

The Bella Bella Prehistory Project

JAMES J. HESTER

INTRODUCTION

When I first became interested in Northwest Coast archaeology, a review of the literature revealed that no other major culture area of North America was so poorly known archaeologically. At the same time the ethnographic cultures of the region had been intensively studied and the opportunity to use the direct historic approach seemed promising. The selection of the Bella Bella region as the focus of studies came about through discussion and correspondence with other archaeologists working on the coast. The National Museum of Canada had ongoing research on the Queen Charlotte Islands and the Skeena river mouth. Simon Fraser University was initiating research in the Bella Coola region. The geographically intermediate and archaeologically little known Bella Bella region seemed an obvious choice.

Research was initiated during June of 1968. This preliminary season was devoted to exploratory efforts as a guide to future research. At the inception of the work, none of the researchers had prior experience in the area, nor much experience in the survey and excavation of shell middens, consequently during the first week of the season we initiated a survey to locate prehistoric sites. Our first efforts consisted of motoring along the shoreline looking for any obvious remains or unusual topographic or vegetational features. We would then go ashore to examine likely areas. We also examined other areas selected at random to learn if we were overlooking any sites. The dense vegetation combined with the steepness of the shoreline quickly convinced us that more efficient survey methods had to be developed. We were recording less than one site per day, yet were expending great amounts of energy. We therefore began a systematic program of interviewing residents about the location of sites. Many local people knew the locations of pictographs and petroglyphs; but their knowledge of midden locations was less precise. One man in particular, Willie Gladstone, of the Bella Bella band,

at that time 82 years old, proved to be a mine of information. He provided us with more than fifty site locations, and marked our navigational charts with additional comments regarding site type and distinctive features. We then proceeded to visit and record each location. At the conclusion of the field season we had recorded 51 sites and had yet to investigate an additional 31 sites reported by local residents. Additional efforts during 1968 included test excavations at Namu and Kisameet. The survey (Fig. 1) from its inception in 1968 has been directed by J. Anthony Pomeroy who is preparing a separate report on this aspect of our project.

In 1969 the field party was based at the town of Namu. The midden there, one of the largest in the area, is located in the centre of the community and has built upon it a 60-room bunkhouse, now abandoned, which was made available for use as a field laboratory. Excavations at Namu during the 1969 season revealed a sequence of occupation beginning with a microblade component at least 6000 years of age and extending through a long record of a fishing, shellfish gathering, and sea mammal hunting adaptation, one of the most recent levels of which was radiocarbon dated at 2800 B.P. Inasmuch as all the 1969 excavations at Namu were conducted at the rear of the midden, it was anticipated that more recent levels would be found in the front of the midden, an assumption which was verified by the 1970 excavations. The findings at Namu also included a large number of burials in the midden fill. Burial patterns included partly or wholly disarticulated interment in bundle-fashion; extended and flexed inhumations, and burned bone fragments which may represent intentional cremation. Other activities during 1969 included a small excavation at Kisameet Bay and the initiation of an ecological sampling program similar to that pioneered by Meighan (1959, 1970) and his students (Meighan, et al. 1958a, 1958b). During the academic year 1969-70 ecological samples were processed

