
94. pictograph DiRr 7. On the western shore of the arm south of Croker Island and about 275 meters south of DiRr 6. Lundy/Oliver unpublished survey 1972.
95. pictograph DiRr 8. On the eastern shore of the arm on cliffs to the east of the Vancouver City Powerhouse site. Lundy/Oliver unpublished survey 1972.
96. pictograph DiRr 9. On the western shore of the arm about 100 meters north of Brighton Beach, site DiRr 2. Lundy/Oliver unpublished survey, 1972.
97. pictograph DiRr 2. About 750 meters north of Brighton Beach on the western shore of the arm. Lundy/Oliver unpublished survey, 1972.
98. pictograph DiRr 10. On the eastern shore of the arm, almost directly across from Alder Creek, between the powerhouse and Twin Islands. Lundy/Oliver unpublished survey, 1972.
99. pictograph DiRr 11. At North Sunshine on the western shore of the arm. Lundy/Oliver unpublished survey, 1972.

100. pictograph DiRr 12. On the western shore of the arm, just north of Deep Cove Marina, and a little beyond the Grey Rocks powerline. NMC, Lundy/Oliver, unpublished survey, 1972.
101. pictograph DiRr 13. On the western shore of the arm opposite Farrer Cove and approximately at Grey Rocks. Lundy/Oliver unpublished survey, 1972.
102. pictograph DiRr 14. Approximately 125 feet south of site DiRr 2 on the western shore of the arm. Lundy/Oliver unpublished survey, 1972.

Fraser Valley

103. pictograph DiRp 9. At Deer Point on the eastern shore of Pitt Lake. Lundy 1972.
104. pictograph DiRp 8. On the western shore of Pitt Lake about 1/6th mile south of Cedar Point. Lundy 1972.
105. pictograph DiRp 7. Midway between Cedar Point and Bridal Veil Falls on the western shore of the lake. Lundy 1972.
106. pictograph DiRp 10. On the western shore of Pitt Lake near Cedar Point about 150 feet south of site DiRp 7. Lundy/Oliver survey 1972.
107. pictograph DiRp 11. On the western shore of Pitt Lake about 100 feet north of site DiRp 1. Lundy/Oliver survey 1972.
108. pictograph DiRp 1. On the western shore of Pitt Lake, opposite the northern end of Little Goose Island, and just south of Bridal Veil Falls. Jennes 1935, Lundy 1972.
109. pictograph DiRp 6. On the western shore of Pitt Lake, opposite the northern end of Little Goose Island and just north of site DiRp 5. Lundy 1972.

110. pictograph DiRp 5. On the western shore of Pitt Lake, opposite the northern end of Little Goose Island and just south of Bridal Veil Falls. Lundy 1972.
111. pictograph DiRp 12. On the western shore of Pitt Lake, about 500 meters north of site DiRp 4 and directly opposite the mouth of Raven Creek. Lundy/Oliver survey 1972.
112. pictograph DiRp 13. On the eastern shore of Pitt Lake about 600 meters north of the outfall of Raven Creek. Lundy 1972.
113. pictograph DiRp 4. On the western shore of Pitt Lake south of Goose Island and opposite the mouth of Raven Creek. Lundy 1972.
114. pictograph DhR1 23. On side of road leading to Chehalis Reserve Lands. Duff 1949.
115. combination Located at Doctor's Point, on Harrison Lake. Smith 1946.
116. pictograph DhR1. Reported to be located on the Harrison River near the CPR tracks. BCPM.
117. pictograph DhR1 22. On the eastern bank of the Harrison River on point of land east of dry creek which is east of Morrison Slough. Personal communication D. Huntley, Simon Fraser University, 1972. (7)
118. pictograph Reported to be located on Harrison Lake. Newcombe 1907.
119. petroglyph DiRj 1. Originally located three miles downstream from Hope on the northern bank of the Fraser River. Removed 1971 to British Columbia Provincial Museum. BCPM, Simonsen 1971.

Boundary Bay

120. petroglyph DgRr 7. Originally located below the railroad tracks

near Crescent Beach. Removed to proposed parksite on Crescent Beach Road. Personal communication, R. Percy, Simon Fraser University, 1972.

121. petroglyph DgRr 9. Originally located at the foot of North Bluff Road in Crescent Beach. Removed to Surrey Historical Society Museum in Surrey B.C. Personal communication, E. Hill, 1972.

Gabriola Island

122. petroglyph Reported as being located at Malispina Galleries but may refer to natural formation. NMC.
123. petroglyph DgRw 2. Close to Degnan's Wharf at the southern end of the island. BCPM.
124. petroglyph DgRw 30. On the southwestern shore of the island north of Degnan Bay and facing False Narrows. Personal communication, E. Hill, 1972.

Nanaimo Area

125. combination DgRx 7. Originally located on Jack's Point at the entrance to Nanaimo Harbour. Relocated to new Nanaimo Museum. BCPM.
126. petroglyph DgRx 6. In Petroglyph Provincial Park 2 miles south of Nanaimo. NMC, BCPM, Smith 1923, 1927.
127. petroglyph DgRx 8. On the west side of the Nanaimo River near Wilkinson Road on private property of P. Monsell. BCPM.
128. petroglyph DgRx 9. On Harewood Plain, in the Nanaimo area. BCPM.
129. petroglyph DgRw 41. In the area of the Nanaimo River, near Cedar. BCPM.

"petroglyph" Originally located on the Nanaimo River near Harrison

Island now removed to old Bastian Museum in Nanaimo. Regarded as petroglyph by some sources. NMC, Gjessing 1958. (8)

130. petroglyph DhRx 30. On point of land extending south from Brachin Mine near Nanaimo. This site could not be located in 1972 survey and is likely buried beneath construction fill or else destroyed. NMC, Personal communication E. Hill, 1972.

131. petroglyph DgRw 40. On the southern shore of Holden Lake. BCPM.

132. petroglyph DgRw 42. On private property in Boat Harbour near Nanaimo. Site has been destroyed during boat building operations. Personal communication E. Hill, 1972.

133. petroglyph DgRw 37. On the southern shore of Kulleet Bay 2 miles from Kulleet Village at the head of the bay. BCPM.

134. petroglyph DgRw 36. On the northern shore of Kulleet Bay about half way between Deer Point and the head of the bay. BCPM.

Thetis Island

135. petroglyph DfRw 6. On the southwestern coast of the island. BCPM.

Galiano Island

136. petroglyph Reported as being located on the northern shore of the island. NMC.

137. petroglyph DfRu 24. On the southern coast of the island, on the property of Mr. Tolan on Georgeson Bay. Now part of garden wall. BCPM.

Mayne Island

138. petroglyph DfRu 33. Originally located at Helen Point on the

northwestern shore of the island. Removed to private property of Mrs. Prieswick, Saanich, B.C. NMC, Smith 1927.

Saltspring Island

139. petroglyph DfRv 6. Just under half a mile north of Parminter Point which is north of Vesuvius Bay. BCPM.
140. petroglyph DeRu 45. At the Cudmore Log Dump near Fulford Harbour. BCPM.
141. pictograph About 200 yards from the end of Dock Point which is at the extremity of Vesuvius Bay. BCPM.

Juan de Fuca Strait

142. petroglyph DcRx 1. Near the end of Point No Point west of Victoria. NMC, BCPM.
143. petroglyph Reported to be located at low tide in the area of Point No Point. BCPM.
144. petroglyph DcRw 18. At Otter Point south of Gordon's Beach. BCPM.
145. petroglyph DcRw 26. At Otter Point south of Gordon's Beach. BCPM.
146. petroglyph DbRw 1. On Hohap (Deer) Point 2 miles west of Beechey Head. NMC, BCPM.
147. petroglyph DcRv 40. About 1 mile west of Beechey Head on Beechey Head Islet. NMC, BCPM.
148. petroglyph DbRv 5. On the west side of the entrance to Beecher Bay, at Aldridge Point. Smith 1925.
149. petroglyph DbRv 6. At the eastern entrance to Beecher Bay, on Large Bedford Island. BCPM.
150. pictograph On Beecher Bay, near Sooke. NMC.
151. petroglyph Reported as being located on a reef, under water in

- Victoria Harbour, near Colville Island. BCPM.
- petroglyph Possible reported site on Mary Todd Island off Oak Bay. BCPM.
- petroglyph Originally from Malaspina Inlet, in private home R.J. Bissett, Malahat, B.C. See site #30.
- petroglyph Originally from Hartley Bay, now cemented into wall of Crest Motel, Victoria, B.C. See site # Ts 35.

Puget Sound

152. petroglyph Originally located in cave on shore of Rocky Ridge, Lake Whatcom. Relocated by property owner J. F. Bolster, Bellingham, Washington.
(NOTE TO 1415 AT MICHIGAN 1979)
153. petroglyph Reported as being located on Lummi Island, near the ferry landing. Personal communication, E. Hill, 1972.
154. petroglyph Reported as being located on Chukanut Bay, in Whatcom County. Personal communication, R.L. Carlson, Simon Fraser University, 1971.
155. petroglyph Reported as being located on Consolation Road, on private property, near Bellingham. Personal communication, E. Hill, 1973.
156. petroglyph At Agate Point near Seattle on the western shore of Puget Sound. Bertelson 1948:7, 1948, p.7., Smith 1946:308-9, Leechman 1952:266-7.
157. petroglyph At Agate Pass near Seattle. Personal communication, E. Hill, 1973.
158. petroglyph Reported to be located near Youngstown, adjoining West Seattle. Personal communication, R.L. Carlson, Simon Fraser University, 1971.

159. petroglyph Reported to be located near Eneti on the Twana Reserve Lands. Newcombe 1907.
160. petroglyph Reported to be located on Miami Beach near Hood Canal. Personal communication, R.L. Carlson, 1971.
161. petroglyph At Victor Dock, Washington. Personal communication R.L. Carlson, Simon Fraser University, 1971.
162. petroglyph Reported to be located at Cromwell 1/4 mile west of the mouth of Wollochet Bay. Personal communication, R.L. Carlson, Simon Fraser University, 1971.
163. petroglyph Originally located on Hartsline Island near Olympia, now relocated to Tumwater Park, Olympia. Personal communications, R.L. Carlson, Simon Fraser University, 1971, E. Hill, 1973.
164. petroglyph Reported to be located on Squaxin Island near Olympia. Personal communication, R.L. Carlson, Simon Fraser University, 1971.
165. petroglyph Originally located at Mud Bay (Eld Inlet) now relocated to State Capitol Museum, Olympia. Smith 1946.
166. petroglyph Reported to be located in Tacoma area near Half Moon railway yards and now believed covered by construction fill. Hunt 1916:20-21.
167. petroglyph Reported to be located at Utselady, near Bellingham. Personal communication E. Hill, 1973.

Pacific Coast, Washington

168. petroglyph Reported to be located near Port Grenville. The Oregonian, Friday July 17, 1970, Portland.
- "pictograph" Puget Sound. (9)

ROCK ART SITES LOCATED IN CHINOOK TERRITORY

The Lower Columbia River

1. petroglyph In Patton's Valley about 2-4 miles from Gaston, Oregon. Mallery 1893:105, Lloyd 1906:4-5, Cressman 1937:12 (site 1).
2. petroglyph Opposite the mouth of the Willamette River, at Black Rock, on the north shore of the Columbia River. Strong and Schenck 1925:87, Enterprise Courier, Oregon City, September 30, 1966.
3. petroglyph At Portland on the Oregon side of the Columbia River, bordering the Willamette River. Strong Schenck and Steward 1930:128.
- petroglyph Originally from Wallula, on the Middle Columbia River. Relocated to Portland City Hall. Smith 1910:123.
4. petroglyph Reported at Oregon City. Seaman 1946:215 (10).
5. petroglyph C11. Nearly midway between Vancouver and Gamas on the Washington shore of the river. Strong 1959:130.
6. petroglyph C12. At Fisher's Landing, 9 miles above Vancouver at Milepost 19 on the Washington shore of the Columbia River. Strong and Schenck 1925:87, Strong, Schenck and Steward 1930:130.
7. petroglyph C13. At Ten-mile Tavern on the Washington shore of the river. Strong 1959:26. (11)
8. petroglyph At Cape Horn in Skamania County. Mead 1971.
9. pictograph Sk 1. Reported to be located near Cape Horn and above Camas, Washington. Strong 1959:33.

10. petroglyph Sk 2. Near Marr's Landing on the Washington shore between Camas and Beacon Rock. Strong 1959:33.
11. petroglyph Near Skamania, Washington, at Milepost 42.8. Strong, Schenck and Steward 1930:130.
12. petroglyph Sk 5. On the Washington shore of the river at Garrison Eddy. Strong 1959:33.
13. petroglyph Near Cascades, Oregon at Milepost 49. Strong, Schenck and Steward 1930:128.
14. petroglyph Near the mouth of the White Salmon River at Underwood on the Washington shore. Donovan 1963:4.
15. petroglyph At Big Eddy on the Oregon shore of the river. Strong, Schenck and Steward 1930:33-4, 128., Strong 1959:111-12.
16. pictograph At the base of the rimrock at Big Eddy on the Oregon shore of the river. Strong, Schenck and Steward 1930:128, Strong 1959:111.
17. petroglyph At Milepost 96, below Celilio on the high water islands opposite Seuferts, nearer the Washington shore. Strong, Schenck and Steward 1930:127-8, Seaman 1946:216.
18. pictograph At Milepost 96, below Celilio on the high water islands opposite Seuferts. Strong, Schenck and Steward 1930:127-9, Seaman 1946:216.
19. combination At Spearfish overlooking the Long Narrows on the northern shore of the river. Strong, Schenck and Steward 1930:130, Strong 1959:107-9. (12)
20. petroglyph At Milepost 99, near Spearfish, in Petroglyph Canyon. Site is now flooded. Strong and Schenck 1925, Strong, Schenck and Steward 1930:130, Cole and Hegrenes 1953(13).

21. pictograph At Milepost 99, near Spearfish, in Petroglyph Canyon. Site is now flooded. Strong and Schenck 1925.
22. petroglyph On both shores of the river in the area of the Long Narrows. Site now flooded. Strong, Schenck and Steward 1930:130. (13)
23. pictograph In Colowash Bottom in the Long Narrows area and on both sides of the river. Strong, Schenck and Steward 1930:130, Cole and Hegrenes 1953:8.

NOTES

1. There is some confusion regarding both designs and technique at this site. The National Museum of Man has a photograph taken by Barbeau which shows a row of painted coppers, yet Barbeau himself (1945:216-17) comments on "engraved and painted native shields on either side of a human face".
2. Meade (1971:25) reports carvings of canoes and a legend involving a grizzly attack. However, this may refer to the pictograph site nearby which has canoes as design elements. The petroglyph site reported for the Namu region is supposedly that of a fish.
3. The National Museum of Man has a brief note stating that carvings and paintings of Indians and canoes are reported in this vicinity. There may be some confusion with local pictographs.
4. This site and site 37 are incorrectly placed on the west coast of Vancouver Island, in Nootka territory by Meade 1971:39-40.
5. The male counterpart of this figure, as reported by Gjessing 1958:270-1, doesn't exist or has disappeared according to Beth Hill's Petroglyph Recording Group in 1972.
6. This site maybe the same as that designated DhRt 1 (site 82).
7. This site maybe the same as that designated DhR1 22 (site 116)
8. This carving is assumed to be from Smith's "Nanaimo River Falls" site listed in his list of petroglyphs in British Columbia (1927).
9. Steward in 1936 states that Quinault boys painted sea monsters on the rocks of Puget Sound. This is in error. No pictographs are as yet known from Puget Sound, the Quinault territory is located on the Pacific Coast of Washington, and Olsen, who studied among the Quinault lists rock art as a negative trait, (also incorrect).

10. This site maybe the same as one or two others in the Portland area, such as site 2 or 3.
11. This site appears to be same as that called Gentry's Landing by Meade 1971:91.
12. There apparently exists some doubt as to whether the red colour of this site is natural or pigment added to it.
13. Petroglyphs salvaged from these and other sites flooded during dam construction are located with various private individuals and institutions, such as Emory Strong, one person in Tigard, another in Oregon City. The majority are located in the Dalles Museum, and there are casts at the Oregon Museum of Science and Industry, Portland.

CHAPTER THREE
DESIGNS AND DISTRIBUTIONS

All design in the rock art of the coast can be divided into three major categories; zoomorphic designs, anthropomorphic designs and geometric designs. These three categories are further subdivided, as follows:

I. Zoomorphic Designs

A. Quadrupeds

1. Bear
2. Bison
3. Canine
4. Deer and Elk
5. Horse
6. Mountain Goat
7. Mountain Sheep
8. Undifferentiated Quadrupeds

B. Sea Creatures

1. Crustaceans
2. Fish
 - a) flounder
 - b) salmon
3. Seal
4. Shark
5. Whale
6. Undifferentiated Sea Creatures

C. Birds

1. Blue Jay
2. Duck
3. Eagle
4. Owl
5. Puffin
6. Raven
7. Sandhill Crane
8. Undifferentiated Birds

D. Other Zoomorphic Designs

1. Frog
2. Insect
3. Mythical Creatures
 - a) Sea Monsters
 - b) Serpents
 - c) Thunderbird
4. Snake
5. Tracks
6. Turtle
7. Woodworm
8. Undifferentiated Zoomorphic Designs

II. Anthropomorphic Designs

A. Full Anthropomorphic Figures

1. Male Figures
2. Female Figures
3. Mythical Figures
4. Other Figures
 - a) Figures Within Other Figures
 - b) Undifferentiated Anthropomorphic Figures

B. Portions of Anthropomorphic Figures

1. Heads
 - a) Circle faces
 - b) Other Heads or Faces
 - c) Undifferentiated Heads or Faces
2. Other Portions of Anthropomorphic Figures
 - a) Eyes
 - b) Hands
 - c) Feet
 - d) Sex Sign

III. Geometric Designs

A. Rectilinear

1. Forked Lines
 - a) "Arrows"
 - b) Two-forked lines
 - c) Three-forked lines
2. Crosses
 - a) Religious Symbol
 - b) Obliquely Crossed Lines
3. "Grid" Designs
 - a) Cross-hatch
 - b) "Ladder"
4. Rayed Lines
5. Squares, Rectangles, Coppers
 - a) Squares
 - b) Rectangles
 - c) Coppers
6. Other Straight Lines
 - a) Dashes
 - b) Sharpening Marks
7. Zigzag

B. Curvilinear

1. Single Circles or Ovals
2. Connected Circles or Ovals
3. Divided Circles or Ovals
4. Rayed Circles or Ovals
5. Concentric Circles or Ovals
6. Spirals
7. Circles or Ovals with Central Dot
8. Semi-circles
9. Rayed Semi-circles
10. Dots, Pits, "Bedrock Mortars"
 - a) Dots
 - b) Pits
 - c) "Bedrock Mortars"

C. Other Geometric Designs

1. Building
2. European Ship
3. Wagon

It is perhaps a mistake to isolate the designs of rock art sites since the total impact of the site often comes from the juxtaposition, association and inter-relationships of the individual designs. This is particularly true where groups of figures are involved. However, it appears to be necessary to examine the parts which together make up the whole and for this reason the designs of Northwest Coast rock art are seen as individual and isolated.

I. Zoomorphic Designs

A. Quadrupeds

1. Bear

At least three possible bear depictions are to be found in coastal rock art, all are petroglyphs and all show only the head. de Laguna (1964:23) identifies a circle-face on a single boulder at Yakutat Bay (Tl 1) as being that of a bear. The design has a wide, well toothed mouth. A second bear's head is reported to be located on a boulder at high tide near the mouth of Kitkatla Creek (Ts 31). On the shore of the Englishman's River (CS 44) are three heads, all drawn in profile. One of these clearly displays details of the historic Northwest Coast art style with its flowing lines, space fillers and the distinct eye, and is ethnographically identified as depicting a bear. Another carving reported from the head of Theodosia Inlet (CS 29) design consists of a circle-face and several attendant circles, (Daily Colonist, December 15:16). There is little known regarding the history of this particular petroglyph and the interpretation is questionable. Figure 2 illustrates one bear design to be found in coastal rock art.

2. Bison λ

One bison design is known, this being a single painted figure recorded at Petroglyph Canyon (Ch 20) by Strong and Schenck (1925:84). It is identified by its short horns and humped back. The design is isolated from others surrounding it by both technique and subject since all other designs at this site are carved and the closest other bison designs are known (rarely) from eastern Oregon. John Corner notes that there is only one bison figure in interior British Columbia pictographs, this at Cayuse Creek on Lower Arrow Lake (1968:83). Figure 3 illustrates the Petroglyph

Figure 2

Bear Design. This petroglyph, from DhSb 5 on the Englishman's River (CS 44) is drawn from a rubbing in the BCPM to a scale of one inch to one foot.



Figure 2

Figure 3

Bison Design. This pictograph from Petroglyph Canyon (Ch 21) is redrawn from a sketch in Strong and Schenck (1925:78). No dimensions are given.

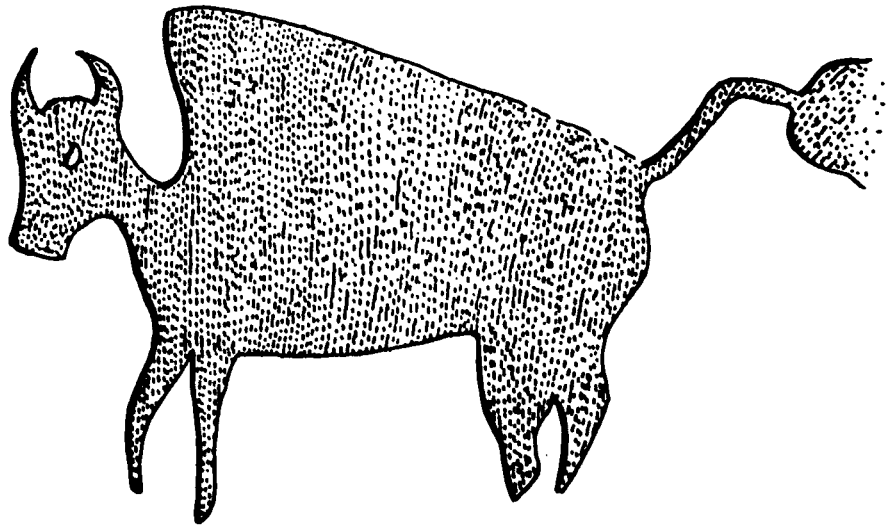


Figure 3

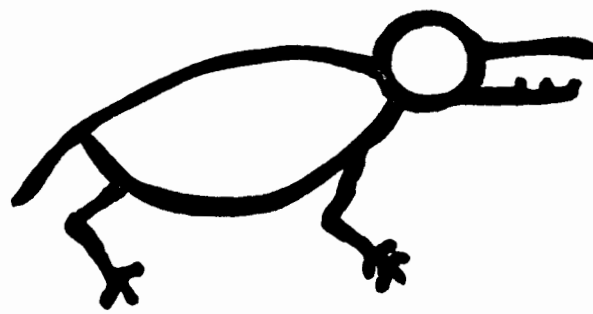
Canyon bison design.

3. Canine

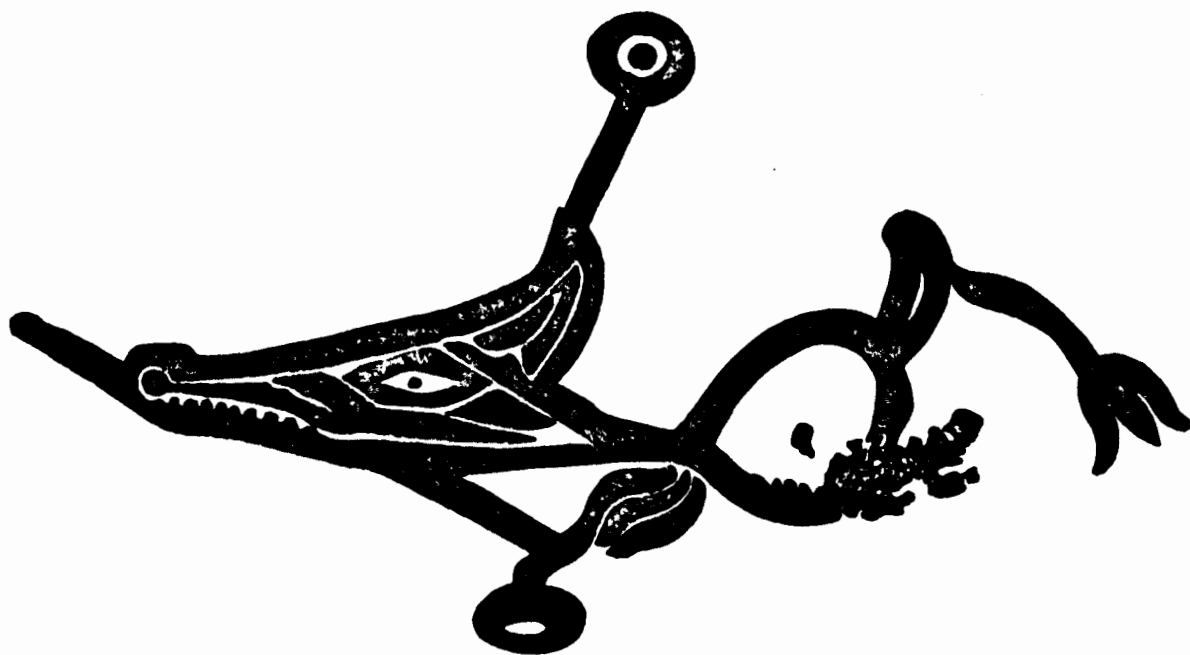
This category includes any wolf, coyote, fox, dog or other dog-like creatures. Emmons (1908:224) identified one design at Lisiansky Bay (T1 37) as being representative of Kun-nook, the guardian of fresh water who often appeared in wolf form. His illustration is not very wolflike, however. He also illustrates another wolf design from an unspecified site in southeastern Alaska. Opposite the mouth of the Noosatsum River (BC 13) is a carving of a four-legged creature with a long wolf-like snout (Smith 1925). Wolves are frequently encountered in the Bella Coola region, in fact they ranged along most of the Northwest Coast. Another carved wolf at Kulleet Bay (CS 133) is shown in profile and is identified by characteristics such as "the ear at the upper right, the shape of the tip of the nose, the curve of the cheek and the open mouth" (NMC note). A similar profile wolf's head is painted at Grey Rocks (CS 100) on Indian Arm (CS 86). Five wolf-like creatures, each with lolling tongue and bushy tail and which may have been intended to depict the mythical sea wolf, form part of the largest cluster of designs at Petroglyph Park (CS 126). A somewhat similar figure occurs at Fort Rupert (K149). A short distance from Petroglyph Park, at the Monsell site (CS 127) a clearly defined wolf design has been carved into the sandstones in association with many strange mythical creatures. At Petroglyph Canyon (Ch 20) Strong and Schenck (1925:83) tentatively identified a single coyote figure, on the basis of its tail, ear and mouth. Similar coyotes have been reported from Roosevelt further up the Columbia River. Nordquist (1965:32) calls these creatures dogs as they

Figure 4

Canine Designs. Design a is from the Noosatsum River (BC 13) as illustrated by Harlan Smith (NMC). Design b is from Kulleet Bay (CS 133) and is drawn from a rubbing in the BCPM. Both designs are petroglyphs and both are drawn to a scale of one inch to one foot.



a



b

Figure 4

Figure 4 continued

Canine Designs. Design c is from the Monsell Site (CS 127) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design d is from an unspecified site in southeastern Alaska as illustrated by Emmons (1908:226). No dimensions are given. Designs e and f are from Petroglyph Park (CS 126) and are drawn from a rubbing in the BCPM to a scale of one half inch to one foot. All of the designs are petroglyphs.

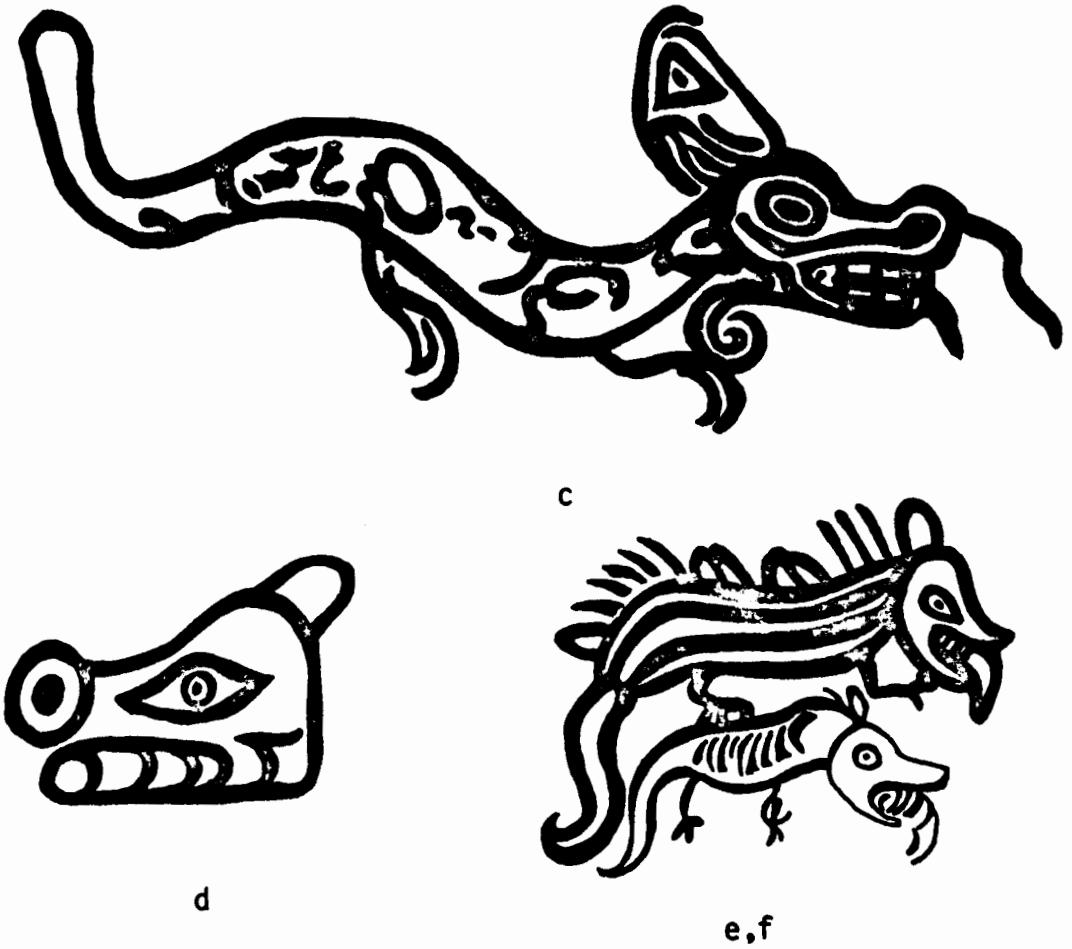


Figure 4 continued

may be a part of a hunting scene and are in association with human and deer designs. Corner reports a number of canines in the rock art of the southern British Columbia interior, but these, like those of Roosevelt and Petroglyph Canyon differ markedly from the coastal figures. Figure 4 illustrates several canine designs.

4. Deer and Elk

The forward sloping and well forked antlers are the identification markers used by Cain (1950) as well as Strong and Schenck (1925) for determining the deer. Despite its being a common animal along most of the coast and Columbia River, the only definite depictions are known from Coast Salish and Chinook territory with one from that of the southern Kwakiutl. This latter and some of the Salish designs are much closer to other coastal rock art designs in general appearance while those of the Lower Columbia resemble the art of the Interior Plateau. The most northerly deer is the stylized circle face with short antlers as identified by Meade (1971:41) at Port Neville (K 191). A more realistic deer-like creature is carved at Hornby Island (CS 35). This figure in turn is somewhat similar to one from Hohap (Deer) Point (CS 146) on southern Vancouver Island but lacks the parallel rib designs of the latter. A curious creature which appears to have branching antlers, yet is bipedal has been tentatively described by Smith (1907:329) at Petroglyph Park (CS 126) as either a deer or possible bird figure. A possible doe, solidly painted occurs as part of a group of figures at Grey Rocks (CS 100). Strong and Schenck (1925:30) report three deer designs at Petroglyph Canyon (Ch 20). These are similar in appearance to those known upriver at Roosevelt and at Interior Plateau sites in both British Columbia and Washington. In view

Figure 5

Deer and Elk Designs. Design a is a deer from Port Neville (K 191) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design b is a deer from Hohap Point (CS 146) and is drawn from a photograph (NMC:71512). No dimensions are given. Designs c and d are from Petroglyph Canyon (Ch 20) and are redrawn from sketches in Strong and Schenck (1925:81). No dimensions are given. Design e is from Big Eddy (Ch 16) and is drawn from a photograph in Seaman (1946:236). No dimensions are given. All but e are petroglyphs.

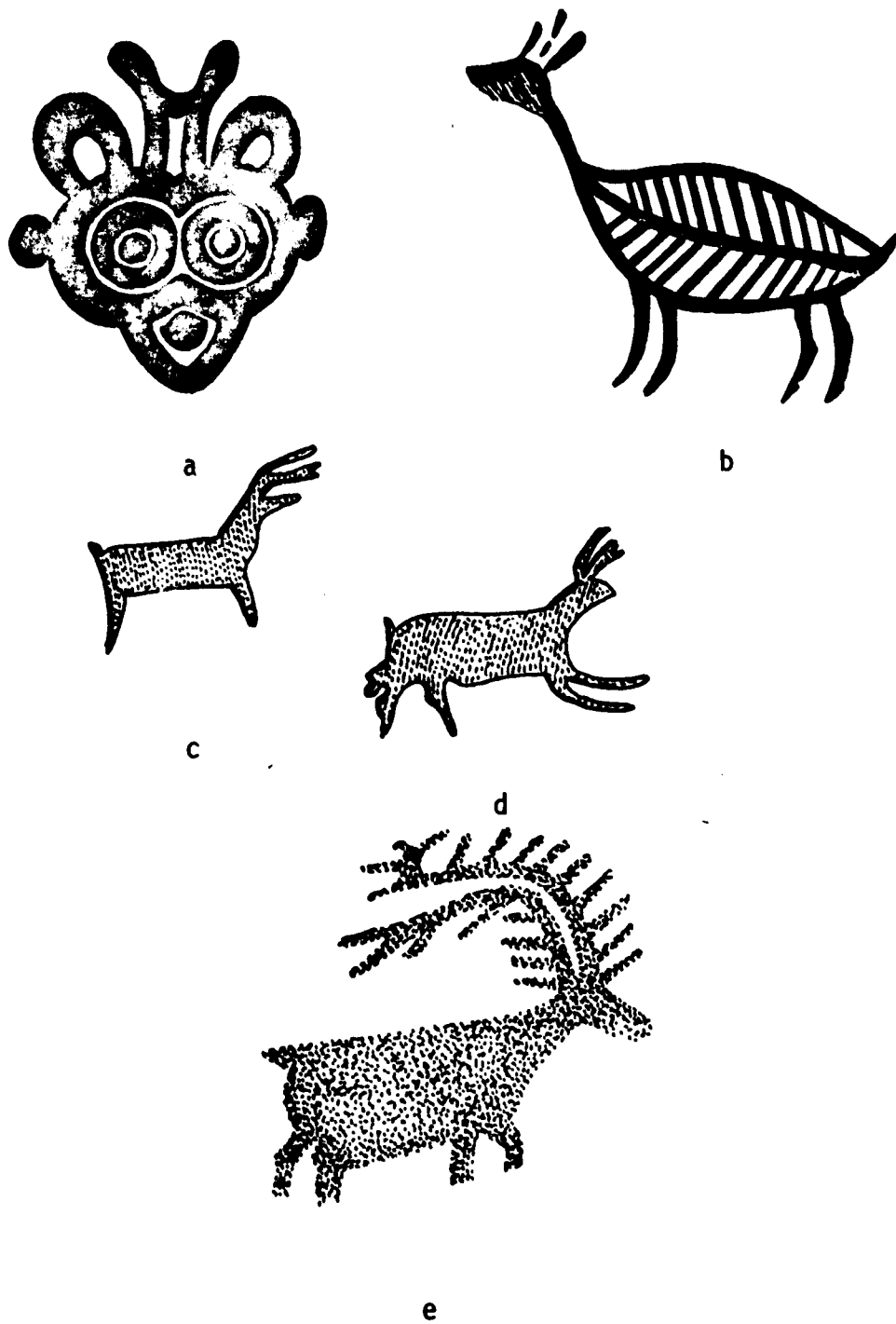


Figure 5

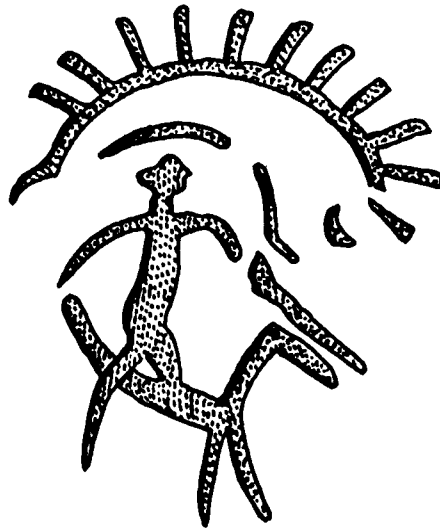
of the wide geographical spread and economic importance of these creatures it is quite likely that many otherwise undifferentiated zoomorphic designs were possible representations of deer. Of course, the reverse may also be true; in that these creatures, being so common were taken for granted and not regarded as important enough to warrant their being used as rock art designs. Representations of elk have been determined at only three Lower Columbia sites (Ch 16, 17, and 20). Strong and Schenck (1925:82) identify the creature by its straight and many-tined antlers. One such design is painted at Big Eddy (Ch 16) and this would appear to be the most westerly occurrence known. Corner reports only one elk figure in the rock art of the southern British Columbia interior, this at Braeside (1968:68-9), while two similar figures are listed by Cressman, both as pictograph designs, in central Oregon (1936:65). Cain classes deer and elk together and lists a frequent occurrence of such creatures in the art of the Middle Columbia. Like the deer, the elk was a common animal along the coast. Figure 5 illustrates several deer and elk designs.

5. Horse

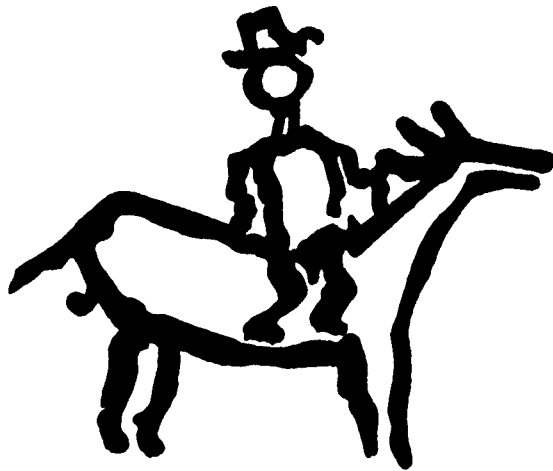
Probable horse designs occur at five coastal sites and in a variety of forms. As they are generally undetailed, the presence of a rider is often the best identification clue. Such designs occur at two sites on the west coast of Vancouver Island (N7, and 18) and at Petroglyph Canyon (Ch 20). At one Kwakiutl pictograph site (K 177) a probable horse is drawn pulling a wagon. The most northerly horse design occurs at a Kwakiutl pictograph site (K 110). Horses as historic subjects are reasonable indications of at least contact age for at least a portion of the sites where they are found. Strong, Schenck and Steward (1930:135) note that the horse arrived in the Lower Columbia region around 1750. Corner lists several possible horse

Figure 6

Horse Designs. Design a is from Petroglyph Canyon (Ch 20) and is redrawn from a sketch in Strong and Schenck (1925:78). No dimensions are given. Design b is from Blowhole Beach (N 18) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Both designs are petroglyphs.



a



b

Figure 6

designs in Interior Plateau pictographs. Figure 6 illustrates two horse designs.

