British Columbia Archaeology in the 1970s

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Some of the practising archaeologists of British Columbia, in rare pauses in their perpetual melee with grant proposals, impact statements, budgetary commitment reports, permit applications, preliminary reports, final reports, student papers, theses, publications, conference papers, lecture preparations, museum displays and a myriad other foes, may recall with nostalgic fondness a time, not long ago, when their discipline was younger, simpler and more innocent. Without doubt, the last ten years have been a decade of tremendous growth and change in B.C. archaeology — change which has profoundly affected the amount, type and results of archaeological research, and which in itself may not always have been uniformly productive in furthering the fundamental goals of the discipline. This paper will review briefly this decade of change and evaluate its effects in terms of two general criteria: (1) the amount of new information gained about past cultures in the province, and (2) the efficiency with which this information has been passed on to the general public.

In the early-to-mid 1960s the number of archaeologists possessing at least Master's degrees and employed full-time in British Columbia archaeology could be counted on the fingers of one hand with some digits left over. Students then seeking training in archaeology were members of a small and somewhat outcast group who hopefully submitted their names every summer for the one or two research projects happening in the province that year - and usually ended up working for construction companies. There were no field-schools, almost no graduate students, virtually no research funds, and a generally negative attitude towards archaeology by existing university anthropology-and-sociology programs. As late as 1970, UBC offered only one regular undergraduate course on North American archaeology and had only one practising prehistorian, C. E. Borden, who was hired as a member of the German department. Archaeology in B.C. before 1965 was a marginal discipline struggling for a minimal existence on emaciated budgets, with little university, governmental or public recognition. This situation began to change radically in

the last few years of the 1960s and by the early 1970s the picture was entirely different.

Today (1980) there are over twenty-five professional archaeologists (i.e., full-time employment with at least an MA or equivalent) working on B.C. archaeology in the universities, government offices, colleges and museums of the province. There are about forty graduate students currently enrolled at the three universities, and an uncounted number of undergraduates and non-students are seasonally employed in archaeology. Dozens of field-projects are usually conducted each year (e.g., forty-three in 1976 alone) with total funding from all sources for archaeological field work in the peak years of the late 1970s approximating one million dollars annually. The average provincial salary for field-workers has jumped from \$200-300 per month in the mid-1960s (if indeed there was any salary) to over \$1000 per month by 1979, and with greatly improved working conditions, one no longer requires a self-denying dedication to archaeology to survive a summer's field-work - even the food in fieldcamps is finally beginning to approximate the standards of the nonarchaeological world! These major changes in the quantity and-"style" of archaeological activity, beginning in the early 1970s, were directly related to several very important developments in institutions and legislation fostering, overseeing and controlling the development of archaeology in the province, as well as changing perspectives in the discipline overall.

Undoubtedly the development which had the single greatest effect on the amount and direction of archaeological field-work carried out in the seventies was the formal establishment, in May of 1971, of the Provincial Archaeologist's Office in Victoria. Ably managed from the outset by Bjorn Simonsen, this provincial government agency has administered, organized and controlled the bulk of archaeological research funds, field-projects and field-employment available in the province in the 1970s. Working with the Archaeological Sites Advisory Board and under the guidelines of the Archaeological and Historical Sites Protection Act (replaced by the Heritage Conservation Act passed in 1977), the Provincial Archaeologist's Office has provided managerial control and planning affecting the nature and long-term direction of archaeological inquiry in British Columbia. Simonsen's office has worked to open avenues of communication with government development companies and agencies, such as B.C. Hydro and the Department of Highways, and has striven to direct archaeological energies toward long-term rational management of the nonrenewable and rapidly diminishing archaeological resources of the province. The Provincial Archaeologist (now titled "Chief, Resource Management Division, Heritage Conservation Branch") and his nine full-time co-workers have co-ordinated systematic site surveying or "resource inventories" across the province, so that over 13,000 archaeological sites are currently documented in the provincial site-file. In addition, they have managed numerous salvage excavation programs on the southern coast and throughout the interior, and have been generous to a fault in providing research funding opportunities for students and faculty of virtually all the colleges and universities of the province.