BELLA BELLA PREHISTORY

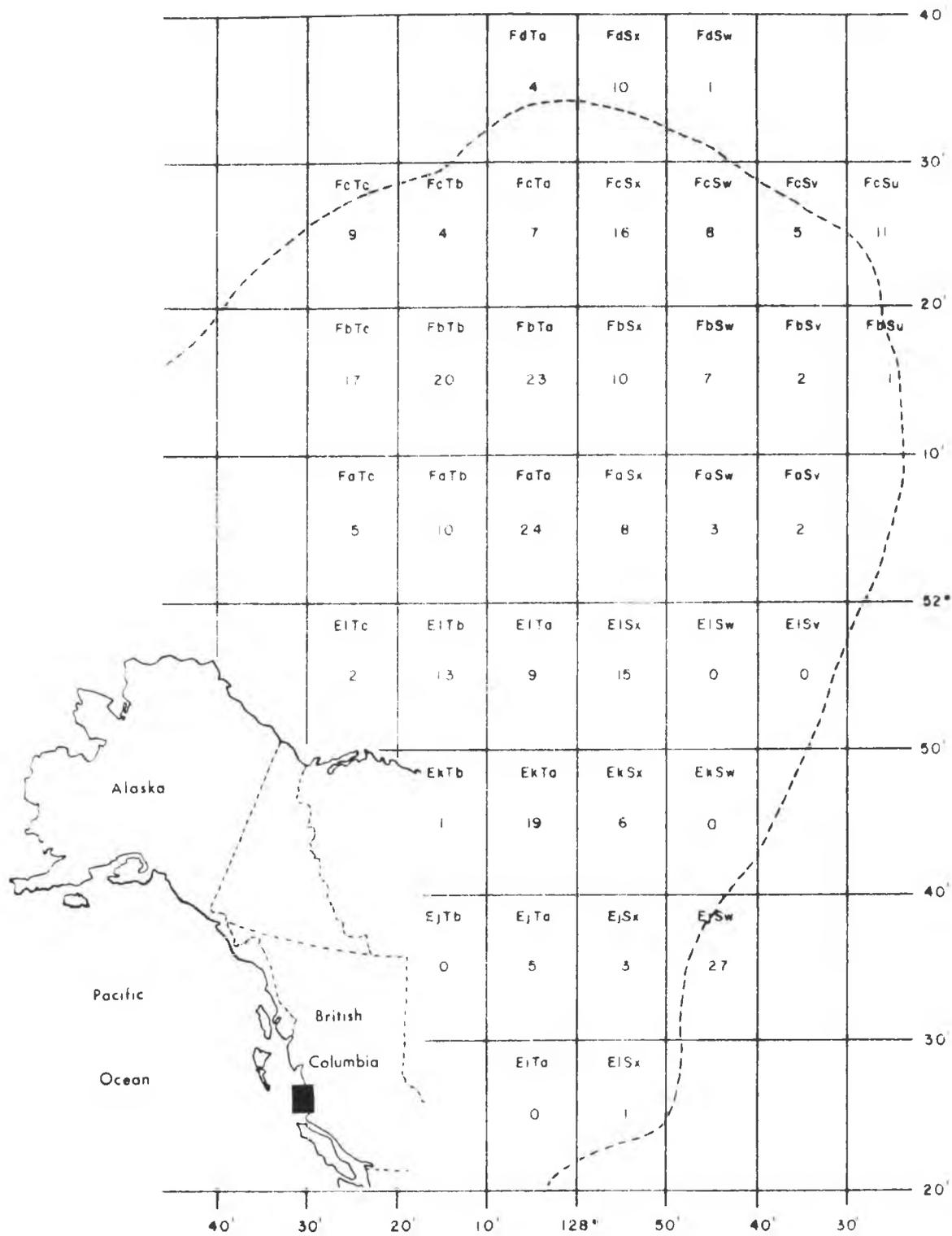


Fig. 1 Survey area. Number of sites located in each grid square are indicated.

primarily to recover microfauna, and the recovered materials were shipped to various specialists for identification.

The 1970 field season featured a continuation of projects begun during the preceding season. Major excavations on the front portion of the midden at Namu revealed strata covering the most recent 3000 years. The survey was continued, bringing the known site total to 185. A new emphasis involved the detailed sampling of strata utilizing a newly designed methodology. These intensive profile samples, described in later sections, were collected from several trenches at Namu as well as from the sites at Kisameet Bay and Roscoe Inlet 1A. Other research activities included the interviewing of the older Bella Bella Indians by cultural anthropologists. The Indians were asked about the seasonal use of sites and the specific food collection and food preparation techniques employed at each site. At Namu, the excavation in the front of the midden, some 6 metres in depth, revealed an occupation extending over the past 3000 years. This front trench overlapped in age with the

rear deposits and could be correlated with them. The site at Roscoe Inlet was excavated in order to provide modern information on the site as well as to provide additional information on the findings reported by Drucker (1943).

A number of environmental studies were also undertaken. Aerial survey of the inland lakes revealed that bogs are common. In one test a minimum depth of five feet of bog deposits was indicated. Several exposures of laminated fine grained clay beds were located, as well as beds of alluvial gravels.

Ancillary studies include a detailed study by Michael Finnegan (1973) of the Bella Bella skeletal remains from our excavations as well as the burials from other nearby localities. Local rock art sites were recorded and integrated into a larger study of rock art of the entire Northwest Coast by Ruth Smelser. Studies of the historical and ethnographic culture of the Bella Bella were conducted during the 1970 season by Kerry Feldman and Kerry Pataki.

