## Archaeology in British Columbia

ROY L. CARLSON

The reports in this volume are concerned with new discoveries in the archaeology of the province. New discoveries, however, cannot be fully understood without reference to what has gone before, that is, to earlier archaeological research to which these new data relate, and to the general goals of Archaeology. The purpose of this introductory paper is to indicate some of these goals, and to summarize the history of archaeological research in the province.

## METHODS AND GOALS

Archaeology is the science of predicting man's prehistoric past. Its goals are the reconstruction of past cultures in terms of their content, ecological and historical relationships, and of the processes which brought about cultural beginning, growth, and change. The predictions which archaeologists make are probability statements based on the assessment of varieties of data which are approached not only by excavation, but by examining the ethnography, language affiliations, and ethno-history of the indigenous peoples of the region under investigation. The logic of this multi-dimensional approach is that any culture at any particular point in time is a product of a series of unique historic events that preceded that point in time. All cultures have a past and the first readily available clues to that past are the cultures themselves as they existed at a known point in time. This approach is particularly viable in the Archaeology of British Columbia because of the abundance of data on the native cultures of the early historic period.

In the long run it will be the Indian peoples of British Columbia who will benefit most from the work of archaeology, as it is their culture history which reaches back beyond the time of written ethnographies, beyond the journals of the early explorers, and indeed beyond the time of events as remembered in myth and legend. The present Indian population has an acute awareness of its past and pride in its cultural heritage.



Fig. 1. Location of Historic Indian peoples of British Columbia.

Archaeology fills the blanks in the prehistoric record of the native cultures.

At the time of European contact there were an estimated 74,400 Indians in the province (Borden 1954: 187) who can be most readily classified in terms of their linguistic affiliations (Fig. 1). There were six and possibly seven major language stocks present at this time indicating that as a minimum requirement the archaeologist is faced with reconstructing the prehistoric culture history of at least six different linguistic groups. Unfortunately, unwritten languages do not leave tangible remains in the ground and the archaeologist must rely on correlations between language and technology in tying protohistoric cultures to their historic descendants, and to their early prehistoric antecedents.

Similarities in technology tend to cluster regionally and differences occur between regions. Some of these similarities and differences correlate with language distributions; others do not. Differences in technology occur particularly between the cultures of coastal British Columbia on the one hand and cultures of interior British Columbia on the other. Some of these differences are rooted in factors of the natural habitat which offer somewhat different economic resources, but many are rooted in historical rather than environmental factors in that their occurrence is dictated by tradition. For example, on the Coast during the historic period there was a tradition of large multi family plank houses, whereas in the Interior the typical dwelling was a quite different structure termed a pit house. Another example is the tradition of using arrow points of flaked stone by the Indians of the Interior at the time of contact, whereas on the Coast at that time points of bone were used on arrows. Many other examples could be cited as well as examples of significant differences which cluster in sub-regions of both the Coast and Interior. Archaeological cultures are actually correlated distributions of artifacts at given points in time. As the archaeologist moves backward in time through excavation of prehistoric sites, he discovers that these artifact distributions were not static, but changed, and he must puzzle out the reasons for such changes in terms of evolutionary, diffusional, and migrational hypotheses.

Part of the approach in predicting and reconstructing the prehistory of a given area is through reference to the archaeological record of other areas. The reasoning here is that cultures past as well as present did not exist in total isolation from each other. Before the age of electronic communication the spread of techniques and ideas from one part of the world to another occurred much more slowly than today, but it did take place. Increases in complexity and diversity are the main characteristics

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of culture during prehistoric time. Whereas about two million years ago the only culture in existence was uniform in content, by the time of abundant evidence for the presence of man and culture in the Americas some 12,000 years ago, hundreds of distinct cultures which had diverged from their parents and accumulated considerable specialized knowledge can be recognized. The archaeological evidence from other areas of the world indicates that man with his kit of tools and ideas spread in only relatively recent prehistoric periods to North America from Asia via Bering Strait, and that he was present in regions to the south of British Columbia at a time when the province was still covered with the vast ice sheet of the last continental glaciation. By 8,500 B.C. this sheet had melted permitting man to move into the province. Thus for the source of the first inhabitants of the province, the archaeologist looks to the unglaciated areas adjacent to the province and compares his discoveries here with artifact assemblages there. This process of comparison is employed for cultures of all periods in order to draw inferences regarding historical change. Comparisons are also made between technological changes and environmental change to draw inferences relating more to internal rather than external causes of change. Such is the strategy of archaeology. The following section discusses the growth of archaeological research in the province.