6. Mountain Goat

These creatures have been identified only from Coast Salish and Chinook sites although in actuality they ranged over most of the Northwest Coast (McTaggart-Cowan and Guiget 1956:391). The single Salish petroglyph design (CS 92) is stylistically similar to the Kulleet Bay wolf and other coastal art, and is quite different from the mountain goats of the Chinook region. These latter are similar to the designs of central Oregon and the Interior Plateau and Great Basin areas. They have oval or "boat-shaped" bodies and long thin legs. The backswept horns are the best single identification clue. Strong and Schenck (1925:82) define the Lower Columbia creatures as subspecies "oreanus montanus montanus" once common to the Dalles region and now no longer occurring there. Cain (1950:36) reports mountain goats to be common designs along the Middle Columbia and this distribution would seem to continue into the British Columbia interior as Corner (1968:128) lists frequent occurrences at several well scattered sites. It would seem that these designs, like that of the bison are good boundary markers. Figure 7 illustrates various mountain goat designs.

7. Mountain Sheep

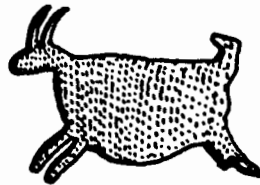
Designs of these animals occur at two Chinook sites (Ch 20 and 22). They are identifiable by their prominent and well curved horns. Cressman (1936:61) reports that such designs occur only in southeastern Oregon and therefore those of the Lower Columbia River must be accounted for by means other than a northward continuation of the Oregon designs. Since mountain sheep designs similar to those of the two Chinook sites noted are commonly encountered along the Middle Columbia (Cain 1950:36) and well into the British

Figure 7

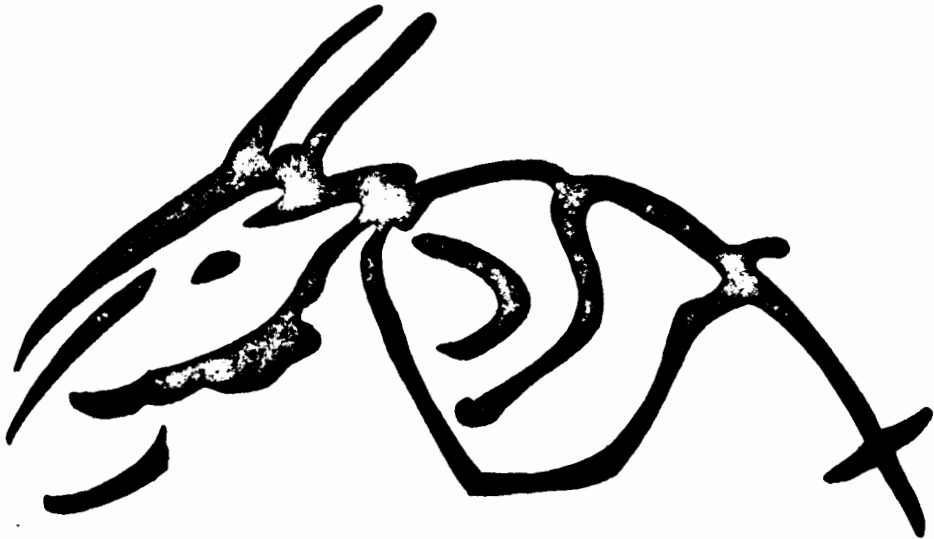
Mountain Goat Designs. Designs a and b are redrawn from Strong and Schenck (1925:81). No dimensions are given. Design c a petroglyph from North Vancouver (CS 92) is drawn from a sketch in the files of the Centennial Museum (Vancouver). The original carving was reported to be forty-two inches long by twenty-three inches high. Designs a and b are both from Petroglyph Canyon (Ch 20).



a



b



c

Figure 7

Figure 8

Mountain Sheep Designs. All of the designs are from Petroglyph Canyon (Ch 20) and are redrawn from sketches in Strong and Schenck (1925:81). No dimensions are given.

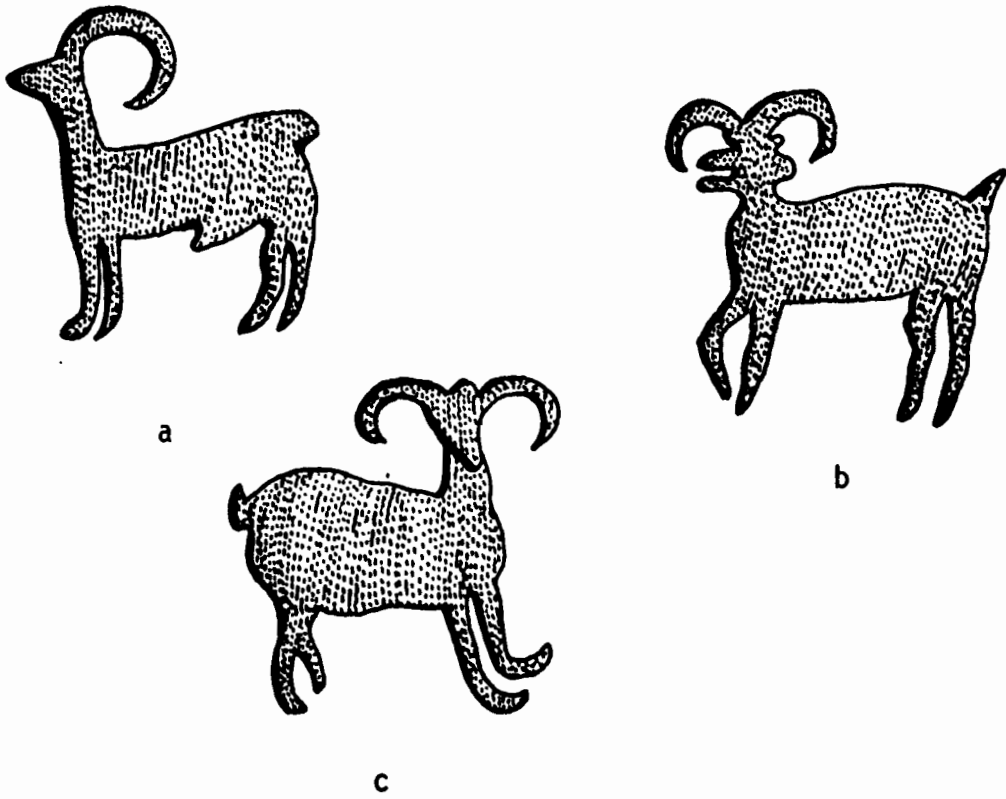


Figure 8

Columbia interior where Corner lists six occurrences it is likely that those of the Lower Columbia are in fact related to designs occurring farther up river. As with mountain goats, mountain sheep would seem to be an interior design which meets with more typically coastal designs in the vicinity of the Long Narrows. Figure 8 illustrates various mountain sheep designs.

8. Undifferentiated quadrupeds

Among several Coast Salish and Kwakiutl carvings and paintings are many obviously quadruped creatures of uncertain species. Sites K 72, 106, 109, and 160 contain examples of such figures as do sites CS 65, 73, 76, 80 and 82. Most have simple bodies with four or two legs shown (the other two presumably hidden by the sideway pose), and a head, ears and tail. Many of these are simple "stick" figures of a kind frequently encountered in Interior Plateau rock art sites. Most of the pictographic designs are solidly painted. At Walsh Cove (CS 16) two quadrupeds appear to have the oval bodies common to Lower Columbia mountain goats or sheep, but the distinctive horns are not shown. No undifferentiated quadruped designs appear in the rock art of the Northern linguistic groups (Tlingit, Haida, Tsimpsian or Bella Coola) where all zoomorphic designs that have been illustrated or published appear to be clearly identifiable by conventionalized characteristic features. For example, a beaver's face is said to be one of the crest designs at one Tsimpsian site (Ts 1) according to Canon Rushbrook (Drew 1969:17). In a great many cases, the classification of specific designs as "undifferentiated" in this report is due to poor field recording or simply a lack of more definite information.

B. Sea Creatures

1. Crustacean

Figures of crabs occur at two Salish petroglyph sites. At Petroglyph Park (CS 126) there is at least one crab design while another is carved into the rocks at Kulleet Bay (CS 134). A third possible crab occurs among the carvings of Yellow Island (CS 41). Figure 9 illustrates two such designs.

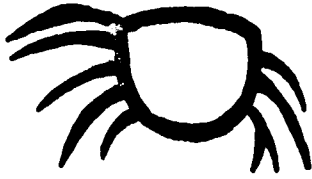
2. Fish

a) Flounder or Halibut. Five flounders can be seen carved at Petroglyph Park (CS 126). They are identified by their unusual shape and the position of the eyes; close together and on the same side of the head. A flounder is said to be among the figures of fish carved at Jack's Point (CS 125), but it is difficult to determine which design is meant (Barrow 1942:95). Halibut are reportedly carved at sites TL 60 and Ts 1. Figure 10 illustrates flounder designs.

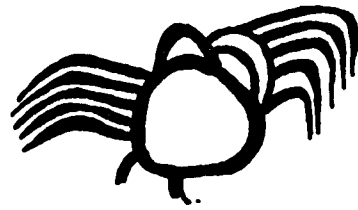
b) Salmon. Salmon are specifically identified at only two coastal sites, both are carved and both are Salish. A fish figure at Englishman's River is supposed to represent the salmon (CS 44) according to local tradition (BCPM) and a similar tradition identifies four species of salmon as being the fish carved and painted at Jack's Point (CS 125). These are the coho, spring, humpback and dog salmon (Barrow 1942:95). Emmons (1908:228) illustrates a salmon petroglyph from southeastern Alaska, identifying it by its characteristic head and tail form but he does not specify where the figure is actually located. Finally, Kennedy (1974) reports a possible salmon figure at Kalinin Bay (T1 31). In view of the importance of salmon to the people of the Northwest Coast one might expect that they would be more frequently depicted in the rock art, especially those sites known to have been concerned in one way or another with fishing activities. Perhaps

Figure 9

Crab Designs. Design a is from Petroglyph Park (CS 126) while design b is from Kulleet Bay (CS 134). Both drawings were made from rubbings in the BCPM, both are petroglyphs and both are drawn to a scale of one inch to one foot.



a



b

Figure 9

Figure 10
Flounder or Halibut Designs. All designs
shown are petroglyphs from Petroglyph Park
(CS 126). All are drawn from rubbings in
the BCPM to a scale of one inch to one foot.

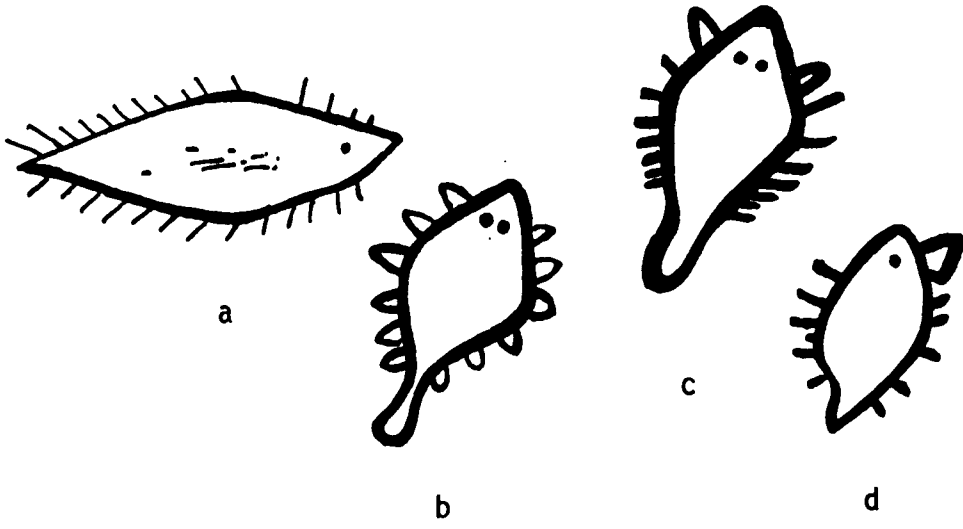
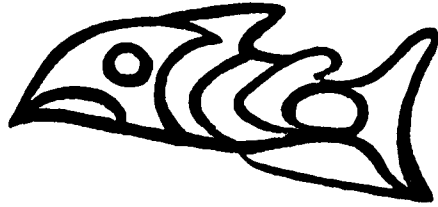


Figure 10

Figure 11

Salmon Designs. Design a is from an unspecified site in southeastern Alaska as illustrated by Emmons (1908:228). No dimensions are given. The figures of design b are from the painted petroglyph at Jack's Point (CS 125) and are drawn from a rubbing in the BCPM to a scale of one inch to one foot.



a



b

Figure 11

many of the otherwise unspecified but obvious sea creatures were intended to represent salmon. Perhaps too, some of the circle faces located intertidally at known fishing places were representative of the human aspect of the "salmon people"? The reverse could just as easily be true in that salmon, like the deer being so common were not considered important enough to warrant their inclusion as rock art design. They would be carved and painted only when the salmon run was small or late as was known to be the case among at least one coastal group (see function chapter). Figure 11 illustrates some salmon designs.

3. Seal

Clearly defined seal figures occur at only three coastal sites despite their wide geographical spread along the coast. One carved figure is reported to be located on the eastern shore of Dean Channel (BC 3) and another occurs at Blowhole Beach, (N 18). A third is to be found at West Beechey Head (CS 146) while a rock at Pachena Point (N 13 or 14) was reported to be "in about the shape of a seal", (NMC). Another may be located at Englishman's River (CS 44). The rounded head and long, sinuous body would seem to be the identifying characteristics. They are no clear illustrations of definite seal designs.

4. Shark

One shark figure is listed by Emmons (1908:228) although he doesn't specify which southeastern Alaska site he means. He notes that the characteristic features of this creature are the pointed head and heterocerc tail. Figure 12 illustrates this design.

5. Whale

Whale designs are among the most commonly encountered. These creatures can be identified by the prominent upright dorsal fin and presence of a blow-

Figure 12

Shark Design. This design is taken from Emmons (1908:228). No specific site is given although it is located in southeastern Alaska. No dimensions are given.

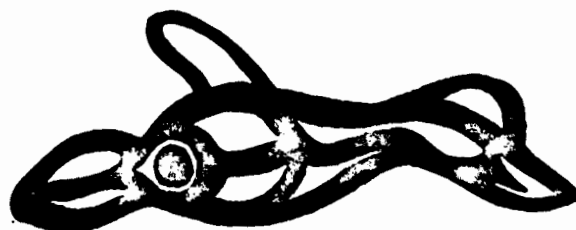


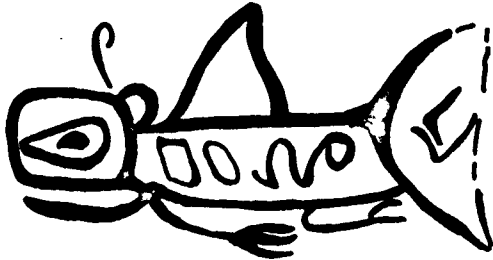
Figure 12

Figure 13

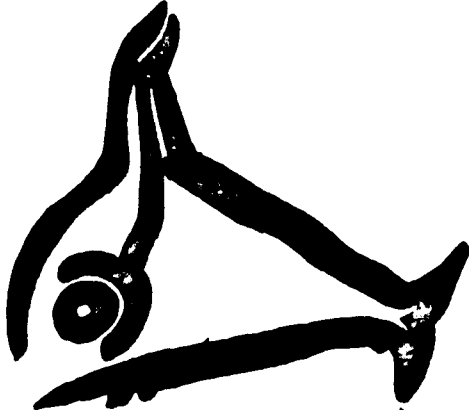
Whale Designs. Design a is from the Hill Site (N 19) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design b is from Wrangell (T1 54) and is redrawn from a sketch in Emmons (1908:228). No dimensions are given. Design c is from Tralee Point (CS 35) and was drawn from a rubbing in the BCPM to a scale of one inch to one foot. All of the designs are petroglyphs.



a



b



c

Figure 13

Figure 13 continued

Whale Designs. Designs d and e are from the Kwatna River (K 88). The smaller of the two figures is about fourteen centimeters in length while the larger is closer to twenty. They are not drawn to scale. Designs f and g are from Port John (K 72). Both figures are approximately one hundred centimeters in length, and are not drawn to scale. Design h is from Degnan's Bay (CS 123). Dimensions are not given. The drawing is made from a photograph in the BCPM. Design i is from Wedding Rock (N 22) and is redrawn from a sketch from Stallard (1958:47). Dimensions are not given.

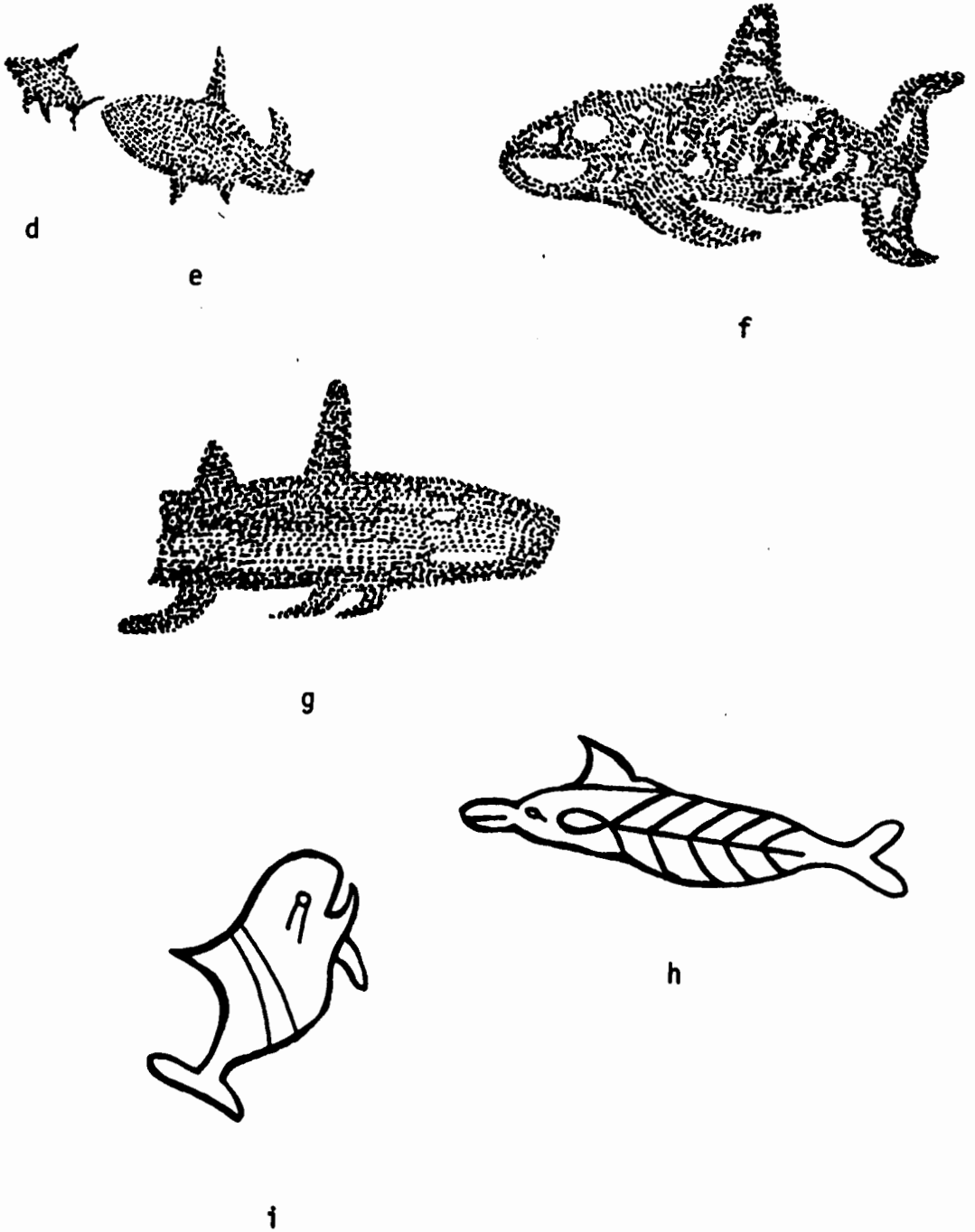


Figure 13 continued

hole. Wherever local tradition makes more specific identification possible it seems as though the killer whale was the favoured species in rock art designs. It is also a well-known crest of the Northwest Coast. Whale figures occur in the rock art of all but the Chinook linguistic areas and they are found in both carved and painted form. They occur as outlined figures at several sites (K 40, 57, 103, 140, 225, N 19) and solid bodied at others (K 88 and 97). The majority of the designs contain some internal decoration (N 18, 19, 22 and CS 35, 39, 123, 142, 144, 148) and a few contain clear elements of the historic Northwest Coast art style (T1 15, 54, Ts 1, 24 and K 72). In addition, whales are reported but not described at five other sites (T1 31, 77, H 5, BC 5, N 17). Figures 13 illustrates several examples of whale designs.

6. Undifferentiated sea creatures

There are many designs which while obviously depicting sea creatures are not detailed enough to specify a particular species. Many may have been intended to represent whales, or salmon or other such economically important fish; others may have been depictions of mythical creatures. One shark-like figure is painted at Port John (K 72) and halibut are reported from two coastal sites (T1 60 and Ts 1). A possible skate has been noted at Cape Alava (N 23). Other sites with depictions of undifferentiated sea creatures are: Ts 1, 19, BC 12, K 31, 42, 65, 77, 149, 164, 191, 202, 215, 222, N 12, 13, 14, 22, and CS 14, 16, 17, 23, 26, 27, 33, 34, 35, 38, 41, 54, 56, 57, 58, 67, 71, 90, 109, 127, 132, 141, 145, 146, 147. As can be seen, the greatest number of undifferentiated sea creatures cluster in the Wakashan and Coast Salish areas where there are also the greatest number of sites. Only one fish figure is known from the Lower Columbia, this at the Long Narrows (Ch 22).

C. Birds

1. Blue Jay

This design is identified only once in coastal rock art, by Keithahn (1940:132) as being one of several bird figures carved at Wrangell (T1 54). He doesn't note his basis for identification.

2. Duck

Duck-like figures occur at only one coastal site, this being along the shore of Pitt Lake (CS 108) where there are four almost identical figures. See anthropomorphic figures (mythical).

3. Eagle

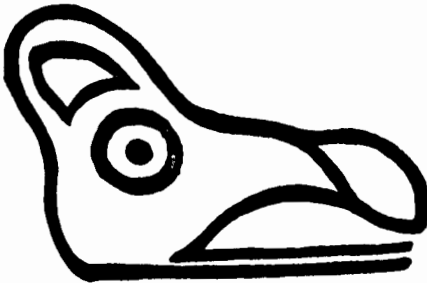
This bird is recognizable at only two coastal sites. Emmons (1908: 227) identifies it at an unspecified southeastern Alaskan site and it is found as a pictograph design at Dallery Creek (K 107). The painting is a clear, realistic representation with a few traces of historic Northwest Coast stylistic traits, notably in the decorative lines of the mouth. Nothing is known regarding the background of the site. A carving at Cape Alava (N 22) may also have been intended as an eagle. Another possible somewhat similar eagle figure is carved at Blowhole Beach (N 18) but the lines of the figure are not clear. The characteristic beak is the best identification clue. Figure 14 illustrates two Northwest Coast eagle designs.

4. Owl

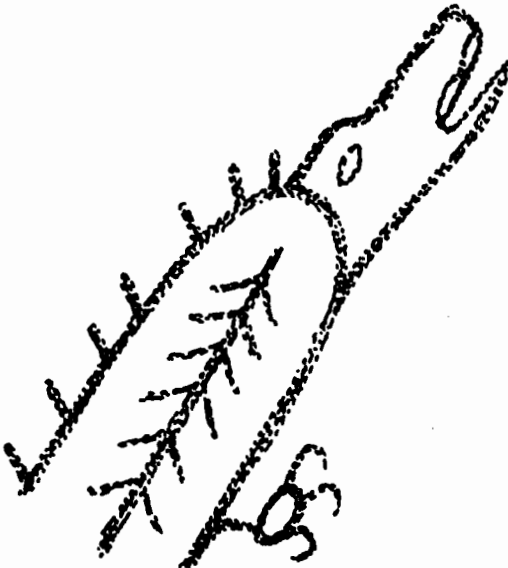
Clear representations of owls occur at least six times along the coast and at five different sites. Four of these sites are petroglyphs of the Columbia River. The exception is a pictograph in Kwakiutl territory (K 6)

Figure 14

Eagle Designs. Design a is a petroglyph from an unspecified site in southeastern Alaska as illustrated by Emmons (1908:227). No dimensions are given. Design b is a pictograph from Dallery Creek (K 107). It is drawn from a sketch in the BCPM. No dimensions are given.



a

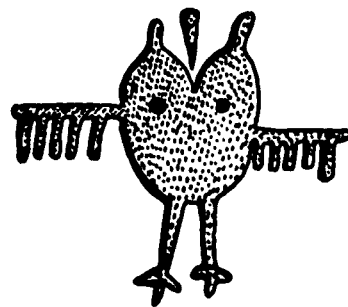


b

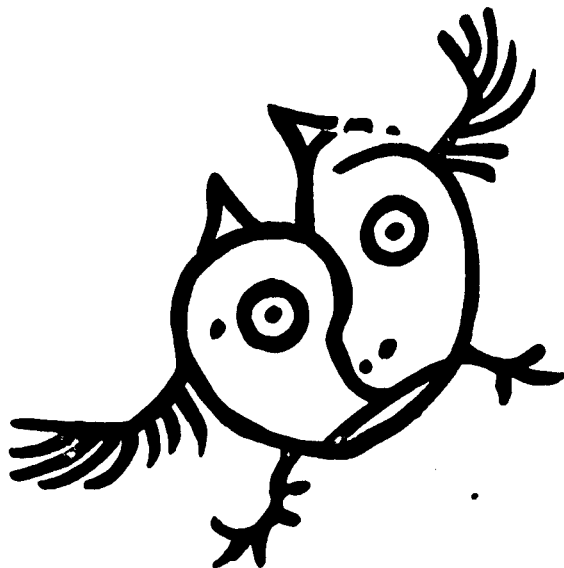
Figure 14

Figure 15

Owl Designs. Design a is a "Spedis Owl" from Petroglyph Canyon (Ch 20) as redrawn from sketches in Strong and Schenck (1925:78). No dimensions are given. Design b is also a "Spedis Owl" from Skamania (Ch 11) and was drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design c is a pictograph from Bish Creek (K6). The drawing was made from a sketch in the BCPM for which no dimensions were given. Designs a and b are both petroglyphs.



a



b



c

Figure 15

which is painted in a simple, fairly realistic manner. The large eyes, short wingspan and tufts or "horns" above the head would seem to be the identifying characteristics. There is another owl figure reported at the petroglyph site at Muir Cove (K 29) but no illustration exists for this site. The Columbia River owls are all identical in appearance and are characterized by heart-shaped bodies, outstretched short wings with even shorter "rays" to represent the feathers, and straight three-toed feet. They are locally known as Spedis Owls taking the name from an old village site near the Dalles, (Seaman 1946:225). Two are noted to be in the vicinity of the Long Narrows (Ch 22) with several more reported nearby. At least one such design is carved at Petroglyph Canyon (Ch 20). The most westerly occurrence of the Spedis Owl is at the Skamania site (Ch 11) downstream from the Long Narrows. An undescribed owl is also reported to be located north of the Dalles region on the Oregon shore of the Columbia River near the mouth of the John Day River. Why the owl should be so predominant in this relatively confined area is not known. Figure 15 illustrates various owl designs.

5. Puffin

The Yellow Rock petroglyph site (CS 41) contains carved bird designs which may have been intended to represent puffins. The unusual beak shape may be the clue to identity.

6. Raven

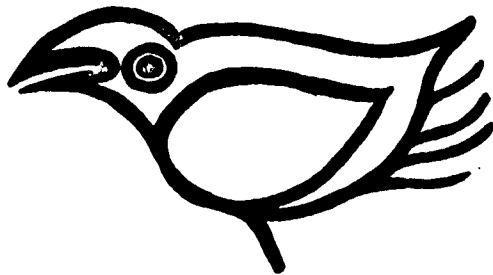
This bird is identified at three coastal sites. At Lisiansky Bay (T1 37) Emmons (1908:223-4) interprets one of several intertwined carvings as being representative of Yehlh "who assumed many forms but more often appears in the guise of a raven". He identifies Yehlh on the basis of the characteristic sharply pointed bill. More realistic raven designs are carved at Wrangell (T1 54) and de Laguna considered one carving at Chatham

Figure 16

Raven Designs. Design a is from Wrangell (T1 54) while design b is from an unspecified southeastern Alaska site. Both drawings are based on sketches in Emmons (1908:226) and both are petroglyphs of unknown dimensions.



a



b

Figure 16

(T1 25) as combining the forms of frog and raven (1960:71). Other possible ravens are noted by Drucker (1933:110) at Meadow Island (K 69) and McNeary (personal communication) at Lava Lake. Emmons also identifies a raven at an unspecified southeastern Alaska site. Figure 16 illustrates two such raven designs.

7. Sandhill Crane

This bird is identified only once in coastal rock art, this from an unspecified southeastern Alaskan site noted by Emmons (1908:226). He makes this identification on the basis of the long beak. Figure 17 illustrates this design.

8. Undifferentiated birds

The greatest number of what are obviously bird designs must be considered at this time to be undifferentiated, that is, too general or undetailed in form to be assigned to a species. Such designs occur all along the coast, but they are much less common among the northern linguistic groups. Many such designs with outstretched wings may have been intended to represent the eagle or thunderbird (see mythical animals). The following are sites containing undifferentiated bird designs: T1 54, Ts 35, BC 1, 12, 13, 16, K 47, 72, 81, 226, N 4, 18, 19, CS 29, 46, 82, 108, 109, 126 (?), 127, and Ch 20.

Figure 17

Sandhill Crane Design. This design is from an unspecified southeastern Alaska site as illustrated by Emmons (1908:227). No dimensions are given.



Figure 17

D. Other Zoomorphic Designs

1. Frog

The frog is identified at one illustrated site and reported at three others, all along the northern part of the Northwest Coast. de Laguna defines one design at Chatham (T1 28) as combining frog and raven figures. A frog was reported to be located on a rock in Kitselas Canyon (Ts 26) but has not, to date, been verified (NMC note). Another frog-like figure was found carved on a rock, removed and consequently lost from the Kispiox area (Ts 28). (This figure may have been intended to represent a human in the "squatting" position commonly encountered in Northwest Coast art.) Keithahn identifies a single figure on Dall Island (H 15) as being that of a supernatural frog (Tozer 1953:26) and finally, pictographs reported on the shores of Seymour Inlet (K 143) included a frog design but this design, like others at this site may, have been painted recently by vandals. Of all of these figures for which there are illustrations the Kispiox stone bears closest resemblance to at least one Interior Plateau frog design as interpreted by Corner (1968:116) from Stuart Lake. The Haida site is closer to historic Northwest Coast art in appearance having such emphasized identification markers as the pointed head and prominent "hands". One frog figure was reported and "lost" at Black Rock (Ch 2). Figure 18 illustrates one frog.

2. Insect

One insect design, from Kispiox (Ts 29) has been described as depicting either four hornets or four large flies. The long pointed "nose" is the best indicator. The design is somewhat similar to one painted at Lava Lake (Ts 22) a site not far from Kispiox. The Lava Lake site may

Figure 18

Frog Design. This design, a petroglyph from Dall Island (H 15) is drawn from a photograph by Tozer (1953:26). No dimensions are given.



Figure 18

Figure 19

Insect Design. This design is a petroglyph from Kispiox (Ts 29). It is drawn from a cast at the Prince Rupert Museum and BCPM. The actual design is approximately ninety centimeters high.



Figure 19

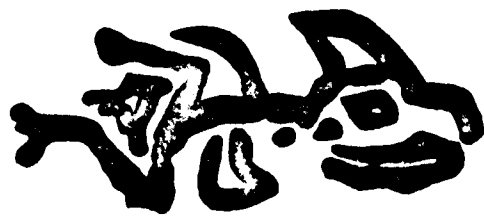
have been intended to represent a raven. It is possible that the same creature was intended at both sites. Two horned, "many-legged" designs from the area of Culloden Point (CS 48,49) may also have been representations of insects as they are somewhat similar to figures interpreted as insects by Corner (1968:101). It is difficult to determine in two dimensional art if an upright (that is anthropomorphic) or four-legged (zoomorphic) figure is intended. Insects, with their antennae can be easily confused with horned or other mythical human forms. Cole and Hegrenes (1953:10) interpret one carving at Petroglyph Canyon (Ch 20) as a butterfly and also include several other designs in their insect category. Most of these are in the Long Narrows (Ch 22) area. Figure 19 illustrates one coastal insect design.

3. Mythical Creatures

a) Sea monsters. Sea monsters are identified at seven coastal sites. They range in appearance from the well-known circle-face to specialized figures well known in coastal mythology. The sea wolf is recognizable at least three sites (K 227, T1 ?, CS 126?, N 16) and is reported at another (T1 60). The distinctive wolf head combined with upright dorsal fin are the identifying characteristics. Keithahn (1943:74) identifies a sea-grizzly at Wrangell (T1 54) and Boas (1897) notes that a large circle-face carved on a beach outcrop at Fort Rupert (K 149) is said to be that of Ia'kin a sea monster. Boas also considered the intricate carvings at Sproat Lake (N 16) to be depictions of sea monsters. These figures are carefully formed, and are intricate and detailed yet do not resemble known creatures. As they do appear to have fins and fish-like tails perhaps they are best considered as mythical sea monsters or sea creatures. One (mentioned above) appears to be the sea wolf. Another Nootkan fish carving at Great Central Lake (N 15) was reported to be a "devilfish" in notes held in the National Museum.

Figure 10

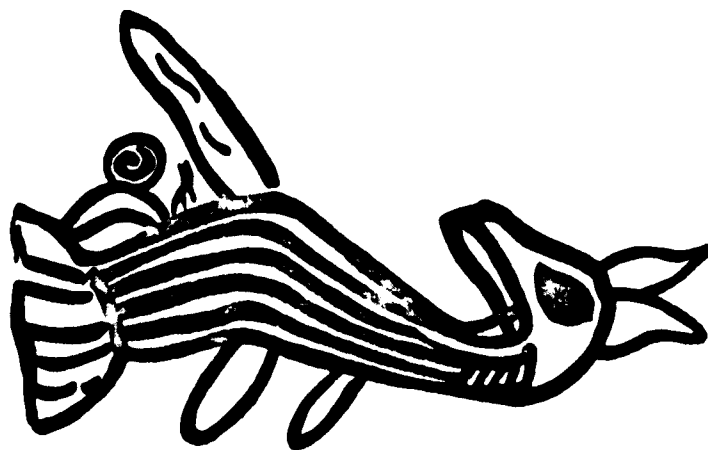
Sea Monster Designs. Design a is from Dogfish Bay (K 227). It is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design b is located on Hettie Inlet (H 6) and is redrawn from a sketch in Keithahn (1940:128). No dimensions are given. Design c is from Sproat Lake (N) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. All of the designs are petroglyphs and all appear to depict the sea wolf.



a



b

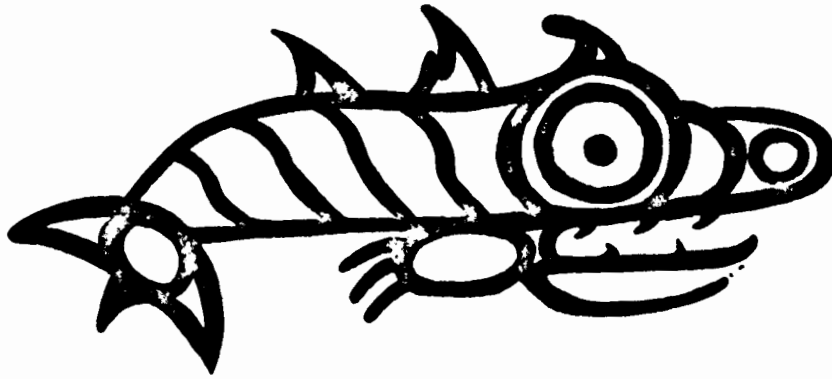


c

Figure 20

Figure 20 continued

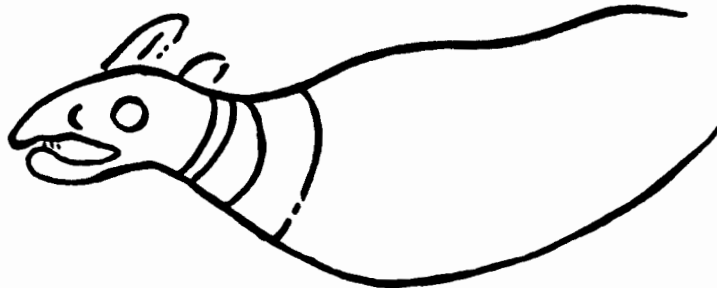
Sea Monster Designs. Design d is a sea grizzly as illustrated by Keithahn (1940:131). The carving is located at Wrangell (T1 54). No dimensions are given. Design e is identified as a carving of "Ia'kin" and is from Fort Rupert (K 149) as illustrated by Smith (1923:86-7). No dimensions are given. Design f is located at Aldridge Point (CS 148) and is drawn from a photograph (NMC:58822). The actual carving is at least six feet long.



d



e



f

Figure 20 continued

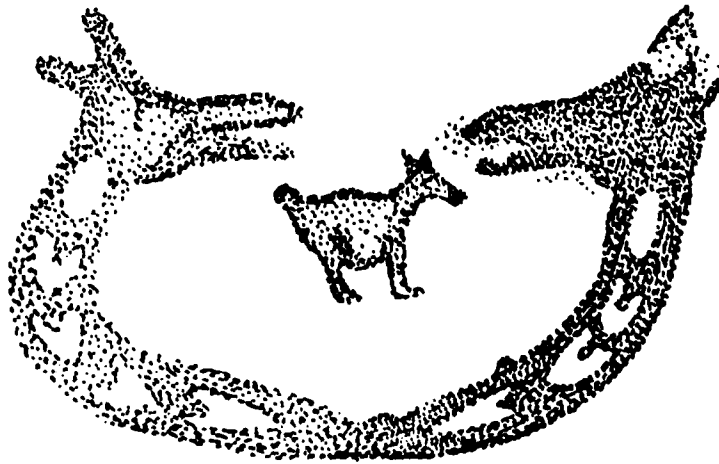
Nothing is known regarding the history of the site, and the design is quite distinct. Finally, the carving at Aldridge Point (CS 148) is reported in a local myth to have been a representation of a sea monster that terrorized the Beecher Bay tribes (BCPM). This design is said to resemble a sea lion or large seal. Figure 20 illustrates several coastal sea monsters.

b) Serpents. The Sisiutl or "double-headed snake" well known in the mythology of the Northwest Coast also appears in its rock art. All of the known sisiutl designs are pictographs and all occur within Coast Salish territory, in the area of Sechelt Peninsula. One at Salmon Arm (CS 76) has a quadruped figure nearly enclosed by the snake's curved body while at another nearby site (CS 80) a similar serpent has almost encircled a human figure in a similar manner. The significance of this association is not known. A third such site shows the sisiutl figure alone (CS 79). A "stick" figure of the sisiutl is found at one other Coast Salish pictograph site (CS 4). One possible sisiutl is found painted in black pigment at Codville Lagoon (K 71) in Kwakiutl territory while undescribed serpent designs are reported at two other pictograph sites, K 129 and N 3. Several geometric designs composed of straight or arcing lines with regularly spaced barbs may have been intended to represent sea serpents. Such designs occur at the following sites: K 174, CS 9, 10, 59, 61, 64, and 71. Figure 21 illustrates a few serpents.

c) Thunderbird. Although there is little to differentiate the thunderbird from other bird designs in coastal rock art, this creature has been either reported or tentatively identified at five different sites. Four of these are pictographs. Association with other specific designs may aid in identifying the thunderbird at three of the five sites, K 23, CS 8 and 97. In each case the bird figure seems to be carrying or directly connected

Figure 21

"Sisiutl" (Double-headed Snake) Designs.
Design a is from Salmon Arm (CS 76) and is drawn from a photograph taken by Mr. L. Peterson (1966). The actual design is six inches high by sixteen inches long and the drawing is not to scale. Design b is from Sechelt Rapids (CS 80) and is drawn from a sketch in the BCPM. The actual design is seventeen inches high by about twenty two inches long. The drawing is not to scale. Design c, also from Sechelt Rapids (CS 79) is drawn from a sketch in the BCPM. No dimensions are given. All of the designs are pictographs.



a



b



c

Figure 21

Figure 22

Thunderbird Designs. Design a is a petroglyph from Eneti (CS 159). It is drawn from a sketch in Newcombe (1907). No dimensions are given. Design b is a pictograph from McPherson Creek (K 23) as drawn from a sketch in the BCPM. No dimensions are given. Design c is a pictograph from Salmon Bay (CS 8). It is drawn from a sketch in the BCPM for which no dimensions are given.



a



b



c

Figure 22

with a fish design. This combination of figures may refer to a coastal myth (see Function Chapter) which involves the thunderbird, whales, and the mythical "lightning snake" (Gjessing 1958:260-1). A single figure of a thunderbird is reported at one other pictograph site (K 166). Finally, Newcombe (1907) identified a circle-face with a sharp beak at Eneti (CS 159) as being that of a thunderbird. Figure 22 illustrates various thunderbird designs.