PRIOR RESEARCH

Archaeological research in the Bella Bella region undertaken prior to our work is limited to a two week exploratory survey carried out in 1938 by Philip Drucker and Richard Beardsley (Drucker 1943). Their survey reported a total of 20 sites, some of which were not visited but were only described to the researchers by Indian informants. Three sites, termed Roscoe Inlet, Roscoe Inlet 1A, and Kilkitei Village, were tested with trenches. The artifacts from the excavations and survey along with other specimens from the Northwest Coast in museum collections were described in a typology.

One justification for Drucker's and Beardsley's work was the opportunity to apply the direct historic approach to archaeology.

An attempt to apply the direct historical approach to a new archaeological field ordinarily must be based on the records of the period of early European contacts, utilizing them to determine tribal distributions and to identify sites. For the Northwest Coast, however, historic records are less essential though of unquestionable value as a check and guide, because of the fact that the native cultures there persisted little modified much longer than in many other parts of the New World. The nature and effects of European contacts on the Northwest Coast differed markedly from those in other areas. The chief difference rests in the fact that there have been no major populational movements, voluntary or enforced since earliest historic times. Even despite the steady numerical decrease of population, and the tendency for survivors of decimated groups to assemble in central or stronger villages, the sites of early historic times (and many of them go well back into the prehistoric period) are not only still known and occasionally utilized, but are also considered the property of the rightful heirs

of the past occupants. Most of these sites in British Columbia have been set aside by the Canadian Government as Indian Reserves. Consequently, the identification of historic horizons with ethnically known groups does not constitute anywhere near as difficult a problem as in the Plains or the Southeast. Any tolerably well-informed modern native can tell to what ethnic group, and what division within the group, a given site belongs; indeed, he can ordinarily point out a number of the older people who were born there [Drucker 1943 p. 25].

Drucker's comments must be somewhat modified for the Bella Bella of 1970. The relocation of peoples from various reserves to the old village at Bella Bella took place in the 1880's. Therefore few Bella Bella living in 1938 were born in the original villages. The modern village of New Bella Bella was established in 1897. It grew out of the period of Hudson's Bay trade and missionization, and was not a continuation of a prehistoric settlement. Today few living Bella Bella remember life prior to that date. Nonetheless Drucker's statement is true in a general sense as ownership of specific reserves is still vested in individual families. In addition many economic practices from prehistoric and historic periods persist.

Concurrent with the present project other research has been in progress. The National Museum of Canada has conducted extensive excavations in Prince Rupert Harbour under the direction of George MacDonald. Beginning in 1968, Simon Fraser University has had archaeological parties working in the Bella Coola region under the direction of Roy Carlson and Philip Hobler. It is anticipated that some culture trait distributions will be common to both

the Bella Bella and Bella Coola regions. As yet, most of these findings from nearby projects are unpublished

although preliminary statements appear in MacDonald (1969), Carlson (1970, 1972), and Hobler (1970, 1972).

THE PROBLEM

The major emphases of the project have been ecological in nature, as the majority of our data consists of bones, shells, soil, etc., rather than either cultural features or artifacts. The problems researched have also been structured by the nature of the ethnographic literature. The ethnology of the Northwest Coast has been extensively studied over the past eighty years. These studies have revealed that the native Indian cultures of the area were among the most elaborate and complex aboriginal cultures in North America (Swanton, 1905; Boas, 1889; Niblack, 1890; Codere, 1950; Drucker, 1955). Of special interest to anthropologists is the high level of culture that was achieved by peoples practising an economy featuring hunting, fishing, and gathering. Normally such cultural attainment has been restricted to peoples with an agricultural economy. A current problem is the determination of the antiquity and origins of the ethnographic pattern.

In his 1943 report Drucker provides us with an admirable summary of the general ethnographic characteristics of Northwest Coast culture. Inasmuch as these features are typical for the Bella Bella region we will quote Drucker's description nearly in its entirety. This section by Drucker may be viewed as a hypothetical culture pattern for the prehistoric inhabitants of the Bella Bella region. Our archaeological data will provide evidence to test in part the historical validity of Drucker's ethnographic reconstruction as it applies to the Bella Bella.