Due to the energetic urgings of the Provincial Archaeologist's Office, coupled with the formation of the provincial government Environment and Land Use Committee and a generally heightened public concern with ecology and resource depletion, major land-development companies have over the last few years invested significant sums of money in archaeological resource "impact studies" in areas threatened by proposed landaltering activities. A leader in this area has been British Columbia Hydro Corporation, which between 1974 and 1979 funded two major archaeological studies—the Peace River Project, contracted to SFU, and the Hat Creek Project, contracted to UBC—as well as a large number of smaller projects. B.C. Hydro Corporation deserves public commendation as an example of a company with a positive commitment to preserving British Columbia's heritage resources.

In addition to an increased governmental planning function and sharp rises in local sources of funding, higher educational institutes throughout the province have also undertaken a marked development of archaeological programs in the last ten years. At least eight regional colleges throughout the province now employ full- or part-time archaeological faculty and teach varied numbers of archaeology courses, and some conduct fieldschools or carry out other field-research. The University of British Columbia has added three faculty positions in prehistoric archaeology since 1970 and has developed new research facilities in conjunction with its impressive new Museum of Anthropology. Simon Fraser University has, since 1970, added eight archaeology faculty positions and developed a fully separate Department of Archaeology, which is now housed in a new building, including a museum and sophisticated research facilities such as a complete radiocarbon dating laboratory. The SFU Department of Archaeology now represents one of the largest concentrations of archaeology faculty and advanced research and analysis facilities anywhere on the continent. Not to be outdone by universities and colleges, museums throughout the province have grown in numbers and quality. Housed in a major building complex finished in 1970, the archaeology division of the

Provincial Museum of B.C. at Victoria has added thirteen permanent staff-members since 1970, and the new Provincial Museum now displays some of the finest and most dramatically effective exhibits of North American archaeology and ethnology of any museum in Canada or United States. In addition to the provincial institution, numerous smaller local or municipal museums have opened or grown over the last decade, providing various communities with focal points for heritage studies and locally accessible repositories for artifacts.

With unparalleled growth in numbers of people, research facilities and research dollars, one would expect that the 1970s would have been a time of equivalently rapid and substantive change and evolution in our knowledge of prehistoric cultures of B.C. In my opinion this has not been the case and the reasons for this failure need examination.

By "knowledge" I mean the generally accepted series of progressive states of archaeological data accumulation, beginning with basic descriptive reporting, leading through the development of local and regional cultural chronologies, and ending in "processual" studies of past ecological and social relationships. Most archaeologists agree that each stage of this process must be predicated on a firm basis in the previous stages i.e., reconstruction of prehistoric social behaviour or other sophisticated analytical tasks is ludicrous without firm control of chronology. Nevertheless, this seemingly logical sequence of events has not been adhered to by British Columbia archaeologists. Particularly, new discoveries and expansion of cultural-chronologies, during the 1970s in general and especially the last five years, have lagged in comparison to developments in other areas of North America. For parts of the province our understanding of cultural-chronology, let alone anything else, has not greatly progressed since the late 1960s, with some of the exceptions to this rule printed in this volume. To those few more cynical colleagues who might argue that cultural-chronology is no longer "relevant" or important, I would respond that archaeology is the study of past cultures in time and space, or it is nothing. The initial basis of all archaeological analysis, for any purpose, must be the ability to recognize "single cultures at single intervals of time," so that a culture's internal structure may be examined without danger of contamination by elements from "other cultures at other times." To deny this necessity and still attempt "processual" manipulations of archaeological cultures is inevitably to produce logical absurdities. While few would deny that some early cultural-historical projects can be seen in today's brilliant light as less than rigorous, this does not mean that we should stop cultural-historical research. Instead, it demands that we test and refine cultural historical methods and systematically set about expanding and improving on what is still a data base inherited with little change from 1970, or earlier.

The reasons for a decline in substantive new developments in B.C. archaeology, particularly over the last five years, compared to the escalating resources available to the discipline, can be tied directly to trauma which affected archaeology all over the continent to varying extents through the 1970s. These can be summarized as: (1) the advent of large-scale archaeological impact assessment and salvage contracts; (2) the development of new methodological and theoretical approaches, usually somewhat pompously called the "New Archaeology"; and (3) a general systematic paralysis caused by effectively instantaneous growth in numbers of research personnel, students, facilities and dollars.