4. Snake

The only realistic snake design is that carved at Petroglyph Canyon (CH 20) and identified as a rattlesnake by Strong and Schenck (1925:84). Another possible snake occurs at Harewood Plain (CS 128). Figure 23 illustrates the Petroglyph Canyon design.

5. Tracks of Zoomorphs

In 1925 Smith recorded a curious figure at the Noeick River petroglyph site (BC 16) which he felt may have been intended as either a human face topped by long straight hair or a stylized bear paw with the pads and claws emphasized. In all likelihood identification of this figure as a bear track is somewhat unlikely mainly because such designs are not common along the Northwest Coast and because it is unlike those few which are known. Only three such designs have been noted: all at Thorsen Creek (BC 12) and these in turn are all similar in appearance to those bear tracks commonly encountered in Interior Plateau pictographs and more rarely in petroglyphs. Hoofprints of deer and other such animals are found only in the area of the Long Narrows (Ch 22) on the Columbia River. Once again, animal tracks would appear to be an Interior Plateau design intruding into the Northwest Coast culture area at only two locations, the Columbia River and Bella Coola valley. Such designs may have been concerned with marking game trails or




Figure 23

Snake Design. This design, probably of a rattlesnake is from Petroglyph Canyon (Ch 20). It is drawn from a sketch in Strong and Schenck (1925:78) for which no dimensions are given.

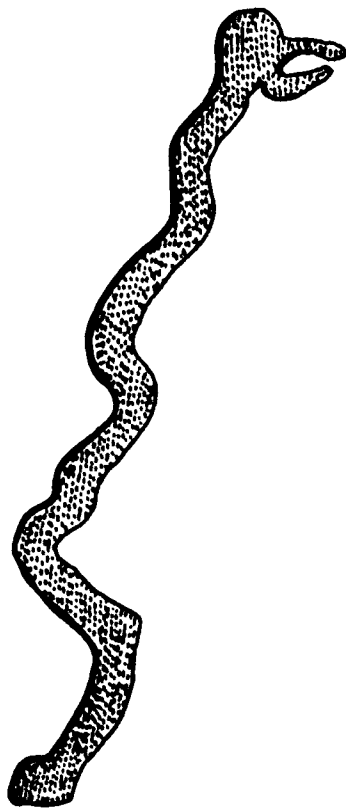
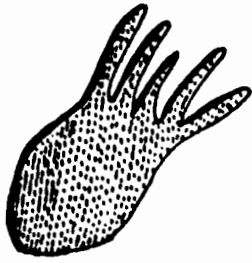


Figure 23

Figure 24

Zoomorphic Track Designs. Design a is from Petroglyph Canyon (Ch 20). It is probably a representation of a bear paw and is drawn from a sketch in Strong and Schenck (1925:78). No dimensions are given. Design b, also a bear paw is from the Noeick River (BC 16). It is drawn from a photograph in the National Museum (No. 58362) for which dimensions are not given. Designs c and d are also bear tracks and are from Thorsen Creek (BC 12). The drawings are made from rubbings in the BCPM to a scale of one inch to one foot. All of the designs are petroglyphs.



a



b



c



d

Figure 24

hunting places as was discovered to be the case in the Great Basin region upon examination by Heizer and Baumhoff (1967). One frequently encountered design is the three pronged "arrow" or "bird track", however as it is not known for certain that bird tracks (or arrows for that matter) were initially intended by this design, it is considered to be geometric. One pictograph at Mereworth Sound (K 128) may have been intended to depict a canine paw mark. Figure 24 illustrates several zoomorph tracks.

6. Turtle

Clear representations of turtles occur only on the Columbia River near the Long Narrows and Petroglyph Canyon (Ch 20, 22). This creature is a popular subject for rock art elsewhere in North America but is not reported elsewhere in the rock art of the Northwest Coast. Figure 25 illustrates one turtle design from Petroglyph Canyon.

7. Woodworm

A woodworm design is identified at the northern site of Chatham (T1 25) by de Laguna (1969:77). This creature often represented as a simple spiral is also noted by Emmons who identifies it at an unspecified southeastern Alaskan site and who comments that it is a popular Tlingit family emblem (1908:230).. It is considered here as a geometric design.

8. Undifferentiated Zoomorphic Designs

Many coastal designs while not detailed enough to classify as a particular animal or species are still fairly obviously intended to represent animal forms. Several of these may, of course, belong in the category of mythical animals. Included in the category of undifferentiated zoomorphic designs are figures at the following sites: T1 25, Ts 24, 35, K 72, 126, 136, 222, and Ch 6, 20, and 22. Circle faces at two sites (CS 163 and Ch 19) are anthropomorphic in general appearance yet have ears set atop the head as in

Figure 25

Turtle Design. This design is from Petroglyph Canyon (Ch 20) and is drawn from a sketch in Strong and Schenck (1925:78). No dimensions are given.

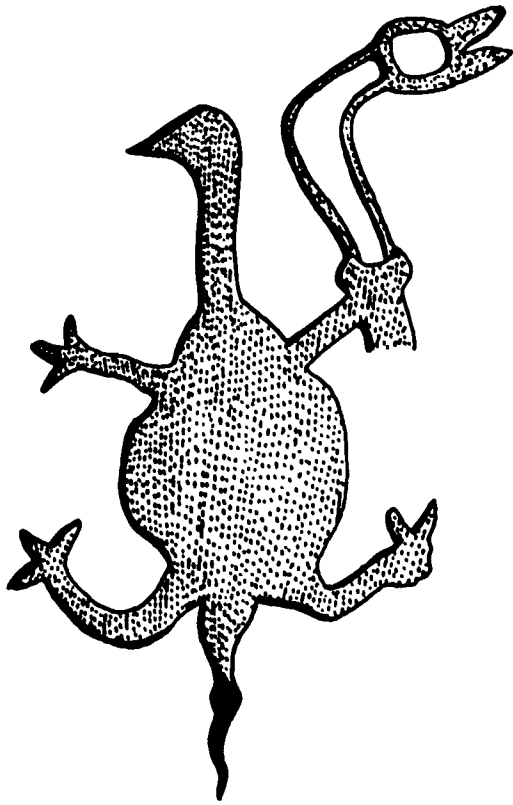


Figure 25

animal depiction. They are noted here but are discussed in greater detail in the anthropomorphic design elements section.

Table 1 shows the distribution of zoomorphic design elements by type and individual representation.

TABLE I
Distribution of Zoomorphic Designs

Table I.
Distribution of Zoomorphic Designs

	petroglyphs	pictographs	combination
A. Quadrupeds			
1. <u>Bear</u>			
Tlingit	1 ✓		
Haida			
Tsimpsian	31 ✓		
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish	44(3)		
Chinook			
2. <u>Bison</u>			
Tlingit			
Haida			
Tsimpsian			
Bella Coola			
Kwakiutl			
Nootka			
Coastal Salish			
Chinook		21	
3. <u>Canine</u>			
Tlingit	37 ✓		
Haida			
Tsimpsian			
Bella Coola	13		
Kwakiutl	149		
Nootka			
Coast Salish	86,126(5),127,133	100	
Chinook	20		
4. <u>Deer and Elk</u>			
Tlingit			
Haida			
Tsimpsian			
Bella Coola			
Kwakiutl	191		
Nootka			
Coastal Salish	35, 126?,146	100?	
Chinook	17,20(+)	16	

5. Horse

	petroglyphs	pictographs	combination
Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		110,117	
Nootka	18		
Chinook	20(+)		

6. Mountain Goat

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish	92		
Chinook	20(+), 22(+)		

7. Mountain Sheep

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish			
Chinook	20(+)	21	

8. Undifferentiated Quadrupeds

Tlingit			
Haida			
Tsimshian	1	✓	
Bella Coola			
Kwakiutl			72,106,109,160
Nootka			
Coast Salish			16,65,73,76,80,82
Chinook			

B. Sea Creatures1. Crustacean

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish	41,126,134		
Chinook			

2a. Flounder

	petroglyphs	pictographs	combination
Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish	125,126(5)		

2b. Salmon

Tlingit	31	✓	
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish	44		
Chinook			125(4)

3. Seal

Tlingit			
Haida			
Tsimshian			
Bella Coola	3		
Kwakiutl			
Nootka	18		
Coast Salish	146		
Chinook			

4. Shark

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		72	
Nootka			
Coast Salish			
Chinook			

5. Whale

Tlingit	31,54,77	✓	15
Haida	5	✓	
Tsimshian	1,24	✓	
Bella Coola			5(+)
Kwakiutl	225		40,57,72(4), 88(3)
Nootka	17,18,19(4),22(3)		97(2),103,140
Coast Salish	35(6),39,123,142(3), 144,148		
Chinook			

6. Undifferentiated Sea Creatures

	petroglyphs	pictographs	combination
Tlingit	60 ✓		
Haida			
Tsimshian	1,19 ✓		
Bella Coola	12		
Kwakiutl	31(5),42,65,149(2), 191,202(2)	77(+),164,215(2), 222(6)	
Nootka	12(5),13,14,22,23,		
Coast Salish	23,33,34,35(7),38, 41(8),127,132(+) 145,146(2),147(2)	14(9),16(7),17(3), 26,27(2),54(5), 65(2),57(4),58,67, 71(6),90,109,141.	
Chinook	22		

C. Birds

1. Blue Jay

Tlingit	54 ✓		
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish			
Chinook			

2. Duck (part of Mythical Anthropomorphic Designs)3. Eagle

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		107	
Nootka	18,22		
Coast Salish			
Chinook			

4. Owl

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl	29	6	
Nootka			
Coast Salish			
Chinook	11, 20,22(2),29.		

5. Puffin

	petroglyphs	pictographs	combination
--	-------------	-------------	-------------

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish	41(3)		
Chinook			

6. Raven

Tlingit	25,34(+),37	✓	
Haida			
Tsimshian			
Bella Coola			
Kwakiutl	69		
Nootka			
Coast Salish			
Chinook			

7. Sandhill Crane

Tlingit			
Haida	*	?	
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish			
Chinook			

8. Undifferentiated Bird Designs

Tlingit	54(+)	✓	
Haida			
Tsimshian	35	✓	
Bella Coola	1,12,13,16		47,72(?)
Kwakiutl	81,226(2)		4
Nootka	18(3), 19(2)		30,46,82,108,109
Coast Salish	126(?),127,(4+)		
Chinook	20		

D. Other Zoomorphic Designs

1. Frog

Tlingit	28	✓
Haida	15	✓
Tsimshian	26	✓
Bella Coola		
Kwakiutl		
Nootka		
Coast Salish		
Chinook	2	

2. Insect

	petroglyph	pictograph	combination
Tlingit			
Haida			
Tsimshian	29 ✓	22	
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish		48?, 49?	
Chinook	20, 22(+)		

3a. Sea Monster

Tlingit	?, 54, 60 ✓
Haida	
Tsimshian	
Bella Coola	
Kwakiutl	149, 227
Nootka	15, 16(9)
Coast Salish	148
Chinook	

3b. Serpents

Tlingit	
Haida	
Tsimshian	
Bella Coola	
Kwakiutl	71, 129, 174(4)
Nootka	3
Coast Salish	4(2), 9(2), 10, 59, 61(2), 64, 71, 76, 80.
Chinook	

3c. Thunderbird

Tlingit	
Haida	
Tsimshian	
Bella Coola	
Kwakiutl	23, 166
Nootka	
Coast Salish	159
Chinook	8, 97

4. Snake

Tlingit	
Haida	
Tsimshian	
Bella Coola	
Kwakiutl	
Nootka	
Coast Salish	128(?)
Chinook	20

5. Tracks of Zoomorphs

	petroglyphs	pictographs	combination
Tlingit			
Haida			
Tsimshian			
Bella Coola	16,12(3)		
Kwakiutl			
Nootka			
Coast Salish			
Chinook	22		

6. Turtles

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish			
Chinook	20,22		

7. Woodworm

Tlingit	25	✓	
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish			
Chinook			

8. Undifferentiated Zoomorphic Designs

Tlingit	25	✓	
Haida			
Tsimshian	24(3),35	✓	
Bella Coola			72,126(2),136,222
Kwakiutl			
Nootka			
Coast Salish	163(+)		
Chinook	6,20(2),21(2)		19?

II. Anthropomorphic Designs

A. Full Anthropomorphic Figures

1. Male Figures

Presence of a phallus, frequently of exaggerated size on otherwise undifferentiated figures serves to indicate a male figure. Sites containing such designs are: BC 2, K 60, 181, N 18, 19, 20, CS 41, 50, 55, 109, 110, 127, and 129. To this list can probably be added the "hermaphrodite" figure (Meade 1971:73) of Harewood Plains (CS 128) whose female breast is in all likelihood only a poorly drawn right hand. Figure 26 illustrates male anthropomorphic figures in coastal rock art.

2. Female figures

The female sex sign would seem to be a bisected circle or oval sometimes placed outside the body outline. A few such designs occur alone and it is questionable if their meaning can still be considered as similar. Because of this uncertainty such isolated bisected circles or ovals are considered as geometric designs (see geometric designs based upon the circle). Breasts are very rarely indicated. Sites with female or probable female figures include: Ts 16, 40, BC 2, K 60, 81, N 18, 19, 20, CS 36, 37, 108 and 129, and Ch 8? Figure 27 illustrates two female figures found in coastal rock art.

Generally speaking, anthropomorphic figures from the southern portions of the Northwest Coast are more likely to indicate sex. These figures tend to be more simple, more realistic and less conventionalized than are those from the northern coast. Most commonly, no sex is indicated in the actual carving or painting although tradition may suggest that a male or female figure was intended, as for example, the "Man Who Fell From Heaven" (Ts 11) or Tsagaglala a woman chief turned to stone along the Columbia River (Ch 19).

Figure 26

Male Anthropomorphic Designs. Design a is a petroglyph from Yellow Island (CS 41) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design b, also a petroglyph is from the D.O.T, Cabin site (N 20) and is also drawn from a rubbing in the BCPM to the same scale. Design c is a pictograph from Littleton Point (K 81) as drawn from a sketch in the BCPM. No dimensions are given.



a



b

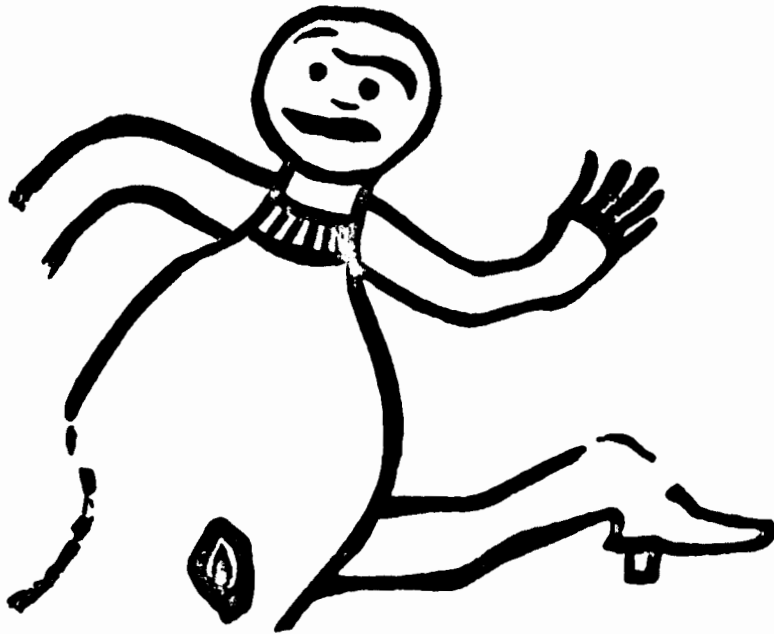


c

Figure 26

Figure 27

Female Anthropomorphic Designs. Design a is a petroglyph from Whaling Station Bay (CS 37) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design b, also a petroglyph is from the Hill Site (N 19) as drawn from a rubbing in the BCPM to the same scale.



a



b

Figure 27

3. Mythical anthropomorphic figures

Mythical anthropomorphic figures are considered to be those which contain unusual or unrealistic features on a basic anthropomorphic form. Most commonly these features take the shape of head decoration such as a crest or a horn or horns or unconventional facial features. In some cases it is not clear if hair or a headdress or mythical appendages are intended. Mythical anthropomorphic figures are found at the following sites: Ts 16, K 72, 111, 173, 192, N 23, CS 100, 103, 108, 109, 110, 126, 127. The most unique mythical beings occur at the Monsell petroglyph site (CS 127) where one suspects that they are intended to represent locally or well known mythical creatures. Figure 28 illustrates several mythical anthropomorphic figures encountered in Northwest Coast rock art.

4. Other anthropomorphic figures

a. Figures within other figures. This design is quite common in the historic art style of the Northwest Coast and occurs on occasion in its rock art. Sites with such design included K 81, CS 127, N 20, and N 21. The meaning of the practise is unknown: it is possible that it served as a decorative space filler, or may have indicated a spirit presence. When a female host figure is involved the inner design may be an indication of pregnancy. Figure 29 illustrates two of these designs.

b. Undifferentiated anthropomorphic figures. The most commonly encountered anthropomorphic figures are undifferentiated as to sex and do not appear to be mythical. Like other anthropomorphs, they share a number of frequently repeated features. For example, they are often carved or painted facing forwards in a "squatting" position with knees and elbows bent. A few are drawn in outline with the lines of the trunk not meeting but continuing to form bent or stretched legs and feet. The feet and to a

Figure 28

Mythical Anthropomorphic Designs. Both designs are from the Monsell petroglyph site (CS 127). They are drawn from rubbings in the BCPM to a scale of one half inch to one foot.

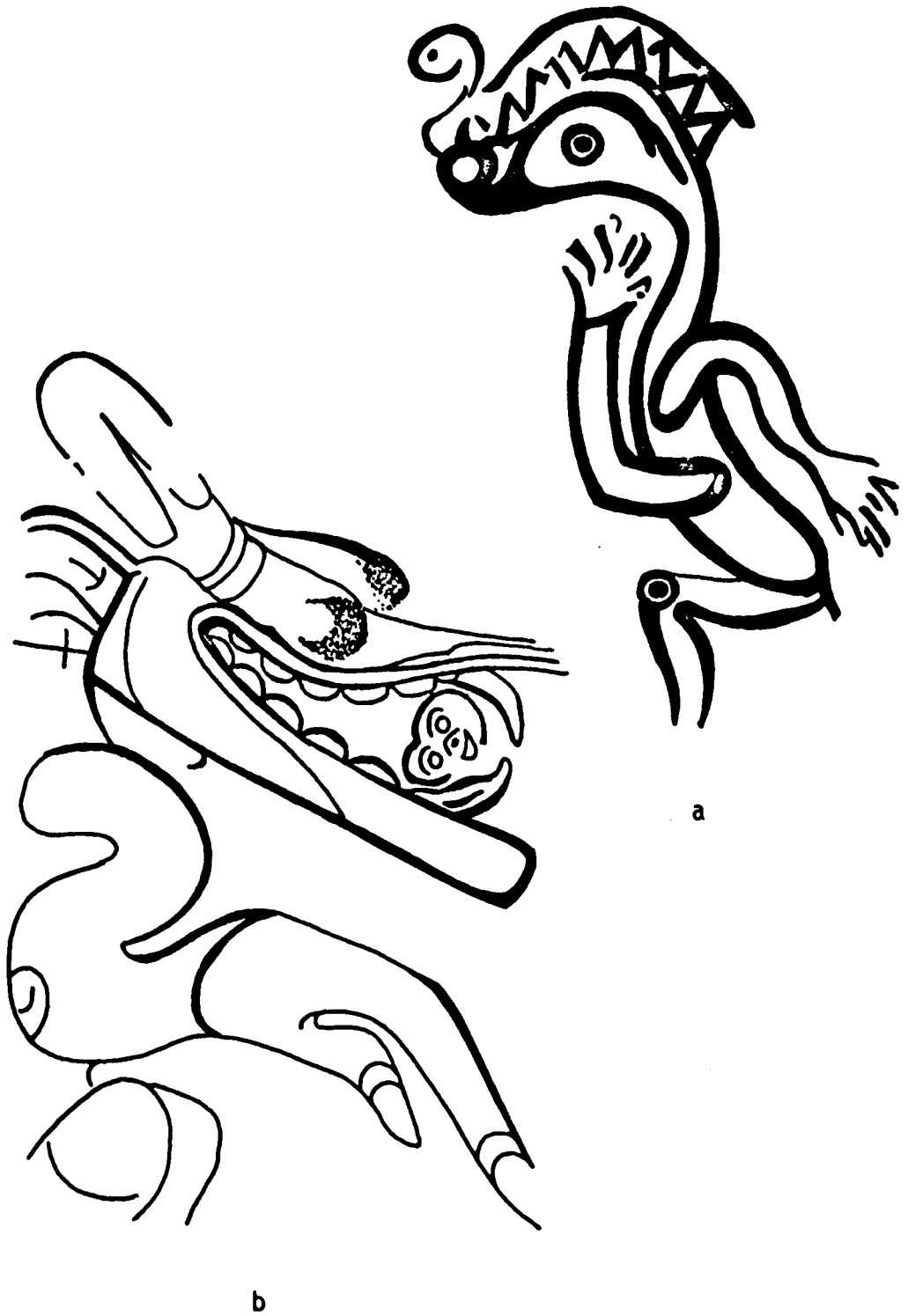


Figure 28

Figure 28 continued

Mythical Anthropomorphic Designs. Designs c and d are both from Pitt Lake (CS 108). The actual designs are approximately one metre tall. Design e is from Port John (K 72) and is approximately forty centimetres tall. Designs f and g are from Pitt Lake (CS 110 and 109). Both designs are about one metre tall. All of the designs shown are pictographs and none are drawn to scale.



c

d



e



f



g

Figure 28 continued

Figure 29

Anthropomorphic Designs Containing Others.

Design a is a petroglyph from Elcho Harbour (K 81) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design b, also a petroglyph is from the D.O.T. Cabin site (N 20) and is also drawn from a rubbing to the same scale.



Figure 29

lesser extent the hands, are de-emphasized. Feet may be three simple lines much like a bird track or may be quite realistically drawn. Hands may have two to five digits and may be attached to head lines if the body is not shown. (figure 30i-1) Body outlines are either circles or ovals or may be "stick" figures as are commonly encountered in the rock art of the Interior Plateau, or maybe represented only by hand or arm lines (figure 30, i-1). In both carvings and to a lesser extent, paintings the skeletal structure of the trunk is often emphasized. Ribs and backbone are usually present. Some pictographs of human-like figures are solidly painted, showing no detail inner or otherwise. Figures in canoes are usually shown as simple lines with round heads. In a few cases items of clothing or personal ornaments such as earrings may be depicted or the figure is shown holding on to something. Both ribs and clothing are shown together on one figure from Jump-Across-Creek (BC 2). The twin or "brothers" design common to rock art of the Middle Columbia river and other Interior Plateau regions does not occur along the coast. Similarly there are few scenes of activities where several figures were obviously intended to be part of a dance or other group activity. Generally speaking, each anthropomorphic design seems to stand alone, independent even of nearby figures. There are a few exceptions such as sites with carving or paintings of men in canoes, in particular CS 109 where two such figures are clearly shown and CS 80 a painting of an anthropomorphic figure nearly encircled by a sisiutl. Other sites where the anthropomorphic figures seem to belong with other such designs are K 60, 72, N 19 and CS 108. In all, sites containing undifferentiated anthropomorphic figures include: T1 6, 50, 72, Ts 5, 7, 8, 10, 11, 15, 16, 24, 28, 35, 36, 40, 41, BC 2, 12, 14, K 5, 16, 24, 31, 42, 47, 60, 69, 72, 75, 81, 88, 98, 109, 110, 111, 112, 117, 119, 123,

138, 157, 159, 163, 164, 165, 174, 177, 181, 191, 207, 224, 226,
N 2, 7, 18, 20, 21, 23, CS 4, 5, 16, 17, 29, 34, 35, 38, 39, 41, 44,
50, 54, 55, 67, 68, 75, 77, 78, 80, 82, 90, 95, 99, 100, 102, 108,
109, 110, 111, 113, 115, 124, 126, 127, 128, 129, 130, 131, 134, 141,
Ch 1, 8, 17, 20, 22, and 23. Figure 30 illustrates several undiffer-
entiated anthropomorphic figures in Northwest Coast rock art.

Figure 30
Undifferentiated Anthropomorphic Designs.
Design a is from Elcho Harbour (K 81) and
b is from Ringbolt Island (Ts 24). Design
c is from the Monsell site (CS 127) and d
is from Jump-Across-Creek (BC 2). All are
drawn from rubbings in the BCPM to a scale
of one inch to one foot.



a



b



c



d

Figure 30

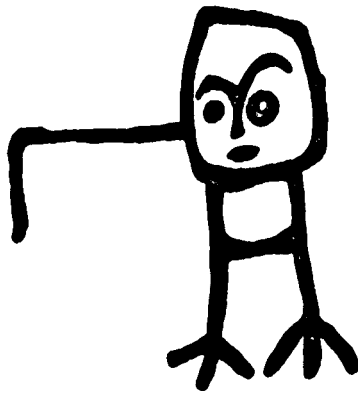
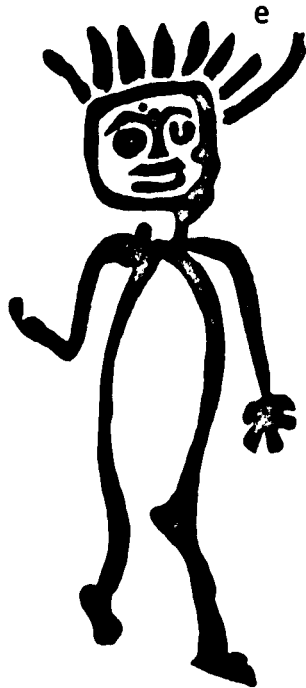
Figure 30 continued

Undifferentiated Anthropomorphic Designs.

Design e contains figures from Port John (K 72). The group is approximately one hundred centimeters in length. Design f another pictograph, is from Pitt Lake (CS 109) and is about one meter in height.

Design g is a carving from Blowhole Beach (N 18) as drawn from a rubbing in the BCPM to a scale of one half inch to one foot.

Design h is another carving, this from Yellow Island (CS 41) as drawn from a rubbing in the BCPM to a scale of one inch to one foot.



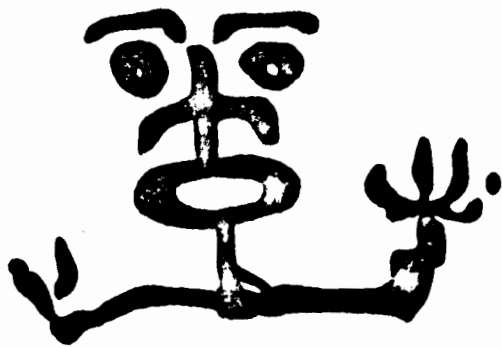
g

h

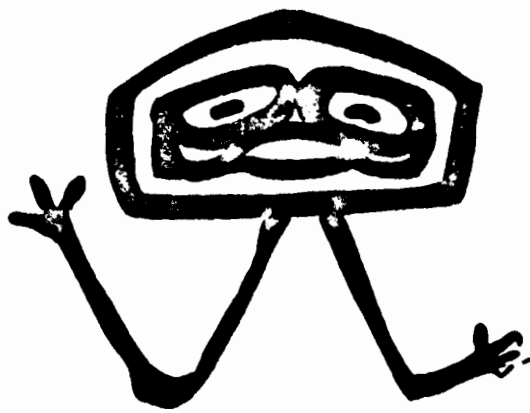
Figure 30 continued

Figure 30 continued

Undifferentiated Anthropomorphic Designs. Design i is a petroglyph from Jump-Across Creek (BC 2). The original carving is about thirty centimeters high. Design j is a petroglyph from North Return Channel (K 42) and is about thirty two centimeters high. Design k is a petroglyph from West Carolina Island (Ts 8) and the actual design is about fifty centimeters high. Design l is a pictograph from Pitt Lake (CS 110). The actual painting is about fifty centimeters high. None of the drawings are to scale and all are examples of anthropomorphic figures whose arms are attached directly to the head.



i



j



k



l

Figure 30 continued

B. Portions of Anthropomorphic Figures

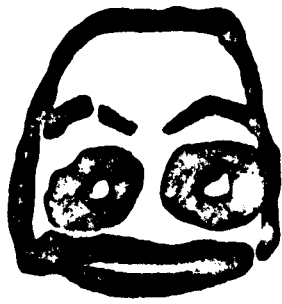
1. Heads

The most commonly isolated portion of an anthropomorphic figure is the head or face.

a. Circle face. Perhaps the most frequently encountered design in coastal rock art is the anthropomorphic face which is composed of pits, circles or ovals. This design is characterized by prominent circular or oval eyes above a wide mouth and is often enclosed within a circular facial outline. Noses, ears, teeth, hair (?), and eyebrows are at times depicted but most commonly they are not. When eyebrows are added they are usually emphasized and often appear to meet above the bridge of the nose, continuing down the center of the face to form the actual nose line. The large eyes, which are always present may be shown as single circles or ovals, often about central dots, or they be double or even triple. A common variation involves mismatched eyes where the number of circles used for each eye in a single face is not the same. One Nootkan site (N 22) contains two circle faces with small triangles carved from the sides of the eye lines thus giving the faces at this site a "weeping" eye appearance. This is the only occurrence of this motif known along the coast. The ubiquitous circle face design with its several variations occurs along the length of the Northwest Coast, being more common in carvings than paintings. The most northerly pictograph with this design is one Bella Coola site (14). In the northern areas, the eyes are more frequently of rectangular or even square shape while still being curvilinear. Thus some of these circle faces appear to be more closely related to the historic art styles of the Northwest Coast than do those with true circular eye forms. Along the Columbia River the facial outline is at times more heart-shaped than circular

Figure 31

Circle Face Designs. Design a is from the Stikine River (T1 50) and is drawn from a photograph in the BCPM. No dimensions are given. Designs b through e are all from Wrangell (T1 54) as illustrated by Keithahn (1940:126). No dimensions are given. Design f is from Metlakatla (Ts 7) and design g is from Kitkiata (Ts 35). Design f is about ten centimeters wide while g is about twenty five centimeters wide. Design h is from the Noeick River (BC 16) and is drawn from a photograph (NMC: 58362). Designs i, j and k are all from Thorsen Creek (BC 12) and were drawn from rubbings in the BCPM. All of the designs shown are petroglyphs and none are drswn to scale.



a



b



c



d



e



f



g



h



i



j

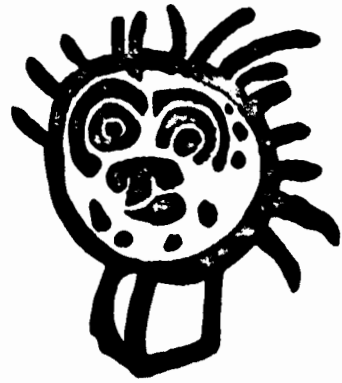


k

Figure 31

Figure 31 continued

Circle Face Designs. Designs l, m, and n are all petroglyphs from Fort Rupert (K 149). They are drawn from rubbings in the BCPM to a scale of two inches to one foot. Design o is also a petroglyph, but from Cape Mudge (K 226). It is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design p is a pictograph from Indian Arm (CS 94). The actual painting is about ten centimeters high. Designs q and r are from Wedding Rocks (N 22) as illustrated by Stallard (1958:47). No dimensions are given. Design s is a petroglyph from Holden Lake (CS 131) and is drawn from a rubbing in the BCPM to a scale of one and one half inches to one foot. Design t is a painted petroglyph from Spedis (Ch 19) as drawn from a photograph by Strong (1959). No dimensions are given.



l,m,n



o



q

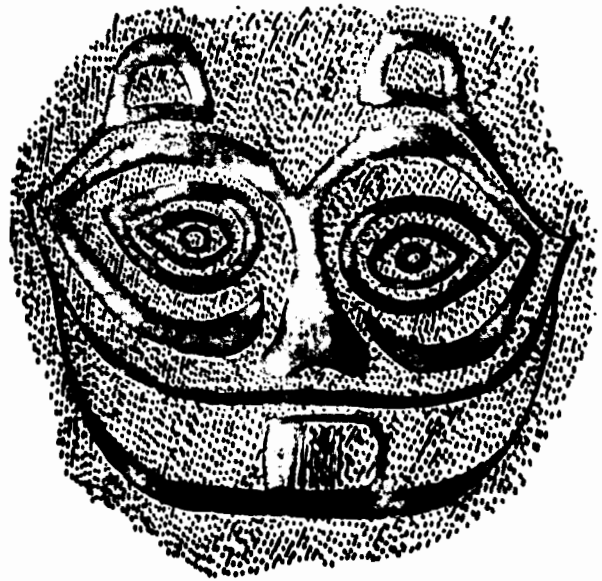


p



s

r



t

Figure 31 continued

and much use is made of concentric circles. The circle face is the major design (along with pits and eyes) in the Venn Passage area near Prince Rupert and throughout Puget Sound. No one meaning is known for the design: it is seen to represent animals and people, both real and mythical, as well as spirit beings. It should be noted that besides occurring as a design on its own, these faces are also found with full anthropomorphic figures. In addition, many of the sites for which clear descriptions are lacking may also contain the design. It is perhaps the one design which can be said to typify Northwest Coast rock art. Figure 31 illustrates several types of circle faces. Sites which contain the design include: T1 1, 6, 14, 50, 54, 67, H 2, 3, 6, 9, 21, 22, Ts 1, 2, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 24, 33, 35, 37, 40, BC 1, 2, 11, 12, 13, 14, 16, K 23, 31, 42, 45, 46, 51, 55, 58, 60, 65, 69, 72, 75, 76, 81, 86, 91, 146, 147, 149, 169, 171, 176, 181, 186, 191, 192, 198, 199, 202, 203, 204, 205, 220, 225, 226, 227, N 10, 18, 19, 20, 22, 24, CS 2, 5, 18, 30, 31, 32, 40, 41, 94, 119, 120, 127, 131, 134, 135, 138, 139, 140, 147, 149, 152, 154, 156, 157, 159, 161, 162, 163, 164, 165, Vh 2, 12, 19, 20, and 22. There are many similarities with Siberian circle faces of the Amur River area as illustrated by Okladnikov (1971).

b) Other heads or faces. Although both human and animal figures are often depicted in a profile position, the isolated heads or faces are not. There are only a very few instances of profile faces on the Northwest Coast. Animal heads seem to be more commonly in profile than humans, for example the three heads at Englishman's River (CS 44) and the wolf head at Grey Rocks (CS 100). One anthropomorphic profile face occurs at Wrangell (T1 54).

A few researchers have noted that some of the rock art faces may have been intended to portray masks or masked heads. Harlan Smith (1907:326) in

particular commented on similarities between carved faces and specific masks at Yellow Island (CS 41) and Beechey Head Islet (CS 147). Both are considered here to be within the category of circle face.

At two well separated sites there are almost identical faces composed of short, undulating lines which make up the eyes and mouth. These sites (CS 160 and K 183) are quite dissimilar from any others.

Two other sites, (CS 32) and (K 4) are unique in that there appear to be anthropomorphic figures contained within the lines of the circle faces.

Several anthropomorphic faces do not appear to be circle faces and yet do not fit into the special categories mentioned above. A few resemble rock art designs of the Interior Plateau with the addition of short rayed arcs as part of the lines of the face. Sites which contain this motif include K 7, 90, and CS 97. Finally, two other faces TS 20 and K 9 are similar to the historic style of Northwest Coast art.

c) Undifferentiated. The remainder of anthropomorphic heads and faces are those about which information is either lacking or is not clear. Most are described verbally, simply as human faces. The majority of these are probably circle-faces. These sites include the following: T1 18, 31, 35, 51, 60, 87, T1 or H 2, H 1, Ts 3, 21, BC 4, K 50, 54, 70, 77, 84, 89, 95, 100, 148, 150, 196, 216, CS 16, 75, and Ch 3.

2. Other Portions of Anthropomorphic Figures

a) Eyes. Designs involving two adjacent circles (or ovals, or concentric circles) or circles about central dots are interpreted as representing eyes. They are generally speaking the same in appearance to the circle eyes found in circle-faces. Although their actual meanings are generally unknown Keithahn (1943:62) commented that only the eyes were deemed necessary in order to portray "the spirits" on the rocks. This design is mentioned under geometric designs based upon the circle

(Geometric Design Elements). It is well represented all along the coast retaining essentially the same simple form. Again, in the north the circles are inclined to be more rectangular or square at times. It occurs in both pictographs and petroglyphs and is most common in the area of Venn Passage (Tsimpian) near Prince Rupert. In only two known cases is a single eye and eyebrow design treated in a realistic manner. Both sites are pictographs in Kwakiutl territory (K 98 and K 210). Sites along the coast which contain the paired circle or "eyes" design include the following: T1 6, 12, 50, 54, H 21, Ts 1, 2, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 24, 35, 37, 40, BC 1, 11, 12, 14, 16, K 31, 40, 69, 70, 72, 76, 98, 149, 191, 202, 203, 210, 220, 225, 226, N 18, CS 30, 41, 54, 119, 120, 126, 134, 152, 154, 161, 163, and Ch 12. For the most part the eyes design would seem to be an abbreviated form of the circle-face. Several variations of eye designs can be seen in the illustrations of figure 30 and 31.

b) Hands. Hand designs occur only twice along the coast, both at Kwakiutl pictograph sites. One design is solidly painted (K 60) and the other is outlined (K 54). Both designs are fairly realistic with five digits shown on each. (Hands depicted as a part of figures are usually quite rudimentary and may have anywhere from two to five digits).

c) Feet. A human foot design is reported at one site near Bowen Island (CS 19). Realistic feet occur as part of a few petroglyph carvings of the Coast Salish area (for example, CS 124 and 127). Generally, feet, like hands are de-emphasized on anthropomorphic figures.

d) Sex Sign. Designs which may have been intended to represent the female sex occur at at least six coastal sites, three carved and three painted: K 72, 74, 95, N 13, 22, and 23. These designs are all similar in appearance: a partially bisected oval. A design related in appearance if

not in possible meaning is the oval with central dot which occurs at three Pitt Lake pictograph sites: CS 107, 108, and 109. There does not seem to be a corresponding male sex sign which is carved or painted as an isolated design element.