Though there were numerous minor differences of culture between the various groups, a few major trends and patterns were common to all. Economically, dependence was not only on fish, but on species — particularly salmon — seasonably available. This brought about a series of annual movements of each group, for a settlement adjacent to a salmon stream might not be conveniently located for digging clams when the salmon run was over or for the herring fishery, or, in late spring and summer, for halibut fishing and sea-mammal hunting. Each tribe, and often each lineage within the tribe, had a series of sites used at different times during the year. Some ranked as important settlements, while others were little more than camps in use but a short season. Within the territory claimed by each tribe there would, therefore, normally be a considerable number of sites, large and small.

Of no little importance is the fact that the chief staple, salmon, could be obtained in great quantity, and was fairly easy to preserve. A surplus could be put up at the fall fishing that would last well through the winter, or to the time of the herring or olachon run. Not only did this almost inexhaustible food source support a dense population, and allow for leisure time in which the native arts could be

developed to the peak for which Northwest Coast culture is justly famous, but it permitted the assembling of large groups in the winter villages... for a season of festivity and ceremonial. It was here that carved ornaments and masks and the like were made and used, and here that the great potlatch houses stood.

The dwellings of both Tsimshian and Northern Kwakiutl conformed to the general areal pattern: they were large rectangular structures of split planks. Specifically, they were of the northern type, nearly square in plan with the side planking morticed into slotted plates between the corner posts, and gabled roofs. Southern Kwakiutl houses are known to have changed in type during the late historic period. The old type was long and narrow, the roof, gabled or occasionally of "shed" type, supported by massive posts and beams against which the planking was laid up. These southern houses were usually stripped of their planking when time came to move to fishing stations, the planks being taken along to be used there. All the groups constructed houses at important fishing places similar in plan to those at the winter village, although sometimes smaller and usually less carefully built. Among minor patterns, we may note frequent use of pile dwellings, use of cribwork foundations to compensate for inequalities in ground level, and sporadic occurrence of central pits (often "stepped", having four levels) throughout our region.

Like all Northwest Coast groups, Tsimshian and Kwakiutl emphasized woodworking in their manufactures. The presence of a variety of trees — straight splitting, easily worked red cedar, the finer-grained yellow cypress and alder, and the tough elastic yew — made possible the use of wood for a great number of purposes, and permitted the development of a trend toward woodworking unique in western North America. Not only were there dwellings of wood, but the all-essential canoes that made possible efficient exploitation of the country were cedar dugouts, and food vessels and spoons, storage containers, quivers, and a great deal of the ceremonial paraphernalia — rattles, drums, masks, and headdresses — were made of wood... Stone mauls, handheld among Southern Kwakiutl, both handheld and hafted among their northern kin and the Tsimshian, served to drive wooden or whalebone wedges; stone-bladed splitting and planing adzes (the former a Tsimshian tool), and hafted stone chisels were for cutting and planing. Drills with bone points were used to make holes for lashings or dowels at joints. For fine carving, it is probable that knives of beaver teeth were used, although steel blades were adopted so early that no modern natives are sure of the ancient implement. Sandstone and shark or dogfish skin gave smooth finish. With these tools, and a few simple techniques, the natives were able to make neatly and often beautifully finished objects for whatever purpose they required.

A glance at a collection of tools and weapons from the region makes apparent the pattern of preference for bone, horn, and shell for cutting edges. Arrow, harpoon, and

spear points were made most often of these materials. Women's knives were usually the sharpened shells of the large mussel *Mytilus californianus*. Most noteworthy is the dearth of chipped stone. The stone projectile points, and occasional stone knives, were of ground slate. Stone mauls, adzes, and celts were pecked to shape and polished. That the absence of chipped stone was a matter of cultural preference, not environmentally conditioned, is indicated by the fact that stone suitable for flaking occurs in the region, although perhaps not in vast quantities.

The trees that furnished material for so many articles of manufacture were the source of another product, textiles. Dress consisted of furs and woven robes and capes. In such a humid climate native leathers are of little service. Neither Tsimshian nor Kwakiutl equalled the Tlingit or Coast Salish in excellence of their woven goods (though traditionally the Tsimshian are supposed to have invented the Chilkat blanket), but they were able to make technologically rather simple robes of shredded cypress bark. The inner layers of the bark were stripped off, soaked, beaten with a heavy grooved mallet, loosely spun, then twined together on a suspended warp loom. Sometimes mountain-goat wool was woven, but less was used than by Coast Salish or the Chilkat Tlingit. The bark of the red cedar was utilized for making the ubiquitous checkerwork mats, used for a thousand purposes – to sleep and to sit on, to cover canoes, to gamble or cut fish on, to wear as a rain cape. Checkerwork baskets of red-cedar bark met nearly as many needs. The same bark was hackled with a whalebone "shredder" to make ceremonial insignia, bandages, cradle padding, and, in the days of muzzleloaders, gun wadding.

