



Vol. VIII, No. 4
October 1976

Editor
N. Russell

THE MIDDEN

PUBLICATION OF THE
ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA

Produced by the Publications Committee five
times a year. Gladys Groves, Chairman,
504-2005 Pendrell St., Vancouver, B.C. V6G 1T8

Next issue: December 1976

ISSN 0047-7222

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OPINION: "Inasmuch as the National Museum had a speaker tour Canada last spring justifying its policies on salvage archaeology, I thought it appropriate to provide an alternative point of view and have written the enclosed."

CANADIAN SALVAGE ARCHAEOLOGY IN STATE OF "CRISIS".

Ottawa policy labelled "...reactionary, wasteful and unimaginative".

by Brian Hayden,
Simon Fraser University

After the Ontario Archaeological Society (OAS) has been relieved of the responsibility of excavating the Draper site, and after William Finlayson has presented Ottawa's alternative approach to excavating the site, I think a number of issues of importance merit discussion. Of central concern is the role and goal of salvage (or "rescue") archaeology as currently perceived by Ottawa archaeologists. Because the Draper site held unusual potential both in terms of information and financial resources, it is an especially instructive example of the beliefs, goals, and actions behind the archaeological salvage policy in Ottawa.

A number of characteristics of the Ottawa outlook are readily apparent from policy statements from Ottawa. These will be briefly stated as a working base for interpreting events at the Draper site.

Perhaps the most distinguishing characteristic of the Ottawa policy has been an extreme aversion to research. The distinction has often been verbalized and it has been insisted upon in writing: that salvage archaeology is not, and must not be, research archaeology.

Closely related to this attitude is the belief, or implicit assumption, that there is some intrinsic worth in some limited types of information and that other types of information are more or less irrelevant. The information to be obtained is relatively static and unchanging and is essentially the same for all sites where it is available. There is an "intrinsic" worth in the data that salvage archaeology seeks. On the other hand, "research" archaeology is presumably oriented toward more theoretical aspects, toward exploration, toward the resolving of issues, etc., and it is presumably equated with the "newer" archaeologists. In the research orientation, data is only important if it is useful in the context of explanation. One might characterize the opposing salvage position as continuing the Boasian tradition of scouring the earth for bits of information with only the vaguest notion of why or how such information fits

into broader theories, or why they were ultimately important.

I would like to argue that the ossification of policy on the types of data to be recovered from "salvaged" sites has led to redundant excavations in which the same data has been collected over and over again with no new dimensions added to our understanding of the past. It might be objected that time and funds do not permit alternatives, however the Draper site proved otherwise.

Perhaps intrinsic to any "salvage" organization is the express goal of saving one's cultural heritage. Unfortunately, too often the "saving" is done in the American style of "saving" threatened Southeast Asian villages. Whether to impress bureaucrats who know little about archaeology, or for whatever other reasons, the emphasis among traditional salvage groups, as well as in Ottawa, has been on how much of the heritage has been saved in terms of thousands of artifacts recovered, square yards of dirt moved, and now, pounds of charcoal consumed in feeding crews! The heritage which is stressed is that of the antiquarian; new insights into past cultures come only as a poor second where they are present at all. Insights into how culture works are anathema. To impress superiors, each other, and subordinates, many sites are destroyed, rather than excavated, in order to obtain as many artifacts as possible, while new types of information are lost.

OTTAWA ENVISAGES THREE SORTS OF ARCHAEOLOGY

Thus, salvage policy in Ottawa is defined as: (1) in opposition to research (a distinction insisted on only by Ottawa); (2) acquiring a limited type of data intrinsically worthy of collection; and (3) antiquarian concern for preserving cultural heritage by acquiring only the most superficial types of data (quantity excavations rather than quality).

To demonstrate what effect these attitudes and goals have in the field, I would like to use the Draper site as an example, since I was the 1973 field director at the site. The Ontario Archaeological Society was under contract from the Archaeological Survey of Canada (ASC) to excavate the site.

The site is a Late Ontario Iroquoian site just outside Toronto and is quite special in that about six acres of this unusually large village had never been plowed. No undisturbed Iroquoian sites have been excavated and reported on in the literature, and even Ottawa representatives admit that only about six such sites are known at present in Ontario. Thus, the Draper site is a rather special non-renewable resource. Because the site was to be destroyed (by the construction of the Pickering Airport), it seemed only natural to try to profit from the unique characteristics of the site and to explore new dimensions of data recovery and analysis as well as gathering the more traditional types of data.