Table 2 shows the distribution of anthropomorphic design elements by site and individual representation.

TABLE II
Distribution of Anthropomorphic Designs

•

Table II.
Distribution of Anthropomorphic Designs

A. Full Anthropomorphic Figures

	petroglyphs	pictographs	combination
1. <u>Male figures</u>			
Tlingit			
Haida			
Tsimshian			
Bella Coola	2		
Kwakiutl		60,181	
Nootka	18,19,20		
Coast Salish	41,127(4),128,129	50,55,109,110	
Chinook			

2. Female figures

Tlingit			
Haida			
Tsimshian	16,40		
Bella Coola	2		
Kwakiutl	81	60	
Nootka	18,19(2),20		
Coast Salish	36,37,126?,129	108?	
Chinook	8?		

3. Mythical Anthropomorphic figures

Tlingit			
Haida			
Tsimshian	16		
Bella Coola			
Kwakiutl	192	72(2),111,173	
Nootka	23		
Coast Salish	126,127(6)	100,103,108(4), 109(2),110(2).	
Chinook			

4a. Figures within other figures

Tlingit		
Haida		
Tsimshian		
Bella Coola		
Kwakiutl	81	
Nootka	20,21	
Coast Salish	127	
Chinook		

4b. Undifferentiated anthropomorphic figures

Tlingit	6,50,72	
Haida		
Tsimshian	5,7,8(3),10,11,15,	36(5)

	petroglyphs	pictographs	combination
Bella Coola Kwakiutl	16(2), 24, 28(3), 35(3) 40, 41(2). 2(5), 12 31(2), 42(2), 69(3), 75, 81, 191, 224(2), 226(2).	14 5, 16, 24, 47, 60, 72(6), 75, 88(2), 109, 110, 111, 112, 117(2), 119(2), 123, 138(+), 157, 159(4), 163, 164, 165, 174, 177, 181, 207	
Nootka Coast Salish	18, 20, 21, 23(2) 34, 35(+), 38, 39, 41(12), 44, 124, 126(4), 127(2), 128, 129, 130, 131, 134(2),	2, 7 4, 16(2), 17(4), 30(7), 50(2), 54, 55, 67, 68(3), 75, 77, 78, 80(2), 82, 90, 95, 99(3), 100(5), 102, 108, 109(4), 110, 111(2), 113, 141(2). 23(+)	115
Chinook	1(3), 8?, 17(+), 20 22(+)		

B. Portions of Anthropomorphic Figures

1a. Circle-faces

Tlingit	1, 6, 14(+), 50(+), 54(+), 67(3)		
Haida	2, 3, 6(2), 9?, 21, 22(3).		
Tsimshian	1, 2(2), 5(5+), 6(4+), 7(7), 8(2+), 14(3+), 15(4+), 16(3+), 17(2+), 24(5+), 33, 35(14+), 37(7), 40(4).		
Bella Coola	1, 2(3), 11(2), 12(15), 13(2), 16(2).	14	
Kawkiutl	31(7+), 42(3+), 65, 69, 75, 76(2), 81(3), 147(2) 149(13), 169, 191(6), 192(2), 202(8), 203(2), 220(4), 225(3), 226(11) 227(2).	23, 45, 46, 51, 55, 58, 60, 72(3), 86, 91, 146, 171, 176, 181(2), 186, 198, 199, 204, 205,	
Nootka	10, 18, 19(2), 20, 22(2), 24(2).		
Coast Salish	29(2), 31, 32, 40, 41(8+), 119(2), 120(2), 127, 131, 134(7), 135 138, 139, 140, 147, 149(2), 152(+), 154(+), 156(4), 157, 159, 161(7+), 162(+), 163(4+), 164, 165. 2(2), 12, 20, 22(3+).	2, 5(2), 18, 94,	19
Chinook			

1b. Other heads and faces

	petroglyphs	pictographs	combination
Tlingit	54		
Haida			
Tsimshian		20	
Bella Coola			
Kwakiutl		7,9,90,183	
Nootka			
Coastal Salish	44(3),160	97,100	
Chinook			

1c. Undifferentiated heads and faces

Tlingit	18,31(+),35,51, 60(+),87		
Haida	1(+)		
Tsimshian		3,21(2)	
Bella Coola		4(+)	
Kwakiutl	70,148(4),196	50,54,77,84,89 95,100,150,216(+)	
Nootka			
Coastal Salish		16,75	
Chinook	3		

2a. Eyes

Tlingit	6,50,54(2+)		
Haida	21		
Tsimshian	1,2,5,6,7,8,9,10 11,14,15,16,17,24, 35(2+),37,40(3+).		✓
Bella Coola	1,11(2),12(2+),16,	14	
Kwakiutl	31(3),69,70,76, 149(4+),191(2),202(2), 203,220,225,226.	40(2),72,98,210,	
Nootka	18		
Coastal Salish	30,41,119,216(2), 134(2),152(154),161(5+)	54	
Chinook	12		

2b. Hands

Tlingit			
Haida			✓
Tsimshian			
Bella Coola			
Kwakiutl		54,60	
Nootka			
Coastal Salish			
Chinook			

2c. Feet

	petroglyphs	pictographs	combination
Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coastal Salish	19?		
Chinook			

2d. Sex sign

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		72,74(6),95	
Nootka	13(6),22,23(2+)		
Coastal Salish		107?,108?,109?	
Chinook			

III. Geometric Designs

Geometric designs can be divided into three major categories; those based upon the straight line (rectilinear), those based upon the curved or circular line (curvilinear), and those others, which are set aside as they indicate objects or ideas of European introduction (others).

A. Rectilinear

1. Forked lines

Designs reminiscent of the modern sign for an arrowhead or an indicator of direction are grouped together even though there are some possible differences in both form and function. These designs, are with one exception encountered only in Kwakiutl and Coast Salish pictographs. The sites include the following: K 3, 27, 159, 172, 182, 189, CS 5, 8, 16, 48, 57, 73, 81, 141, with Ch 22 a petroglyph being the lone exception. Although no meaning is known for this design in a coastal context, it is given a variety of interpretations in the British Columbia Interior Plateau where it is a commonly encountered rock art design. ⁽¹⁾ Morice considers one form of this design to be "the emblem of the otter" (1893:206-7, figure 196a) and his example from the pictographs of the Western Dene is quite similar to one coastal figure at Salmon Bay (CS 8) on Toba Inlet (see figure 32a). Similar designs have been recorded by McMurdo (1972) along Takla Lake in the northern British Columbia interior. Teit, researching the Interior Plateau to the south of Morice's area interprets a similar design in the pictographs of the Thompson River area to mean a fir branch or fir branches, ⁽²⁾ the needles of which have been plucked off. This branch, he notes, is used as an offering by girls undergoing puberty training. The girls pluck the needles one by one that their fingers may become nimble and that they may not grow tired by the work that will be part of their lives, (1900: 228-9, figures 3, 9, 24, etc.). Morice also interprets another design as

Figure 32

"Arrow-like" Designs. Design a is from Salmon Bay (CS 8) and is drawn from a sketch in the BCPM files. No dimensions are given. Design b is from Ruby Creek (CS 57) and is also drawn from a sketch of unknown proportions in the BCPM. Design c is from Ruby Creek (CS 59). Its dimensions are unknown. All of the designs are pictographs.



a



b



c

Figure 32

representing any kind of fish (1893:206-7, figure 196b) and a similar design is to be found at Ruby Creek (CS 57) on Jervis Inlet, where it is painted alongside several more realistic fish figures. Another similar design occurs at Walsh Cove (CS 16) on Redonda Island, only this is painted with an open "mouth" like some of the possible serpent representations of the Coast Salish area. Another design of the Western Dene in the northern Interior Plateau is interpreted as a conventionalized beaver (1893:206-7, figure 194c). A quite similar design occurs at Ruby Creek (CS 59). Teit considers such a design, among the Thompson people, to represent either a poorly drawn fir branch (with central, basal line missing) or a trench with fir branch at either end. He comments that girls used to dig trenches in order to attain skill and endurance in digging roots and doing hard work of all kinds (1900:228-9, figure 10). Figure 32 illustrates various "arrow-like" designs to be found on the Northwest Coast.

b) Two-forked line. This design has no counterpart in the rock art of the Interior Plateau. It is to be found only along the coast, in Kwakiutl and Coast Salish pictographs and one Coast Salish petroglyph. It is a simple, straight line with a fork at one end and its meaning is unknown although its frequent association with fish and serpent figures suggests that it may be a simplified form of these. It is related, formwise, to the rayed arc, discussed below. Sites which contain this design include; K 17, 23, 159, 174, 222, CS 16, 54, 59, 60, 61, 71, 90, 141, and 41 (petroglyph). Figure 33 illustrates this design and its possible relationship to fish and serpent figures.

c) Three-forked line. This design is known only in pictographs of the Kwakiutl and Coast Salish. It occurs at the following sites: K 3, 14, 72, CS 6, 17, 71, 76, 105, 108. It is a common design and on the coast is

Figure 33

Two Forked Line Designs. Group a is from Miller Point (K 134) and design b is from Walsh Cove (CS 16). Design c is located at Ruby Creek (CS 61). All are pictographs, drawn from sketches in the BCPM for which no dimensions are given.

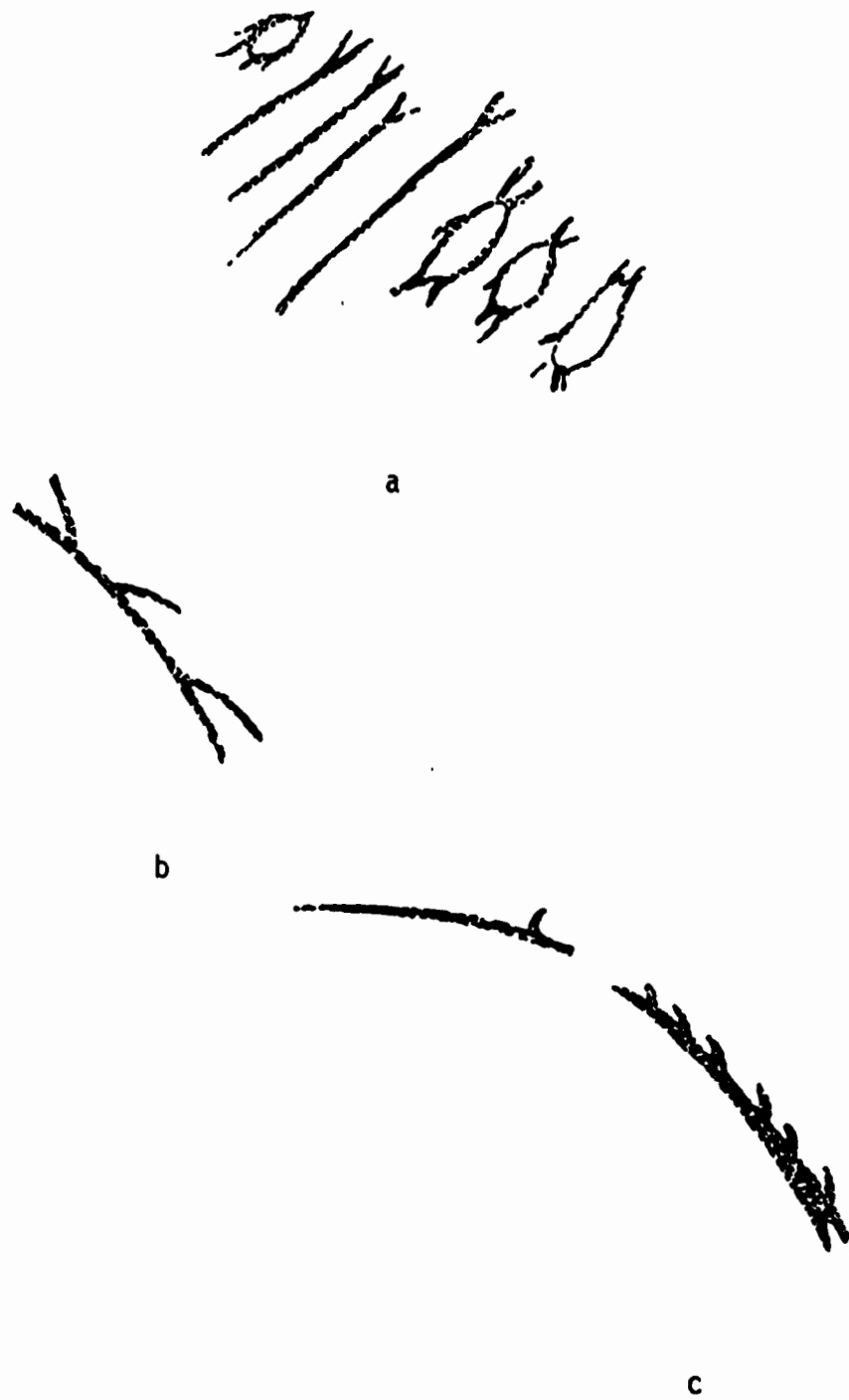


Figure 33

Figure 34

The Three Forked Line. This design is from Pitt Lake (CS 105). The actual painting is about thirty centimeters high and the drawing is not to scale.

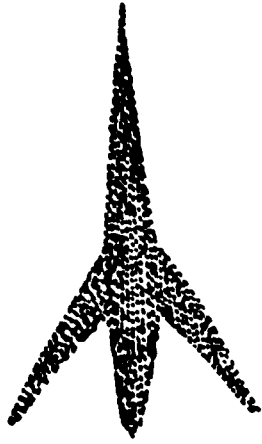


Figure 34

frequently encountered as a means of denoting hands and feet on humans (as well as some animal and mythical creatures). (Only rarely, in human depictions are five digits shown, perhaps because most rock art is not life-sized but much smaller and there is not enough space to paint or carve each digit separately, especially where the lines of the figure involve paint applied with the fingers, or the making of deep, wide grooves.) It seems that three lines are sufficient to indicate that hands and feet are present. Although no meaning for the three-forked line is known on the coast, there are various interpretations for it in neighbouring areas. Frederica de Laguna encountered it at Tuxnedi Bay, Cook Inlet, well to the north of the Northwest Coast and she comments that the design "suggests the conventionalized symbol used by the Eskimo of Bering Strait to represent the raven" (1934:151, plate 62b). Morice (1893:206-7) notes the three-forked line to be a bird symbol in pictographs and tattoo designs of the Western Dene while Teit considers it to represent fir branches as mentioned above (1900:228-9, figure 4). Cain (1950:56-7) also lists this design as one commonly encountered along the Middle Columbia River. Figure 33 illustrates this design.

2. Crosses

a) Religious symbol. Only one cross of the type associated with religious organizations is known in coastal rock art. This is a recent fake carved at McKenzie Sound.

b) Cross composed of obliquely crossed lines. Crosses in rock art of the coast seem confined to a few Kwakiutl and Coast Salish pictographs including the following sites; K 95, 145, 172, CS 13, 14, 16, 17, 19, 20, 60, and 71. Teit (1896:228-9) identifies the cross design in southern interior rock paintings as meaning "a crossing of trails". He comments that

"at such places girls used to bury part of the food they were given after having fasted four days at the beginning of purification". No interpretation is known for such designs along the coast.

3. Grid-like designs

a) Cross-hatch. This design has been located at only one coastal site (CS 97) although it is reported to occur at another (T1 2). It is somewhat similar in appearance to one design of the southern British Columbia Interior Plateau which Teit (1900:378) interprets as a symbol for matting. Figure 35c illustrates the cross-hatch design.

b) Ladder. Ladder-like designs occur at only two coastal sites, CS 54 and 71. Their meaning is unknown and the term "ladder" is of course only given on the basis of appearance due to the similarity between the design and modern ladders. It is not intended to convey function. Morice makes no mention of such designs as occurring in the pictographs of the northern Interior Plateau and Corner lists them as an absent design element in the southern regions (1968:126, 128). However they appear in the rock art of Washington and Oregon. Frederica de Laguna notes its occurrence on Cook Inlet in Eskimo territory where she comments that it is a well-known Eskimo design (1934:151, plate 62a). Figure 35a,b illustrates ladders.

4. Rayed Line

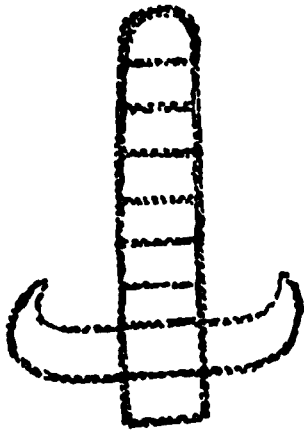
The short line with upright "rays" at right angles to it is a common design and appears to be related to the rayed arc or so-called "sunburst" symbol. It is discussed below.

5. Squares, Rectangles and Coppers

a) Squares. This design is known mainly from Kwakiutl and Coast Salish pictographs including the following sites; K 3, 4, 82, 120(2), 152, 181, 209, CS 102, 163. In several instance the square encloses a central circle or other form of decoration and it may be that many if not all of

Figure 35

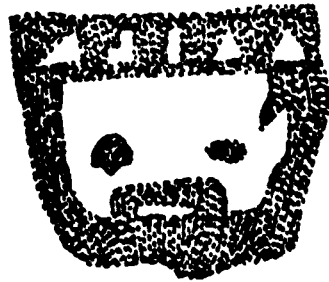
Ladder and Cross Hatch Designs. Designs a and b are from Sakinaw Lake (CS 71) and are redrawn from sketches in the BCPM. a is given as being sixty two inches in length while b is about thirty six inches. Design c is from Indian Arm (CS 97) and includes the face which is in close association with the cross hatch. The cross hatch is about fourteen centimeters high. All of the designs shown are pictographs.



a



b

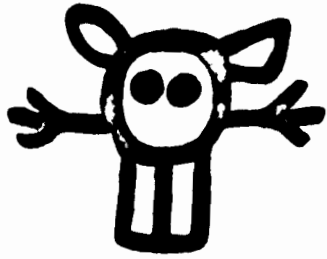


c

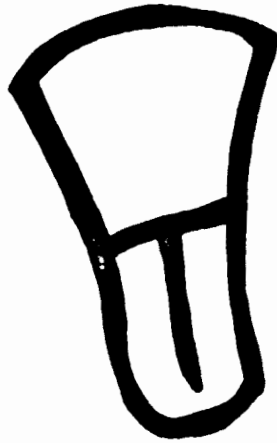
Figure 35

Figure 36

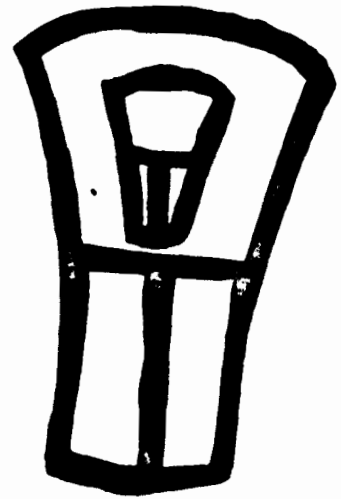
Copper Designs. Design a is a petroglyph from Port Neville (K 192) and is an example of an anthropomorphic copper. It is drawn from a slide in the BCPM for which no dimensions are given. Designs b and c are from Beaumont Island (K 65). They are drawn from rubbings in the BCPM to a scale of one inch to one foot. Design d is a pictograph from Port John (K 72). It is not to scale. Designs e through i are pictographs from Petley Point (K 160) as drawn from a sketch in the BCPM for which dimensions are not given.



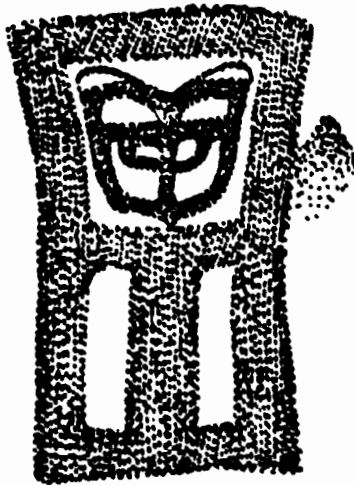
a



b



c



d



e



f



g



h



i

Figure 36

these squares were intended to represent coppers or portions of coppers.

b) Rectangles. Rectangular designs are assumed to be representative of coppers, less distinctly drawn. They are therefore included below.

c) Coppers. The copper, a wealth and status indicator made of a sheet of flattened copper is unique to the Northwest Coast and is a common design in the rock paintings and carvings of this culture area. The shape of copper designs is basically rectangular although there is great variety in decorative detail. A few have portions missing while others have anthropomorphic limbs or features. Some are merely outlines, while others are quite detailed. Coppers occur singly, in small groups, or in great numbers. (One Kwakiutl site, K 121, has a total of 28 painted coppers in all). The copper design is one of the most common designs of the Kwakiutl area and such representations become fewer in numbers and cruder in appearance toward the southern coast. They are rare in Coast Salish territory, non-existent in the rock art of Puget Sound and along the Columbia River and thus would appear to reflect the actual distribution of coppers, serving to emphasize the inherent relationship between rock art subject matter and other facets of Northwest Coast culture. Coppers are one design to be found only in the rock art of the coast where they functioned as records of status and wealth (Ts 20, k 207), records of warfare (BC 14), records of agreements reached (T1 25) and as memorials to the dead (K 184, 195). They may also have marked burial places (K 208) or ceremonial places (K 121). Sites with copper designs include the following: T1 25, 77, Ts 3, 20, 22, 39, BC 8, 9, 14, K 1, 5, 6, 13, 14, 18, 32, 39, 40, 45, 48, 51, 57, 60, 65, 69, 72, 81, 83, 86, 88, 96, 98, 100, 104, 120, 121, 124, 138, 150, 160, 163, 178, 184, 185, 189, 190, 192, 194, 195, 199, 207, 208, 209, 216, 223, N 1, CS 1, 2, 32, 73, 97, Figure 36 illustrates various copper designs to

be found in coastal rock art.

6. Straight Lines

a) Dashes. This design consists of a few or many short, straight lines in rows, all the same length. It too, occurs only in Kwakiutl and Coast Salish pictographs and may be related to lines of dots in similar pictographs or even to pits in petroglyphs. No meaning is known although these could be ways of keeping numerical records? Sites with this design are: K 3, 40, 82, 144, 145, 156, 159, 172, 179, 181, 214, CS 22, 100, 112.

b) Sharpening Marks. These are regular grooves, usually cut into sandstone bedrock, deeper than most petroglyphs. In many cases such marks occur near other carvings. Keithahn (1940:124) notes that Hydaburg Creek (H 3) was such a place and he comments that there are other such "grind-stone creeks". One other is known in Tlingit territory where a rock with many parallel grooves on its edge is located near several concentric circles. A similar site occurs at Beecher Bay southern Vancouver Island. Such marks are not considered to be true petroglyphs.

7. Zigzag

The zigzag is not a common design in coastal art and it occurs only rarely in the rock art. Such lines form part of a design of insects at Kispiox (Ts 29) where they join the faces of opposing creatures. The design occurs again along the Columbia River (Ch 7, and 8). No interpretations are known for this design, although it is suggested that its use as part of a design at one Coast Salish site (CS 8) may have been indicative of lightning.

Although rock art designs based upon the straight line occur all along the Northwest Coast, there appears to be a correlation between certain specific designs of the Kwakiutl and Coast Salish pictographs and other

designs occurring in some Interior Plateau pictographs. This similarity between actual designs, along with a similarity of technique which is also to be found in the two areas (solidly painted small humans and animals) suggests a continuous distribution of some Interior Plateau art (where these designs and techniques predominate) onto the coast within the linguistic boundaries mentioned. Continuous distribution in turn is suggestive of similar function and possibly similar interpretations for the coastal designs.

B. Curvilinear

1. Single circle or oval

This design occurs as both petroglyph and pictograph along most of the Northwest Coast. Although it is usually found alongside other designs it occurs periodically as an isolated design. It is commonly found in pairs, to form eyes or in groups of three or more to form circle faces. No meaning is known for this design although its association with a crescent at one Kwakiutl site (K 23) is suggestive of the full and quarter moons. Sites containing this design include: T1 25, 49, 50, 85, H 6, 15, Ts 1, 2, 24, 35, BC 1, 11, 12, 14, 16, K 4, 16, 17, 23, 159, 176, 178, 189, 193, 209, 215, 219, 220, CS 71, 152, 154, 161, 163, Ch 2 and 14.

2. Connected circles

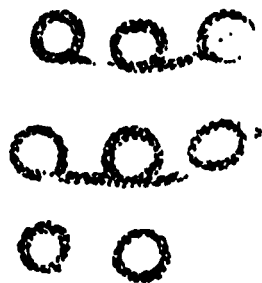
This design involves a series of two or more circles either connected by a line or lines or having outer rims touching. No actual meaning is known for the design on the coast but it is similar in appearance to one interpreted by Teit (1900:378) as meaning two lakes joined by a river. The inner circles (Teit's design involved concentric circles) represented the actual lake. This design was from the Thompson area of the Interior Plateau. At one coastal site bearing the connected circle design (T1 54) two circles about central dots are joined by a line and enclosed by a flattened circle. They may represent eyes. Sites containing this design include: T1 54, BC 1, K 3, 152, 181, 226, CS 21, 54, 101, and Ch 22. Figure 37 illustrates a few of the connected circles designs of the coast.

3. Divided circle or oval

Various designs related to a basic form of a bisected or otherwise divided circle are included in this category. Such designs are almost totally confined to rock paintings of the central and southern coast. At

Figure 37

Connected Circle Designs. The elements of design a are from Indian Arm, (CS 101). The actual painting is about twenty centimeters in length. Design b is a petroglyph from the Dean River (BC 1) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot. Designs c and d are from Patrick Point (CS 54) and are drawn from a sketch in the BCPM. No dimensions are given. All but b are pictographs.



a



b



c

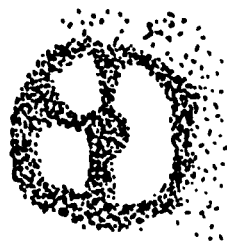


d

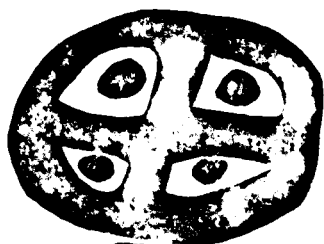
Figure 37

Figure 38

Divided Circle Designs. Design a is a pictograph from Pitt Lake (CS 104). The actual painting is about thirty-seven centimeters in height. Designs b through f are from the Willamette River (Ch 2) and are drawn from a sketch in the Enterprise Courier, Oregon City (1966:30). These are carvings. No dimensions are given.



a



c,d



b



e,f

Figure 38

several sites, partially bisected ovals may have been intended to represent the female sex sign (K 74, 94, N 13, 22) while at another the designs have arm and leg-like appendages added and may have represented conventionalized human figures. At still another site two ovals with crossing lines are reminiscent of simple fish designs. No actual interpretations are known for any of these. Sites that contain the design include the following: K 74, 95, 126, 159, 182, 215, N 13, 22, CS 10, 11, 95, 104, 111, Ch 2.

Figure 38 illustrates a few of these designs.

4. Rayed circle or oval ("star", "sundisc").

There are several forms of this commonly encountered design. It is frequently interpreted as a "sun" symbol because of its similarity to the European concept of a sun sign. However, Emmons (1908:229) does identify three related designs including the rayed circle as sun signs among the Tlingit, as does Teit (1900:378) among the Thompson of the Interior Plateau. In addition, Emmons considers a circle and central dot with four rays all on the same side of the circle as a sign for the human hand or foot. It is similar to a few shown on some human figures. Keithahn (1943:74) called a rayed circle about a hollow center a star sign although he gives no source. Strong, Schenck and Steward (1930:132) call certain rayed circles "sun signs" although in Petroglyph Canyon (Ch 20) a similar sign is tentatively called a star by Strong and Schenck (1928:78). Teit (1900:378) calls crossing oblique lines a star sign. It appears that these interpretations, with the exception of those of Teit are made on the basis of the appearance of the design and not on any recorded native meanings. The design occurs in both carvings and paintings and is well spread along the coast. Included in this category is the "cogged wheel" design of Cain and Steward of which there is only one clear example on the coast, this at

Nicholas Point (CS 177). In a few instances the circle has one ray elongated or otherwise "stemmed". Sites which contain variations of this design include: Tl 22, 54, H 4, Ts 41, BC 12, K 16, 41, 126, 211, CS 16, 21, 41, 50, 90, 121, 127, 156, Ch 11.

5. Concentric circles or ovals

Concentric circle or oval designs may involve two, three or more circles. The use of these circles and ovals either as isolated designs or as parts of more complex figures is wide-spread along the coast. It is, however, more common in rock carvings than in paintings. Emmons interprets the concentric circle design of the Tlingit area as being either a sun or earth symbol (1908:229). Nothing is known regarding the great majority of these designs. In Chinook territory concentric circles are sometimes drawn around a central dot or pit, or the outer circle may be rayed, or rays may even be drawn between two circles thus giving a spoked wheel effect. Sometimes the outline is more diamond shaped than circular (Ch 7) or it may even be closer to a square (Ch 8). Concentric circles are prevalent as designs in the rock art of parts of the U.S.S.R. (Okladnikov 1971), and in other parts of North America including California (Heizer and Clewlow, 1973) and Oregon (Cressman 1937). Sites containing concentric circles or ovals include the following: Tl 10, 11, 25, 31, 34, 50, 60, 61, H 6, 9, 22, Ts 1, 5, 32, BC 1, K 21, 30, 40, 72, 86, 219, N 14 (?), CS 41, 50, 66, 69, 120, 121, Ch 6, 7, 8, 11, 12, 20, 22, and 23.

6. Spiral

The spiral appears to be far more common along the northern coast than anywhere else. It occurs, so far as is known, only in petroglyphs and, in form, would seem to be related to the concentric circles and ovals.

Several interpretations are known for the spiral design. Emmons (1908: 229-230) identifies it as the woodworm, a totemic emblem of one of the principal Tlingit families (the Ganaxadi) although Keithahn comments that it may, at one particular site (H 3) refer to a legendary whirlpool where the Tlingit shaman "Shin-quo-klah" was drowned (1939:22). At Wrangell (Tl 54) several spirals appear to have appendages attached, (Keithahn 1940: 126, figure 4a,b,c.). Emmons (1908:222) calls such spirals "where the sun light comes from". Sites containing this design include the following: Tl 2, 21, 25, 30, 31, 60, H 1, 12, Ts 1, and N 14 (?).

7. Circle or oval with central dot

This design is very common along the length of the coast. It is to be found either alone or in combination with other designs. Most often circles and dots form eyes in circle faces. They may also be combined to form more conventionalized designs. Emmons (1908:224) illustrates one such complex figure in Tlingit territory which makes use of several connected circles, some with central dots, and which he claims is representative of Kun-nook the guardian of fresh water among others. Sites which contain this design include the following: Tl 27, 54 H 22, Ts 1, 5, 7, 15, 24, 37, BC 1, K 31, 76, 81, 202, 220, 226, N 18, CS 57, 107, 108, 112, 113, 120, 163, Ch 2, 11.

8. Semi-circles

Isolated semi-circles (or arcs, or crescents) are known at present from only five coastal sites. These sites are: Tl 20, K 21, 23, 86, CS 67. At two of these site (Tl 20 and K 21) the arc line is directly associated with a dot and at another (K 23) it is associated with a circle and together they may represent the sun and moon? At K 86 it is enclosed in a "D" shaped outline. All of these sites are pictographs. Teit (1900:

378) considers two parallel arcs to be a rainbow sign among the Thompson but there is no corresponding sign as yet known from the coast.

9. Rayed semi-circle ("canoe", "rake", "sunburst")

The rayed arc or semi-circle is a common design along the coast and elsewhere where it is known, variously as the "rake" where the rays spread from a straight line, or a "sunburst" or "rising sun" where they spread from a curved line. It is more commonly known in different parts of the world including the Great Lakes region, the Interior Plateau, and parts of the U.S.S.R. as a simple canoe form. On the Northwest Coast, too, this appears to be the most logical explanation as one can determine how more complex (and more definite) canoe forms developed from the simple rayed arc. The more elaborate canoe forms are included in this category since they appear to be quite closely related to the simple rayed arc canoes. This design is almost entirely confined to the pictographs. As far as is known it occurs in carved form at only one site (BC 2) where it is essentially the same as the painted designs. The rayed semi-circle is commonly seen functioning as part of other designs, such as bird wings, (Ts 35), fish skeletal structure (CS 97), or hair (K 86). Sites containing the rayed semi-circle include T1 7, 35 (both reported as sunburst), BC 2, K 27, 40, 72, 91, 95, 108, CS 7, 14. Sites containing more obvious canoe designs include K 4, 23, 72, 152, 180, 199, 208, CS 53, 71, 97, 108, 109. In addition, canoes are reported but not illustrated at K 77, 92, 131, and 140. At two sites (K 72 and CS 97) the ends of the canoe are joined by an arcing line above the body of the craft thus making a circular outline. The human crewmen are usually indicated by the rays, but often one or more figure is seen in some detail. Corner (1968) lists several canoes of the rayed semi-circle type and they are frequently encountered north of the Northwest Coast culture area. Giddings (1941) reports human figures in

Figure 39

The Rayed Semi-circle and Canoe Design.
Design a is a petroglyph from Jump-Across-Creek (BC 2) and is redrawn from a rubbing in the BCPM. The actual carving is about forty five centimeters in length and the drawing is not to scale. Design b is a pictograph from Pitt Lake (CS 109) and designs c and d are both pictographs from Port John (K 72). Designs e and f are from Namu. Dimensions are not known for the pictographs.

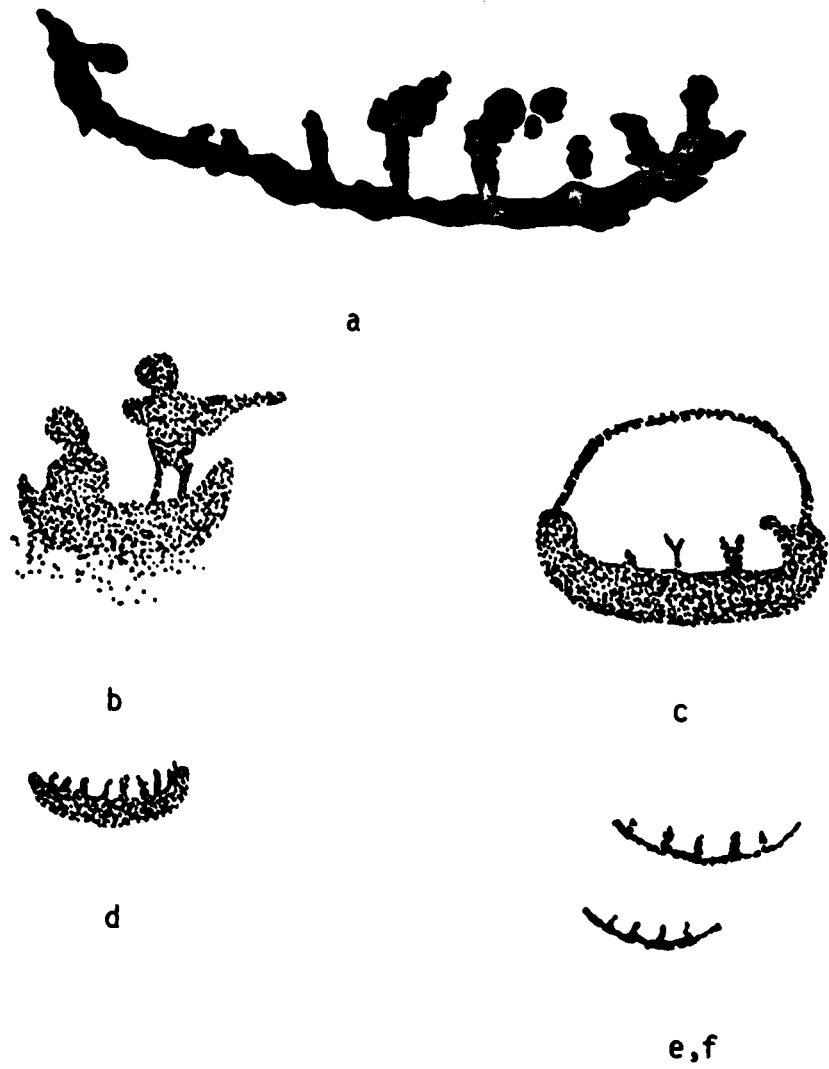
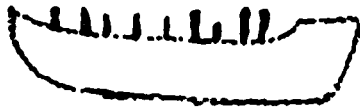


Figure 39

Figure 39 continued

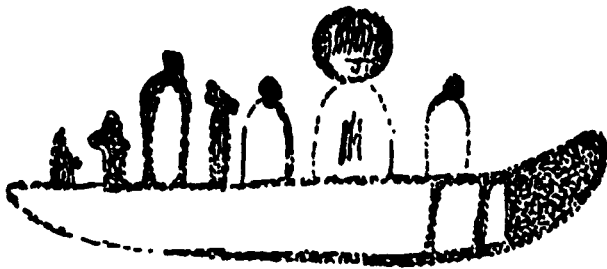
Canoe Designs. Design g is from Picton Point (K 208) and is drawn from a sketch in the BCPM. The actual painting is reported to be four feet long. Designs h, i, and j are all from the Britain River pictograph site (CS 53). The drawing was made from sketches in the BCPM. Design h is reported to be two and one half feet in length while i is about five feet long and j is about three feet in length.



g



h



i



j

Figure 39 continued

such boats which he feels are similar to dugouts. This is at Moose Creek, 19 miles north of Fairbanks Alaska. Similarly, de Laguna (1956:105) reports two boats with paddlers among other designs at Mummy Island in Chugach Eskimo Territory. She also notes a painted "umiak" with five paddlers at Hawkins Island while at Tuxnedi Bay she comments on a boat similar to those found in Carrier pictographs of the northern British Columbia interior. Canoe depictions based on the rayed semi-circle are to be found even farther from the Northwest Coast. They are commonly encountered along the waterways of the Great Lakes where, like the coast, canoes must have been vital to travel and communication. Dewdney and Kidd (1962:90, 99, 111, 125, etc.) illustrate many examples of such designs as does Okladnikov (1971:151, 238, 273), for the U.S.S.R. Included in this category (for convenience) is the "rake" of the interior of Washington and Oregon states; a rayed design based upon a straight rather than curved line. There are only two such "rakes" to be found so far in coastal rock art designs, these from CS 81 and Ts 38. Figure 39 illustrates several rayed semi-circle designs along with several more complex canoe designs.