The Kwakiutl and Tsimshian were important centers of ceremonialism on the Northwest Coast. Their rituals were for the most part dramatic performances at which supernatural beings and deeds were represented realistically. Deities, spirits, and other beings were personified by masked dancers, who performed to an accompaniment of carved rattles, wooden drums, and wooden whistles. Elaborate and ingenious devices were made to reproduce supernatural events. Great wooden birds flew from one end of the house to the other, a supernatural mink might come up through the floor, run across the room, and disappear, a human dancer would be dragged down into the ground by a spirit from the underworld. Shamanism, too, had a wealth of regalia and tricks that depended on mechanical contrivances.

The social system of our region is of interest on several counts. First of all, the area was heavily populated. Estimates in terms of number of persons per square mile mean little in a region where just the shoreline was habitable, but even such figures indicate a large population. Kroeber (1934, p.12) has calculated the prehistoric density of the Northwest Coast from the Straits of Georgia north to be 26.3 per 100 square kilometers. At the winter villages, where numbers of clans or lineages assembled, large groups were the rule. Within the group, individuals occupied fixed statuses of graduated rank, the system of grading closely

linked with heritage and wealth. Token wealth consisted of "coppers" and copper ornaments, *Dentalium* shells, furs, and slaves, all of which were articles of trade. The chief source of copper was far to the north (though there appear to have been several places in the interior from which placer copper was obtained); the dentalia came from the west coast of Vancouver Island. The wide occurrence of these particles throughout the area and in neighboring regions points to a network of trade routes – channels by which not only token wealth but other culture items could be transmitted.

Along with the system of graduated status in part based on ancestry was a marked interest in historical tradition. Genealogies were systematically remembered, to be recited on formal occasions. These family legends, which purport to cover the family's history from the time of its earliest ancestors, are far more than a recital of personal names and relationships – they tell also of war and conquest, and of movements of families from one place to another. The places referred to are actually long-abandoned village sites. So matter-of-fact and internally consistent are these relations, and above all, so consistent are those of one family line with the traditions of their neighbors, that no ethnographer who has worked in the area has denied their historic value. Coast Tsimshian traditions trace the spread of the several tribes coastward and north and south along the seaboard from an ancient site above the canon of the Skeena – Temmaxam. Heiltsukan folk-history brings these people from the landlocked heads of long inlets, Rivers Inlet, Dean and Burke Channels, through a series of movements down to the outer coasts and northward. . . .

Differences in social position were reflected in the treatment accorded the dead. Men of standing were accorded great honor; the bodies of the aged, and of slaves, were disposed of with a minimum of formality. The Northwest Coast as an area is one in which there was great diversity in mortuary customs. Among the Tsimshian, bodies of chiefs were sometimes put in caves in cedar boxes, but most people were cremated; while "the body of a slave was thrown out on the beach." Interment is reported by some informants, denied by others. Kwakiutl did not practice cremation. Among the northern groups, small gravehouses were built, and bodies of relatives were put in them from time to time. Among Southern Kwakiutl, a common mode was to put the cedar box containing the body in the branches of a tree. Cave (or better, rock shelter) burials were also common. All the groups destroyed quantities of property, at least at the death of a person of note. Much of it was burned, although in late historic times valuables were placed at or near the grave. Granite-ware dishes, Hudson's Bay blankets, and even sewing machines and gramophones, may be seen scattered about near recent graves. Mortuary potlatches, often involving the setting up of a memorial pole, may be construed as another form of the prevalent property destruction. More recently, erection of an expensive tombstone has been equated with the mortuary potlatch and memorial column. [Drucker, 1943]

RESEARCH GOALS

Within the limits of this archaeological and ethnographic background the initial research goals developed

for the Bella Bella project were as follows:

1. Construct an archaeological regional sequence of cultural units.
2. Test the validity of the concept that site density and size are related to one of three zones of differing environmental potential identified within the Bella Bella region.
3. Test the relative importance of the "salmon run" and 'fur trade' hypotheses of the origin of wealth in Northwest coast culture.
4. Examine the potential of using ecological factors as diagnostic characteristics suitable for the definition of archaeological phases.
5. Develop a set of methodological techniques specifically applicable to midden archaeology.