To archaeologists used to the difficulties of squeezing a few dollars each year from traditional national funding agencies, the budgetary opportunities presented by major impact-study contracts were of a different world. Instead of having to run a field project for three to four months on \$4,000 to \$5,000 (including salaries, food, transportation, equipment, materials and analysis costs) we were suddenly presented with potential annual budgets into hundreds of thousands, if not ultimately millions of dollars, and such contracts were more easily obtained than much smaller sums from national granting agencies. Universities saw the large contracts as opportunities to hire numbers of students and as sources of innumerable graduate theses, while researchers initially saw them as heaven-sent opportunities to carry out a style and scope of field-work impossible in the past. Unfortunately we were partially blinded by the six-figure budgets and did not fully realize, until a substantial amount of time and effort had been invested, that contract impact assessments are inherently relatively unproductive of new information useful in the analysis and interpretation of past cultures, compared to the staggering amounts of data that would be generated by equivalently funded projects geared to specific research goals.

The problem, and one now recognized all over the continent, is the fact that impact assessments funded by land-altering industrial agencies are "applied archaeology" in the sense that an engineering study is "applied science." Thus, just as an engineering study is unlikely to yield new information about the fundamental properties of matter or energy, an archaeological impact study is not easily able to generate new data about past cultures. Instead, impact studies are intended, primarily, to satisfy legal obligations on the part of a land-altering agency, relative to

heritage legislation applicable in the affected area, and not to answer any specific questions about past cultures. The companies will naturally react to their legal obligations in the most cost-efficient manner, and in most cases this means initially carrying out a site inventory so that planners can later integrate and weigh the monetary costs of avoiding, salvaging or destroying heritage resources. In such impact inventories, guidelines for archaeological field-crews have emphasized the simple location and description of sites, followed by generation of a simple site classifactory scheme, and evaluation of the cost-benefits of various construction and mitigation options as they might affect the site population. Knowing anything about the sites, other than location, approximate areal extent and surficial characteristics, has been given low priority in most impact assessment projects in British Columbia conducted to date. Although it is usually assumed that more sophisticated studies will follow after the initial inventory stage, it is not necessarily certain that development companies will in fact see further expensive archaeological research as the most cost-effective choice available to them. Thus, so far, after a huge expenditure of money, we are left with lists of sites whose spatial locations are fixed, but whose chronological placement, internal structure and contents, and activity orientations are usually completely unknown. In most cases one could have predicted as much about the prehistory of an area on the basis of pre-existing research studies in adjacent regions, ethnographic data and pioneering archaeological information, as can be said after the completion of a very large and very expensive impact study!

Since 1975 all three universities have undertaken major impact assessment projects and devoted a great many man-hours to these studies. My own involvement in the Peace River project from 1974 to 1976 convinces me of the validity of the above criticisms, and also convinces me that if effective rates of new information return are to be developed in British Columbia prehistory, most university archaeologists must get back to doing academic, or "pure" archaeological research and leave "applied" studies to individuals and private companies geared to such work, although there is a potential valid role for specialized faculty dedicated to the teaching and practice of "applied archaeology" and archaeological resource management. In addition, unless we wish future archaeologists to look back on this period as the time of great wasted opportunity, any continuing impact inventory studies in any way administered or controlled by provincial archaeological agencies must insist in their initial guidelines on some significant level of data recovery beyond simple site location and description. This must include an attempt at provisional chronologies — for archaeology, fixing a site in time is at least as important as knowing its location on a map — and some assessment of the internal structure and contents of a site. Discretionary test-excavation and surface collection (with suitable controls) must be encouraged in future surveys conducted by experienced personnel, not actively discouraged as has been the case in the past few years.

Besides the development of large-scale impact studies, and the subsequent draining-off of archaeological energies to "applied" pursuits, a general turmoil in the theoretical and methodological under-pinnings of the discipline characterized most of North American archaeology in the late 1960s and 1970s, and British Columbia did not go unaffected. In this province, manifestations of the "New Archaeology" have taken a number of forms including: (1) widespread concern with research design and sampling-methods, and replacement of judgmental sampling methods in survey and excavation by probabilistic or statistical approaches (e.g., Mitchell this volume); (2) a generally heightened awareness of statistical methods (e.g., Matson this volume); and (3) a widespread awakening of interest in ecological and paleoecological studies, particularly on the Northwest Coast, which had seen virtually no concern with the analysis of faunal and floral remains, site matrices or geological and paleoenvironmental data prior to the late 1960s (e.g., MacDonald and Inglis, Matson, this volume). These and other changes were mainly brought into the province by the stream of newcomers who arrived to fill new faculty and graduate student positions that opened during the '70s, but others were valiantly espoused, often against considerable resistance, by a few members of the local archaeological community.