With the \$23,000 that the project was given for 1973, I decided to see how much quality, as opposed to quantity, of information was

obtainable from excavations in the undisturbed portion of the site. Our mandate from the ASC was simply to investigate settlement patterns. I therefore initiated a series of ecological studies to examine determinants of settlement locations (multi-spectrumed remote sensing, pollen analysis, proton-magnetometer, faunal, and seed remain studies) as well as a relatively intensive investigation of intra-structure settlement patterning. It was assumed that the village patterning would be manifest when the entire site had been excavated. Although not all these studies were productive (some were highly productive), if they had been able to yield structure and midden locations, much destructive work could have been averted. These techniques at least had to be tried.

Inasmuch as no one had ever published excavations of an undisturbed Iroquoian site before, I was faced with the question of how much information was potentially available from the undisturbed portion of Draper, and how to recover and analyze it. This too was a very exploratory matter in Ontario archaeology, but given the nature of the site, and given the advances being made in spatial analysis of artifact distributions, as well as indications of success in determining activity areas and social groupings in contemporary archaeology elsewhere, it seemed foolish to treat the unplowed portion of the site as though it were just another plowed site. It seemed that relatively fine provenience controls might produce clearer, more reliable, and newer types of results. We recorded materials in 50 cm. squares and 3 cm. levels. Although we were unable to carry out an analysis of this material in as detailed a fashion as had originally been hoped (due to lack of money, unavailability of appropriately specialized personnel in programmes, and lack of specialized programmes for our needs), we did carry out detailed settlement pattern analysis within the structure at the 4 m.² unit level. I was not completely satisfied with our report. Resources did not permit us to take the matter further, however I doubt that as thorough a report has been written on any other Iroquoian excavation in Ontario.

During the course of excavations it became clear from those most influential in Ottawa (although they never deigned to visit the site) that their definition of settlement pattern studies did not include the usual spectrum of data, but were rather narrowly constrained to the finding of postholes and pits. After the season was well underway, the word arrived that Ottawa had little use for detailed excavations, new approaches, theory, or research. What the Ottawa policy mandated was finding houses--as many as possible, in as short a time as possible. What they did not seem to apprehend was that we did intend to find all the houses--indeed, we intended to excavate the entire site--but we intended to find them in more detail, and we intended to obtain more insights out of them than was customary, at least for the undisturbed portion of the site. (If the site were to be destroyed, we were going to wait until the last possible moment before using earth-moving equipment in the undisturbed zone).

ESTIMATE MADE FOR COMPLETING SITE

For that summer, with \$23,000, we were able to hire eight crew members (including a cook), of which only five worked at Draper. All analysis was performed out of those funds. On the basis of the work accomplished by that impoverished crew, I calculated that the entire site could be excavated for \$500,000 over 2-3 years. This included detailed excavation and recording of the undisturbed area and analysis. It also assumed (although it was never stated) support from volunteer workers recruited nationally and internationally, as well as support from local field schools which could excavate plowed portions of the site.

When the OAS submitted a proposal to the ASC for completely excavating the Draper site for a cost of \$500,000, utilizing detailed techniques in the undisturbed portion of the site, the reaction was almost immediate.* The proposal was soundly rejected on the grounds: (1) that it was a research proposal, and (2) that the cost was unrealistic. Since then the criticism has also been verbally made that the 1973 excavations had simply "not done the job."

One of the more interesting assessor comments came from within the ASC itself. Although dubious of the availability of funds, the assessor stated that: "Ideally, a project of this scope would be generated for all salvage situations." He is no longer employed by Ottawa.

What was the feasibility of funding the Draper site excavations in a manner suited to "research?" The ASC was not providing funding, rather the federal Department of Transport was. The position that the ASC seemed to adopt *a priori* was that to ask for \$500,000 was not a salvage request, and therefore could not be made. This was obviously a self-fulfilling prophecy and a good exemplar of archaeological tokenism. On the other hand, sufficient precedent existed elsewhere, as in the United States, for demanding up to 5% of total project costs for archaeological work. In the case of the multi-hundred million dollar Pickering airport, \$500,000 would hardly have caused a stir. In addition, the Department of Transport, already under heavy public pressure to abandon the airport on environmental grounds could not have afforded to turn down any request for the adequate retrieval of Ontario heritage, especially with non-renewable resources as unusual as the Draper site. For the Department of Transport to have refused funds for adequate study of the site could easily have caused the entire programme to collapse. And in fact, public pressure was so strong that plans for work in the near future have been abandoned. Finally, as an ultimate, rather ironic, demonstration of the rhetorical nature of the ASC financial objections to the OAS "research" proposal, the projected cost of their own within-house salvage project is \$750,000--50% more than proposed by the OAS.