10. Dots, pits and "mortars"

a) Dots. One of the most common of all pictograph designs is the grouping of round, solidly painted dots. This design clusters in Kwakiutl territory and occurs less frequently in that of the Tsimpian and Coast Salish thus apparently reflecting the known distribution of rock paintings. Although there may be only one or two dots present, numbers of ten, twenty, or even thirty are more common, while at one particular site(K60) a total of 100 individual dots were recorded. Dots may be painted in vertical or horizontal rows and the rows may be single, double, triple or more. Sometimes a line of dots is seen to enclose another design thus giving the

appearance of having framed it. At four Kwakiutl sites (K 13, 23, 47, 60) such lines of dots frame a bird and fish, a profile face, two circle-faces and a copper thus setting these designs apart from others at the same sites. A few sites, notably around Roscoe Inlet and Spiller Channel, dots are the only design present. Dots (along with dashes) are common in rock paintings of the Interior. Corner (1968:126, 128) lists twenty-six sites where they occur. According to Teit (1900:382) dots are the Thompson sign for stars. Cain (1950) records dots along the Middle Columbia River and speculates that they may have been used as a counting device for passing time or as numerical records for animals hunted. He also notes their use as frames for other designs (1950:37). It also appears that some irregular dots at pictograph sites were "test spots" where pigments were checked for suitability before being used to create other designs. Sites containing dots include the following: Ts 21, 38, 42, K 3, 4, 10, 12, 13, 15, 16, 17, 18, 19, 20, 22, 23, 35, 36, 37, 38, 39, 41, 43, 44, 45, 47, 50, 53, 54, 55, 58, 59, 60, 61, 62, 67, 72, 73, 74, 78, 86, 88, 89, 95, 110, 111, 153, 154, 158, 163, 176, 186, 187, 188, 189, 209, 216, CS 5, 6, 10, 22, 46, 51, 73, 76, 97, 100 and 102.

b) Pits. Pitted rocks occur all along the Northwest Coast. They are sometimes found as the only design at a site, but more commonly they are found in association with others, especially the circle-faces. Pits are particularly prevalent in the area of Prince Rupert harbour and the Venn Passage nearby and along the Columbia River between the mouths of the Willamette and Deschutes Rivers. (This southerly distribution does not stop with the Columbia but continues up the Columbia and Fraser Rivers and into Oregon, California and the Great Basin area.) It is possible that the pitted rocks of the Lower Columbia are a northern expansion of the weather

control rocks commonly found in Northern California and reported in parts of Oregon. Heizer (1953:34) discusses in some detail the function of these rocks as weather control devices and comments on the similarity of one pitted boulder at Skamania (Ch 11) to such rocks. However, pitted boulders are a common coastal trait and although weather control as a motive for rock art is encountered along the coast it is encountered only rarely. Keithahn (1940) felt that pits (and grooves) made in rock surfaces by natural means were often embellished by carvers until designs were created around them. He cites the circle faces in particular as deriving from natural depressions. In a few instances, natural hollows and cracks have been utilized in creating carved (and even painted) designs, for example, at sites K 72 and CS 133. Edward Stasack, who, with J. Halley Cox co-authored Hawaiian Petroglyphs (1970) compared several man-made pits at a number of Coast Salish sites (in particular Harewood Plain, CS 128) with similar marks left by the ancestors of present day Hawaiians for the purpose of holding a newborn child's "piko" or umbilical stump (personal communication, 1973). However no such purpose is known for similar coastal pits. It should be noted that Okladnikov too lists pits as common designs and it seems that they are such a basic design that they are found, like most petroglyph designs wherever the rock surfaces were suitable. Pits may be isolated, or in apparently random groupings, or formed into patterns such as lines or faces. Two pits together are seen as a variation on two circles or eyes. Two such pits above a third pit are seen as elements forming a circle face design. In one instance (N 12) a cluster of pits form internal decoration for the body of a zoomorph. One Columbia River site has over 300 individual pits. Circles and other forms based on the circle may all be outgrowths of the simple pit and dot

designs. It is easy to overlook such simple designs in favour of more complex, more easily seen ones and there are likely many more sites than the following which contain pitted rocks: T1 25, 50, 54, H 21, 22, Ts 1, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 24, 28, 35, 37, BC 1, 11, 12, K 31, 149, 219, 220, 225, 226, 227, N 12, 18, CS 120, 121, 127, 128, 152, 154, 161, 163, Ch 2, 5, 7, 11, 12, 14.

c) "Mortars". Large, smoothly finished pits in rock faces are sometimes associated with petroglyph sites. Some of these are several inches across and may have been natural pits that were deepened and widened by human activity. They are commonly called "bedrock mortars" or "ceremonial bowls" although their actual function is unknown. Although there doesn't appear to have been any organic material or pigment traces left in the depressions no detailed analysis has ever been made to refute such suggestions or to suggest others. Sites with such "mortars" present include: Ts 32, K 69, 226, CS 126, 134, Ch 6.

C. Other Geometric Designs

1. Buildings

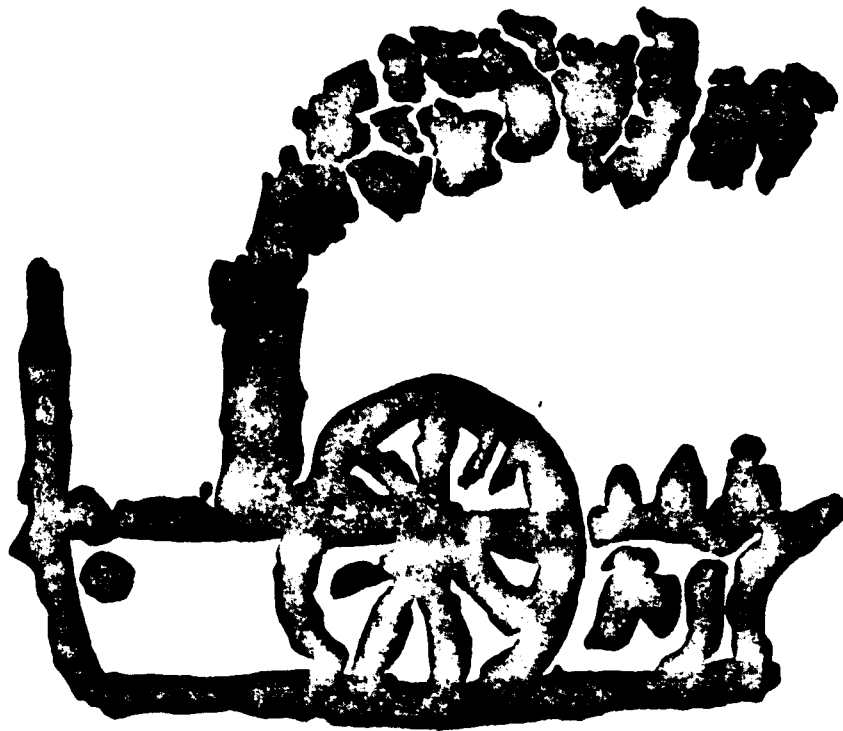
A house structure is carved near a human figure on Hornby Island (CS 38). It is square in shape with a steeply pitched roof and appears to be supported on posts above the ground. In shape it seems closer to modern cabins than to native plank houses.

2. European ships

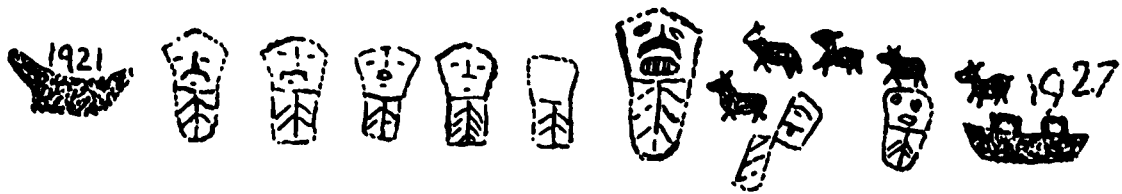
Two types of water craft exist in Northwest Coast rock art designs; the native canoe which is discussed above and the historic, European ship with anchors, mast, sails, paddle wheel or funnels. Such designs are indicative of at least historic age and are to be found in both pictographs and petroglyphs. Gjessing (1952:75) noted that because no carved sailing

Figure 40

European Ship Designs. Design a is a petroglyph from Blowhole Beach (N 18). It is drawn from a rubbing in the BCPM to a scale of two inches to one foot. The figures in design b are from Petley Point (K 161) as illustrated by Gjessing (1952:69). Only a few of the many figures painted at this site are shown here and Gjessings dotted line separating the two pigments is not shown.



a

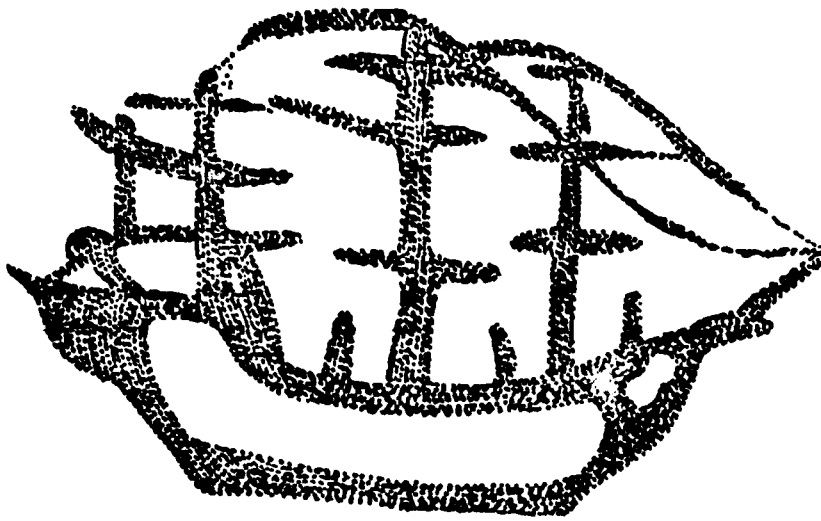


b

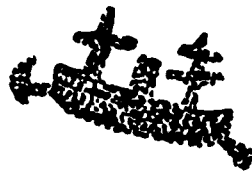
Figure 40

Figure 40 continued

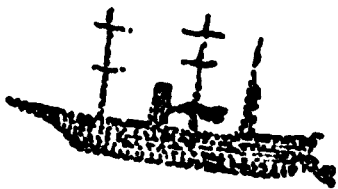
European Ship Designs. Design d is located at Magpie Point (T1 15) as drawn by de Laguna (1960:74, figure 7a). No dimensions are given. Designs e through g are from Nicholas Point (K 177) and are drawn from a sketch in the BCPM. No dimensions are given. Both sites are pictographs.



d



e



f



g

Figure 40 continued

ships were known, then the petroglyphs were probably older than the pictographs on the coast. The recording of several carved and obviously historic ships at sites such as Cape Alava and Blowhole Beach (N 18 and 23) must refute this general statement. The most northerly historic ship is painted at Magpie Point (T1 15) and may have commemorated a shipwreck from which natives gained valuable items. Near Mereworth Sound (K 131) Gjessing reports a number of canoes and a European ship. However the ship may be a larger, more elaborate canoe. A "brig" is reported near Namu (K 91) alongside several native craft and at Petley Point (K 160) two historic ships are drawn as part of what may be the only absolutely dated pictograph on the coast. This painting is done in two colours and contains six coppers, a historic (?) ship with large keel, and the numbers (or date?) 1921 in red pigment and eleven quadrupeds, a historic ship with funnels, 1 copper, a name or word "Sutsuma" and a second number (or date) 1927, in black pigment. It is tempting to assign the name to the black ship and the date (1927) to ship, animals and 1 copper while leaving the second date (1921) to the other ship and coppers. The site implies that rock paintings in native style were being made on the coast as late as the 1920's. The coppers, animals and ships are all quite similar to other such designs found along the coast and black pigment, while rare, is not unknown. At Nicholas Point (K 177) are three ships with masts painted very much like the usual native canoes with small vertical lines to indicate their crews. A small boat with no mast but a large anchor is painted below them. These designs are associated with a "cogged wheel" or rayed circle design and a square-headed human figure in a cart drawn by a long-tailed quadruped (horse?). Once again, despite the historic subject matter, the style of the work is native. Three historic ships reported at Bold Point on Quadra

Island are quite unlike any others known along the coast with regards to both style and technique, and it is believed that they were done quite recently by a local inhabitant. At Philadelphia Point (K 159) there is a painting of a boat with a dug-out shape, several crewmen and a tall mast. At Blowhole Beach (N 18) near Clo-oose there are five historic ships carved into the sandstone bedrock along with many other varied figures. Four of these are sailing ships while the other is a steamer with side paddles and may be a representation of the Beaver of the Hudson's Bay Company. If it is indeed the Beaver, then the carving would date from 1836, when the ship arrived off the west coast of Vancouver Island to anywhere up to around (or later than) 1888 when she was wrecked at Prospect Point near Vancouver. The sailing ships may have been representations of some of the many barques that came to the coast for timber. At Cape Alava (N 23) there is a sailing ship similar to those at Blowhole Beach. At Ruby Creek (CS 58) there is a solidly painted boat with a mast and three crewmen while a similar design has been painted at Booker Point (CS 17). Figure 40 illustrates several historic ships as depicted in coastal rock art.

3. Wagon

A wagon painted in side view is to be found at Nicholas Point (K 177). The driver or occupant is a large-headed human figure and the wagon is drawn by an undifferentiated quadruped, likely a horse. Table 3 shows the distribution of geometric design elements by type of site and individual representation.

TABLE III
Distribution of Geometric Designs

Table III.
Distribution of Geometric Designs

A. Linear

1a. "Arrows"

	petroglyphs	pictographs	combination
Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		3,27,159,172(2), 182,189	
Nootka			
Coastal Salish		5,8(2),16,48?,57, 73,81,141(3)	
Chinook	22		

1b. Two-forked lines

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		17,23,159,174(4), 222	
Nootka			
Coastal Salish	41	16,54(3),59,60, 61(2),71(2),90(2), 141.	
Chinook			

1c. Three-forked lines

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		3,14,72	
Nootka			
Coastal Salish		6,17,71,76,105, 108.	
Chinook			

2a. Religious Symbol. No genuine symbol known

2b. Obliquely crossed lines

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		95,145,172(2)	
Nootka			

	petroglyphs	pictographs	combination
Coastal Salish		13,14(2),16(2), 17,19(5),20(2), 60,71(2).	
Chinook			
3a. <u>Cross-hatch</u>			
Tlingit		2	
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coastal Salish		97	
Chinook			
3b. "Ladder"			
Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coastal Salish		54,71(2)	
Chinook			
4. <u>Rayed line.</u> Included in Rayed semi-circle			
5a. <u>Squares</u>			
Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		3(2),4,82,120(2), 181?,209	
Nootka			
Coastal Salish	163	102(2)	
Chinook			
5b. <u>Rectangles.</u> Included in Coppers			
5c. <u>Coppers</u>			
Tlingit	25,77(+)		
Haida			
Tsimshian		3(15),20(7),22(2),30, 8?,9,14(2)	
Bella Coola		1(2),5(3),6,13(2), 14(4),18,39,40, 45,48,51(3),57,60(2), 72(3),83(+),86,88,96, 98,100,104(7),120(4).	
Kwakiutl	32(5),65(5),69(2), 81(2),192,223		

	petroglyphs	pictographs	combination
		121(28),138,150(4)	
		160(7),178(3),184(7+),	
		185(4+),189(4),190	
		194(2),195(8),199,207(3),	
		208,209,216	
Nootka		1	
Coastal Salish	32	1?,2(2),73,97	
Chinook			

6a. Dashes

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		3(7+),40(5),82(4),	
		144(+),145(2),156(26+),	
		159(58),172(4+),179(24),	
		181(4),214(25+).	
Nootka			
Coastal Salish		22(21),100(14),112(3)	
Chinook			

6b. Sharpening marks

Tlingit	34	
Haida	3	
Tsimshian		
Bella Coola		
Kwakiutl		
Nootka		
Coastal Salish		Beecher Bay(no site in vicinity)
Chinook		

7. Zigzag

Tlingit		
Haida		
Tsimshian	29	
Bella Coola		
Kwakiutl		
Nootka		
Coastal Salish		
Chinook	7(3),8	

B. Curvilinear

1. Single circle or oval

Tlingit	25,50,85	49
Haida	6,15	
Tsimshian	1,2,24,35	
Bella Coola	1,11,12,14,16	
Kwakiutl	193?,219(4),220	4,16,17,23,159

	petroglyphs	pictographs	combination
Nootka		176,178,189,209, 215	
Coastal Salish	152(+),154(+), 161(+),163(+)	71	
Chinook	2(2),14(+)		

2. Connected circles

Tlingit	54		
Haida			
Tsimshian			
Bella Coola	1		
Kwakiutl	226	3,152(3),181	
Nootka			
Coastal Salish		21(3),54(4),101(6)	
Chinook	22(4)		

3. Divided circles

Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		74(5),95(2),126(2), 159(3),182(2),215(2)	
Nootka	13(4),22		
Coastal Salish		10,11,95,104,111(2)	
Chinook	2(5)		

4. Rayed circle or oval

Tlingit	54(3)	22(2)	
Haida		4	
Tsimshian		41	
Bella Coola	12		
Kwakiutl		16,41,126,211	
Nootka			
Coastal Salish	41(3),121,127 156	16,21(2),50,90	
Chinook	11(2)		

5. Concentric circles or ovals

Tlingit	10(+),11(+),25(+),31 34(+),50,60,61		
Haida	6,9,22		
Tsimshian	1,5,32		
Bella Coola	1		
Kwakiutl	31,219(2)	20,40(3),72,86	
Nootka	14		
Coastal Salish	41,120,121(2)	50,66,69	
Chinook	6(2),7,8,11(2), 12(13+),20,22	23	

6. Spiral

	petroglyphs	pictographs	combination
Tlingit	21(+),25,30(+), 60(+)	2	
Haida	1,12		
Tsimshian	1		
Bella Coola			
Kwakiutl			
Nootka	14?		
Coastal Salish			
Chinook			

7. Circle or oval with central dot

Tlingit	37(2),54		
Haida	22		
Tsimshian	1(2),5,7,15 24,37		
Bella Coola	1		
Kwakiutl	31,76,81,202, 220,226		
Nootka	18		
Coastal Salish	120(2),163	57(2),107,108(2),112 113	
Chinook	2(3),11(4)		

8. Semi-circles

Tlingit		20	
Haida			
Tsimshian			
Bella Coola			
Kwakiutl		21,23,86	
Nootka			
Coastal Salish		67(5)	
Chinook			

9. Rayed semi-circles

Tlingit	7(+),35		
Haida			
Tsimshian			
Bella Coola	2(2+)		
Kwakiutl		4,23(2),27,40,72(3) 77,91,95(2),108(3), 131(6),140(3),152,180(5), 199(3),208	
Nootka			
Coastal Salish		7,14(2),53(3),71,97 108,109.	
Chinook			

	petroglyphs	pictographs	combination
Tlingit			
Haida			
Tsimpsian		21(+), 38(+), 42(7)	
Bella Coola			
Kwakiutl		3(2), 4(28), 10(42), 12(10), 13(80), 15(13), 16(11), 17(8), 18(14), 19(8), 20(21), 22(5), 23(63), 35(18), 36(10), 37(11), 38(8), 39(23), 41(2), 43(15), 44(14), 45(60), 47(47), 50(9), 53(4), 54(18), 55(13), 58(20), 59(3), 60(100), 61(+), 62(25), 67(2), 72(8), 73(8), 74(25), 87(25), 86(4), 86(65), 89(9), 95(15), 110(35), 111(4), 153(13), 154(94), 158(65), 163(4), 176(16), 186(38), 187(47), 188(10), 189(5), 209(8), 216(3).	
Nootka			
Coast Salish		5(6), 6(7), 10(3), 22(21) 46(15), 51(+), 73(10), 76(5), 97(3), 100(2), 102(3).	
Chinook			

10b. Pits

Tlingit	25(8+), 50(3), 54(+)
Haida	21(5+), 22(2),
Tsimshian	1, 5(+), 6(+), 7(+), 8(+), 9(+), 10(+), 11(+), 14(6+), 17(+), 24(6+), 28 35, 37.
Bella Coola	1(17+), 11, 12(+)
Kwakiutl	31, 149(+), 219 220, 225(5), 226(7+), 227(10+)
Nootka	12(10+), 18
Coast Salish	120(30+), 121(4) 127(+), 128(6), 152 154, 161, 163
Chinook	2(18+), 5(+), 7(19+), 11(20+), 6(390), 12(+), 14(+).

10c. "Mortars"

	petroglyphs	pictographs	combination
Tlingit			
Haida			
Tsimpian	32		
Bella Coola			
Kwakiutl	69,226		
Nootka			
Coast Salish	126,134		
Chinook	6		

C. Other geometric Designs

1. Buildings

Tlingit	
Haida	
Tsimpian	
Bella Coola	
Kwakiutl	
Nootka	
Coast Salish	38
Chinook	

2. European ships

Tlingit		15
Haida		
Tsimpian		
Bella Coola		
Kwakiutl		91,131?,159,160(2), 177(3)
Nootka	18(5),23	
Coast Salish		17,58
Chinook		

3. Wagon

Tlingit	
Haida	
Tsimpian	
Bella Coola	
Kwakiutl	177
Nootka	
Coast Salish	
Chinook	

There appear to be more geometric designs than either anthropomorphic or zoomorphic. The great numbers of dots, pits and coppers is the main reason for this. Generally it is more common to consider dots and pits as basic design units (design elements), which when combined into groups can be seen to form a design or designs. However, here they are considered individually, that is each distinct dot and pit is considered to be a separate design just as each copper or anthropomorphic face is categorized as a separate design. It is recognized that a face design can be and frequently is composed of a purposeful grouping of pits or dots but in such cases it is the combination of elements which is important since the complete face is recognized as a separate, individual design albeit composed of various elements. Since the pits and dots of the Northwest Coast do occur alone and are not always found grouped into discernable designs it seems necessary in order to be consistent, to consider such isolated occurrences as individual designs much like circles or any other designs. In other words, when pits and dots are combined to form a design such as a face they are treated as elements of that design, but when pits and dots are found singly or in groups which do not form a discernable design then they are considered to be individual designs of that particular site.

The most commonly encountered designs to be found along the coast are as follows:

1. dots	at least 600 individual designs
2. pits	" " " " "
3. circle faces	" " 300 " "
4. coppers	" " 200 " "
5. undifferentiated anthropomorphs	" " 170 " "
6. undifferentiated sea creatures	" " 100 " "
7. paired circles (eyes)	" " 70 " "

Several designs appear confined to specific techniques. The following have

so far only been recorded as carved designs:

- | | |
|------------------|---|
| 1. <u>bear</u> | 12. snake |
| 2. mountain goat | 13. zoomorphic tracks |
| 3. crab | 14. turtle |
| 4. flounder | 15. woodworm (spiral) |
| 5. seal | 16. anthropomorphic figures containing others |
| 6. blue jay | 17. tool sharpening marks |
| 7. puffin | 18. zigzag |
| 8. raven | 19. pits |
| 9. crane | 20. "mortars" |
| 10. frog | 21. building |
| 11. sea monster | |

Other designs appear predominately as petroglyph designs and are seen, but rarely as pictographs:

- | | |
|--------------------------------|-------------------------------------|
| 1. canine | 6. paired circles (eyes) |
| 2. <u>deer and elk</u> | 7. single circle or oval |
| 3. owl | 8. concentric circle or oval |
| 4. <u>female anthropomorph</u> | 9. spiral |
| 5. <u>circle face</u> | 10. circle or oval with central dot |

Designs which, so far as is presently known have appeared only as pictographs include the following;

- | | |
|--------------------------------|-----------------|
| 1. bison | 6. "ladder" |
| 2. <u>anthropomorphic hand</u> | 7. dashes |
| 3. three forked line | 8. dots |
| 4. obliquely crossed line | 9. semi-circles |
| 5. cross-hatch | 10. wagon |

Designs which occur most often as pictographs and more rarely as petroglyphs include the following;

- | | |
|-------------------------------|------------------------------|
| 1. undifferentiated quadruped | 6. square |
| 2. serpent (sisiutl) | 7. copper |
| 3. thunderbird | 8. divided circle |
| 4. "arrows" | 9. rayed semi-circle (canoe) |
| 5. two forked line (serpent?) | 10. European ship |

Generally it can be said that petroglyph designs tend toward the identifiable zoomorphic designs and those geometric designs which are based upon the curved line, as well as circle faces and other curvilinear forms. Pictograph designs tend toward the geometric forms as based upon the straight line, although it should be stressed that there is much overlap in subject matter between the two techniques. The following designs are about evenly shared by both carved and painted art:

- | | |
|-------------------------------------|---|
| 1. horse | 5. undifferentiated anthropomorphic figures |
| 2. whale | 6. undifferentiated anthropomorphic heads |
| 3. male anthropomorphic figures | 7. connected circles |
| 4. mythical anthropomorphic figures | 8. rayed circles |

On the basis of present data it appears that a few designs are confined to certain portions of the coast. The following are known only from the northern Northwest Coast:

- | | |
|----------------------|-------------------|
| 1. blue jay | 3. sandhill crane |
| 2. spiral (woodworm) | |

So far as is known there is only one design which is unique to the central coast, this being the historic wagon encountered at Nicholas Point (K 177).

Designs unique to the southern coast include the following:

- | | |
|-----------------|--------------------|
| 1. snake | 7. mountain goat |
| 2. building | 8. "ladder" |
| 3. puffin | 9. flounder |
| 4. crab | 10. turtle |
| 5. "spedis" owl | 11. mountain sheep |
| 6. bison | |

A very few designs appear to be unique to the rock art of the Northwest Coast and do not appear outside of its immediate boundaries. Such designs include the following:

- | | |
|---------|----------|
| 1. crab | 7. raven |
|---------|----------|

- | | |
|-------------|--------------------------------|
| 2. flounder | 8. sandhill crane |
| 3. seal | 9. serpent (sisiutl) |
| 4. shark | 10. two forked line (serpent?) |
| 5. blue jay | 11. copper |
| 6. puffin | 12. European ship |

The zoomorphic designs listed above may well have counterparts in neighbouring cultural areas where they have not been identified. The sisiutl, possible simplified serpents and coppers appear to be completely unique to the Northwest Coast, arising from its own particular cultural history. More commonly encountered are those designs which appear to have a continuous distribution onto and even through the Northwest Coast. These designs are compared with those illustrated by Okladnikov (1971), Heizer (1947) and de Laguna (1934, 1936) which deal with those areas north of the Northwest Coast, and with Morice (1893), Corner (1968), and Cain (1950) who discuss the interior of British Columbia and Washington state, and also with Cressman (1937), Steward (1936) and Heizer and Clewlow (1973) who have covered the southern interior regions and coastlines south of the Columbia River.

Designs in coastal rock art which are also to be found in the rock art of Alaska and Siberia include the following:

- | | |
|-----------------------|--------------------------------|
| 1. circle faces | 5. circle and central dot |
| 2. paired circles | 6. pits |
| 3. concentric circles | 7. rayed semi-circle (canoe) |
| 4. spiral | 8. undifferentiated quadrupeds |

Those designs which are similar to designs of the British Columbia and Washington state interior include the following:

- | | |
|-------------------------------|---|
| 1. "arrows" | 6. dots and pits |
| 2. three forked line | 7. mountain goat |
| 3. rayed circle | 8. mountain sheep |
| 4. rayed semi-circle | 9. bear track |
| 5. undifferentiated quadruped | 10. undifferentiated anthropomorphic figure |

Finally there are those designs which are similar to ones found in southern Oregon and the state of California:

- | | |
|----------------------|---------------------------|
| 1. mountain goat | 5. pits |
| 2. mountain sheep | 6. divided circle |
| 3. bison | 7. circle and central dot |
| 4. concentric circle | |

One curious undifferentiated anthropomorphic figure from Meyers Passage (Ts 41) is remarkably similar to human figures frequently encountered in the petroglyphs of the Hawaiian Islands as illustrated by Cox and Stasack (1970). However, nothing is known regarding the history of the Meyers Passage site. The presence of similar specific designs to the north, east, west and south of the Northwest Coast as well as along its length suggest that where these designs are concerned the coast is part of a continuous distribution. The pitted boulders which occur from Siberia through to California and into the Great Basin are an example of such a distribution. However, although the sites may look very much alike, they appear to have served somewhat different functions in each region. For example, the pitted rocks of Hawaii were "baby rocks" while in California similar pits were also part of rainmaking ceremonies. On the Northwest Coast their function is unknown. The circle faces of Siberia bear striking similarities to those of the Northwest Coast and along with other shared designs such as the rayed arc (canoe) suggest a long period of cultural contact between the two areas. It is impossible at present to say which was the place of origin for any of these widely distributed designs since dating of rock art is not very well established on the Northwest Coast or, for that matter, in neighbouring areas either. However, the circle faces of Siberia may well be older since they have been stylistically linked to the Neolithic Period of the Amur River, some five to six thousand years ago (Okladnikov 1971:133).

The following sets of tables provide comparative information regarding distribution patterns of specific rock art designs. Each design is placed according to technique of manufacture (petroglyph, pictograph, etc.) and is listed according to its presence in each linguistic region. The sites are identified by their site numbers. Additional numbers in parenthesis indicate how many individual representations of the design are to be found at a given site. The + symbol indicates either that an unknown number of representations is reported for that site or that there are an unknown number more than that already noted.

This section must be considered only as an approximate indication of any distribution pattern since it is too often based upon second or third hand information, and this is frequently of a subjective nature. Only in those cases where accurate drawings or clear, comparable photographs or petroglyph rubbings have been made can the information on designs be considered to be reliable. Even then, it may be incomplete.

The term "technique" is used here to refer to carvings versus paintings and to those details of manufacture such as abrading, incising, pigment composition, pigment sources, site location and distribution. There are over 600 rock art sites now known along the coast and without a doubt many more remain to be recorded. Table IV indicates by linguistic area, their total distribution. According to present data there are slightly more painted than carved sites along the Northwest Coast. While carvings outnumber paintings along the northern coast there is a clear reversal of the trend in Kwakiutl territory. The Nootkan linguistic region is evenly divided between paintings on its northern shores and carvings to the south. The territory of the Coast Salish contains only a few more painted than carved sites especially its northern shores but there is again a reversal with petroglyphs predominating in the southern Coast Salish areas and in that of the Chinook.

Pigments.

Five colours have been recorded in coastal rock paintings, these being red, black, yellow, white and blue. Table V indicates the distribution of each. The obvious preference for red pigments appears to be a widely spread phenomena occurring not only along the entire Northwest Coast but also throughout most of the North American continent. It is a preference which has yet to be completely and satisfactorily explained. Teit, describing red pictographs of the B.C. Interior (1900) comments that the colour was used because it was symbolic of life, goodness, good luck and so on. Red hues on the coast may have been similarly regarded. The red colours found in coastal pictographs range from red with a purple cast (Ts 20) through scarlets and orange hues to red-browns. Investigations at Pitt Lake and Indian Arm in 1971 and 1972 (Coast Salish territory) indicated that these pictographs fall between 10R 4/8 and 2.5YR on the Munsell Soil Colour Chart. This range

TABLE IV
Distribution of Rock Art Sites by Type and
Linguistic Area

	petroglyph	pictograph	combination	unknown	total
Tlingit	77	9	-	1	87
Haida	20	2	-	-	22
Tlingit/Haida	9	2	-	-	11
Tsimshian	30	12	1	-	43
Bella Coola	8	8	-	-	16
Kwakiutl	38	187	-	2	227
Nootka	16	8	-	-	24
Coast Salish	69	97	2	-	168
Chinook	17	5	1	-	23
Total	<u>284</u>	<u>330</u>	4	3	<u>621</u>

TABLE IV

TABLE V
Distribution of Pigments Used in Pictographs

	Red	Black	Yellow	White	Blue	?	Total
Tlingit	7	-	-	-	-	2	9
Haida	1	-	-	-	-	1	2
Tsimshian	11	-	-	-	-	1	12
Bella Coola	6	-	-	-	-	2	8
Kwakiutl	156	3	2	-	1	30	192
Nootka	3	-	-	-	-	5	8
Coast Salish	84	-	-	-	-	14	98
Chinook	3	-	1	1	-	2	7
	271	3	3	1	1	57	336

TABLE V

seems to be typical of most coastal pictographs. Red pigments were generally obtained from naturally occurring ochres. These ochres produce yellow-brown, orange-red and bright true reds according to the percentage of iron oxide to other minerals or impurities that they contain and also according to the method of preparation (Garfield 1950:63). In most cases the material is cleaned and ground to a powder in a mortar or on a flat rock and a media of grease or oil added as a binder. At Cook Inlet, north of Tlingit territory de Laguna (1934:150) notes that the pictographs there were made with red hematite probably mixed with animal fat. Among the Tsimpian, Garfield reports that lumps of red ochre were wrapped in cedar bark and then baked producing brown or dark reds depending upon heat applied and baking time (1950:63). Leechman (1937:204) notes that another source of red pigment was a fungus (possibly *Ganoderma tinctorum*) which was roasted and then powdered. In a few instances (as at Ts 22) tradition states that the red colours were made from human blood, usually obtained from defeated war parties. No analysis has ever been made to determine if this is in fact true and it may be that the red pigments suggest such a source to persons no longer sure of the history of the paintings.

Black pigments occur at only three sites along the coast, all within the Kwakiutl linguistic area, namely K 71, 72, and 161. Strong, Schenck and Steward also note the use of black pigments along the Columbia River but list no specific sites. It is also noted to the north of the Tlingit at an Eskimo pictograph on the Tuksuk River (de Laguna 1956:105) and by John Corner (1968:21) for the British Columbia interior. Cain also notes its infrequent use along the Middle Columbia (1950:4). The sources for black pigments could have been any of the following: graphite, manganese, charcoal, lignite, dark earths or even soot (Cain 1950:5). The black paint at two coastal sites (K 71, 72) is very faint and a possible lack of permanency may have been one

reason for its infrequent use.

The most northerly occurrence of yellow pigment is at one site (K 88) on the Kwatna River. The paint has a brown tint and does not stand out as well as the orange and dark reds at the same site. Leechman (1937:205) commenting on coastal paints notes that yellow came from yellow ochres and was used as a face paint but "was not strong enough for large surfaces" though it was so used occasionally. Again, a lack of strength or permanency may be the reason for its restricted use in rock art. Yellow paints are also reported at the Long Narrows (Ch 22) where they are associated with white and red designs. Other possible sources for yellow pigments may include yellow mosses and some yellow lichen.

White pigments occur only at the southeastern extremity of the Northwest Coast and thus appear to be a continuation of the bichromes and polychromes of Oregon and California. It is to be found in the Long Narrows region (Ch 22) and is associated with yellows and reds. Likely sources for white paint include talc, kaolin or other white clays.

Blue pigment has been reported at only one coastal site, this being Moore Bay (K 158). Garfield, commenting on Tsimpian paints notes that "a rare and highly prized blue-green pigment was made from copper-impregnated clays", (1950:63). Rarity of source material is the likely reason that blue pigments are so rare.

Fading of pigments

It is frequently noted that pictographs are growing fainter or even fading completely until the designs are no longer recognizable. This apparent disappearance is a source of concern to many observers, but recent studies at the Canadian Conservation Institute may explain this phenomena and allay some worries. Samples of pigment-bearing rock were removed from a

pictograph at Agawa, Ontario and examined and analyzed using a combination of optical microscopy, X-ray diffraction, and the scanning electron microscope. The results for all samples were consistent. Between the rock base (unweathered rock) and the pigment layer and over the pigment layer itself was a thin white deposit. A report of this study (Taylor, Myers and Wainwright, 1974) summarizes their findings:

From these results it is quite apparent that the white layer observed in the cross-sections is a mineral deposit which had formed on the rock before the paintings were made and subsequently has continued to form as a result of groundwater seepage over the rock face. It is not a weathered crust or patinated layer formed by the chemical leaching action of rain or wave splash...areas of a rock cliff which have a high seepage rate have a higher rate of deposition, producing a thicker deposit, than areas with a lower rate.

The deposit can be described as an aluminium silicate clay, consisting of extremely fine particles, and in some cases, it contains calcium carbonate.

It is apparent that the pigment is attached firmly to and intimately mixed with the mineral deposit in a sandwich structure rather than directly to the rock itself.

The report goes on to note that the surface deposit can act as a protective coating against the effects of leaching action of rain and erosion by wind. It also explains why tests involving a wet chemical field conducted to determine if iron is present in the pigment usually fail to produce results since the deposit prevents the dissolution of the pigment. In 1974, the Canadian Conservation Institute sent a team to perform a study similar to that conducted in Ontario, on B.C. pictographs of the Similkameen Valley in southwestern British Columbia. The results from that study are not yet available. It is suspected that a dry climate and little or no apparent ground water seepage may produce quite different results. With regard to the actual "fading" of designs, the authors comment:

Another mechanism of deterioration, the "faded" appearance of some rock paintings can also be attribu-

ted to the mineral deposit. Due to continued seepage, the surface layer thickness increases and gradually obscures the painting below. As a result the paintings appear to fade.

Sections of rock examined with the electron scanning microscope have revealed several distinct layers of pigment each with a white deposit between even though only the uppermost layer can be seen by the unaided eye. This suggests that the site concerned had been re-used several times as a new and apparently clean surface appeared for the painter's use. The possibility of determining the rate of buildup of the white layer as a possible dating method is discussed in chapter seven.

Deposit Fallout

The same study mentioned above also provided information into the physical processes involved in the breaking away or flaking of small pigment-bearing sections of pictographs. This is what Dewdney (1970) refers to as "granular fallout". A minute crack (ca 5 microns in width) was found to exist in all samples taken. This crack occurred between the unweathered rock base and the white deposit which separated it from the pigment layer. The authors felt that the crack may have been formed because the deposit has a comparatively weak attachment to the rock base and as temperatures fluctuated so there would be different rates of expansion and contraction. This would dislodge small segments of the painting.

Media

Media used to aid in mixing and applying the paint to the rock surface were probably similar to those available for painting on wood or other such subjects. Leechman (1937) lists several sources which were used for painting on non-rock surfaces along the coast. His list includes, salmon eggs either fresh or dried, fish oil especially that of the eulachon or

"perch", a glue made from singed mountain goat skin, saliva, and mountain goat fat. He notes that according to one native informant salmon eggs were only used for red and black pigments. No analysis has yet been made to determine the composition or the binder used in coastal rock paintings. Experiments performed in 1967 by Selwyn Dewdney indicate that in some cases, no binder was used but water was added to pigment and applied directly to the rock.

Tools

Fine, even lines at several sites indicate the use of brushes. Although none have been found associated with pictograph sites, they were used for other forms of painting on the coast and so their use by rock painters is assumed. At a great many sites, the thickness and crudeness of the lines suggests that fingers were used for applying the paint. Isolated blobs or streaks of colour may indicate where the artist tried his colour out before beginning his design.

Location

Most pictographs are located along the shores of inlets, rivers, or lakes and are on smooth, light-coloured rock faces that command a view of the area. They are generally located well above the high water mark and the rock face is commonly in a niche or below an overhang or otherwise sheltered so that the designs are to some extent protected from the elements. These pictographs were meant to last as long as possible and they were intended to be seen by all who passed nearby. Unfortunately in some cases, the same ground water deposit that caused the white background against which the red paints stand out so well is also an indicator that these designs will "fade" more quickly than others as the deposit continues to grow actively over them.

Other pictographs are located where they cannot be easily seen from

the water, that is, they are in caves, or rock crevices. These may have marked burial or ceremonial places.

Most sites are accessible from the water by a series of rock ledges, but a few were probably painted from canoes during high water periods and in one or two instances it seems as though the artists must have climbed now fallen trees, or used ropes to reach their chosen sites. Ethnographic information from the Tye pictograph site (Ts 20) noted that a scaffolding was erected in order to paint the designs on a steep, smooth rock face, (Robinson 1973:54).