Probably no other question raised so much heated debate during the 1970s as the validity of random or probabilistic sampling methods in site surveying and excavation. Many archaeologists (including this writer) initially strongly objected to the utility of restricting survey coverage to randomly selected sampling areas, instead of judgmentally searching "where sites were most likely to occur." Initial proponents of probabilistic surveying in British Columbia (Mitchell, Matson, Simonsen and others) received no small amount of criticism from their colleagues for this approach, but have since apparently been vindicated by the proven effectiveness of the procedure for predicting overall site populations and their characteristics, and for forcing survey investigations of areas not usually examined. From the standpoint of resource-inventory impact-studies of the type discussed earlier, probabilistic surveying is also cost effective (in comparison to a 100 percent coverage of a huge survey area) and ex-

presses archaeological assessments in a form familiar to developmental corporations. Although various probabilistic methods are now used in British Columbia and most of the rest of North America as routine methods of archaeological surveying, the effectiveness of probabilistic excavation of multi-occupation sites is far less certain, and the debate on this aspect continues here and elsewhere.

Debate and controversy are normal aspects of any developing science and it is certain that the changes in archaeological method and theory begun during the 1970s will generally have long-term positive effects. Nevertheless, in the short term they resulted in the partial fragmentation of the expanding archaeological community of British Columbia into a number of loosely defined "schools-of-thought" that viewed each other's work rather coolly, at best. Although rifts are slowly healing, communication among all active archaeological researchers of British Columbia is still far from ideal, considering what should be widely shared interests.

If communication among professional archaeologists in this province has lagged (partly due to the lack of a provincial archaeological journal and research-oriented conference), communication between professional archaeologists and the general public has been abysmal. Although archaeologically interested people have been writing about the prehistory of this province for over 100 years, few of the hundreds of resulting reports and publications have been specifically intended to inform the general public about archaeological activities and discoveries. If archaeologists wonder at a lack of enthusiastic welcome when we begin field-work in a new area or at a lack of public or governmental support for archaeological legislative or management issues, we must start by blaming our own failure in supplying the public and the legislators with effective information about archaeology. Some of the initial moves in filling this gap have actually come from the public, even though they should not reasonably be expected to carry out what is a basic responsibility of the professional discipline. The Archaeological Society of British Columbia, formed in 1966, has grown over the last fourteen years into a respected and influential member of the archaeological community, active in public education and legislative lobbying, and publishers of The Midden, a newsletter which has served as the only in-province source of regular communication among archaeologically interested people. As well, two members of the Society have published monographs which, in addition to the BC Studies special issues and MacDonald and Inglis (1976), represent almost the only written sources of information about B.C. archaeology currently easily available to the local public (Stewart, 1973; Bunyan, 1978), a fact which should make professional archaeologists feel no small embarrassment. A general interest textbook on western Canadian prehistory is urgently needed.

Of course, it would be neither accurate or fair to leave the impression that archaeologists have not been doing anything over the last ten years. Indeed, a large amount of field-work and publication has resulted, and some researchers have made special efforts to communicate their work to the public (see MacDonald and Inglis this volume). The early half of the 1970s saw substantial amounts of field research in many areas of the province. A representative listing, by no means comprehensive, of publications and theses produced since 1970 follows below:

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Central Coast	— Apland (1977); Carlson (1972, 1976, 1979); Carlson and Hobler (1976); Chapman (1976); Hester (1978); Hobler (1972); Mitchell (1979, and this volume); Pomeroy (1976); and Simonsen (1973).
West Coast, Vancouver Island	— Cybulski (1978); Haggarty and Boehm (1974); McMillan (this volume); and McMillan and St. Claire (1975).
Southern Coast	— Borden (1975, 1976); Burley (1979); Charlton (1977); Haggarty and Sendey (1976); Kenney (1974); Matson (this volume, 1976); McMurdo (1974); Mitchell (1971a, b); Monks (1977); and Percy (1975).
Fraser Valley	— Crowe-Swords (1974); Hanson (1972); Le-Clair (1976); Von Krogh (1976); and Whitlam (1977).
Southern Interior	— Blake (1976); Bussey (1977); Choquette (this volume); Copp (1979); Eldridge (1974); Ham (1975); Pokotylo (1977, 1978); Stryd (1972, 1973, 1974, 1978); Turnbull (1977); and Wilson (1977).
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