* Because the airport was a federal project, all contract excavating had to go through ASC.

REJECTED BECAUSE OF "IDEOLOGICAL OBSTINACY"

Thus, it would appear that the only reason the OAS proposal was rejected was ideological obstinacy--a revulsion for research and theory and displeasure at not finding postholes fast enough. The price of this obstinacy was high, for with only two field seasons available to excavate the site before destruction (in principle), the ASC was unable to find adequate assistance to carry out excavations during the first of those two years, which only left one season in which to excavate the entire site! The result was a not inconsiderable amount of chaos, and the bulldozing of some of the undisturbed portion of the site. Perhaps part of the increase in excavation cost can also be attributed to this state of affairs.

It would be nice to think that because of the theoretical problems raised by the 1973 report, and because of the unusually detailed provenience recording, subsequent workers were encouraged to keep moderately good controls on excavations, and that this resulted in some of the high cost of excavation (those in the know at the ASC originally deemed \$75,000 reasonable). It is also flattering to see many of the problem orientations originally formulated in the 1973 report actually presented to the public as important questions that the Draper site might relate to, although it would be nice to see OAS credit for those ideas, rather than see them presented as in-house products of the ASC. In the final analysis, perhaps because of these factors, not as much destruction has occurred at Draper as might have otherwise taken place. Only the final ASC report on Draper can determine this. Perhaps relatively adequate data retrieval has taken place. There is no doubt, however, that OAS excavations would have been more detailed and different in emphasis.

If Finlayson and other ASC archaeologists really view the 1973 excavations as "worthless" and having "completely wasted the funds provided", it is a sign of their own intellectual myopia and the anti-research policy of the ASC.

Certainly a not inconsiderable amount of dirt was moved per capita at Draper by the OAS crew in 1973, and good provenience is available for all material: the minimal requirement of a good excavation. In addition, substantial advances were made in a number of realms of analysis, including ecological patterning and stylistic intra-structure patterning. The resulting research included types of analysis that were new to Ontario, and in some cases probably new to the hemisphere. Such results are hardly worthless even though the ASC believes they are not worth publication. On the other hand, Finlayson appears to think that the mechanical regurgitation of artifact proveniences on maps by computers constitutes a new advance and the ultimate goal in programming. This is comparatively common procedure in most large projects, and I hope that his analysis eventually goes further.

In summary, I hope that I have established peculiarities of federal policy on "salvage" operations, and how this policy can, and has, limited effective and good archaeological work in Canada, with the Draper site as an exemplar. The policy has led to needless destruction and waste of information, and non-renewable resources, and to unnecessary limitations on the scope of archaeological inquiry. The distinction between salvage and research archaeology is false and is being attacked in the literature as such (Schiffer and House, in press, Rex 1976). It is counterproductive, and it is anti-intellectual. "Salvage" groups around the world are asserting more and more that there must be sophisticated research designs behind salvage operations in order to maximize the usefulness of salvage operations and to obtain the maximum return for taxpayers' dollars. Without theory, priorities have no meaning and much that is valuable and useful will be lost. To divorce theory, models, exploration, and research from salvage archaeology is to render it impotent, and runs the risk of rendering the museums and institutions that support salvage archaeology no better than antiquarian collectors. In this respect, ASC policy has been remarkably reactionary, wasteful, and unimaginative. The attempt would be made to see how much data can be saved from unusual sites such as Draper, and I would urge archaeologists, especially in salvage archaeology, to use the funds provided to probe the limits of archaeology.

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"Cultural resource management and archaeological research."
Current Anthropology.

Wilson, Rex

1976

A status report to the archaeological community. Interagency
Archaeological Services Division, National Park Service,
U.S. Department of the Interior: Government Printer:
Washington, D.C.

Wilson Duff: a great loss



The death of Professor Wilson Duff at 51 will be a great loss to northwestern anthropology.

This close, it is hard to measure his contribution. Most recently, of course, there is the dramatic Images: Stone: B.C. exhibition and catalogue. But a long and impressive list of professional posts and publications precedes that.

He was always a westerner, from his first undergraduate work at U.B.C. (interrupted by three years with the R.C.A.F. in the war), through a succession of important promotions: B.A. (U.B.C.) in 1949; M.A. (Washington), 1951; Curator of Anthropology in the Provincial Museum from then until 1965; Associate Professor of Anthropology at U.B.C. until 1971, when he was made a full professor. In the meantime he was on the advisory planning committee for the new Centennial Museum, and was its Consulting Curator for exhibits; he was Consultant to the National Museum of Man in Ottawa, to evaluate Northwest Coast holdings; he was Consultant to the Alaska State Museum in 1971 on totem restoration, and was several times consultant on B.C. Indian affairs.