Pictographs, as a general rule do not necessarily seem to be associated with old village sites, rather they are located along well used water routes, or are in what must have been relatively isolated places. The motive behind their creation likely decided the type of location.

The carvings

The carvings of the coast indicate at least two methods of manufacture, abrading and incising. Most petroglyphs are pecked and abraded, that is, the grooved lines are produced by a series of linked pecked dots which are abraded or smoothed to a uniform width and depth. Some designs are incised into the rock, that is, the lines are sharp and thin. Some incised designs may have been with steel tools.

The rock surface preferred along the coast seems to be sandstone, a rock that relatively speaking, is so easily worked that it will be marked by a steel brush. Most sandstone petroglyphs are abraded and the finished lines are of consistent dimensions. In the Venn Passage area a schist-like rock which tends to erode in flat sections was utilized but the difficulties of controlling this type of rock may have been the reason why most of the designs carved into it are small and simple such as faces, eyes or pits. Along the southern coast of Vancouver Island the rugged granites of the

region were utilized for carvings, even though they do not lend themselves to a clear design. Harlan Smith (1924) described the method of manufacture at Aldridge Point (CS 148) and his description holds for all of the carvings of this region:

This petroglyph was formed by bruising lines in the rock. The lines average about an inch wide by perhaps a quarter of an inch deep. The natural surface is made up of large crystals weathered out in relief. These throw shadows and the intervening spaces have caught dirt, lichens and the like. Thus it appears dark like a stone building in a soft coal district. The surface of the bruised lines of the petroglyph, on the other hand, is smoother and consequently not only shows smaller shadows but little lichen or other dirt. It appears light in contrast to the natural rock. From a distance the lines resemble faint chalk marks.

There are two techniques of manufacture to be found along the Columbia River, one being coastal and the other interior. The coastal form is essentially the same as pecking and abrading mentioned above; the interior form is more typical of rock carvings to be found in Nevada, Central Oregon and Washington and it involves the pecking out of the entire design, not just the outline. The pecked, unweathered rock in contrast with patinated untouched rock alongside is what provides the design.

Tools

E.L. Keithahn (1954:250) suggested that petroglyphs of the Tlingit area were in part made by two local tools, the "T-hammer" and the "flat-topped pestle". He cites the distribution of these tools and that of the then known petroglyphs noting that they co-incided. However, since he wrote, other sites have been discovered outside of his designated area and it is not known how this affects the validity of his ideas. He notes also that the greenstones of which the two tools were made wear out quickly when applied to granites into which many of the northern coast petroglyphs were carved and he postulated that hafted pecking hammers and hypothetical stone chisels

were used for the preliminary work with the greenstone tools being reserved for finishing. Unfortunately, no recognizable tools have been found near any northern or central coast site. Strong and Schenck (1925:79) note the following find along the Columbia River in Petroglyph Canyon (Ch 20):

On a ledge underneath one of the largest figures we found one of the rock tools used in making the pictures. It was a small, irregular boulder of hard green stone naturally conforming at one end to the grip of a hand and worn down at the more pointed end. A little experimentation showed that these pictures were not pecked into the rock but were ground out by constant rubbing which was carried on until the dark surface of the basalt was entirely removed and a gray solid body for the design formed. The deepest designs were about one quarter of an inch in depth; the others usually less.

Tools such as that described by Strong and Schenck may have been used in other parts of the Northwest Coast. If so, they may have been overlooked by early researchers and could possibly be found should excavation of areas with petroglyphs in association be conducted.

Location

Almost all petroglyph sites are located on or near water; on beaches, near river or lake shores. The carvings may be on individual boulders as is common along beaches, or on extensive outcrops of workable rock. These outcrops are usually on ridges, hills or other such places of elevation higher than surrounding regions. When the designs are carved onto beach boulders they almost always face out toward the sea so that they are visible to persons approaching from the water. Petroglyphs, generally speaking are located very near to or within a short walking distance of village sites. McIlwraith (1948:178) notes that sites of the Bella Coola were purposely located in a natural, unusual setting on ledges or at the bases of cliffs or some other easily distinguishable feature. He describes one such location, the meeting place of the local Kisiut Society (BC 11):

The meeting place of the Zomquets chiefs is on a ledge of rock jutting out over a waterfall about a quarter of a mile from the village. The stream winds down a narrow cleft of the mountainside screened by dense vegetation and suddenly falls into a cauldron, so hemmed in by cliffs that no sunlight can enter. The ledge is immediately above the brink of the falls, one of the most awe-inspiring places imaginable.

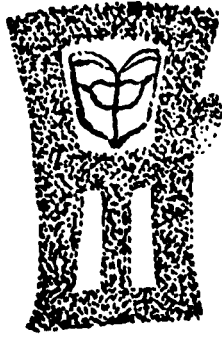
Other coastal petroglyphs have been recorded in such places as on islands in the middle of swift, dangerous rivers, (Ts 24), or on steep ledges above such rivers (CS 44), around the rim of a natural sandstone ringed pool (CS 134) or near unusual rock features (BC 2). The designs do not appear to have been arranged in any order except in a few isolated instances, such as Sproat Lake (N 16). It is assumed that the first carvers selected the best locations and other, later designs were fitted around them. There is no superposition of designs. One Kwakiutl site, Meadow Island (K 69) appears to indicate this selection of best locations on a specific rock face by first carvers and less advantageous places being utilized by later carvers.

CHAPTER FIVE
STYLISTIC ANALYSIS

The Northwest Coast contains a tremendous variety of rock art. This art differs not only with regard to techniques of manufacture but also in its subject matter and in overall appearance even when techniques and designs are similar. Even subjects which are unique to the coast may be quite dissimilar in appearance. For example, figure 41 contains drawings of three painted coppers which exhibit quite different features. Design a contains features reminiscent of the classic Northwest Coast art style (for example, the use of formlines in inner decoration), while design b appears to be a simplified form of the first containing enough of the basic identifying traits (for example, the rectangular shape) to be recognizable. Design c is so simplified that it is almost unrecognizable and only its roughly rectangular shape and the oral tradition associated with the site indicate that a copper was intended. Similarly, the human figures which are encountered in rock art all along the coast may appear in a wide range of related, yet dissimilar forms. Again, turning to figure 41, design d is somewhat similar to the classic art style well known from wood carvings on the coast. The posture of the figure and its unique head form are characteristic. Design e, like b above seems to be a simplified form of the preceding design, that is design d. Design f however, is almost identical to human depictions from the interior of British Columbia, Washington and Oregon and it is totally unlike either d or e. Finally, design g, while still different from the others seems to combine some traits of both interior (straight limbs) and coast (circle face). In each of the examples noted, the designs were considered the same (coppers, anthropomorphic figures) and in the case of the coppers, so was the

Figure 41

Stylistic Differences in Copper and Anthropomorphic Designs. Design a is from Port John (K 72), and b is from the Nass River (Ts 3) while c is from Green Point Rapids (K 207). All of the designs are pictographs. Designs d and e are both from Cullum Point (Ts 40) and are petroglyphs while design f is a pictograph from Port John (K 72) and design g is a pictograph from Pitt Lake (CS 110). None of the designs shown are drawn to scale.



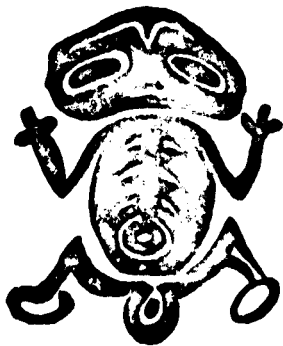
a



b



c



d



e



f



g

Figure 41

the technique used as each example was painted. Yet the figures are different in appearance and it is this difference not arising from subject matter or technique that comprises the style of the figure and which must now be isolated and discussed.

In his 1967 publication, on the rock art of the American Indian, Campbell Grant created a generally acceptable classification system for North American rock art. He notes that there are three stylistic types into which all North American rock art falls. These are:

1. naturalistic
2. stylized (conventionalized)
3. abstract

He interprets "naturalistic" to mean "work done in a realistic or natural manner, while "stylized" he interprets as "recognizable subjects rendered in a conventionalized or nonrealistic manner." Finally, he interprets "abstract" as "having little or no reference to the appearance of objects in nature." To the three stylistic categories he adds the terminology of technique:

1. pecking (or abrading)
2. painting (bichromes and polychromes)
3. incising (or scratching)

By combining such stylistic and technical terms Grant lists sixteen general categories for North American rock art. He fits the Northwest Coast into three of these categories, namely, painted naturalistic, painted stylized and pecked stylized. However, such a general system runs into serious problems when confronted with the details of a specific culture area such as the Northwest Coast. For example, it doesn't allow for the several kinds of conventionalized or abstract art encountered in coastal sites. However, if Grant's basic system is somewhat modified, it can be a useful guide for classifying coastal rock art styles. One modification is the elimination of the technique differentiating terms (pecked, painted, etc.) There is enough over-

lap between styles and techniques on the coast to make it redundant. (This technique distinction is retained in the tables that follow the discussion of coastal styles as there it provides useful distribution data). All that is really needed is the general stylistic indicator coupled with a further identifying term particularly relevant to coastal rock art. With such modifications, the rock art styles of the coast can be classified as follows:

1. Basic Coast conventionalized style ✓
2. Classic coast conventionalized style ✓
3. Columbia River conventionalized style ✓
4. Coast abstract curvilinear style ✓
5. Interior abstract rectilinear style ✓
6. Interior naturalistic style ✓

A great majority of coastal rock art designs appear to bear some similarities to the classic northwest coast art style best known from carvings in wood and argillite, yet are different enough to warrant their being classified as stylistically separate. These designs differ in that they are simpler and less detailed than the classic designs and do not contain such traits as the Northwest Coast eye, or use of ovoids or formlines. They also appear less cluttered, with more open space. De Laguna (1960:73) makes the following observation:

That the interpretation of rock pictures by the natives is so often vague may perhaps be explained by the fact that the techniques of rock painting and carving are much cruder than those employed in ordinary wood painting and carving, so that the styles of the pictographs and petroglyphs, while related to those of traditional Northwest Coast art, are yet different.

Petroglyphs and pictographs like this, because they contain certain basics of the classic Northwest Coast art style are here considered to form a Basic Coast Conventionalized rock art style.

Basic Coast Conventionalized Rock Art Style

The basic coastal rock art style, like that of the classic art which

it closely resembles, is a conventionalized curvilinear style making considerable use of circles and smoothly curved connecting lines. It is to be found all along the Northwest Coast and is often in direct association with designs done in other styles. Typical designs found in this style include circle faces, eyes, and some coppers which retain the typical copper shape and some internal decoration, along with anthropomorphic and zoomorphic figures having simple internal detail usually involving the ribs or backbone. The riblines may be curved, straight, or composed of undulating parallel lines. The backbone is usually a simple straight line. Anthropomorphic heads are almost always of exaggerated proportions and the less detailed bodies may be depicted in either a squatting or straight-legged position. This style appears to be the most commonly encountered one along the coast especially where petroglyphs are concerned and its intrinsic relationship to the classic style cannot be overstressed. At a great many sites especially of the northern coast, it is really a simplified classic style. At a few sites of the southern coast, notably in the Nootka linguistic region it is so simplified as to be almost crude (as in figures 26b, 27b and 29b).

Any style spread over such a great distance as the Northwest Coast is bound to develop substyles and local characteristics confined to specific parts of the coast. A few of these are listed and briefly discussed although there are no doubt many more still to be determined.

a. Open trunk-line.

At ten petroglyph sites there are depictions of anthropomorphic figures having open trunked bodies. That is, the outlines of the neck and torso continue, without meeting, to form the lines of the legs. These leg lines terminate in three to five toed feet and they may be either straight or upraised in the "squatting" position. Arm and hand lines branch off at appropriate places although there are no shoulders and while no backbone or

or ribs are depicted the sex sign is indicated in all but three instances. Sites containing this open-trunk variation include K 69, 192, 202, N 18, 19, 20, CS 37, 41, 129, and 131. Therefore, it appears to be confined to that region of the coast falling between Bella Bella and the southwestern shores of Vancouver Island. Figures 26 a,b,c, 27 a,b, and 30g are examples of this variation.

b. No body.

Another somewhat unusual method for depicting anthropomorphic designs involves the depiction of arm lines which are attached directly or nearly so to head lines without the benefit of either shoulders or, in most cases, necks. They may join on to the lines of the mouth if the face is non-outlined, or into the "chin" line of the lower jaw. Usually, the faces involved are circle faces. Because of the presence of the arms (and hands) these designs were included in the category of anthropomorphic figures instead of that of anthropomorphic heads. This is no local design trait; it is to be found from the territory of the local Tsimpsian through that of the Bella Coola and Kwakiutl and into that of the Coast Salish, occurring at the following sites: Ts 8, BC 2, K 42, 72, 226, CS 41, 110 and 134. Of these sites, only two (K 72 and CS 110) are pictographs. It is likely that this method of depiction is connected to the widespread preference already noted which results in exaggerated heads and de-emphasized bodies. Figure 30i - 1 illustrates four examples of this variation.

c. Undulating internal lines.

One striking characteristic of the Sproat Lake (N 16) petroglyph site is the presence of mostly parallel horizontal undulating lines which decorate the bodies of nearly all of the zoomorphs. It is these lines plus the fact that all of the figures are facing in the same direction that gives this group of designs a feeling of graceful motion. The same decorative device is used

to a lesser extent on the bodies of the wolves at Petroglyph Park (CS 126) and even less on a few of the strange creatures at the nearby Monsell site (CS 127). Internal decoration is common in both classic and basic art styles but it is usually placed vertically in the body or radiates out from a central backbone. The lines may be curved. Undulating lines are most effective but appear to be confined to the three mentioned Vancouver Island sites. Figures 4e and 20c illustrate this variation.

d. "Collared" sea creatures.

A trait which appears to be a local variation occurs at two Nootkan sites which contain figures carved in the basic style. At N 19 and N 22 whale designs are drawn in a similar manner having stubby outlined bodies and open mouths with flat square-fronted heads, along with tails that are depicted as a straight line from upper to lower tip, that is, not bifurcated. They are in my opinion, strikingly similar to incised sketches which I have seen on bone artifacts from an old beach level at the Ozette excavation which have not yet been dated. Three such figures occur at wedding Rock, (N 22) and these have a band consisting of two parallel lines drawn across the body from just in front of the dorsal fin to the belly line. One figure at the Hill site (N 19) has a single line carved in approximately the same location. The sea monster of Aldridge Point (CS 148), drawn in quite a different manner although still within the basic style, has the same banding but in this case, the lines are drawn around the creature's neck in parallel bands. The single fish depiction known from the Long Narrows (Ch 22) has a similar set of bands about the neck. The significance of this design trait is unknown.

As has been noted already, the Basic art style is well distributed all along the coast. It can also be found spreading inland along the major river

systems. It occurs up the Nass River at least as far as Canyon City and up the Skeena to Kispiox. It is found along the deeply indented inlets of the Bella Coola region and on up the Bella Coola Valley, and is known on the Fraser at least as far inland as the Lytton-Lillooet region. There designs of the basic style can be seen carved alongside more typically interior designs. This inland spreading up the rivers can be clearly seen along the Columbia as well, where the Basic style has been noted on deeply carved riverside boulders in the Portland area and upstream past the Dalles where the Northwest Coast cultural influences are generally held to weaken. The basic style is to be found upstream as far as Wallula, Washington where Smith (1910: 122-4) noted a boulder carved with deep circles and undulating lines which he felt to be reminiscent of some designs of the southern British Columbia coast, notably Petroglyph Park (CS 127). Such a spread of coastal artistic traits along major navigable rivers is only to be expected since these waterways were communication routes of the past; routes which served to distribute cultural traits and ideas outside of cultural boundaries.

The basic rock art style of the Northwest Coast appears to be stylistically related to the stone sculpture complexes of the Fraser River, Gulf of Georgia and Columbia River regions. With regard to the former, Duff (1956) illustrates several pieces of sculpture which I feel, contain traits also found in basic rock art carvings and paintings. (In particular figure 4, page 70, face in plate 8, page 135, and figures a and i, page 146 should be noted.) Duff also comments that the stone sculpture complex also hints of the classic art style known from northern wood carvings and he suggests that the stone sculpture complex of the Lower Fraser and Gulf of Georgia may have been an ancestral art form:

The stone sculpture complex is best regarded as an

early Northwest Coast art form. In style it seems closely related to the wood sculpture of the Kwakiutl and northern tribes, or, more exactly, to the basic Wakashan style which underlies the classic Northwest Coast style of these tribes. It shows less resemblance to recent Salish wood sculpture, which suggests that the latter must represent a decline or change since the climax period of the stone sculpture. It is possible that many of the basic features of the Northwest Coast style were worked out first on the soapstone carvings and then transferred to wood, so that in this sense the stone sculpture complex may be an ancestral Northwest Coast art form (1956:114).

The rock art designs in the Basic Style also fit in with this conclusion in that they hint of the classic art and may have preceded it. They may perhaps be considered to be another form of the stone sculpture complex, co-existing with the bowls and mauls and other types of sculpture, at least in this part of the Northwest Coast. However, the wide coherent spread of the rock art designs of the Basic style suggest that instead this style is a part of an even earlier stratum that lent to the stone sculpture complex such traits as circled eyes and faces, ribbed anthropomorphic and zoomorphic figures with large heads and so on. These older traits would persist along with the stone sculpture and later classic forms.

On the Columbia River too, a case can be made for relating the local stone sculpture there to the Basic rock art style, since it is similar to pieces of sculpture of what Butler calls the Middle Period of Lower Columbia prehistory (6,500 years ago to around A.D. 500). The sculpture of this period contained massive pieces with prominent circle eyes, ribs, and other such features found in the basic rock art style (Butler illustrates such designs on page 164).

It is likely that the Basic Northwest Coast rock art style is an early style at least on the Columbia and Fraser Rivers and perhaps by inference along much of the rest of the coast. There are several reasons for suggesting

this possibility:

1. In the first place, the Basic Style has a wide geographical distribution, all along the Northwest Coast and to the north of it into parts of Siberia. Such a distribution suggests a respectable time span.

2. The Basic Style seems to belong "hand-in-hand" with the Coast Abstract Curvilinear Style (discussed below) especially the pit and groove designs and this particular style also occurs from Siberia through the coast and well into the heart of the North American continent in the Great Basin and South-western cultural areas in particular.

3. The Basic Style is remarkably coherent wherever it occurs. Some of the designs of Siberia are strikingly similar to others from the British Columbia coast, for example, Okladnikov (1971) illustrates many examples of circle faces and other curvilinear designs which compare closely with examples from the Northwest Coast. Similarly, along the coast itself, there are many duplications of both simple and complicated designs.

4. The Basic Style contains similarities to some pieces that are part of the old stone sculpture complex as isolated by Duff (1956) and which he feels to be an early art complex of the coast, ancestral perhaps to the classic wood art of the northern coast (see below).

5. The Basic Style is also quite similar to pieces of Columbia River stone sculpture which, according to Butler (1957:161-5) are dated to the Middle Riverine Period of habitation near the Dalles about 6,500 years ago to around A.D. 500. (The Columbia River Style into which category some other rock art can be placed appears to belong to a much later period).

6. Finally, if the unique Columbia River style did evolve from a mixing

of coastal and interior styles as some researchers believe (Strong, Schenck and Steward 1930:143) then it is only logical to assume that the coastal partner in this merging to be the Basic Style since it is to be found along the Columbia while the only other coastal style that is suitable (the classic) is not. It is then also logical to assume that the Basic Style be initially present before becoming so modified to form the Columbia River Style.

All of this is not to say that all rock art designs of the Basic Style are automatically older than those of any other style, but that they are depicted in a style which may be an early form and which did spread over a great distance and which may have persisted for a long time on the Northwest Coast. Figure 42 illustrates a few examples of the Basic Conventionalized Rock Art Style and table VI indicates its distribution.

Classic Conventionalized Rock Art Style

This style is known mainly from paintings and wood and argillite carvings of the late prehistoric and historic periods of the coast and it contains certain repeated characteristics. The term "classic" is used rather than historic as the latter implies a limited age range and the dates of this art style have not yet been defined. It is a conventionalized art style making great use of curvilinear lines, usually form lines which taper into ovoids for basic shapes. The subjects, usually anthropomorphic or zoomorphic are depicted with much decorative, internal detail especially with regard to the use of space fillers, such as circles for joints. Heads are broad, exaggerated and contain the distinctive, realistic Northwest Coast eye form. The anthropomorphic figures are frequently depicted in a "squatting" position with knees and elbows bent. The subject is often "split" down the middle and spread across the design area thus forming a balanced design. Although no split representation as such as been noted in the rock art recorded to date,

Figure 42

Examples of designs in the Basic Conventionalized Rock Art Style. Design a is from Fulford Harbour (CS 140). Design b is from Wallace Bay (K 75) and design c is from Petroglyph Park (CS 126). All are petroglyphs and all are drawn from rubbings in the BCPM to a scale of one inch to one foot.

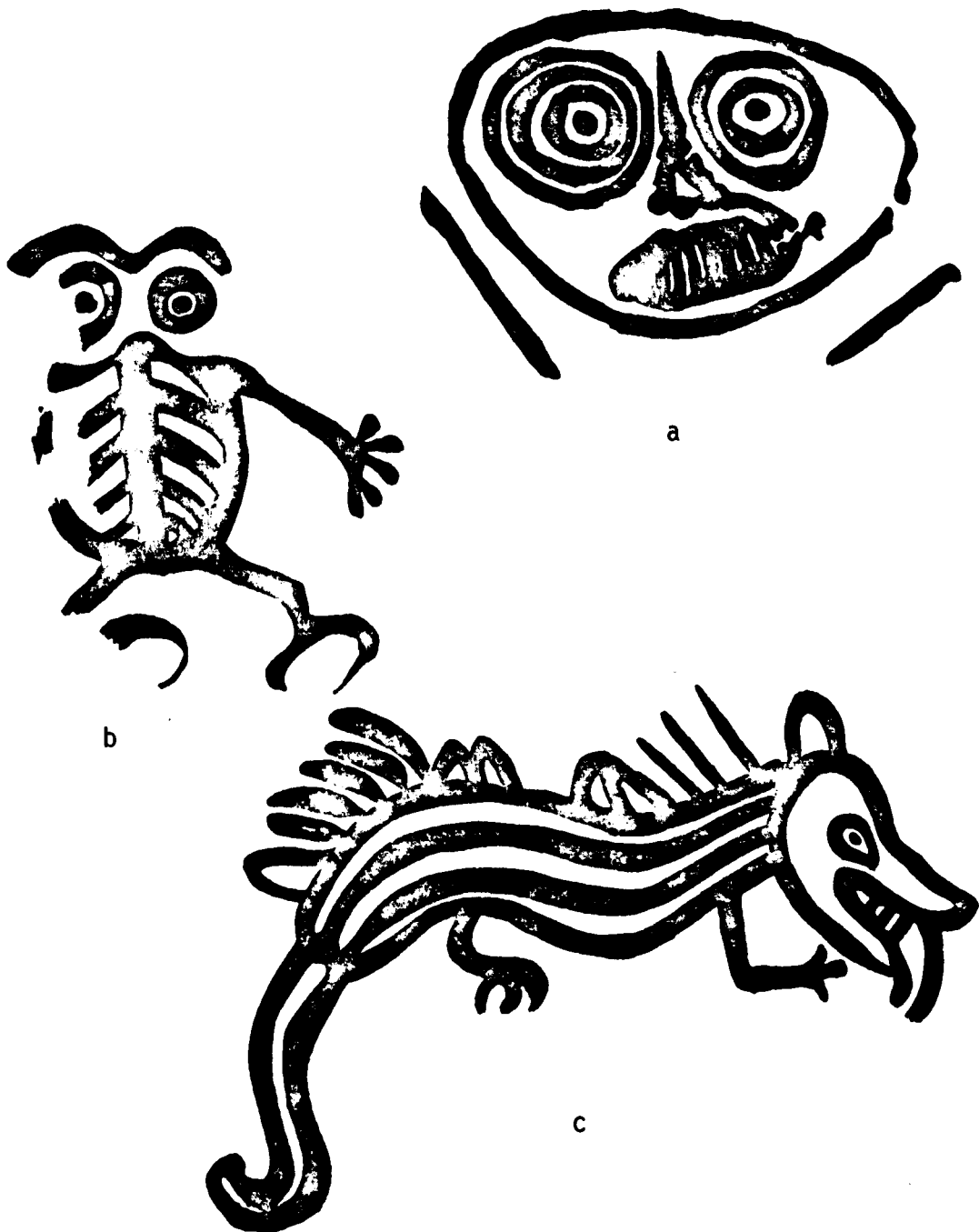


Figure 42

TABLE VI
Distribution of the Basic
Conventionalized Rock Art Style

	petroglyph	pictograph	combination
Tlingit	1,9,25,50,51,54	15	
Haida	2,3,6,15,21,22		
Tsimshian	1,2,5,6,7,8,9, 10,11,14,15,16, 17,19,24,28,29, 33,35,37,40	3,20,22,39	
Bella Coola	1,2,11,12,13,16	14	
Kwakiutl	31,42,65,69,75, 76,81,147,149,169, 191,192,202,203, 220,224,225,226,	4,5,6,9,13, 14,23,40,45, 46,47,48,51, 55,58,60,71, 72,86,88,91, 96,98,100,104, 107,120,121, 124,146,150, 160,163,171, 174,176,177, 181,184,185, 186,189,194, 195,197,198, 199,204,205, 207,208,209, 210,222.	
Nootka	10,12,15,16,17,19, 20,21,22,23,24,	9	
Coast Salish	23,30,31,32,33,34, 35,36,37,38,39,40, 41,44,92,119,123, 124,125,126,127,128, 129,130,131,133,134, 135,137,138,139,140, 142,143,144,145,146, 147,148,149,152,153, 154,156,157,159,161, 162,163,164,165.	2,4,5,6,16 18,26,27,53, 55,76,90,94, 103,108,109, 110,111,113	
Chinook	2,6,8,12,20,22		

TABLE VI

there are a few rock carvings and paintings that appear to contain enough of the other characteristics of this classic style to be considered a part of it. Generally speaking, the classic style in rock art is more commonly encountered among petroglyphs of the northern coast. Figure 43 illustrates a few designs of the classic conventionalized rock art style, and table VII indicates the distribution of this style along the coast.

Columbia River Conventionalized Rock Art Style

The Columbia River art style is found in strength only along the Lower Columbia River from the area of the Long Narrows to that of Portland. Because of both its appearance and its limited geographical distribution it is generally considered to be a local modification of Northwest Coast art. Its uniqueness involves a subtle alteration of the coastal design traits along with the addition of traits derived from interior art forms. This Columbia River Style, known from bone and stone carvings is to be found in several of the rock art sites of the area and therefore the name is retained when describing the rock art. This style is characterized by the following features: the "grinning" anthropomorphic face, often heart-shaped, with eyebrows well defined and continuing together to form the nose line. Eyes are almond-shaped and represented by two concentric lines and a curved cheek line is frequently shown. The mouth is of exaggerated proportions, crescent shaped and is open revealing teeth and a protruding tongue. Headdresses are elaborate with zigzag or straight parallel lines for decoration and often a "comb" added. The body is less detailed than the head, but ribs are always prominent. The coastal portion is represented by conventionalized appearance, the large head, prominent circled eyes and skeletal body. The river style often contains a single large tooth in the lower jaw which, with the heavily circled eyes gives

Figure 43

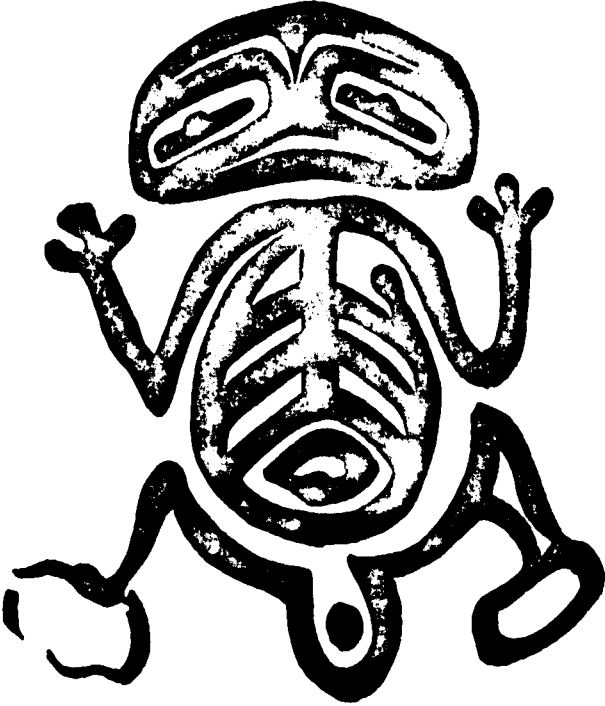
Examples of the Classic Conventionalized Rock Art Style. Design a is a petroglyph from the Monsell Site (CS 127) drawn from a rubbing in the BCPM to a scale of one inch to one foot. Design b is a pictograph from Port John (K 72). The actual painting is approximately 60 cm in width. Design c is a petroglyph from Cullum Point (Ts 40) drawn from a rubbing in the BCPM to a scale of one inch to one foot.



a



b



c

Figure 43

TABLE VII

Distribution of the Classic Conventionalized
Rock Art Style

	petroglyph	pictograph	combination
Tlingit	25,54		
Haida	6		
Tsimshian	1,40	20	
Bella Coola			
Kwakiutl	31,227	<u>72,160</u>	
Nootka			
Coast Salish	44,127	100	
Chinook			

TABLE VII

the appearance of an old person's face. The plateau portion seems to be represented by the use of the zigzag or straight or angular lines which usually are to be found in the headdress. The zigzag while not unknown in coastal art is comparatively rare. Strong, Schenck and Steward (1930:143) interpret the style as:

A unique blending of the realistic art from
down river with a geometric art from upstream.

There are several examples of rock art sites containing designs which are part of this stylistic category, as they share the characteristics noted above. Butler (1957) places all such works into his Late Period which he dates from between A.D. 500 and about 1850. During the latter part of this period (1400 - 1800) the carving of stone and antler reached a peak and many examples of this art have been recovered from cremation carvings which exemplify the Columbia River style and which the rock art so named resembles. One design commonly encountered was the grinning face of an old woman "Tsaqaglala", known as "she who watches". The design occurs as both petroglyph and combination site in the Long Narrows area. Another common design is the skeletal human figure which prompted one researcher (Strong 1945) to suggest that it indicated the presence of a comparatively recent death or ghost cult. However, it appears that this is not the case since such ribbed figures would seem to be a very old, widespread stylistic trait beginning with the Basic Style and becoming transferred to the Columbia River style. Figure 44 illustrates two examples of Columbia River style rock art, showing the Tsaqaglala face and Table VIII indicates the limited distribution of the Columbia River style.

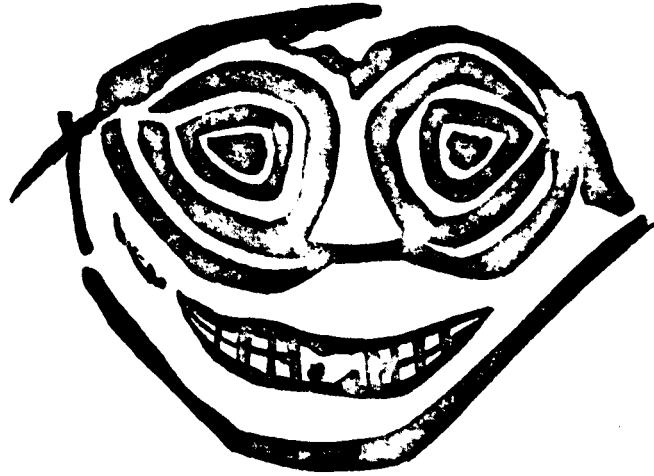
Coast Abstract Curvilinear Rock Art Style

Designs of this style appear to co-exist along with those of the conventionalized forms, especially some of the Basic Style. Included in this

Figure 44

Designs of Columbia River Conventionalized
Rock Art Style

Design a of Tsagagl'alal's face is a petroglyph from the long Narrows area (Ch 22) is drawn from a rubbing in the BCPM to a scale of 1/2" to 1 foot. Design b, of the same face is a combination site near Spedis (Ch 19) as drawn from a photograph in Strong (1959). No dimensions are given.



a



b

Figure 44

TABLE VIII
Distribution of the Columbia River
Conventionalized Rock Art Style

	petroglyph	pictograph	combination
Tlingit			
Haida			
Tsimshian			
Bella Coola			
Kwakiutl			
Nootka			
Coast Salish	140?		
Chinook	11,20,22		19

TABLE VIII

category are pit and groove designs although in his original scheme, Grant (1967) had placed these designs into a separate category. (If one were to apply a stylistic term to pit and groove designs it would be abstract curvilinear and therefore they are included in this category). The designs of this style and especially the pit and groove designs appear to be an old and widely distributed form since they are known from Alaska throughout the coast and well into California (Heizer 1953). The rain rocks of the Talowa, Karoc, Hupa and Shasta as well as the "baby" rocks of the Pomo tribes of northwestern California were usually pitted and grooved boulders. These designs occur also in Siberia (Okladnikov 1971) and the Hawaiian Islands (Cox and Stasack:1972). If age cannot be held to account for the wide distribution of such designs then their simplicity probably can. As Keithahn (1940:124-5) noted, such simple designs as pits (he calls them "cups") may have been inspired by natural depressions in sandstone as well as by marks left by tool shaping and sharpening activities:

The most primitive types, which are at the same time the most abundant are those generally referred to as "cup sculptures". These are simply cuplike depressions made at random on the surface of boulders, probably by whirling a stick and at the same time pouring in an abrasive such as sand...There seems little likelihood that the earliest makers of these depressions considered their work art. Probably they were simply imitating natural potholes made by the whirling of sand and pebbles in the neighbouring stream beds. Yet, there came the time when these cups were encircled by rings and concentric rings, then spirals and finally, face-like forms appeared. Thus art was created ... (1939:10).

Whether such forms are indeed the beginnings of art per se on the coast or even the beginnings of rock art we do not know, but Keithahn's comments do serve to emphasize the intrinsic link between the abstract pit and groove designs and the simple circle faces of the Basic Style. In Puget Sound and along the Venn Passage near Prince Rupert these pits and faces are the pre-

dominating designs; the former serving to link the Columbia River rock art traditions with those of the southern British Columbia coast. Table IX indicates the distribution of the Coast Abstract Curvilinear style and figures 45, illustrates some of the designs of this style while figure 31 b - e provides a few examples of some of the simpler faces that Keithahn believed arose from the pit or cup sculptures.

One phenomenon evident in coastal rock art is the appearance of a great many pictograph sites of the Kwakiutl and Coast Salish area, the designs, techniques of manufacture, and overall appearance of which are markedly similar to rock paintings of the British Columbia, Washington, and Oregon interior. Sites such as these seem to "intrude" upon the predominately stylized art of the coast. The designs of this category are generally either naturalistic or rectilinear in style, and are grouped together under the title Interior Intrusive.

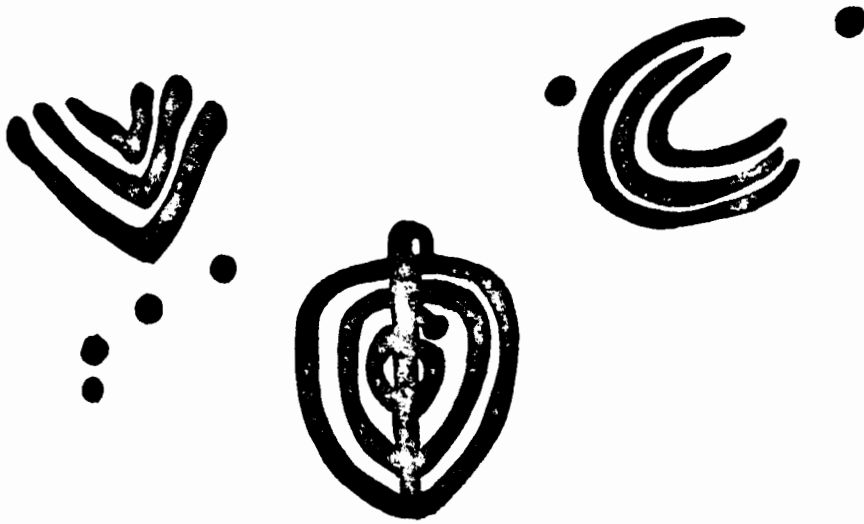
Interior Intrusive Rock Art Style

There are several reasons for suggesting that the art belonging in this category is intrusive onto the Northwest Coast:

1. In appearance, technique and subject matter, the designs of this category are more similar to the art of the interior than they are to art of the coast. Such interior traits include solidly painted or abraded figures with no inner detail as opposed to outlined and internally decorative work of the coast. The designs are small and simple and many are clustered onto the rock panels while coastal art is less clustered and more complex, well spaced and more nearly life sized where available rock surfaces permit. Anthropomorphic figures are single and linear while zoomorphic figures tend to be naturalistic. Most geometric designs are based on the straight

Figure 45
Designs of the Coast Abstract Curvilinear
Rock Art Style

The Designs of group a are a few of many at the Ten-mile Tavern (Ch 7) site (Gentry's Landing). They are drawn from a rubbing in the BCPM to a scale of 1 1/4 inches to one foot. Design b is from Skamania (Ch 11) and is drawn from a rubbing in the BCPM to a scale of one inch to one foot.



a



b

Figure 45

TABLE IX
Distribution of the Coast Abstract
Curvilinear Rock Art Style

	petroglyphs	pictographs	combination
Tlingit	11,21,25,37,50, 54,60	20,22,49	
Haida	6,9		
Tsimshian	5,6,7,8,9,10, 11,14,15,16,17,32		
Bella Coola			
Kwakiutl	149,219,226,227	74,128,152, 182,183,211, 215	
Nootka	13,14		
Coast Salish	120,121,127,152, 153,161,163	21,64,101,104 108	
Chinook	2,6,7,8,11,12, 14,22		

TABLE IX

rather than curved line. Common designs include, besides anthropomorphic and zoomorphic figures, rayed arcs, rayed lines and circles, dots, dashes, crosses, forked lines, "arrows", and other basically linear designs.

2. This type of rock art is the dominant form of the British Columbia interior as described and illustrated by Corner (1968), and Middle Columbia and most of Washington state as illustrated by Cain (1950). It is also the dominant form covered by Cressman (1937) in most of Oregon state, barring the Columbia River and coast. By way of contrast, the coastal stylized forms appear to intrude into the interior along the rivers and more deeply indented inlets.

3. Many coastal rock art sites contain both a coastal and interior style side by side. For example, at Port John (R 72) there are paintings in both the Classic and Basic styles alongside others which contain distinctly Interior characteristics. In the Bella Coola Valley, too at Thorsen Creek (BC 12) one boulder contains carvings of circle faces similar to others found along the coast but in association with "stars" and bear tracks both of which are commonly subjects of the Interior.

4. This body of interior art is not found in any strength on the off-shore islands of the coast. Instead it is to be found on the mainland waterways almost as though its distribution from Interior strongholds into the coast was not completed before rock painting and carvings were no longer made in any great numbers on the Northwest Coast.

This Interior "intrusive" art appears to be classifiable into two main types, that is there are both naturalistic and rectilinear designs.