RESEARCH METHODOLOGY

The research methods we have employed have been developed to cope with the specific problems, both logistical and data recovery, that we have faced. The major problem areas have been: site location and initial sampling for descriptive purposes, site excavation techniques suitable for data recovery and interpretive purposes and ecological sampling.

Site Location and Description

We have previously described our initial efforts at site location. Since Pomeroy has continued the survey after the termination of the rest of the project, a full survey report will be presented elsewhere.

Site Excavation

Typical sites on the Northwest Coast consist of masses of food debris and soil distributed in a linear band parallel to the marine beach on which they are situated. Termed "shell mounds" because of their high content of marine shell, the middens are a complex record of cultural activities and environmental events, and the obvious component of shell is only a portion of the meaningful data available for study if suitable techniques are employed. The typical site possessed a single row of houses strung out along the beach with the development of the midden resulting from disposal of debris on the front sides of the houses toward the water. This pattern results in a seaward building of the midden deposits with strata dipping toward the waterline and the oldest layers occurring at the rear or uphill portions of the site. House remains are difficult to locate from surface features, especially since the sites are covered with dense vegetal growth, ranging from second growth shrubbery to fully regenerated forest. The middens contain huge volumes of food debris and a limited quantity of artifacts, with cultural features rare and indefinite. In this situation, standard archaeological techniques based on the collection of a large sample of artifacts, and excavation following cultural features cannot be employed. One alternative, the excavation of large volumes of midden debris in order to obtain a large enough artifact sample to be statistically valid, requires the utilization of enormous quantities of labor (a resource which was not available to us). The

approach adopted in our current project has emphasized the fact that the primary data preserved in the middens is ecological in nature and therefore techniques of collection and analysis of these data should be stressed.

The procedure of digging excavation units by level is essential. Use of either arbitrary levels or real stratigraphic levels is theoretically possible. In practice neither method is wholly satisfactory. The real levels are difficult to identify, except in retrospect, through examination of the pit walls. It is possible that even a stratum which appears to be homogeneous may have within it a number of different components masked by one major element. For example, the shellfish remains in the Bella Bella sites excavated visually mask the other materials. Arbitrary levels are equally inadequate in that they may combine more than one real unit into a mixed composite sample. We have experimented with the use of both methods. Excavations conducted during 1968 and 1969 utilized arbitrary levels, while the 1970 excavations experimented with the definition of natural stratigraphic levels. The difficulty has been in defining which levels are meaningful for archaeological purposes. The levels are either broad units with a general similarity in content which represent considerable time, or thin laminae representing intervals of time so brief as to be considered episodic in nature. This problem is further compounded by the fact that these laminae change laterally in a fashion similar to facies change in geological deposits. These problems have impressed us as ones which cannot be resolved by standard archaeological techniques. For example the facies changes prohibit us from publishing our stratigraphic profiles as representative of the deposits throughout the site. Such a standard archaeological inference would be fallacious. We are aware that our diagrams of trench walls are no more than our interpretations of the visible strata at that point and therefore have limited site-wide significance. In addition, we found that different investigators would group the strata into somewhat different clusters. A final problem we encountered was the definition of meaningful natural levels during excavation. We have compared the levels used during the excavation of FS 10 with the profile drawn after it was excavated. The differences between these two interpretations serve to point out