There was much else--including a wife and two children--in his crowded life. But the most obvious of his legacies are his publications, including innumerable articles in the learned journals. The Arts of the Raven will be long remembered by laymen; his Upper Stalo Indians and the Histories, Territories and Laws of the Kitwancool will long be important resource books to scholars. But in some ways at least Images: Stone: B.C. remains his most fitting memorial. The show was stunning and may never be matched. The book, though often provocative and ambiguous, remains the only major work on northwestern stone art.

In his own biographical notes, which he prepared several years ago for U.B.C. records, he says he hopes another work he was preparing would be "a contribution to the art history of the Northwest Coast.

"I am also aware"--he went on--"that I am redefining ethnological materials as 'fine arts' and discovering 'great artists' of the Haida past, thus strengthening an aspect of Indian identity and creating authentic Indian heroes." That he succeeded is unquestionable, and that's a much prouder thing than most of us can boast.



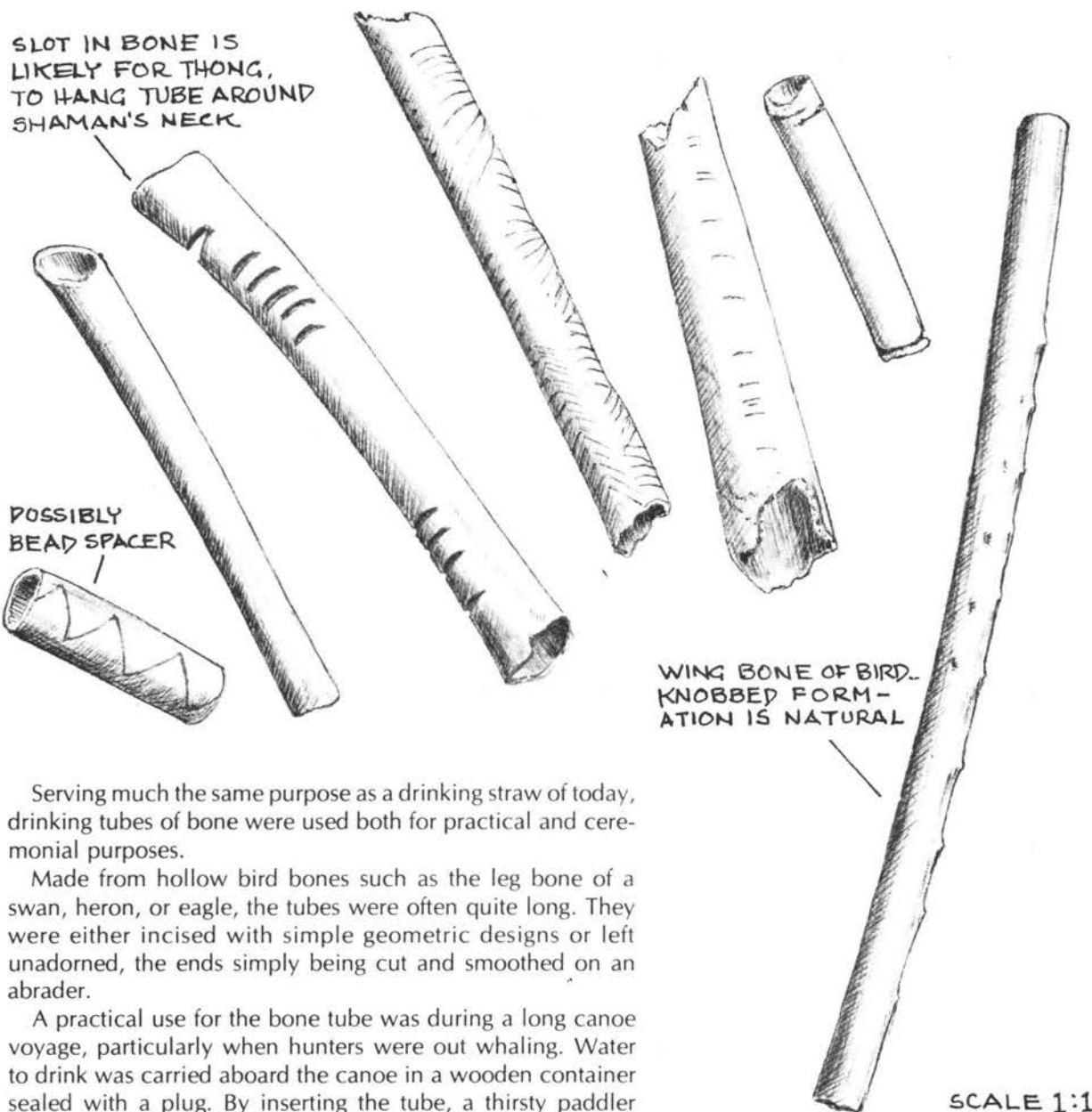
A.S.B.C. EXECUTIVE 1976/77

President:	Marie Duncan	224-7836
Vice-President:	Ron Sutherland	988-0479
Past President:	Nick Russell	462-7321
Secretary, recording:	Helmi Braches	985-0825
Secretary, corresponding:	Derek Scrivener	922-2298
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Chapters:	Marie Duncan	224-7836
Archivist:	Ladene Dehnel	274-2979
Members-at-Large:	Jim Garrison Sheila Neville	263-8782 732-5346

WATCH FOR...

The Society of Historical Archaeology will hold its 10th annual conference in Ottawa Jan. 5 - 8, 1977, in conjunction with the International Conference on Underwater Archaeology.

General Chairman: Jervis D. Swannack, National Historic Parks & Sites, 1600 Liverpool Court, Ottawa, K1A 0H4.



Serving much the same purpose as a drinking straw of today, drinking tubes of bone were used both for practical and ceremonial purposes.

Made from hollow bird bones such as the leg bone of a swan, heron, or eagle, the tubes were often quite long. They were either incised with simple geometric designs or left unadorned, the ends simply being cut and smoothed on an abrader.