## GROWTH OF ARCHAEOLOGY IN BRITISH COLUMBIA

The province has witnessed two major periods of archaeological activity, the first around the turn of the century with the work of Harlan I. Smith and Charles Hill-Tout, and the second beginning shortly before 1950 when Charles E. Borden first published the results of his investigations in the Fraser Delta locality, and continuing up to the present day. The intervening period was marked by sporadic investigations. The most significant events during the last 80 year period of development are in my opinion the following: (1) the work of Harlan I. Smith with the Jessup North Pacific Expedition around the turn of the century; (2) the establishment of the first local chronology of cultures by C. E. Borden in 1950; (3) the Tweedsmuir Park expedition of 1951-2 which established the principle of salvage archaeology; (4) the passage of the Archaeological and Historic Sites Protection Act by the provincial government in 1960; and (5) the founding of the Archaeological Society of British Columbia in 1966.

The work of Harlan I. Smith and Charles Hill-Tout mark the early

period of archaeological research from about 1890 to 1902. Initial credit for putting Archaeology on a scientific footing goes to Hill-Tout with the publications in 1895 of Later Prehistoric Man in British Columbia. Hill-Tout is noted particularly for his work at the Marpole (Eburne) midden near the mouth of the Fraser. He employed tree growth, decomposition of midden material, and growth of deltaic deposits in attempting to date the site, but drew his conclusions regarding culture change in terms of a theory of migration involving a long-headed population being displaced by a later broad-headed one. In his later writings he identified the earlier inhabitants as Eskimo (Hill-Tout 1932).

Working at the same time period as Hill-Tout, but apparently independently of him, was Harlan I. Smith as the archaeologist with the Jessup North Pacific Expedition organized by the American Museum of Natural History. This group of field workers under Franz Boas consisted of archaeologists, ethnographers, linguists, and physical anthropologists. They were by and large a fact gathering group to whom we owe a debt for collecting both information and artifacts regarding the aboriginal cultural traditions which would have otherwise perished. Between 1897 and 1902 Smith conducted surveys, made excavations, and examined local collections in the region between Lytton and the Gulf of Georgia (Smith 1899 a; 1900 a, c; 1903; 1907 b; Smith and Fowke 1901). Smith's publications are valuable for descriptive and distributional data in regard to cairns and burial mounds, sites, and artifacts. Typology and the principles of stratifications and association which are of paramount concern to modern Archaeology were little used. Smith (1907 b: 436) did note the presence of both round headed and long headed skeletons, and appears to have considered the broad headed type as an intrusion from the Interior to the Coast. Smith recognized similarities between Interior and Coastal cultures, but failed to find evidence of a chronology of cultures. The main importance of his work is that he did establish the presence of large, deep, prehistoric sites in the province which he brought to the attention of the scientific world. Implicit in the writings of both Hill-Tout and Smith is the assumption that culture change is brought about by the migration of distinct racial groups. This assumption can only rarely be documented.