The Interior naturalistic designs are those depicted in a natural or realistic (as opposed to stylized or abstract) manner. The carved and painted designs of this type are not very numerous among the predominately stylized

art forms of the coast. They are usually animal depictions especially quadrupeds such mountain goats and mountain sheep and as such would seem to belong to a group of interior traits that have entered coastal territory. Although there are a few exceptions especially in the northern area of the coast, most of the designs of this category are either solidly painted or solidly abraded, that is, they are not the usual outline figures common to the coast. Solidly painted or abraded figures with little or no internal detail are interior technical traits. These designs are encountered in strength only along the eastern fringe of the Lower Columbia River in the area of Petroglyph Canyon and the Long Narrows (Ch 20,21, and 22).

The Interior Rectilinear designs are often of an abstract nature, and are based on the straight line. These designs appear for the most part in pictograph and are strikingly similar to those usually associated with interior sites. Designs which commonly occur in this category include "arrows", two and three forked lines, rayed lines, stars, cross hatchings, zigzags and other rectilinear designs. The two-forked lines which may represent fish or serpents are included in this group since their appearance is nothing like either fish or serpents and the designs are based on the straight line. (These particular designs, occurring only in pictographs of the Kwakiutl and Coast Salish areas appear to be a local variation confined to this part of the coast). Table X indicates the distribution of the Interior Intrusive rock art style and figure 46 illustrates examples of designs of this style.

The stylistic categories listed above should be considered only as rough indications of the characteristics of coastal rock art. There is too much information that is missing or unreliably recorded to assign any site to a category (or categories) with any assurance. The stylistic categories contain

Figure 46

Examples of Designs in the Interior intrusive rock art style. The figures in group a are from Indian Arm (CS 100). The actual painting is about 40 centimeters in width. Design b is from Petroglyph Canyon (Ch 20) illustrated by Strong and Schenck (1925:84). No dimensions are given. The figures in group c are from Port John (K 72) and measure about 60 centimeters in width. All of the designs are pictographs.

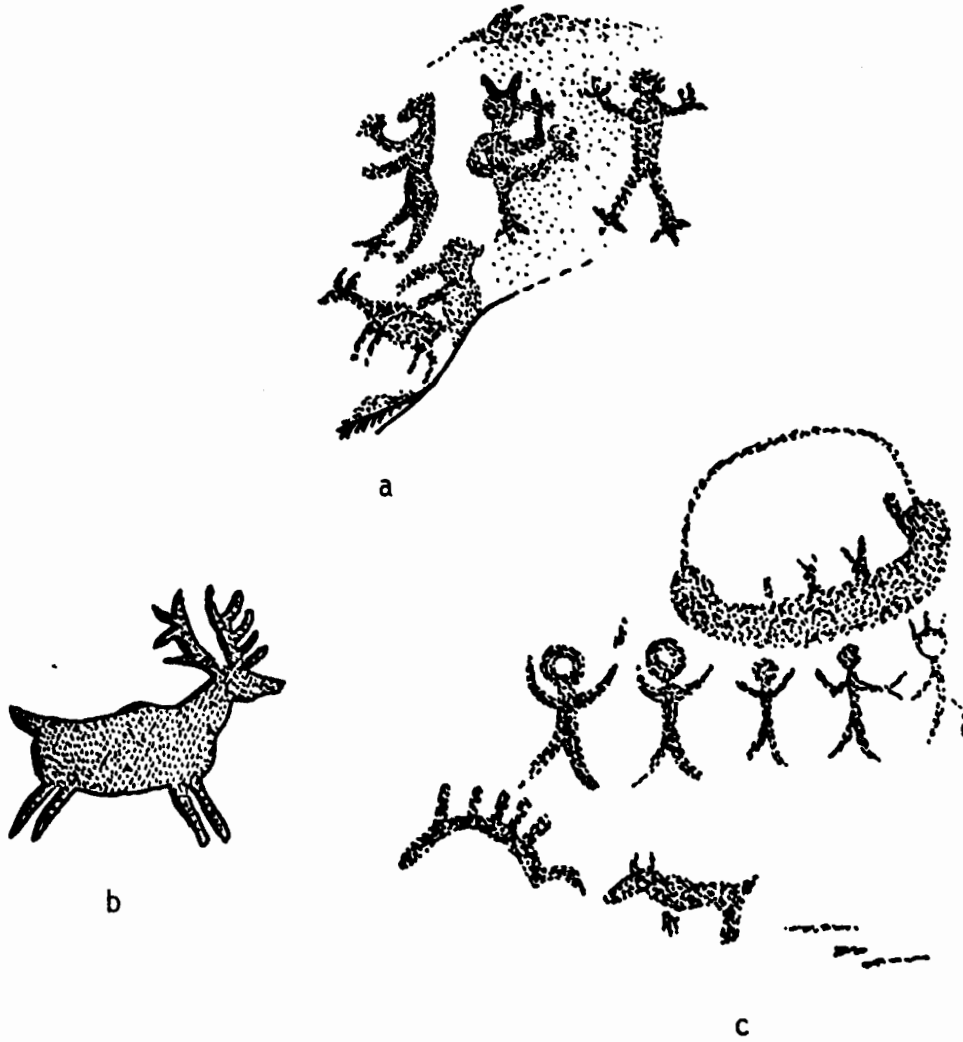


Figure 46

TABLE X
Distribution of the Interior Intrusive
Rock Art Style onto the Northwest Coast

	petroglyphs	pictographs	combination
Tlingit		22	
Haida		4	
Tsimshian	11	36	
Bella Coola	13		
Kwakiutl		3,15,23,26,27, 60,72,79,88,103, 109,110,112,159, 160,163,172,174, 182,222	
Nootka			
Coast Salish	41	6,8,9,10,11,14,16, 17,19,20,29,46,47, 48,49,54,58,59,61, 62,63,65,67,68,71, 73,76,80,81,90,95, 100,105,112,141.	
Chinook	1,7,8,20,22	16,21	

TABLE X

many omissions and inaccuracies and should be considered as rough guides only, suggesting but not defining patterns in the data.

FUNCTION

All rock art is a record. Coastal rock carvings and paintings recorded privileges, events and persons, of a real or mythical nature. One major function of coastal rock art seems to have involved its use as a means of extending to the land the display of those crest symbols which indicated hereditary rights. Frederica de Laguna, researching among the Tlingit makes the following pertinent comments:

Our informants implied that the petroglyphs and pictographs did consist of proprietary and totemic designs and so, indirectly if not directly would indicate the sib that had territorial claims to the areas where they were made. In a general sense, therefore, we may think of these rock pictures as graphic representations of sib prerogatives, analagous to the designs on decorated blankets, crest hats, carved posts, painted house fronts, etc., (1960:72-3).

These comments would seem to be borne out by information gleaned from at least a few other coastal sites and it seems likely that many more carvings and paintings were made for just such a purpose. For example, at Head Island (T1 18) de Laguna notes that petroglyphs there:

could be read like totem poles and identified the sibs claiming the area (1960:71).

At Sitkoh Bay (T1 25) a petroglyph which included a copper and a spiral as designs was said to be the "mark" of the Ganaxadi Tlingit, the copper symbolizing the territorial wealth surrendered at one time by the Ganaxadi to the Decitan Tlingit. The spiral may have represented the woodworm, an important crest of the Ganaxadi (Garfield 1947:441). G. T. Emmons, also working in Tlingit territory believed as well that petroglyphs there were a means of displaying clan emblems and he felt that the carvings of north-western Etoline Island (T1 62) were such a display. He notes further that an intricate series of carved figures at Lisiansky Bay (T1 37) which appeared

to relate the myth of Raven's Theft of Water, is located on land claimed by the Raven sib (1908:221). He comments too, that a carved boulder at Sitka (T1 36) was used as a seat by Katlean, Chief of Sitka's Kake-Satter family (ibid 1908:220). It is perhaps worth inserting at this point a brief comment made by Olsen (1967:56) who states that a pictograph at Takihanus Bay (T1/H 1) was located near a salmon stream at an "owned place" of the Sitka Kisadi group.

Only three Tsimpsonian sites appear to have any connection with property markers. A boulder from the area of Observatory Inlet (Ts 1) is described as belonging to No-ak-laik, a chief of some 200 or more years ago who carved his crest sign first in order to indicate his rights, hunting and fishing, in that vicinity; his successors in time each added their own sign or crest (BCPM, Ethnology Division). Of this boulder F.W.M. Drew (1969:17) quoting Canon Rushbrook, notes that:

It marked the southern boundary of the hunting and fishing domain of the Nach-klats family, (Nach-klats means 'partly furred bear cub emerging from hibernation') and was a deed to the land which stretched northward from An-ga-ish (where the boulder was carved) to Nishka-aks (Indian River) on Observatory Inlet. Carved on the second left hand corner is the eagle crest of the Nach-klats family. Lower down is a halibut and a beaver face to indicate inter-crestral marriages. The spiral shaped drawing denotes the origin of the family at Gish-ga-aks (dwellers on fresh water).

A second stone, bearing an insect design was located at Hagwilget near Kispiox (Ts 29), and was identified by a local Indian as being the property of an eagle's chief. The stone, supposedly symbolized this chieftainship and was brought from Kitsuecla when the eagles moved to Kispiox (anonymous 1928:6). A pictograph at Lava Lake (Ts 22) was said to be a territorial marker of the local Raven group. One design, a zoomorphic

head with prominent nose or beak may have been intended to represent Raven. This painting is supposed to have been made on the spot where a Raven chief found and killed a trespasser, painting the design in his victim's blood. (Personal communication, Steven McNeary, Merion Pennsylvania, 1974). The pictograph at Tyee (Ts 20), according to Robinson (1974:54) was commissioned of a famous Tsimshian artist by Chief Legaik who wished to emphasize his establishment of a trade monopoly on the Skeena River. All who passed up river at this point could see the face and copper designs and were expected to stop and pay tribute.

Unspecified sites in Squamish territory of the southern Northwest Coast may also have served as indicators of ownership. Informants there told Harlan Smith (NMC note) that pictographs were made to mark the boundaries of family hunting territories. Other sites may have served similar purposes; a petroglyph on the Stikine River (T1 51) is said to have been a record of an unspecified agreement between Tlingit and Tahltan peoples in precontact times (BCPM). Another petroglyph, this from Puget Sound (CS 148) is said to have been "marked" by one Kitsap, a famous Suquamish warrior (Smith 1946:314). A useful project, beyond the scope of this thesis might be to search for further correlation between rock art designs and crests or sib ownership for specific areas. The northern coast, where use of crest signs is most marked seems at present to have the strongest correlation.

Some rock art sites of the Northwest Coast appear to be closely linked to certain fishing activities or locations. It is not always known if their designs can also be considered as crests and therefore were records of family prerogatives. E.L. Keithahn of Alaska believed that many of the

petroglyphs of southeastern Alaska were made as supernatural fishing aids. He notes the common occurrence of such carvings on the seaward faces of boulders located at the mouths of known salmon streams where they were wholly or partly submerged by the tides. He speculated that the carvers, deliberately choosing such sites were appealing to the "salmon people" to favour such marked streams (1940:128). Not only would the "prayer" be renewed with each tide, but as most field recorders known, the designs appear more pronounced when the rock surface is wet. Keithahn, noting that the outfalls of streams with good runs of salmon were often crowded with carvings while streams barren of fish were also devoid of carvings, comments:

Sockeye salmon streams seem to have been favoured for this type of art, yet any salmon stream claimed in the past by certain clans will have petroglyphs in the immediate neighbourhood, generally on the saltwater beach on the side from which the salmon entered. Large streams such as the Stikine River or a famous salmon stream such as Anan Creek in the Wrangell District have more glyphs than streams in which the salmon run was small. A small stream near Wrangell barren of salmon at present boasts many petroglyphs at its mouth. The oldest natives remember when it was an excellent salmon stream (1940:129).

Keithahn also believed that a circle-face carving occurring at both Karta Bay (H 2) and Hydaburg Creek (H 3) was intended to represent the Tlingit shaman, Shin-quo-klah, who was concerned with salmon ceremony. A nearby spiral design, according to Keithahn, was a record of the whirlpool where the shaman eventually was drowned. In Coast Salish territory, the painted petroglyph at Jack's Point (CS 125) is known to have been an integral part of the salmon ceremony of the Nanaimo people (figure 11a). Barnett (1955:89) records the following description:

When the salmon run poorly or late, magic was resorted to...evidence of ritual performed here is to be found today on Jack's Point where there is a rock on which are incised figures of various fish. When the salmon run was late, the ritualist painted over these figures with red ochre; at the same time he also painted bits of four different substances including goat wool and a grass and burned them at the foot of the rock.

A similar function may have been served by a rock at Wrangell Alaska (T1 54) where Raven caught a spring salmon "through the use of a stone with a face on it to which he gave magical power by sprinkling it with eagle down" (Keithahn 1940:132). Strong, Schenck and Steward (1930:134) noted that some petroglyphs of the Long Narrows region on the Columbia River were also located at known fishing places, again, frequently submerged. Strong (1945:250) comments of one such site (Ch 22):

This large and deeply incised figure is said, by local Indians to represent one of the spirit guardians of the fishing places on the Narrows where salmon are caught in dip nets. There are a number of these petroglyphs at this site and elsewhere in the vicinity. At high water, the Spedis examples are covered but emerge when the water drops and the dip-netting season approaches. In 1924 these "Guardians of the Fishing Places" still seemed to be held in considerable reverence by the Indians whether as supernatural fishing aids or as family fishing station markers was not determined.

These same sites are also known locally as "water devils" and were also supposedly made as a warning of dangerous places, especially keeping small children away (Seaman 1946:221). In the same area, Strong and Schenck (1925:77) note that only the west wall of Petroglyph Canyon (Ch 21) was covered with carvings, with none appearing on the east wall: the east wall was submerged during high water. This apparently deliberate distribution of designs suggests a quite different motive behind these carvings since elsewhere in the vicinity and along most of the Northwest Coast, petroglyphs are commonly located in intertidal areas or where they will be periodically submerged. It seems reasonable that a great many coastal rock art sites were concerned with fishing activities either as indicators or fishing ownership rights, supernatural aids, or more simply, as indicators of potential. Regarding the latter, it should be noted that petroglyphs in particular are often located at known productive

fishing spots, or near salmon streams or fish traps.

One of the more frequently encountered rock art designs is that of the whale, especially in Nootka territory. This is not unexpected since the Nootka were distinguished among other coastal groups by being true deep sea whalers. Of the sixteen known Nootkan petroglyph sites, half can in some way be linked to whales or whaling ritual. Whales occur as designs at six sites and this distribution continues along the southern Vancouver Island Coastline including four of nine Coast Salish sites of the area. At two of these near Point-No-Point (CS 142,143) the carvings overlook an expanse of Juan de Fuca Strait where the killer whale pods used to pass in great numbers (BCPM). A Ucluelet informant told Harlan Smith about a rock formation near Wreck Bay in northern Nootkan territory commenting that "whale hunters rubbed against it when they bathed and scrubbed with hemlock boughs" (NMC).² In Smith notes that whaling ritual was generally a secretive affair, forbidden to the uninitiated. If petroglyphs and pictographs too were involved in such rituals this same prohibition might apply thus partly explaining the lack of knowledge regarding them. It is curious that the two Nootkan sites on inland lakes Great Central Lake (N 15) and Sproat Lake (N 16) can also be linked with whales. The former was considered to be the home of the "devilfish" which according to an Indian quoted in a doubtful newspaper article of 1925 was carved on the rocks as a warning to other Indians that their traditional enemies, the whales were nearby. At Sproat Lake, one design may have been intended to

2. Smith, at the time believed the rock to have been a petroglyph. The nearest petroglyph in Nootka territory is at Quisitis Point (N 12) which does contain whale figures.

represent the lightning snake or Haietlik, which, in coastal mythology was used as a harpoon by the thunderbird when it sought to hunt whales (Newcombe 1907). All of the above is not to claim that Nootkan petroglyphs were made as part of whaling ritual, but to suggest that such is a plausible function for this particular part of the Northwest Coast. Among the Eskimo, to the north of the Northwest Coast, whaling ritual figured strongly as a motive for the making of rock art. At Orca Bay, for example, in the territory of the Eyak Eskimo, paintings were made in secret by whale killers as "this was their luck" (de Laguna 1934:154). These particular pictographs, in caves and rock shelters usually depict whale and human figures and appear to have been an essential part of the whaling ritual since the creation of the designs was deemed necessary for a successful hunt. At nearby Prince William Sound, pictographs have been similarly related while Heizer (1947:288) reached the same conclusion regarding petroglyphs of Cape Alitak on Kodiak Island, noting that they too were probably the work of whale hunters.

A few coastal rock art sites can be connected to specific ceremonies, in particular those involving secret societies. At Angoon (T1 14) circle-faces on beach boulders were said to represent the faces of slaves killed during potlatches (de Laguna 1960:48). At Fort Rupert (K 149) during one of the winter ceremonials of its early days, a Mr. Hunt and Mr. Moffat witnessed the shooting of a slave of the Nanaimo tribe for the Hamatsa or Cannibal Society. Later, a circle-face representing Baxbakualanu Xsiwaxe, the Cannibal Spirit was carved into a nearby rock as a record of the event, (Boas 1895:439-40). South of Fort Rupert, at Yellow Island (CS 41) a carved human figure reminded Smith (1907:326) of the masked cannibal of the Kwakiutl Winter Ceremonial. A nearby face, he comments:

...also gives the impression that these petroglyphs may represent incidents of the Winter Ceremonial. This face is characterized by a peculiar curvature of the outline which is continued on two horn-like projections one on each outer side of the head, while in the middle there is an oval ornament placed in the middle of the straight top of the head. The figure reminds me of the so called Xwa-exwe.

This particular mask is well known on the southern coast, being concerned with crest acquisition in Kwakiutl groups and with individual power acquisition in Coast Salish groups (Codere 1948:15). At Beechey Head Islet (CS 147) a similar mask-like face is carved into granite rocks. Finally, a boulder with carved animal figures near Youngstown Puget Sound (CS 158) was related to "power figures" according to one Duwamish informant. This boulder, as appears to be the usual case, was used repeatedly (Smith 1946: 315). There are a few other sites which may be concerned with specific ceremonies. A pictograph of the Tzeo River (K 121) contained forty-eight copper designs and was locally known as Potlatch Point, possibly because of a relationship with this particular ceremony. Another pictograph, at Green Point Rapids (K 207) is said to have been painted to record how a chief threw a valuable copper into the sea at this point to vaunt his wealth (Figure 41c). According to F.J. Barrow (BCPM) who initially recorded the site, the copper was worth approximately two thousand dollars. The designs of the site include several crudely painted coppers. Gutorm Gjessing notes that certain Salish pictographs (sites not specified) are reminiscent of figures painted on planks for the Duwamish Spirit Canoe Ceremony of Puget Sound. The designs of the wooden planks are generally zoomorphic in nature, the central figures being surrounded by evenly spaced dots. These dots about the figures were said to represent songs revealed to sham^{ans} by the guardian spirit whose likeness is pictured in the middle of the plank (Waterman 1930:297). The Duwamish paintings appear to be more closely related to the solidly painted, simple pictographs of the Interior

Plateau regions than to those of the nearby coast. However, the idea of dots representing songs is an intriguing one as dots are commonly encountered in the pictographs of both coast and interior and have never been satisfactorily explained. A few miles from Bella Coola are two ceremonial rock art sites, one of which, Tastsquam Creek (BC 11) was the meeting place of the local Kisiut Society. McIlwraith describes the site as follows:

The ledge is immediately above the brink of the falls in one of the most awe-inspiring places imaginable. The meeting places of other villages lack such natural settings, though all are to the bases of cliffs, or near some easily distinguishable feature. Some of them are decorated with rude carvings pecked into the stone. The meanings of the design is not known to any of the present inhabitants. Some of them were made long ago by chiefs when they were composing tunes; they pecked out the rock in time to the music forming in their minds. Others, were memorials of certain events. If a chief gave an important ceremony he or one of his friends carved a figure perhaps that of a man, perhaps some animal connected with the rite, to recall the occasion. (1948:178).

From the above comments it seems as though the location itself was an extremely important consideration and such locations were re-used over and over again. It also seems as though different criteria regarding location was sought for different functions.

The second Bella Coola Valley site, Thorsen Creek (BC 12) with its many diverse designs (figures 24c-d, 31i-h), different artistic styles and techniques may also have been such a well-chosen and re-used location. The extensive pictograph site at Port John (K 72) with its many individual figures (figures 13f,g, 28e, 30e, 36d, 39c,d), different styles and two pigments may well have been another. Both are located in striking settings, one being set deep into the forest near a rushing creek, and the other on high, exposed cliff faces, and at the base of the same cliffs.

A few rock art sites seem to be records of local events, generally of

a disastrous nature and frequently concerning the sea. For example, two sites are linked with drownings. One explanation suggested for the deeply carved human figure at Roberson Point (Ts 11) was that it was made to mark the place where the body of a drowned Indian was recovered (Smith 1936). F.J. Barrow, in 1935, recorded the following explanation of a large series of coppers painted near Naena Point (K 184,185) on Knight Inlet:

About three generations ago, or possibly at an earlier date, a large portion of the mountain opposite Kwalate Point slid into the inlet, causing a huge tidal wave which wiped out all the inhabitants of the village opposite. The Indian name for the mountain is "Tchu" (phonetic) and the vast slide is quite noticeable today...Mr. Johnson (informant) states that the pictograph close to Naena Point was placed there in memory of the chiefs who lost their lives in the cataclysm and to record the event (BCPM).

Along the rugged British Columbia coast shipwrecks of both native and European vessels must have been a common occurrence. A few rock art sites seem to have been concerned with recording such incidents. According to informants of Frederica de Laguna (1960:71) a pictograph at Whitewater Bay (T1 20) was made to record the rescue of a party that had drifted across Chatham Strait on a raft. The shaman with the lost party was able to "contact" another shaman at either Hood Bay or Angoon, and thus the group was rescued. (Possibly this particular pictograph could be said to commemorate not so much the disaster as the exploits of the rescuing shaman). Dr. de Laguna noted that another Tlingit pictograph, this at Magpie Point (T1 15) may have been concerned with a European shipwreck from which the natives gained valuable articles (figure 40d). She comments:

The widow of John Shuwika, chief of the Wuckitan Fort House at Angoon, tried to tell Garfield about the wreck, and her daughter also mentioned it to us, but unfortunately neither of these ladies had sufficient command of English to tell the story and no interpreters were available. A Russian steamer was lost off Whitewater

Bay and the American schooner Langley somewhere in Chatham Strait (Morris 1879:56) and there were doubtless other wrecks of which I have been unable to find any record. The picture may refer to one of these or may possibly commemorate the first encounter with Europeans. Our informant, for example was evidently familiar with the story of the meeting with La Perouse in Lituya Bay in 1786 (1960:73).

At Blowhole Beach near Clo-oose on the rugged western coast of Vancouver Island five historic ships have been carved into the sandstone bedrock. Nearby are figures of humans, birds, fish and circle faces (figure 30g). Four of the ships are sailing vessels while the other is obviously a steamer with side paddles (figure 40a). A Mr. Connell who wrote a brief description of this site for the Victoria Times in 1926 suggests that the steamer might be a representation of the Hudson's Bay Company ship, the Beaver. The sailing ships may have been intended to represent several of the barques that came to the Columbia River for wheat and to other parts of the coast for timber (Connell 1926:28). Another writer, Mr. Don Nelson noting Mr. Connell's article cites the following piece of local history suggesting part of it as a possible explanation of some of the Blowhole Beach (N 18) petroglyphs. Quoting from "The Passing of a Race" by D.W. Higgins of Victoria (1905:179-184) Mr. Nelson gives the following story:

In March, 1869, a barque the John Bright ran aground some 14 miles north of Clayoquot Sound, and all on board, including the Captain, his wife and child, a nursemaid and the crew were killed by natives after they escaped the wreck. A second ship, the HMS Sparrowhawk was sent to bring the murderers to justice. Some were hanged. Years later, another barque, the Edwin, suffered a similar wreck but its crew were treated well by the Indians and returned to safety. Mr. Nelson suggests that three of the carved ships, several of the faces (the first crew were decapitated) and

the figure of a woman in what seems to be a long (European?) dress were perhaps carved in connection with the first shipwreck, or as a reminder of what happened to the murderers.

Warfare was a frequently recorded subject for coastal rock paintings and carvings and is seen as a motive behind sites all along the coast. A petroglyph at Yakutat Bay (T1 1) was said to commemorate the defeat of a Russian trading outpost by a Tlinget sib about 1805 (de Laguna 1964:23). One possible reason suggested by natives for a pictograph at Whitewater Bay (T1 20) was that it was made to record a Tsimpsian war victory (Ibid 1960:72), while a site reported at Tenakee (T1 24) was said to commemorate an attack suffered by its inhabitants (Ibid 1960:71). A pictograph at Klukwan (T1 3) was made to celebrate the slaying of unidentified enemies in battle (Ibid 1960:72) and a painting on the Anuk River (T1 49) was done to commemorate the massacre of Wrangell (Stikine) Tlingit by Nass River Tsimpsian and the capture of a canoe-load of slaves. (Ibid 1956:108). A petroglyph at Berner's Bay (T1 4) was carved after a battle between the Auke tribe and an earlier people who lived at Berner's Bay. After the battle, several high class slaves were required to carve the petroglyphs commemorating the victory of the Auke tribe. When they had finished their task they were killed (Kennedy 1974). The Bensin's Island site in Bella Coola Territory (BC 14) was supposedly painted to record a raid by Alert Bay Indians in the early 19th century (personal communication, P.M. Hobler, Simon Fraser University, 1971). One pictograph on Illahie Arm (K 93, or 94), may have been concerned with the slaughter of a nearby village (BCPM). Prisoners of war were killed on a particular boulder near Cape Mudge (K 226). This stone bore a carved circle-face design. At Gaston, in Patton's Valley, Oregon (Ch 1) a series of carved figures were said to record the story of

an unsuccessful Kalapuya raid against the local Tualati (Mallery 1893:105). Finally, at Petroglyph Canyon (Ch 20) the absence of rock art on the southern shore of the Columbia River near this site was tentatively attributed to periodic raids by parties of Snake Indians who left carvings and paintings of a different style than that found elsewhere in the area (Strong and Schenck 1925:90). There appears to be little correlation between history and design as few of the sites listed above depict battles or weapons. One figure at Bensin's Island (BC 14) has his arms above his head in what may be a surrendering posture.

Occasionally it seems that no other motive for particular rock art sites can be found beyond that of "passing time". At Port Houghton (T1 8) a chief was said to have sent his slaves down to the beach to carve rocks and "to keep them out of mischief" (Keithahn 1940:130). Niblack who visited among the Tlingit was of the opinion that the petroglyphs of the Wrangell area (T1 54) "had no other significance than the practice in idle hours of an art in which they were all striving to attain excellence" (1890:231). Douglas Leechman (1952) reported seeing an Indian acquaintance begin to carve a circle-face on the rocks of Agate Point (CS 156) in Puget Sound. The Indian's explanation was that such were done to pass the time while waiting for the tides to change. In the myth, "A Wasco Woman Deceives her Husband", as noted by Sapir (Strong and Schenck 1925:86) a man of Tenino Village on the Columbia River was said to have "made pictures on the rocks to amuse the youngest child - pictures of deer, birds and weapons".

Another function of petroglyphs may have been concerned with fresh water sources or rain making activities. Keithahn in 1940 suggested this on the basis on an informant who told him that some Tlingit carvings were made "to cause rain". Keithahn speculated that extra rainfall, despite

the naturally heavy rainfall of the northern coast would make it easier for salmon to enter the streams where they could be more easily taken. The only other suggestion of a connection between rock art and rain-making activities along the Northwest Coast is to be found at Eneti (CS 159) on Puget Sound where a boulder with a carved circle-face said to represent the thunderbird (figure 22a) "would cause rain if shaken" (Newcombe 1907). Robert Heizer (1953:33-6) notes that several tribes of Northern California resorted to rain making activities which involved certain pitted or carved boulders. He felt that the Eneti boulder was a northern extension of this distribution. At five other petroglyphs sites along the Northwest Coast there is direct association of designs with fresh water sources. One wolf figure (figure 46) at Kulleet Bay (CS 133) is known locally as "the Rain God" - but this appears to be a recent name. A sea wolf carving at Dogfish Bay (K 227) is by tradition said to be pointing at a nearby spring. It is perhaps worth noting that Emmons (1908:224) identified one design at Lisiansky Bay in Tlingit territory (T1 37) as being Kun-nook, the guardian of fresh water, "who often appeared in wolf form". At three other Coast Salish sites there are carvings located near the springs. These carvings do not depict canines and nothing is known regarding their history. As far as is known, no pictograph is associated with either rainmaking activities or with springs.

Information regarding many Northwest Coast sites has been preserved in the form of myths. However, information of a mythical nature is somewhat disturbing as one is not always certain which came first, the myth or the site. In other words, did the myth inspire the designs or, conversely, did these myths grow up around older, already existing rock art sites which were made for other, unknown reasons? As has been mentioned in connection

with whaling ritual, many aspects of life on the Northwest Coast appear to have been secretive in nature. The secret societies and possibly shamanistic rites too, were forbidden to the uninitiated. Should any rock art connected with such organizations be "rediscovered" long after the ritualist painters or carvers were gone then it seems quite logical to assume that traditions or stories might be begun to account for the mysterious designs. On the other hand, many coastal rock art designs do resemble creatures which are known from other art forms as specific mythical beings and it seems reasonable to assume that some rock art does indeed record the supernatural side of Northwest Coast life. The following are examples of such sites. At Wrangell (T1 54) a series of boulders is supposed to relate the story of how Raven caught a spring salmon (Keithahn 1940:132) while Raven's Theft of Water seems to be illustrated at Lisiansky Bay (T1 37) (Emmons 1908:223-5). In Haida territory circle faces (figure 31d) carved at Karta Bay (H 2) and Hydaburg Creek (H 3) may have been intended to represent the mythical shaman, Shin-quo-klah (Keithahn 1940:130). The same writer notes (1943:62) that spirits were sometimes portrayed only as eyes, sometimes as complete faces if the space was large enough. Perhaps, then, the circle faces so common along the length of the Northwest Coast were meant to portray with a single design, the many different "spirits" or mythical beings. In Tsimpsian territory an informant claimed that a stone (figure 19) recovered from near Kispiox (Ts 29) relates the myth of a robber family who stole salmon from a cache and who were subsequently pursued by four hornets which eventually caught up with the family and stung them to death. (Centennial Museum). This same informant claimed that totem poles were an historic means of recounting and that prior to their use stones were used for the writing of legends and family and tribal traditions. A deeply carved human

figure at Roberson Point (Ts 11) was said to have been carved by a man who wished to convince his fellows that he had gone to heaven and that the impression was that made by his body when he fell from heaven (Smith 1936). Harlan Smith believed that several of the carved figures at Thorsen Creek (BC 12) were intended to represent mythical creatures of the BellaCoola. He named the "haohao" a bird with scales in place of feathers, and the "sniniq" an animal resembling the grizzly bear but with the talons of a bird (Smith 1925:138). On examining the birds and bird-like glyphs at the site it is difficult to determine to which figures Smith was referring. Most lack distinctive detail. In the territory of the Kwakiutl, several faces at Fort Rupert (K 149) were believed to represent such mythical beings as the sea monster Ia'kin (figure 20e) and the cannibal spirit mentioned already in connection with secret societies (Boas 1897:439). It is possible too, that certain designs at at least four widely separated coastal sites may have been intended to illustrate the well known myth which involves the thunderbird, the lightning snake and the whale. According to this myth, the thunderbird, when it becomes hungry, goes in search of a whale to eat. The whale is harpooned with the lightning snake. At the pictograph sites of McPherson Creek (23), Salmon Bay (CS 8) and Brighton Beach (CS 96) and the petroglyph site of Fransisco Point (K 225) there are figures suggestive of this myth. At McPherson Creek, (figure 22b) the most northerly of these sites the simply drawn bird figure is holding in its claws a single forked line similar to the conventionalized fish or serpents found in some Coast Salish pictographs. This particular group is set apart from other designs at the same site by being enclosed in a "frame" of dots. At Salmon Bay, (figure 22c) the figure is more clearly that of a bird with spread wings carrying a fish-like figure. The leg of the bird is a zig-zag line perhaps

suggestive of lightning? Gjessing (1958:260) comments that the thunderbird is a widely spread design but its occurrence with the snake and whale would seem to be unique to the Northwest Coast. The Brighton Beach site is not so clear and it is speculative at best to include it as part of this group. None-the-less, the figure is that of a bird and below its feet is the single forked line. The carving at Fransisco Point is quite similar to the painted figures of McPherson Creek and Salmon Bay. Although nothing is known regarding the history of the figures, there are in four Coast Salish sites painted figures which seem intended to represent the *sisiutl* or "double-headed" snake of coastal mythology. At Orford Bay (CS 4) the snake is seen as a simple line with crested head. At Sechelt Rapids (CS 79) one half of the figure is clear and the other faint, and at another Sechelt site (CS 80) some 200 yards south of the first a small human figure is shown between the two heads (figure 21b). At Salmon Arm (CS 76) the figure is that of a quadruped also placed between the two heads (figure 21a). F.J. Barrow (1942:97) reported that an old chief had told him the following details regarding a pictograph at Foster Point (CS 14) in Coast Salish territory:

The large figure represented Quatam, a mythical being, very fine to look at, but full of evil deeds, and bringing misfortune to people. On the other hand Tongas, another mythical being, very ugly, was full of good deeds.

The painted petroglyph at Jack's Point (CS 125) has already been mentioned in connection with the Nanaimo salmon ritual, but the following myth (precis) is also a part of the tradition belonging to this site:

A strange fish which turned into a young man marries a local priest's daughter and takes his bride to live with his people, the Dog Salmon. Later they return in the guise of these fish bringing with them many others. That was the first time the dog salmon entered the Nanaimo River and the Indians caught them in great numbers. However, they did not touch the two salmon

that leapt from the water side by side since they were the young man and his wife. The girl had told her father that they would thus be recognized. It is thought that he carved the petroglyph and that the figures represented a flounder, spring salmon, humpback salmon, coho and dog salmon. (Barrow 1942:95).

Jenness, in 1936 collected a fragmented tale which may have concerned one or several of the pictographs clustered near Bridalveil Falls on Pitt Lake (CS 108, 109, 110). According to his Katzie informant a supernatural being sent to put the world in order discovers a lazy people inhabiting the western shore of the lake. This being punishes the people by "making them sink beneath the water". As a warning to others, their customs were painted on the rocks "for all to see" (Jenness 1955:28-9). At Aldridge Point (CS 148) near Victoria, are two carvings, one of a "sea monster" (figure 20f). According to a Beecher Bay informant:

Long years ago a great supernatural animal like a sea lion killed many of the Beecher Bay Indians while they were canoeing. The tribe nearly became extinct; the remaining members were afraid to go on the water until one day a mythical man caught the sea lion and turned him into the stone representation on Aldridge Point (Anonymous, Report of BCPM, 1928).

Although nothing else is known regarding the Sproat Lake figures, they may also be representations of sea monsters, for although they are finely detailed they resemble no living creature. Boas (1891:160) noted that the cliff into which they are carved was said to have been the "house of Quotiath" who is the Nootkan Raven divinity. Along the Columbia River, several of the elaborate petroglyphs have been termed mythical beings in lieu of other information. One of the best known sites of the Long Narrow area (Ch 19) is the painted petroglyph known locally as Tsagaglala (figure 31t). The following story is told regarding this particular circle-face design:

A woman had a house where the village of Nixluidix was later built. She was chief of all who lived in this

region. That was a long time before Coyote came up the river and changed things and people were not yet real people. After a time Coyote in his travels came to this place and asked the inhabitants if they were living well or ill. They sent him to their chief who lived up on the rocks, where she could look down on the village and know what was going on. Coyote climbed up to the house on the rocks and asked "What kind of living do you give these people? Do you treat them well or are you one of those evil women?" "I am teaching them to live well and build good houses," she said. "Soon the world will change," said Coyote, "and women will no longer be chiefs." Then he changed her into a rock with the command, "You shall stay here and watch over the people who live here"... (Strong 1959:108-9).

The face is carved in Columbia Valley style, characterized by concentric ovals for eyes and a heart-shaped facial outline and appears to be anthropomorphic. Yet, the ears are set atop the head as are animal representations and not alongside as are humans.

A few coastal pictographs and petroglyphs are located near known burial places and it is possible that they were intended to be grave markers, memorials or guardians. However, there is as yet no definite link known. Certain carvings along the Columbia River have been referred to as "spirit guardians" and were considered locally to be the ancestors of the Wishram people. In the same region, Mark Hedden (1956:30) suggests that other carvings with large round heads and elongated oval bodies may have been intended to represent children in Indian cradleboards. He speculated that although the significance of these carvings is not known, "it may relate to the Wishram practice of "killing" all objects used by a dead child by burning or breaking them and exposing the cradleboard on a high, inaccessible cliff". The frequent occurrence of human figures with a skeletal appearance typified by prominent details of internal bone structure prompted W.D. Strong (1945) to suggest that these figures formed part of a ghost cult. He was concerned with the Columbia River region but speculated that such a

cult might well be coastwide since ribbed human figures are to be found in both rock art and other forms of art all along the Northwest Coast. Duff 1956:52, has noted that owls and other such ribbed figures were considered to be the guardian spirits of the dead at least among some Coast Salish groups. However, once again, no definite connection is known and it appears that the ribbed figures are an old, long established design element of coastal rock art and are found in both anthropomorphic and zoomorphic figures.

A similar, non-definitive situation exists where shamanism is concerned. Once again, although a link between shamanistic ritual and rock art designs seems most logical, there just isn't as yet much positive evidence. Quite likely, any shamanistic rock art sites, like those concerned with whaling ritual, or secret societies, would be secretive in nature as well as location; their meaning hidden from the uninitiated. Only a few coastal sites seem to be connected with shamanistic rites. A pictograph on Lutak Inlet (T1 2) is located near a shaman's grave and may have been intended as a marker of sorts. The pictograph at Whitewater Bay (T1 20) has been mentioned before as being a possible record of shamanistic exploits. A natural sandstone pool which has had animals and anthropomorphic faces carved into its rim is known locally as the "shaman's pool" by the Kulleet Bay people of the Nanaimo area (CS 134). The figures were said to have been made by the ritualists and represented the figures seen in their dreams (BCPM). The painted petroglyph at Jack's Point (CS 125) was supposed to have initially carved and later repainted annually by such persons (figure 11a). A few pictographs, especially those in Coast Salish territory tend to resemble those figures painted on "power boards" and used by the Puget Sound shaman in the "spirit canoe" ceremony. The Youngstown boulder, also of Puget Sound (CS 158) was said by a Duwamish informant to be "related to power

figures" (Smith 1946:315). In neighbouring regions to the north of the Northwest Coast culture area, Frederica de Laguna (1934:154) reports that among the Eskimo population of Prince William Sound, pictographs were often made by persons wishing to become a shaman. The novices spoke to the paintings and gave them pieces of clothing and soon acquired power. This practice of leaving personal items or gifts below pictograph sites has been reported elsewhere in North America. In the Canadian Shield it continued into the twentieth century (Dewdney and Kidd 1962:14). Although it is not reported on the Northwest Coast and no such offerings have been noted near rock art sites, the custom may have occurred here and been discontinued before it could be ethnographically recorded.

A few petroglyph sites probably weren't petroglyphs at all, but merely the marks left by tool-making and sharpening activities. Keithahn (1940:124) cites a few examples from Hydaburg Creek (H 3) and refers to other such "grindstone creeks" where the soft abrasive sandstones were valued for shaping and honing various tools. A cut in the rock near Beecher Bay, southern Vancouver Island was said to resemble marks made by a person learning to cut celts or chisels (Anonymous, Report of BCPM, 1928). One petroglyph on Prince of Wales Island (H 11) was said to be a "source glyph" for the making of Chilcat blankets (Kennedy 1974). Unfortunately nothing more is known regarding this site or its design elements.