A practical use for the bone tube was during a long canoe voyage, particularly when hunters were out whaling. Water to drink was carried aboard the canoe in a wooden container sealed with a plug. By inserting the tube, a thirsty paddler could take a drink without spilling the precious water.

Among most of the cultures, special rituals were observed when a girl reached the age of puberty. Society often required that she withdraw to a small hut, sometimes for months at a time, and observe certain taboos and restrictions, particularly regarding eating and drinking. Taking liquid through a drinking tube was part of this.

In performing special rites to rid a sick person of his illness, a shaman might draw out the evil or sickness from a patient by sucking on a bone tube.

Bone tubes that are rather short may well have been used, not for drinking, but as spacers between beads or pendants.

EXCERPTED FROM:
"ARTIFACTS OF THE NORTH-
WEST COAST INDIANS"
by HILARY STEWART © 1973

Notes from the Fraser Valley Chapter

By Fay Fell, Secretary

With the arrival of the fall season, plans for the winter's activities of the local archaeological group are being formulated by the new executive, who are as follows:

President	Shirley Cooke
Vice-President	Neil Smith
Secretary	Fay Fell
Treasurer	Duncan McIntyre
Membership	John Buehler
Librarian	Edith Heyman
Historian	Nellie McPherson
Telephone Committee	Sheila Middleton Thelma McIntyre

The meetings are held on the first Tuesday of each month at 7:30 p.m. in the Board Room of the MSA Museum in the basement of the Abbotsford Library at 33660 Fraser Highway.

A change has been made in the membership fees which are now \$5.00 for a single person or \$8.00 for a family membership, the junior memberships having been abolished.

Our September meeting, held on the 14th, was a tour of the Anthropology Museum at U.B.C. We went by chartered bus and drew several prospective new members.

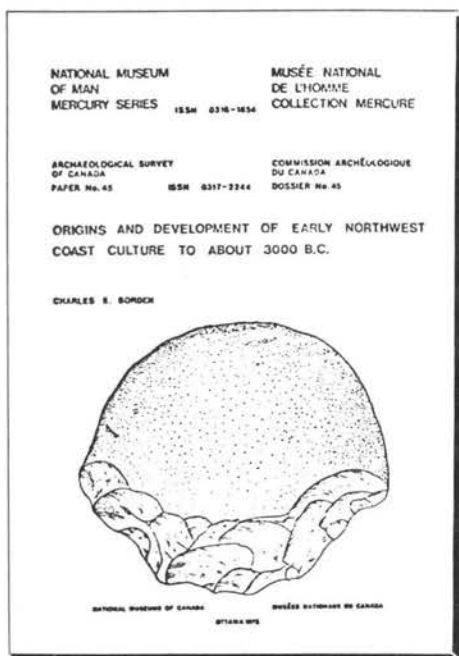
Forthcoming Meetings:

- October - the meeting will be highlighted by films and a talk on "Pictographs of the South Okanagan" by Mr. Stan Copp of Simon Fraser University.
- November - Miss Imogene Lim from S.F.U. will have films and give a talk on "Research on Clay Pipes".
- December - After the regular meeting there will be a film - title to be announced at a later date.