Little archaeological work took place in the province between 1907 and 1946. Smith became chief archaeologist for the National Museum in Ottawa in 1911 where he remained until retirement in 1937. He maintained his long standing interest in British Columbia and continued to visit and to record sites in all parts of the province. The records of

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his surveys are in the National Museum. He paid particular attention to rock pictures (Smith 1927 b), but excavated only at a shell midden on Graham Island in the Queen Charlottes (Smith 1929: 46). In 1938 Philip Drucker of the University of California tested nine sites and recorded many others while conducting an archaeological survey on the coast from Prince Rupert to Rivers Inlet (Drucker 1943). Drucker employed the direct historic approach in that he tested sites known to have been occupied by particular Indian groups. The sites showed no stratigraphic change, and for a provisional chronology he was forced to rely on a seriation of Smith's sites at Port Hammond, Eburne (Marpole), and North Saanich on the basis of the head shape of the skeletons (Drucker 1943: 116). Drucker also reviewed museum collections of artifacts and applied the concepts of typology to archaeological specimens. By plotting the distributions of artifact types horizontally he arrived at a three fold division of the coast into Northern, Milbanke - Queen Charlotte Sound, and Straits of Georgia - Puget Sound aspects. Each aspect or sub-area was characterized by a particular cluster of artifact types. Drucker's contribution was largely in the areas of typology and distributional analysis, and it remained for later investigators to establish chronological sequences based on differences in artifact types within these three sub-areas.

The period between 1946 and the present day has witnessed a resurgence of interest in archaeological field work, the growth of institutions engaged in Archaeology, the enactment of legislation to protect our non-renewable archaeological resources, and the establishment of many local chronologies within the province. Part of this growth is directly the result of the efforts of Charles E. Borden of the University of British Columbia. Another part is the result of the development in 1950 of the Carbon 14 dating technique which has served as the greatest single impetus for the expansion of archaeological research in all of North America.

In 1946 Borden began exploration in sites in the vicinity of the Fraser Delta which resulted in the establishment of the first local chronology of cultures in the province (Borden 1950 a, b; 1951 a). Excavations begun in 1947 in the San Juan Islands (King 1950) resulted in a related sequence for the same biotic zone in the state of Washington (Carlson 1954, 1960). In 1951 Borden instituted the first major salvage project, a survey of sites in Tweedsmuir Park, which were soon to be flooded by construction of the Kinney dam on the Nechako River (Borden 1952 a, b). The problems involved in this survey brought his attention to methods of site designation, and he worked out a site designation scheme

which has since been adopted across Canada (Borden 1952 c). Between 1951 and 1957 he continued work on the Fraser Delta sites, surveyed portions of the Mica dam reservoir in the Kutenai locality, and worked at the Tsimshian village of Gitsumgalum on the Skeena River. In 1958 the Milliken site at Yale was discovered and in 1959 Borden began systematic excavations there which have resulted in a chronology of cultures going back at least 9,000 and possibly 12,000 years. Borden's ideas on the influences and relationships which have shaped the native cultures of the province have remained flexible and continue to evolve as more and more data is brought to light.

In 1960 the provincial government at the urging of the concerned public passed the Archaeological and Historic Sites Protection Act, and established the Archaeological Sites Advisory Board. This Act legally protects all archaeological sites on Crown land and all Indian burials from the ravages of relic collectors and industrial expansion. Qualified individuals whose interests are scientific or cultural are granted permits by the Board for archaeological exploration. Surveys and excavations in the Arrow Lakes reservoir (Turnbull 1968 a) and in other reservoirs have been undertaken since 1960 with funds provided to the Board. Salvage excavations have similarly been undertaken at the Beach Grove site on Boundary Bay, at Helen Point and Montague Harbour in the Gulf Islands, at Fort Defiance, and at other sites.

There has been a gradual increase in the number of individuals and institutions participating in archaeological research in the province since the mid-50's. The Provincial Museum has had an active field work programme since 1957, the University of Victoria since 1966, Simon Fraser University since 1968, and the Centennial Museum in Vancouver since 1968. Non-provincial institutions which have sponsored work in the province within the last ten years are the University of Washington, the National Museum of Canada, the University of Colorado, and the University of Calgary.