Relatively speaking, very few coastal rock art sites have yielded information regarding the reasons why they were made. Yet, what is known has indicated that the making of carved and painted records on rocks was an integral part of Northwest Coast culture. It is also apparent that these carvings and paintings recorded differing aspects of coastal life, from economic, through historical, to ceremonial and supernatural. Apparently

too, differing functions could be served by the use of very basic, even similar symbols like the common circle-faces. These are seen to represent a rainmaking thunderbird on Puget Sound, a sea monster at Fort Rupert, and a mythical shaman at Karta Bay and Hydaburg Creek. Strikingly similar faces recorded ceremonial songs in the Bella Coola Valley and recounted the killing of prisoners of war at Cape Mudge and of slaves during potlatches at Angoon. Many more may have simply been attempts to depict "the spirits".

Probably, many rock carvings and paintings were the prerogatives of rich or prestigious men. Chiefs are mentioned frequently in connection with specific sites. Kispiox, Angaish River, and Tye were concerned with chief's rights, while Tastsquam Creek and Sitka were known as Chief's seats. In addition, Tastsquam Creek and Green Point Rapids record the ceremonies of chiefs while Naena Point commemorates dead chiefs. At Kake too (T1 43) chiefs tested their strength by throwing a carved boulder (Kennedy 1974). Duff (1956:89) notes that a carved stone at Musqueam on the Fraser River was similarly used as a test of strength. Probably, too, in many cases, the actual work of carving or painting was done by artists or slaves, or in certain cases, by ritualists. Although only one site is remembered as being the work of a known artist (Ts 22), several of the rock art sites of the coast can be considered not only as archaeological phenomenon but also as works of art, the results of skilled technicians. Subjectively speaking, the Sproat Lake site (N 16) with its intricate figures and conveyed feeling of motion is aesthetically pleasing. Slaves are credited with the carvings at Berner's Bay, Port Houghton and Takihanus Bay and a shaman with Jack's Point and Kulleet Bay. Adolescents are credited with several pictographs from the British Columbia Interior Plateau. These were made during the Puberty Ceremonies and Guardian Spirit Quest and certain designs at a few Coast Salish sites are similar to those made during such rituals and may have

been made for similar purposes. (For example a series of forked and barbed lines at Salmon Bay (CS 8) resemble the "fir branches" symbol as interpreted by Teit (1900:381). Possibly then, a few sites, especially a few Coast Salish pictographs, may have been made by young men and women as part of such ceremonies.

Although there is really very little definitive data on which to base conclusions, a few patterns do seem to be emerging. For example, it appears that the use of rock art, in particular petroglyphs, to display crest signs and thus indicate inherited rights or property claims is much more prevalent on the northern coast, in particular among the Tlingit. This seems only logical since it was among the northern groups that the crest useage was most common. Like the potlatch and use of coppers it does not appear among the Coast Salish groups. Similarly, the acquisition of individual power (as opposed to inherited power) through the spirit quest may be encountered only among the Coast Salish. Other elements, common to Northwest Coast culture, such as warfare, natural catastrophe and fishing activities are also commonly found as possible motives for rock art along the length of the coast. In all, the rock art of the Northwest Coast reflects a fairly complete range of facets of the culture that created it.

CHAPTER SEVEN

CHRONOLOGY

One of the first questions usually asked by persons viewing a rock carving or painting is "how old is it?" and the lack of definite answers to this query is one of the most frustrating aspects of rock art research. It is not so much that there is a lack of practical or theoretical dating methods available, rather these methods remain to be proven under field conditions or modified to suit the particular needs of rock art research. The following dating methods could be used on the Northwest Coast to yield absolute or relative dates. They are discussed briefly with respect to coastal conditions.

Carbon 14 analysis	✓	pictographs only
Binder analysis		pictographs only
Lichenography	✓	pictographs mostly
Accumulation of white layer		pictographs only
Patination	✓	petroglyphs mostly
Groove depth		petroglyphs only
New surfaces		both
Superimposition	✓	both
Subject matter	✓	both
Stylistic associations		both
Ethnographic identification	✓	both
Tool marks		petroglyphs only
Artifact association	✓	both
Stratigraphic association		both
Overburden accumulation		petroglyphs only

Carbon 14 Analysis

The carbon 14 method of dating which has proven to be a useful tool for dating organic cultural remains has potential for rock art studies as well, even though it has not had marked success in the few attempts made. Attempts to date organic binding agents in pigment samples usually fail because the sample taken is too small for conclusive dating. Taking large enough samples means defacing the paintings. Research is continuing with

a view to gaining better results from smaller samples and once this can be done then carbon 14 could be valuable in dating pictographs where the binder is organic. What is needed as well is an accurate test that will determine if this organic binder indeed exists in the paint to be dated. Dewdney (1970:21) lists several methods:

There are several methods of determining the presence of organic material in small paint samples. Single beam spectroscopy can detect traces of organic material, and the double beam spectroscope may decide whether this is a surface deposit (airborne spores, algae, or bacterial growth) or is intrinsic to the paint. The laser beam can now be adapted to analyze the composition of a paint sample from a mere pin-prick of phased light (Maloy, 1966; 858-869). Another means of detecting the presence of a binder is chromatography, a physical technique for separating out supplemented with single beam spectroscopy was applied by Royal Ontario Museum experts to paint samples only the faintest traces of an organic component were detected.

So far, there has been no attempt to utilize carbon 14 on coastal rock art samples.

Binder Analysis

Should an organic binder be present it may be possible to determine its age by methods other than Carbon 14 analysis. Dewdney notes the following technique:

If the binder contains protein, as in blood or egg yolk, a complex technique suggested by medical research has been devised by Denniger (personal communication; see also Nel, 1966; 28-31) which will detect its presence and determine its age by an assessment of the degree to which the amino acids have deteriorated. This approach involves a combination of chromophotography, light microscopy and chemical analysis.

Dewdney points out that in parts of western Siberia where blood was ethnographically reported to be used as a binder with red ochre to make paint for pictographs, tests using techniques similar to those of the Royal Ontario

Museum mentioned above have proven inconclusive. Along the Northwest Coast too, blood has been mentioned as being used for rock painting therefore should binder analysis produce more definite results it might be readily applicable to some coastal pictographs. However, as Dewdney points out, the use of blood as a binder seems redundant since the red ochre is quite bloodlike in colour and seems to have symbolized life. Fish oils, eggs, bear grease and various animal glues are the usually reported binders. No binder analysis has as yet been attempted on the Northwest Coast; the ethnographically reported pigment ingredients mentioned have not been verified. Both carbon 14 and binder analysis depend upon there being a binder of an organic nature present. Experiments performed by Dewdney in 1967 (Dewdney 1970:21) established that pigments mixed with plain water could outlast those mixed with glue, oil or varnish under specific conditions.

Lichenometry

Many rock paintings and carvings of North America including many known from the Northwest Coast are partially or even totally obliterated by the encroachment of slow-growing lichen. It has been suggested that such design could be dated if estimates were known regarding the ratio of growth of such lichen. The work of Roland Beschel (1961) has been particularly encouraging since he has been able to determine approximate ages of a number of crustose species by taking single thallus measurements where optimal growth conditions are known. As Dewdney (1970:24-5) has noted, there are still considerable problems requiring solutions before lichenometry can be reliably used to date rock art anywhere:

First, the factors that inhibit weathering and so preserve the paintings are the very ones that are hostile to lichen growth; so that to take lichen encroachment into consideration we must know how much more slowly than the optimal rate of growth of

any lichen that does get a foothold will proceed. The second obstacle is the difficulty of giving a time value to the factors - including random ones - that determine how long it will take for algae and fungus spores to lodge in the same rock cranny under conditions favourable for symbiosis.

Lichenometry is further limited on the Northwest Coast to those petroglyphs which are not intertidal (which eliminates a great many) and those pictographs which are not submerged or affected by high water levels (which eliminates a few more sites). A further problem involves not knowing how often a painted or carved design has been cleaned of lichen for purposes of photography or, more recently where petroglyphs are concerned, for rubbing and casting purposes. If these variables are taken into consideration the problems of applying lichenometry become much more complex and the method is perhaps best regarded as still theoretical.

Accumulation of the White Layer

As was mentioned in chapter four, the work of the Canadian Conservation Institute with regard to a detailed analysis of pigments and rock samples suggests another theoretical new dating method for pictographs. This method involves the determination of the rate of deposition of the white layer, a deposit which forms on all pictographs. Once the rates of accumulation are known it may be possible to estimate age by examining the thickness of the deposit. However, as Taylor, Myers, and Wainwright (1974) are careful to point out, there are "several complicating factors" still to be examined:

First even in a small 2 X 2 mm cross-section chip the surface deposit thickness is not uniform, it can vary from a thick deposit to a very thin layer. If an attempt was made to date a painting by placing a present date marker on a painting and measuring the accumulated deposit after a period of say 10 or 20 years the site would have to be monitored over this period to determine that the rate of deposition remains approximately constant. It would also have to be assumed that the rate has not altered appreciably since the painting was made. For example, if the

deposition rate over a recent pictograph had initially been high but subsequently had been reduced considerably due to changes in the crack formation of the rock above the paintings (altering the seepage direction), a measurement of its current rate of deposition and deposit thickness would indicate that the painting is quite old. Consequently many variables affect the deposit formation and the technique does not look promising."

Photographs of the same designs taken years apart suggest that under certain conditions on the Northwest Coast, the white layers can accumulate quite rapidly. Harlan Smith photographed one site on Indian Arm (CS 100) in 1928 where one design is half covered by a white layer. Another photograph taken in 1972 reveals that the layer has advanced and covers almost all of the same design. Should continuing research be able to account for all of the variables which affect the deposition of the white layer it may still prove to be one of the better dating methods available.

Patination

Many of the rock carvings of the Great Basin and Southwestern culture areas were made by pecking through a dark stain of hydrous iron and manganese oxides to expose the lighter original rock surface below, (Grant 1967:43).

This patination or "desert varnish" as it is more commonly known is best known from sandstones and basalts of the western American deserts but it can occur on almost any rock type including those located in wet climates such as the Northwest Coast. One comment of Grant's is of particular interest where certain intertidal and riverine petroglyphs of the Northwest Coast may be concerned:

"Boulders along the Colorado River between high and low water stages are stained a very dark brown. In California, petroglyphs on granite rocks below

high water mark in the Kern River Gorge have turned an intense black." (1967:44).

There is much controversy regarding the processes involved in the buildup of patina and this should be examined and understood before the process can be tapped as a possible dating method for rock art designs. While one school of thought holds that ample sunlight and moisture are needed for the formation of patinas one California researcher, Donald Martin, found that heavily patinated stones removed from a desert to a coastal environment apparently lost their patina thus suggesting that the stain could not form well during periods of intense rainfall. On the basis of such experimentation Martin assigned a date of 2,000 to 3,000 years for designs pecked into Mohave Desert rocks since these rocks were patinated during and after the decline of the "Little Pluvial" of some 3,000 to 4,000 years ago, (Grant 1967:44). Patination studies have proven useful as dating guides where heavily patinated rocks and designs can be found together. Heizer and Baumhoff (1962:284-286) made much use of the technique in the desert varnished rocks of Nevada and eastern California and Dewdney (1970:24) also noted complete correlation between an archaic style of rock art and patinated sandstones in the Milk River area of Southern Alberta. However, in the latter case, the correlation was "ensured by the vulnerability of the soft sandstone exposures, which rarely survived long enough to acquire a heavy patination. Depending upon microclimatological conditions the compositions of patinas may vary from area to area. As yet, no study has been made of coastal patinas to determine their characteristics or suitability for rock art researches.

Comparative groove depth

This is a highly subjective method which relies upon the relative appearance of designs and assumes that the most worn grooves are the oldest while deeper "fresher" grooves are more recent. This may seem logical enough at first glance but there are certain insurmountable difficulties. For example, not all parts of a given rock face weather at the same rates. Certain portions may be subjected to more intensive erosive force than others. Designs cut into the lower portions of some beach boulders may be battered by driftwood, encrusted by barnacles and abraded by tidally moved sand particles. Furthermore, if, as seems likely not all designs were cut at the same time or by the same person, then there are bound to be differences in the depth and shape of the grooves that erosive forces will emphasize. The Trent Rock Art Project of Trent University, Ontario, along with the Canadian Conservation Institute have recently set up long term research projects on certain limestone rocks which bear petroglyphs. These tests are directed toward determining some idea of the rates at which the rock is eroding. No such tests have yet been begun on coastal granites or sandstones although there are a few publications that mention briefly the characteristics of some rock faces of a type that are known to bear petroglyphs. For example the Report on Building and Ornamental Stones of Canada (Federal Department of Mines, 5:452) list sandstones of the Nanaimo area where there are many petroglyphs as being "of average durability" susceptible to erosion at angles and edges and weakened seriously by soaking and freezing.

Appearance of new surfaces

At only one site within the Northwest Coast culture area has an older

design surface partially broken away providing a newer design surface. Strong and Schenck (1925:77) noted this occurrence in Petroglyph Canyon (Ch 20):

In other cases slabs of the basalt have broken off leaving only a half a figure or design, and on the new surface thus exposed a later design has been worked. The older drawings are too obscure, however, to allow any temporal distinctions of type being made.

Nevertheless, this does suggest that Petroglyph Canyon was used for rock carvings for a reasonably long period of time.

Superimposition of Designs

This method, where designs carved or painted below others are seen to be older is one of the most useful in establishing relative chronologies of rock art styles and designs. However it occurs only rarely on the coast and those few instances are not at all conclusive or ever particularly helpful. Strong, Schenck and Steward (1925:77) noted one clear example of superposition in Petroglyph Canyon (Ch 20):

The petroglyphs do not appear to be all of the same age for some are quite evidently superimposed over others. An example of this appears where the recent figure of a man has been placed over the older figure of a goat.

As both goat and man are depicted in the same naturalistic Interior Style this particular instance of superimposition does not yield any relevant information regarding possible stylistic age differences. The only other clear cases of superimposition known from the coast involve the carving of obviously recent names and dates of vandals across petroglyph designs of the Basic Style. At Prince Rupert (Ts 19) the initials W.J. have been carved across a fish figure while at the Hill Site (N 19) there are the names of persons and a boat. Across one circle face from the Venn Passage area near Prince Rupert someone

has carved the initials "SCWJ". A similar lack of superimposition in the rock art of California prompted Campbell Grant to speculate that its lack was one of the arguments in favour of a favour of a fairly recent dating for rock paintings in that state. On the Northwest Coast, however, it seems rather that superimposition was not practised because it was not necessary. There was generally enough of the preferred rock available and where it was not to be had the carvers (and painters) utilized the next best thing.

Subject Matter

The subject matter of rock art sites can contain dating clues usually of the historic period. For example, several coastal sites contain designs of horses or men with horses. These are indicative of ages of no greater than the mid 1700's since the horse did not appear in the area until around then' (Strong, Schenck and Steward 1930:135). It is curious that two of the sites should be located on the rugged west coast of Vancouver Island where horses must have been quite rare. Other sites contain designs of sailing ships which could record initial contact with Europeans, or later shipwrecks. Such designs range from the 1700's through to the 1900's and even into the present. The petroglyph mentioned above that was carved at Blowhole Beach (N 18) on the west coast of Vancouver Island which clearly depicts a side-paddled steamship. This appears to be a drawing of the Beaver of the Hudson's Bay company and is therefore suggestive of an age range of between 1836 when the Beaver appeared off that shore and the late 1880's (or later) when she was wrecked off Prospect Point. A historic ship with funnels and the name "Sutsuma" painted near it at Petley Point (K 160) may be an actual dated pictograph since the probably date 1927 is also painted nearby. Another ship at the

site is associated with the date (or numbers) 1921. Another dating clue to be found in the subject matter of rock art is the depiction of extinct or unusual animals. Strong, Schenck and Steward note the clear representations of a type of mountain goat (*Oreamnos montanus montanus*) at Petroglyph Canyon (Ch 20) where it no longer is found, (1925:82). Drawings of men with bows and arrows as opposed to atlatls have proven to be valuable aids in assigning relative dates to rock art designs in other parts of North America notable some Great Basin sites in California (Grant 1967:48) but such helpful clues are missing or not yet reported in Northwest Coast rock art designs. One point should be borne in mind when considering historic or otherwise datable subject matter: it dates only the designs where it occurs and cannot be considered as the only date possible for the whole site, or other designs nearby. Thus when Grant (1967:53) claims that the most recent of all rock paintings in North America are those of the Kwakiutl of the British Columbia Coast only on the basis of the dated ships at Petley Point (K 160) (figure 40 b,c) he is forgetting that not all of that particular site is necessarily of the same recent age as the historic designs. The coppers and quadrupeds are not definitely dated by association, although one has to admit that there is a reasonable suggestion of similar ages.

Stylistic Associations

In a few instances similarities between rock art designs and carved or painted designs known from other art forms, such as wood, bone, or stone decorative materials are unmistakable. Sometimes the art of other media is

archaeologically dated thus suggesting an age for the rock art designs as well. There are a few such occurrences on the coast. The most notable concerns the Columbia River style carvings from the Dalles region. Here certain petroglyphs and one combination site are identical to small bone cremation carvings recovered from archaeological sites of the area. These excavated carvings have been dated by carbon 14 from A.D. 500 to about 1850 (Butler 1950 : 161). The Columbia River art style falls within these dates and by inference so do these petroglyphs and the painted petroglyph of the Columbia River region. (It is of course possible that the rock art designs were recent copies of the old cremation carvings but there is no evidence to support this view.) A bone comb bridge depicting a wolf (GbTo 23: 850) was recovered from the Garden Island excavation near Prince Rupert and it is very similar in style to the wolves carved at Petroglyph Park (CS 126). These wolves, in turn, are good examples of work in the Basic rock art style. The bone carving does, however, contain a fully developed Northwest Coast eye while the petroglyphs do not. The comb bridge is dated (by carbon 14 analysis) to shortly after 1 A.D., (MacDonald 1971). This is not to say that the petroglyphs at Petroglyph Park also must date to some 2,000 years ago, but that the style in which they are made may be that old or older. The Basic style continued almost into the 1950's since the Agate Point figure (CS 156) witnessed by Leechman was a circle face and was made that recently. Whale designs incised into bone tools were found at an early level at the Ozette excavation on the pacific coast of Washington state. These are very similar in style to petroglyphs from the associated site at Wedding Rock (N 22) and another site on the southwest shore of Vancouver Island (N 19). No accurate carbon 14 or any other dates as

yet are known for the bone tools from Ozette but the designs are clearly related to the petroglyphs. These petroglyphs, too, are collared sea creatures and are in the basic rock art style. Stylistic analysis can rarely date a site very accurately since styles tend to continue alongside each other, earlier and later alike.

Ethnographic identification

Approximate or even absolute dates for particular rock art sites or individual designs can often be obtained from ethnographic sources. This is the most reliable and valuable method presently used to date rock art sites on the Northwest Coast, and there are several examples of its application here. The petroglyph boulder originally from Angaish (Ts 1) in the area of Observatory Inlet was reportedly first carved by a chief "of some 200 years ago" in order to proclaim his hunting and fishing rights in the area. This information was obtained by Canon Rushbrook and published by F. M. Drew in 1969. The initial carvings, then, were made around 1770. A pictograph at Tye (Ts 20) on the Skeena River was reportedly commissioned by Chief Legaik in order to indicate his trade monopoly up that river (Robinson 1973:64, from data collected by Marius Barbeau). This would be shortly after the building of Fort Simpson in 1833. A petroglyph from Fort Rupert was carved to commemorate the killing of a slave during the early days of Fort Rupert (K 149), about the 1850's, and as reported by Boas (1895:439). Finally a circle face from Agate Point (CS 157) was begun sometime just before 1950 by one Jack Adams of the area who explained that it was done to pass the time while waiting for the tide to change. Others

had been made by his father. The carvings was witnessed by Douglas Leechman, then of the National Museum who published a report mentioning it in 1952. Most of the information presently known regarding the history (or prehistory) of certain rock art sites has come from such ethnographic sources. A great deal more must have been lost because there was no one to record it. Ethnographic sources regarding rock art designs are a dwindling resource as fewer and fewer people remember the old stories and traditions. Rock art designs, being valid remnants of cultural activity can very often yield valuable information regarding the people who created them.

On the Northwest Coast it seems that we are in the position of scanning what is already known of native culture in an effort to glean information about their rock art from one of the few sources available.

Modern tools

A few coastal sites carry signs of manufacture by the use of historic steel tools thus providing a general age range for particular sites or designs. These however, are quite rare and are likely to be quite recent. At the Hill Site (n 19) the short, sharp marks of a steel blade are clearly visible on a figure done in the basic style. At Cape Alava (N 23) not far away, Daugherty commented that an eagle design showed the marks of modern tools and was probably quite recent (Personal communication, 1971). Vandal's initials too are sometimes (but not always) clearly done with tools different to that of the art they deface.

Association with artifacts

In only one known case on the northwest coast has there been

an artifact of a type concerned with rock art actually found in the proximity of a rock art site. Strong and Schenck (1925) found a greenstone tool near carvings in Petroglyph Canyon (Ch 20) and experiments showed that carvings made with this tool were identical to those on the walls of the canyon. Unfortunately this particular artifact is not datable. Not enough attention is paid to the ground in the vicinity of rock art sites and there is the possibility that other such opportunities have been missed. Scaffolding or brushes used to create pictographs may be datable by other means and midden deposits located nearby should be systematically investigated. Usually they are so small that they are considered to be insignificant. Association with datable artifacts has proven to be extremely useful in other parts of North America. Campbell Grant (1967:48) comments:

"The best correlation of prehistoric artifacts with rock drawings has been made by Christy G. Turner. When the Glen Canyon region of the Colorado was threatened with inundation by the creation of Lake Powell, a salvage program to record several hundred archaeological sites was undertaken. Pecked designs were found at many sites in association with pottery that has been dated and ascribed to specific cultures. Turner's assumption that the rock pictures are contemporaneous with the pottery seems valid. His dates for the drawings are from before A.D. 1050 to Late Historic times".

Of course there is no pottery on the Northwest Coast, but there are other diagnostic artifacts and associations with these may prove a useful indicator of dates for rock art designs.

Association with archaeological stratigraphy

In a few isolated instances rock art designs of North America have been directly associated with undisturbed stratified occupational debris. This debris can sometimes suggest time ranges when

the associated rock art designs might have been made. The work of Heizer and Baumhoff in the desert country of Nevada and Eastern California provides several particularly clear examples of the value of this association:

"The second example of designs covered by deposit is a site Li-3. Here there is a Katchina figure in red paint buried nearly up to the shoulders, apparently by occupation debris. If the design is shaped as these usually are, 4 or 5 feet of the figure must be buried. This amount of deposit in a rock shelter need not have required an enormous amount of time to accumulate, but certainly a few hundred years were needed and the design must therefore have been made at least that long ago" (1962:231).

They also note a case where deposits needed to reach a certain depth (height) before the associated painting could be made as it is high on a cliff above a rock shelter. So far as is known, no coastal rock art sites have been reported to be in direct association with archaeological deposits. Many petroglyphs are near old village sites and many pictographs have small middens located nearby, but as yet the link has been assumed and left unproven.

Overburden accumulation.

In several instances petroglyphs have been discovered through the removal of a soil or vegetation cover. Assuming relatively undisturbed soil accumulation and plant growth it may be possible to estimate the time that has elapsed from when the rock was bare and the carvings made to the present deposit thickness. The Monsell site (CS 127) provided a unique chance to examine such an overburden. The site was only discovered in 1971 and the Provincial Museum immediately sent a crew to record it. They also recommended that a geologist and pedologist be sent. This was done, but unfortunately in this case the experts were unable to provide the needed estimate as

the site may have been disturbed by logging operations several years earlier. The Noeick River site (BC 16) provides a clear example of how quickly a carved rock may be completely covered by vegetation. This site was cleared in 1923 by Harlan Smith who initially recorded it, and it was left undisturbed until 1973 when a Provincial Museum crew attempted to relocate it. They reported that it was totally covered by thick vegetation and soil. They comment:

"We found the Noeick River site but I swear no one has been there since Harlan Smith in 1923...we found the tattered old remnant's of his Indian's plum orchard and the trails are lost in logging slash ...we went at it from the river side, but his bottom-land has long since disappeared. We thrashed about in the forest searching for granite but found nothing as as the whole site has overgrown. The one hope was his clue about the Indian's sliding down the rock on branches so we searched for a 45 slope to the north and found one with trees growing on it. After examining the swept granite with fingertips, the faint carvings were found. (BCPM).

Vegetation grows quickly on the Northwest Coast if it is left undisturbed.

The greatest obstacle in the way of most dating methods which would rely upon determining rates of ongoing physical or chemical processes is that of uniqueness and discontinuity. Every rock surface has different variables, different conditions of its micro-climate which would have to be isolated, understood and evaluated. At present there is no way of detecting all of these variables or of determining if their effects have been constant. Yet, it is from methods that the ages of the oldest sites will probably have to be determined. Information from alternative sources has not been sufficient in determining dates for the majority of rock art sites.

The following coastal sites are those about which some indication of age is known:

- Tl 1 . This petroglyph is believed to commemorate the defeat of Russians in or about 1802. (de Laguna 1964:23).
- Tl 14. This petroglyph was reportedly made by visiting Tsimpsons "over 50 years ago" as reported in 1910 (de Laguna 1960:71).
- Tl 15. This pictograph contains a design of a historic sailing ship and therefore must date around or after 1780 when the first such ships came to the area. (de Laguna 1960:71).
- Tl 36. This petroglyph was supposed to have been used as a seat by Chief Katlean of the Sitka prior to 1802, (Emmons 1908:222).
- Tl 49. This pictograph was supposed to commemorate a massacre of Stikine Tlinget by Nass River Tsimpsonian in "the middle of the 19th century" (de Laguna 1956:108).
- H 9 . This petroglyph is unclaimed by the Haida and may have been the work of the Tlinget who claimed the area prior to 1750 (Newcombe 1907).
- Ts 1 . This petroglyph as designs that in 1969 were reportedly made by a chief of "some 200 years ago", that is about 1770, (BCPM).
- Ts 20. This petroglyph was "commissioned" by Chief Legaik around 1833 to indicate his trade monopoly (Robinson 1973:64).
- Ts 29. This petroglyph was unearthed from a depth of 15 feet of soil near a road cut and may therefore be quite old (NMC).
- K 69. This petroglyph was uncovered below soil and trees, one of which had 75 annual rings. (BCPM).
- K 149. This petroglyph contains one design carved in "the early days of Fort Rupert", That is about 1850, (BOAS 1895:439).
- K 159. This pictograph contains designs of historic ships (BCPM).
- K 160. This pictograph contains designs of historic ships and the probable dates, 1921 and 1927 (BCPM).
- K 181. This pictograph contains depictions of sailing ships (BCPM).
- K 184. These pictographs commemorated a disaster of three or possibly more generations ago, (Barrow, 1935, BCPM).
- N 6. This pictograph is reported to be of a man on horseback (BCPM).
- N 18. This petroglyph contains designs of sailing ships, a man on horesback, and a steamer which is probably the Beaver dating from the early 1800's, to around the 1880's, (BCPM).
- N 19. This petroglyph contains the marks of modern tools, (BCPM).
- N 22. This petroglyph contains a sailing ship design, (BCPM).
- N 23. This petroglyph contains a recent design done with modern

- CS 14. In 1933 an old Indian told Francis Barrow that this pictograph was then three hundred years old, (Barrow 1942:97).
- CS 37 This petroglyph of a female figure may include a high heeled shoe.
- CS 156 This petroglyph was made just prior to 1952 when it was reported by Leechman, (1952)
- Ch 19 This combination design is stylistically similar to the Columbia River cremation carvings which date between A.D. 500 and 1850, (Butler 1957:161)
- Ch 20 This petroglyph site contains carvings of horses and men on horses thus it has a maximum age of 1750 (Strong, Schenck and Steward 1930:135).
- Ch 22 This petroglyph site contains a design carved in Columbia River style as dated above.

There are three points to be noted from the above list. In the first place, there are only twenty six sites out of the over six hundred now known about which there is some indication of probable age. This is a very small number leaving the great majority of sites with ages totally unknown. In the second place, the majority of the listed information comes from two types of sources, that is, ethnographic identification and subject matter of a historical nature. It seems reasonable to suggest that both of these sources favour the preservation of relatively recent information, or dates of no more than two or three hundred years at the most. Beyond that, historic subject matter of course does not appear and the ethnographic sources fall back onto vague terms such as "made by our grandfathers", made "long ago" or, as Smith (1923:82) has noted, "made before animals were turned into men". It seems that where rock art traditions are concerned, those designs which are most recently made are those which are best remembered. Further, those which are remembered do not necessarily include the most extensive sites or the most striking in appearance.

From the above list of approximately dated sites only one source of data, stylistic analysis, is suggestive of a fairly old maximum date. This refers to those designs carved or painted in the Columbia River style, a style which has

been shown to be composed in part of the Basic Northwest Coast style. This basic style, it is suggested, is an older if not old style. Therefore, since the majority of the rock art of the Northwest Coast is done in the basic style it is to be hoped that dating methods as yet untried can be developed and utilized to verify these suggested but as yet unproven older dates. It is known that coastal rock art is recent, persisting well into the 19th century, but its maximum ages will be determined by three factors. In the first place it is necessary to know how long men have been on the Northwest Coast and in the second place it is necessary to know how long they have had a rock art tradition. In the third place we need to know how long carvings and paintings can survive if left undisturbed. With regard to the first point there is sufficient archaeological information to suggest that man arrived on the Northwest Coast almost as soon as the retreating ice of the last pleistocene glaciation revealed suitable living places. There have been early dates of around nine thousand years before present from the central and southern coasts and many more later dates attesting to widespread human activity. It is quite probable that the rock carving and painting traditions of the Northwest Coast are as old as its human occupation even though there is no proof as yet known to support this statement. However, since the practice^e of painting and carving on rocks is one known throughout the world and is at least 20,000 years old in Europe (Masonowicz 1974:7) it is reasonable to suggest that it was known also to the first inhabitants of the coast. But where is the evidence for these early coastal carvings and paintings? Perhaps they have eroded or "faded" away? Designs in all states of preservation have been recorded on the coast. Some are fresh-looking, others worn and still others too eroded to decipher. Perhaps the oldest petroglyphs have been destroyed by

centuries of erosion while the oldest pictographs may have disappeared under accumulations of mineral deposits until they can no longer be seen by the unaided eye. (Persons recording pictographs have frequently noted the presence of apparently ideal but unutilized rock faces. It may be that these rock surfaces were at one time used and only the electron scanning microscope can now pick out the pigment traces). Ed Meade (1971:10) offers an intriguing theory which suggests great age for many petroglyphs. Noting that most petroglyph sites are intertidal he suggests that the carvers would not deliberately choose such sites where their work would be interrupted by rising tides. He therefore suggests that the carvings were made at a time when sea levels were much lower than at present. He goes on to note that sea levels along the coast were some fifteen feet lower than at present about eight thousand years ago. But he also comments:

One strongly hesitates to place the age of any of the petroglyphs that far back, however, and there is some reason to believe that tidal fluctuations two, three and four thousand years ago resulted in somewhat lower tide levels on the Pacific Northwest Coast, from which time the tide may have risen regularly in infinitesimal degrees. Possibly some of the petroglyphs were carved during one of these fluctuations.

There are two obstacles to this suggestions. In the first place, the carvers may very well have wished to place their designs where the tides could reach and submerge them, thus "calling" the spirits, or the salmon as Keithahn (1940:129) suggests. In the second place there is as yet no information concerning the durability of carved designs in intertidal or any other locations. In view of the apparently rapid erosion of many sites even in the last one hundred years, it is debatable if two, three or four thousand years is a reasonable suggestion.

This then is the present state of chronological information regarding coastal rock art. Reliable evidence informs us that it is recent and

equally strong but circumstantial evidence suggests that it is also very old. Since so much is still unknown there is no conflict between these conclusions. The next step is to attempt to gain more information to bridge the gap between "recent" and "old". This information will have to come from improved or as yet unknown dating methods, probably those relying on measurable, ongoing physical processes. However, any information still available from limited ethnographic sources should not be ignored: rather it should be collected now, before it too is lost.

CHAPTER EIGHT
SUMMARY AND CONCLUSIONS

The rock art sites of the Northwest Coast culture area have been numbered and listed as to type with details of source material briefly noted. A total of six hundred and twenty one individual sites are included within this study. For ease of reference the coast is divided into major geographical features within eight traditional linguistic areas.

The designs of each site were isolated and examined in some detail and it can be seen that all coastal designs fitted into one of three major categories, that is, zoomorphic, anthropomorphic and geometric. The major categories can be further subdivided thus accounting for all of the coastal designs encountered. Where possible examples of each design are given in line drawings. The distribution of design elements is plotted in three tables. This distribution indicates that there are certain designs, such as coppers and the Sisiutl figure that are unique to the Northwest Coast. Other designs, including certain animal figures and geometric designs based on the straight line appear to have been "borrowed" from the rock art resources of neighbouring culture areas, in particular the Interior Plateau of British Columbia and Washington state. A few other designs, being similar to ones encountered in Siberia and California and the Great Basin seem to indicate that the Northwest Coast is part of a greater distribution. Such widely distributed designs include the rayed arc or canoe sign and the pitted rocks. A few designs occur only in carved form while others appear to be confined to paintings. Petroglyph designs are more commonly identifiable zoomorphs, curvilinear geometric forms, or anthropomorphic circle faces. Pictographs tend toward geometric forms based on the straight line. The general rule, however, is one of overlap as

most design elements are shared by both carvings and paintings. One of the most striking features of coastal rock art is its remarkable cohesiveness. While there are regional and stylistic differences along the coast, there are also many similarities and much duplication of designs occurs from north to south. There are portions of the coast where one type of rock art is definitely favoured over another. Petroglyphs predominate along the northern coast and in the territory of the southern Coast Salish and Chinook while pictographs predominate in Kwakiutl and northern Coast Salish territory.

Detailed study of techniques of manufacture has proven to be a useful source of information. There are five known pigments used in coastal rock paintings but of these red is by far the most widely preferred. Pigments were obtained from naturally occurring ochres and may have been baked prior to use. Brushes and binders may or may not have been used. Most pictographs were placed in protected locations near water and where they could be easily seen. Many are fading due to buildup of a mineral layer formed by groundwater seepage. Petroglyphs are made by either pecking and abrading or by incising. The former being the most common. Most are carved into sandstone rock. The great majority of coastal petroglyph designs are outline drawings as opposed to being solidly pecked out as is common elsewhere. Tools are not usually found alongside rock art sites but better recording methods and detailed examination of the site itself may yet reveal their presence. Almost all petroglyphs are located near water and their designs frequently face seaward. They are also frequently associated with village sites and may be located in unusual, natural landscapes.

All rock art belongs to one of three stylistic types: conventionalized, naturalistic and abstract. On the Northwest Coast there are at least three conventionalized styles, one abstract style and one intrusive style. The

Classic conventionalized rock art style is the same as the Classic Northwest Coast art style known from wood and argillite carvings and in rock art it is most commonly encountered among petroglyphs of the northern coast. A great many rock art designs appear to be simple forms of the classic style and therefore are considered as the Basic Northwest Coast rock art style. Like the classic which it closely resembles this is a curvilinear style and most common design elements of which are skeletal anthropomorphic figures and circle faces. However, its distribution is wide, encompassing the entire coast and penetrating the interior along the major river systems. There are several sub-categories of this basic style which indicate regional traits. Because of its coherence, wide distribution and intrinsic relationships to other forms of stone sculpture and other styles this basic style may be an early rock art style of the coast. The third conventionalized style is that of the Columbia River where it is confined. It is a blend of coastal and interior characteristics in which the former apparently predominated. It too is curvilinear and maybe dated by reference to excavated artifacts having a possible maximum age of 2,000 years ago. Designs in the Abstract Curvilinear style appear to co-exist along with the conventionalized styles and included the commonly encountered pit and groove designs which, like other elements of the Basic style, may be early along the coast. Intruding onto the coast are rock art designs which in appearance resemble the art of the interior plateau of British Columbia, Washington and Oregon. These designs, some naturalistic and some rectilinear cluster in the Kwakiutl and northern Coast Salish mainland and rarely appear on the offshore islands.

Coastal rock art can be seen to function as a commemorative device, recording privileges, events and persons of real or mythical natures. Along

the northern coast in particular petroglyphs were a means of displaying crests and the rights and privileges, inherited or acquired that these symbolized. Others indicated wealth, property or economic claims. A few sites along the coast may have indicated fishing places and some were closely tied to fishing or whaling ceremony. Several rock art sites can be linked to the activities of secret societies, while still others mark places of disaster from shipwreck, drownings, or warfare. A few may have been made to pass time and many may illustrate myths or traditions. Shamanism, burial practices and the guardian spirit quest may also have been motives for some sites.

Chronology of coastal rock art is still very much in the speculative stage as few dating methods have been or can be tried on the coast. Only a very few sites can be accurately dated and these, relying upon such dating methods as ethnographic identification and presence of historic subject matter tend to be relatively recent. However, there is certain circumstantial evidence such as stylistic distribution and association that suggest that much of the as yet undated rock art may be well over a few hundred years old. The as yet unknown maximum age of coastal rock art is tied to the length of human occupation on the Northwest Coast and the antiquity of its rock carving and painting traditions. Perhaps most important it is dependant upon the also unknown maximum possible survival time of the sites. There is sufficient evidence to support considerable antiquity for man on the coast and no reason to suggest that a rock art tradition did not come with him. There is little evidence regarding the erosion rates of undisturbed carvings and paintings. It is to be hoped that other, as yet unknown or untried dating methods and rock weathering studies can help to solve this problem and so give coastal

rock art an adequate chronology.

In conclusion, it seems necessary to reiterate that this thesis is only a beginning. It raises more questions than it has answered and has posed more problems than it has solved. The answers and solutions will come from future research. It is hoped that the data collected, analysis made and conclusions suggested in this thesis will then be of use.

APPENDIX A

TERMINOLOGY AND ABBREVIATIONS USED THROUGHOUT THE THESIS

petroglyph	An aboriginal design or group of designs carved or incised into a rock surface. Generally, the remainder of the rock is not altered and it is not of portable size.
pictograph	An aboriginal design or group of designs painted onto a rock surface. Again, the rock surface is not generally of portable size.
combination	An aboriginal painted petroglyph, that is, a carving that has had paint applied to the grooves or to the rock surface that is in some way part of the design.
technique	This term refers to manufacturing techniques, that is, whether the site is carved or painted or a combination. In this thesis the term "technique" is expanded to include details of pigments, location of designs, tools, etc.
northern coast	A collective term used to denote the linguistic territories of the Tlingit, Haida, Tsimshian and Bella Coola peoples.
central coast	A collective term used to denote the linguistic territories of the Kwakiutl and Nootkan peoples.
southern coast	A collective term used to denote the linguistic territories of the Coast Salish and Chinook peoples.
design	A recognizable artistic pattern usually composed of various elements. May be anthropomorphic, zoomorphic or geometric in nature.
design elements	The smallest units or components into which a design may be divided.
figure	As used here the term refers to anthropomorphic or zoomorphic depictions.
BCPM	British Columbia Provincial Museum, Victoria, Archaeology Div., site survey forms.
NMC	National Museums (of Man) of Canada, Ottawa, Archival material.

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