Guests - adults and students - are always welcome and it is hoped that the public can be encouraged to participate in the pleasure of the free, enjoyable and instructive films and lectures at the regular meetings of the Fraser Valley Chapter of the Archaeological Society of B. C.

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Read This Book!



We will not attempt to write a review of Charles Borden's new volume, Origins and Development of Early Northwest Coast Culture to about 3,000 B.C. Who could?

Unless it's a review to say the title is a fearful mouthful, but the book is absolutely must reading for every single person remotely interested in B.C. archaeology.

The book may be obtained for a mere pittance - \$1.75 - through a bookstore, or directly from the publishers, the National Museum of Man. Write the Museum Marketing Services Div., 360 Lisgar St., Ottawa, K1O 0M8, asking for publication No. 45 in the Mercury Series.

The monograph comprises 116 pages of double-spaced typewritten text, plus a full bibliography. Unfortunately, no index, and even the Contents page reveals only the bare bones. But this is not light reading, a bedside thing for occasional dipping: it is a working volume, crammed with information and interwoven with some Borden hypotheses. Read.

(You might even write a review of it.)

NR

A.S.B.C. DIARY

Monthly Meetings - Centennial Museum - 8 p.m.

Oct. 13 - Dr. Hanna Kassis - "Pilgrimage Routes in the Western Mediterranean"

Nov. 10 - Finola Finlay - Fort St. John

Dec. 8 - Alan Sawyer - South America

Jan. 12 - Dr. Richard Pearson - Korea

Feb. 9 - Professor P. Hobler - Moresby Island, Queen Charlottes

Archaeological Institute of America - Lasserre 102, U.B.C. - 8 p.m.

Oct. 19 - Professor Richard Unger, Dept. of History, U.B.C. -
"Excavating Shipwrecks"

Special Events

Oct. 8-10 - Weekend field trip to Ozette, Wash. - Dr. Richard Daugherty - for information call 228-2181, local 237.

Nov. 2 - Guided tour at the new Museum of Anthropology, U.B.C. by Dr. Richard Pearson - meet at front door - 7 p.m.
Tour of archaeological gallery and lab.

UBC Centre for Continuing Education Evening Courses

On the Evolution of Human Beings - Thurs. Oct. 7 - Dec. 2, 8 p.m.
Rm. 202, Buchanan Bldg. \$30.00. Free to participants in East Africa: Cradle of Human Origins Travel Tour Dec. 12 - Jan. 9.
Dr. Karl M. Heidt, anthropologist and linguist.

Traditions of the Northwest Coast Indian Culture: the Graphic and Plastic Arts - Tues. Oct. 5 - Nov. 23 - 7 p.m., Museum of Anthropology.
\$35.00. Madeline Bronsdon, Curator.

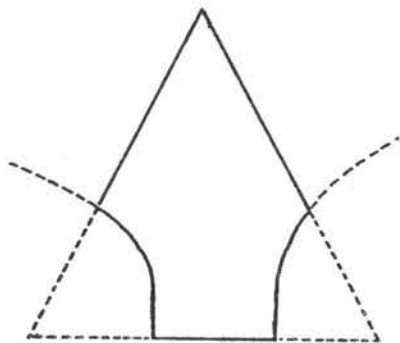
Travels in Asian and Pacific Archaeology - Tues. Oct. 5 - Nov. 23,
7:30 p.m., Museum of Anthropology, Dr. Richard Pearson.

The Cult of the Jaguar - Mon. Oct. 4 - Nov. 22 - 8 p.m., Lecture Hall 1, Woodward Instructional Resources Centre - \$26.00 -
Frances Robinson, Fine Arts Historian.

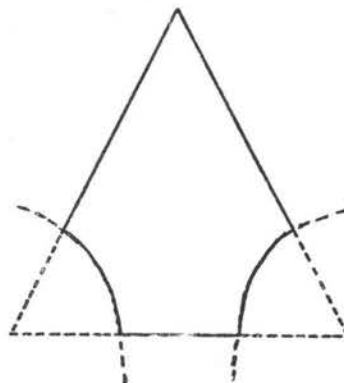
Search-and-Survey Workshop in Underwater Archaeology - Oct. 6-10,
Dr. Harold Edgerton, Professor, M.I.T.

(Part of a continuing series on artifact description, reproduced from the handbook for archaeological staff working on the National Inventory Project in B.C. The Midden extends thanks to Tom Loy of the Provincial Museum for permission to reprint.)