The Provincial Museum has done considerable work on Southern Vancouver Island, and has also worked in other parts of the province. Duff (1955: 45-55) defined the soapstone complex from the Gulf Islands and in 1957 and 1958 tested the Canal site on Pender Island in an attempt to establish the context of these unique items. Excavations were undertaken on Anthony Island in the Queen Charlottes in 1957. Surveys between Sooke and Saanich were done in 1958-59, and in 1959 Michael Kew and Robert Kidd tested H. I. Smith's North Saanich site on Tshehum Bay and another site on Shoal Bay. Donald Abbott, now

	BRITI	SH CO	DLUMBI	A C	OAST	
language	HAIDA	HAIDA TSIM - SALISH		WAKA	WAKASHAN	
locality	QUE EN CHARLOTTE ISLANDS		KWAT NA INLET	NAMU	VANCOUVER ISLAND	GULF ISLANDS
tribe	HAIDA	TSIMSHIAN	BELLA COOLA	KWAKIUTL	NOOTKA	STRAITS SALISH
1,800	·	LATE PERIOD	PROTO – HISTORIC	LATE NAMUIII	LATE YUQUOT	SAN JUAN PHASE
<b>A</b> .D. <b>B</b> .C.		MIDDLE		NAMU II (Marpole Phase?) NAMU I		MARPOLE PHASE
1,000	HONNA RIVER	E A R L Y P E R I O D		(Locarno Phase?)		LOCARNO BEACH PHASE
3.000	SKOGLUND'S LANDING zone II				EARLY YUQUOT	MAYNE PHASE
4.000				FORT RUPERT		
5.000						
6.000	SKOGLUND'S LANDING Zone III	· ·	,	AILLARD CREEK		
8,000				94. 		
9.000						
10,000						

Fig. 2. Cultural Chronology in British Columbia. Compiled from the following sources: (1) Queen Charlottes: Fladmark, this volume; (2) Skeena: MacDonald 1969; (3) Bella Coola: Hobler, this volume; (4) Kwakiutl: Hester, 1969; Capes 1964; (5) Nootka: Folan 1969; (6) Gulf Islands: Carlson 1954, 1960, this volume;

		INTERIOR					
S A	LISH		АТ	language			
FRASER DELTA	FRASER CANYON	SOUTH CENTRAL B C	CHILCOTIN PLATEAU	TWEEDSMUIR PARK		locality	
HALKOMELEM		LILLOOET SHUSHWAP THOMPSON	CHILCOTIN	CARRIER	TAHLTAN	tribe	
STSELAX PHASE	ESILAO PHASE	KAMLOOPS PHASE		PROTOHISTORIC CARRIER	PROTOHISTORIC TAHLTAN	1,800	
PRE-STSELAX- PHASE WHALEN II PHASE	EMERY PHASE	LATE PERIOD	NATSADALIA			1,000	
MARPOLE PHASE	SKAMEL PHASE	12,100	CROSSING			A.D. B.C.	
LOCARNO BEACH PH.	BALDWIN PHASE	UPPER MIDDLE PERIOD	HORN LAKE	NATALKUZ PHASE	N.W. MICROBLADE TRADITION?	1,000	
ST. MUNGO SITE (Eayem Phase?	) EAYEM PHASE	LOWER MIDDLE PERIOD	POPLAR GROVE SITE			2,000 3,000	
	?	EARLY PERIOD				4.000	
	MAZAMA PHASE					6,000	
	MILLIKEN PHASE					7.000	
	PASIKA ?					8,000	
	Sumas Ice advance				_	2.000	
	PASIKA ?				10	0.000	

Mitchell 1969; (7) Fraser Delta: Borden, this volume; Calvert, this volume; (8) Fraser Canyon: Borden 1965; (9) South Central British Columbia: Sanger 1966, 1968c; (10) Chilcotin Plateau: Mitchell 1968b; (11) Tweedsmuir Park: Borden 1952a; (12) Stikine: J. W. Smith 1969.

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Curator of Archaeology at the Provincial Museum, excavated at the Royal Victoria Yacht Club and at Beach Grove on Boundary Bay in 1964 and on Cadboro Bay in 1966, and directed work at False Narrows on Gabriola Island in 1967. The Provincial Museum also maintains the complete file of archaeological sites recorded by all groups working in British Columbia.

Donald Mitchell of the University of Victoria has served as field director for the Archaeological Sites Advisory Board. He excavated the important Pasika complex site at Yale which has yielded only crude pebble tools (Mitchell 1965), conducted a survey of the Gulf Islands, excavated and analyzed the material from Montague Harbour on Galiano Island, has surveyed Johnson Strait and other parts of the coast, and excavated on the Chilcotin Plateau (Mitchell 1968 a, b; 1969).

Archaeology was established at Simon Fraser University in 1966. Field research began in 1968 with excavations at Helen Point on Mayne Island undertaken by R. Carlson and a survey of the seaward reaches of the Bella Coola area by P. Hobler. In 1969 Hobler excavated at Kwatna Inlet. The preliminary reports on these projects follow in this volume. A salvage excavation at the Murray site in Lillooet was undertaken in 1968 (Stryd and Baker 1969).

The new Centennial Museum began active archaeological exploration in 1968 under Gay Calvert with work then and the following summer on the St. Mungo site near the mouth of the Fraser. The preliminary report on this work follows in this volume.

The National Museum has supported field research in the province increasingly since 1955. Between 1955 and 1960 Catherine Capes surveyed and tested a series of sites on Vancouver Island (Capes 1964) under a National Museum contract. David Sanger began work in south central British Columbia in 1960 supported in part by the National Museum, the University of Washington, and the University of British Columbia. Sanger continued work in that area until 1964 and established a 7,000 year chronology for that portion of the Interior (Sanger 1963, 1966). In 1966 W. Folan of the Historic Sites Branch of the National Museum excavated the deep midden at Yuquot on Vancouver Island which yielded a long sequence of cultures beginning 4,200 years ago (Folan 1969). George MacDonald has been working for the National Museum in the Lower Skeena River locality and Queen Charlotte Islands since 1966 and has established a chronology for the Coast Tsimshian locality going back 4,500 years (MacDonald 1969). R. Wilmeth began work in the Chilcotin area around Anaheim Lake in 1968 and has been concerned particularly with the transition between history and prehistory in that locality.

The Archaeological Society of British Columbia was organized in 1966 in Vancouver and since that time has been engaged in test excavations at several Lower Mainland sites.

The Universities of Washington, Colorado, and Calgary have sent field workers to various parts of the province. In 1952 W. Caldwell surveyed portions of the Okanagan and Similkameen Valleys (Caldwell 1954) for the University of Washington. J. Hester of the University of Colorado began work in Bella Bella territory in 1968 and excavated at Namu and Kisameet Bay in 1969 (Hester 1969). Knut Fladmark of the University of Calgary began work in the Queen Charlotte Islands in 1969, and J. W. Smith of the same institution established a tentative sequence for the Stikine drainage near Telegraph Creek (J. A. Smith 1969).

An impressive amount of archaeological field work has been undertaken within the last two decades. The analysis of the materials recovered, and the publications of the results of these investigations in most cases still remain to be done. The chronological chart (Fig. 2) gives some idea of those localities and time periods best known archaeologically. The earliest firmly dated cultural phase is still the Milliken phase at Yale with two C-14 dates which place it between 6,000 and 7,000 B.C. (Borden 1965). Another early date of 6,350 B.C. was obtained by Capes (1964: 60) for a site on Millard Creek on Vancouver Island, but it is uncertain what cultural material is actually dated. The other early phases or complexes shown on the chart exhibit typological similarities and geological context indicative of considerable antiquity, but lack radiocarbon dates. The longest chronology for any locality is that for the Fraser Canyon established by Borden. We are eagerly awaiting the full publication of this important sequence. Sanger's sequence for south central British Columbia is fully published (Sanger 1966, 1968 c, e). Preliminary reports are all that are so far available for many localities. As both field work and analysis and publication of results continue we shall at some future time have a complete picture of the prehistoric cultures of the province and of the processes which shaped them. Much remains to be done.