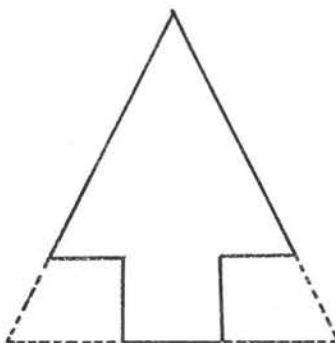
Indentation



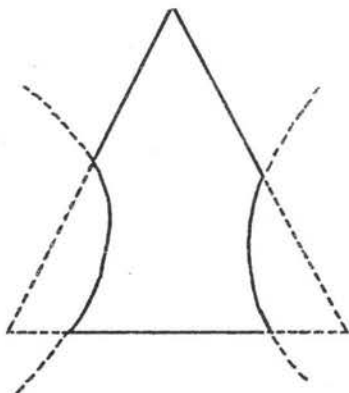
A. straight



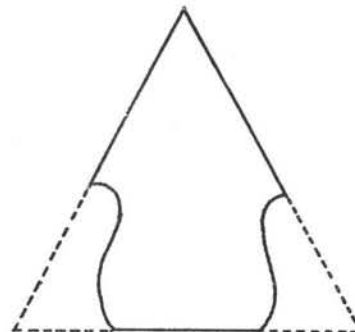
B. contracting



C. rectangular



D. expanding



E. excurve

indentation is a wide semi-circular intrusion into the basic shape of the artifact such that a circle drawn from the arc at the head of the indentation is not enclosed within the reconstructed form or shape of the artifact. A combination of indentation forms is possible.

- A. straight indentation: the bottom of the arc ends roughly perpendicular to the base.
- B. contracting indentation: the bottom of the arc forms an oblique angle with the base.
- C. rectangular indentation: where, rather than an arc of intrusion, two roughly straight intrusions from the base and from the side (blade) meet at a right angle.
- D. expanding: the bottom of the arc forms an acute angle with the base.
- E. excurve: there is first a concave then a convex intrusion, i.e. is first expanding then contracting.
- F. basal indentation: the indentation is included along the reconstructed base.

EDUCATIONAL TRAVEL - Centre for Continuing Education - UBC

East Africa: Cradle of Human Origins, ET 3038 - Dec. 12 - Jan. 9
Dr. Karl M. Heidt, tour director

The Golden Road to Samarkand, ET 3011 - May 1977 - Dr. Hanna Kassis,
archaeologist.

The Grandeurs of Buddha, ET 3005 - Dec. 16 - Jan. 17 - Ken Woodsworth
and Milton Hicks, tour leaders.

Roman Britain, ET 3018 - June 5 - 25 - Dr. James Russell, Dept. of
Classics, tour leader

Classical Greece, ET 3019 - May-June.

For details on above, phone 228-2181

* * * * *

EDUCATIONAL COURSES - Centennial Museum

Northwest Coast Indian Cooking & Fishing - Thurs. Oct. 14 - Nov. 4,
8 p.m. - Junior Workshop - members \$10.00, non-members \$12.00 -
Hilary Stewart, instructor.

Archaeology of North America - Thurs. Oct. 21 - Dec. 2 - 8 p.m.
Auditorium. \$18.00, \$30.00 couple (any two). Dr. Roy Carlson,
co-ordinator.

* * * * *

GOLD OF THE GODS

If you happen to be in Toronto this
Fall . . . visit the Royal Ontario
Museum. From Sept. 28 to Nov. 21,
the exhibition titled Gold of the
Gods will be on loan from Peru's
Museo Oro.

NEW ARCHAEOLOGY: A DEFINITION

By Professor Richard Pearson, Dept. of Anthropology, U.B.C. Dr. Pearson responded to a request by The Midden to explain the term "New Archaeology".

The effects of a new framework of research are being felt in various parts of North America. Since the mid 1960's, a new generation of archaeologists has attempted to develop the discipline as a science rather than as a humanistic endeavour. This does not mean the simple grafting of new analytical techniques or dating methods to the older methodology, but a transformation of the research paradigm of archaeology from inductive to hypothetico-deductive. Basic to this is a different concept of culture, not as normative, but as behavioural - a group of sub systems producing different manifestations in material culture. Previously archaeologists looked at artifacts as markers of shared ideas or historical connections through diffusion. Thus similarities in burial techniques, for instance, were often seen as evidence for migrations or diffusion of ideas. In addition to this interpretation it is possible, however, to see patterns in burials as a reflection of the social structure of one society, or as a reflection of the amount of wealth or leisure it can afford. It has been suggested that in prehistoric societies, the greater the variety in the subsistence base, the greater the variety of different burial forms. In this case, we see the archaeological remains as the product of particular kinds of behaviour.

The questions raised in the new archaeology have to do with the organizational and behavioural aspects of past societies as well as their technological and stylistic features, rather than simply their historical connections and dates. Since different classes of artifacts can be seen as the products of different kinds of behaviour, variation in ornaments will be seen as having a different meaning to the archaeologist than variation in tools such as knives or hoes, which relate to food-getting. And much of the variety in artifacts can be recognized as the reflection of different behaviour of humans at one time level in different situations, rather than in different periods.

In British Columbia, different tool assemblages, rather than being seen as products of different ethnic groups (which are notoriously difficult to recognize in prehistory) may be seen as seasonal or economic variants of the same general group of people. By the same token, "unique" artifacts lose their appeal because we are looking at processes rather than single events or monuments; and surface collected or salvaged materials may diminish in

significance because we cannot see the artifacts in sets or in contexts which would give us a chance to interpret them.

Research efforts are devoted to goals beyond stylistic characterization and historical reconstruction of ancient cultures, to the delineation of patterns of past human behaviour in general. Some archaeologists are working toward general statements of human behaviour, often called laws, rather than descriptions of local remains. An example of such a general statement might be: population increase is associated with social organization of a form which allows for longer storage and wider distribution of food resources. Note that the statement does not imply that one thing causes another; gone are the old notions that cultures change because of single natural calamities, or migrations, or other simple one cause-one effect situations.

In particular, new methodology featuring explicit research design with testable hypotheses, randomized data sampling, statistical analyses, and modelling techniques, have come into the field. It is no longer sufficient to dig a site because it is large or deep, or rich. Many small sites take on significance because they represent behaviour not seen in larger ones. For instance, in the past, pit houses were the only type of sites explored in the Interior because they were full of remains. However, they represent only one kind of site, and no amount of excavation of them will show the full seasonal round of their prehistoric inhabitants. Similarly, sequences of "cultures" or "phases" based on narrow trenches in coastal sites are considered incomplete because we do not know whether the excavated areas constitute comparable entities, or in some cases we do not have any idea what kinds of activities are actually represented at all. Wide area excavation of sites with careful attention to appropriate samples of non-artifactual remains becomes imperative. Refuse takes on as much significance as beautifully finished artifacts; waste flakes and broken pottery often tell more than completed artifacts, of activity areas, tool kits, and associated kinds of behaviour not only within a site but within a region.

Most important is the development of an explicit research methodology, in which hypotheses are tested by observations of archaeological remains. What seems to some people to be an overly formal kind of research design has arisen against the "mindless accumulation of data", in which vast collections were made by previous generations in the hopes that some pattern would emerge at the hands of future researchers, even if the original collectors had not spelled out specific problems. Typologies are seen as relevant to the research problem at hand, as they are in science in general. The methods used are dependent upon the questions asked; thus, above the level of the usual attention to notes which include stratigraphy, provenience, and association, there may be many different methods open to the

researcher. In many cases, testing can be achieved by studying the location of sites in relation to resources, or in the systematic investigation of site structure through surface collections, rather than from excavations. Such work shows particular promise in the Interior. Data banks, and collection of materials through salvage, are seen in a new light, since there is an apprehension that a "neutral" method of collecting or recording may mean that the material cannot be used in future research. Excavation to test certain hypotheses (an example might be: variations in faunal remains found at sites in a locality reflect different rights of particular people to extract certain resources) is, in my mind, an economical way to proceed, since it is possible to evaluate one's progress in refining and developing new questions. Definitely there is still an art, or inductive quality in the selection of problems to be worked upon, or areas for new research.

This note cannot pretend to do more than introduce a few concepts of what is called the new archaeology. Obviously many of its characteristics are shared by prehistorians of early generations and different backgrounds. I have jotted down these ideas at the request of some members of the Society. They are far more elegantly and accurately stated in many articles and books. My favourites are Binford, L. An Archaeological Perspective; Leone, M. Contemporary Archaeology; and Hole, F. and R. Heizer, An Introduction to Prehistoric Archaeology.

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University of Washington Issues Two New Books

Jay Powell, assistant professor of anthropology at U.B.C., is author of Quileute, subtitled An Introduction to the Indians of La Push. The publishers describe the slim volume as a study of the people of the Olympic Peninsula--their history and their home. Illustrated with more than 80 photographs by Vancouver freelancer Vickie Jensen, the book tries to capture the myth, games, recipes, language, and much else, all with full cooperation of the Quileutes. Cloth, \$10. Paper, \$4.95.

From the same press comes A Dictionary of Puget Salish, prepared by Thom Hess, assistant professor of linguistics at the University of Victoria. This 790-page book, which includes a thorough introduction, costs \$17.50.