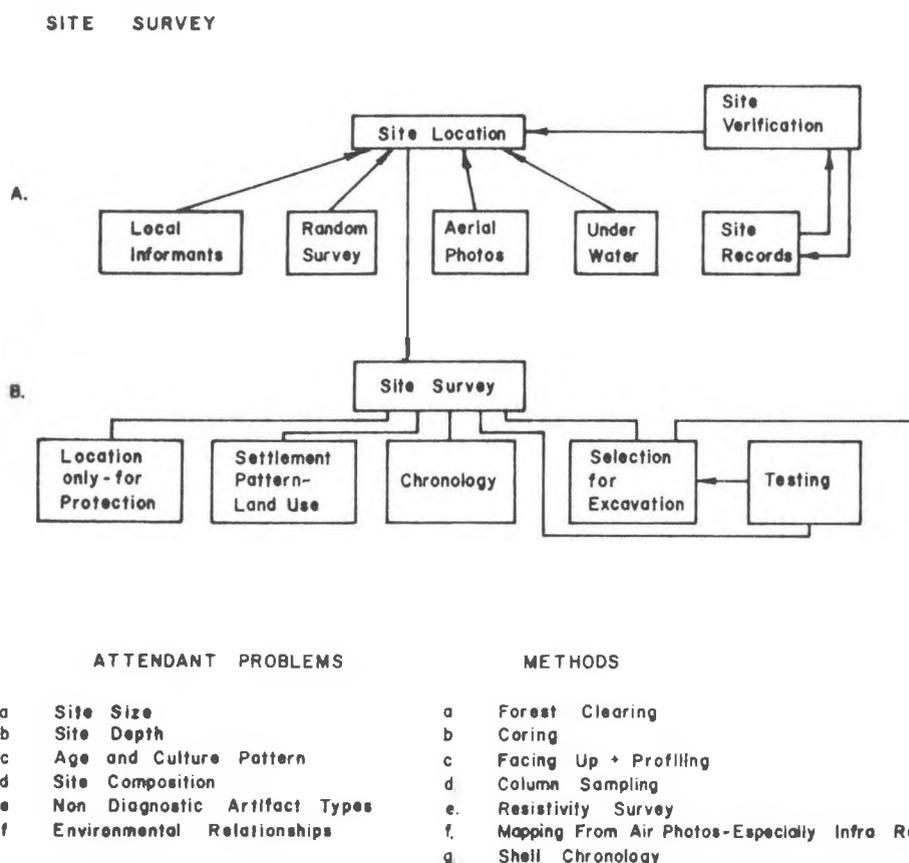


Fig. 2 Research problems in Northwest Coast archaeology.

the *arbitrary* nature of our attempt to excavate by natural levels. Detailed discussion of these approaches are presented in the sections by Luebbers and Conover.

In any event, excavation was conducted in 2 metre squares utilizing either arbitrary or natural levels. Therefore the provenience of individual specimens can be tied to these excavation units.

We also attempted to follow horizontally what seemed to have been walking surfaces or occupation floors. These efforts were for the most part unproductive.

Cultural features in general were rare. We did locate some fire hearths, both stone-lined and pit type, and also some clusters of small pebbles. We located one possible house floor with decayed wood planking. However, in general the major cultural features in the middens were burials.

The majority of the items recovered were particulate, well scattered throughout the midden debris, and included

both artifacts and food remains. Therefore we focused much of our attention on the development of suitable sampling techniques. The development of these sampling techniques was, of course, relevant to the major problems we were researching. Inasmuch as we focused on only a few of the potential archaeological problems it is appropriate here to indicate how we integrate our research methodology into an overall methodology applicable to similar sites wherever they occur. This has been attempted in the following set of diagrams, Figures 2 through 6.

This view of the archaeological reconstruction of pre-historic cultures is based upon two basic premises.

1. The concordance of content and context data including all midden components, not just artifacts, provide a more stable basis for the reconstruction of past cultural patterns.

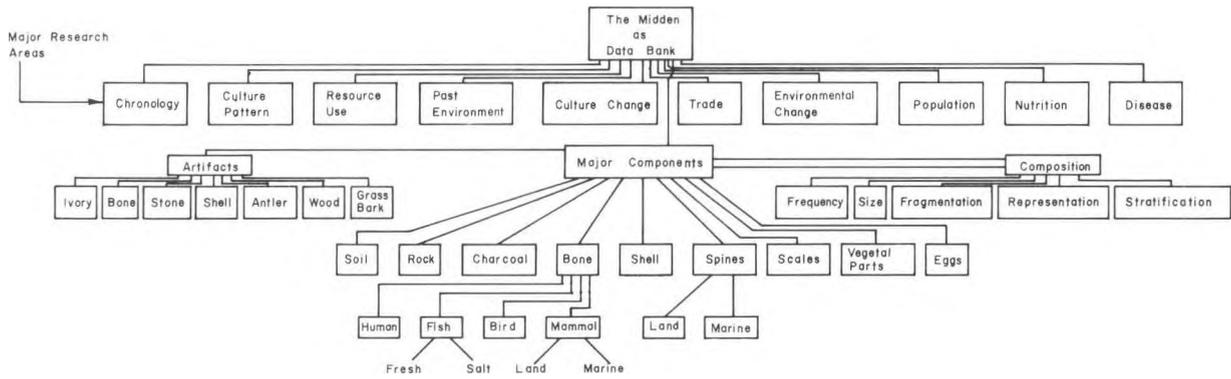


Fig. 3 Site excavations.

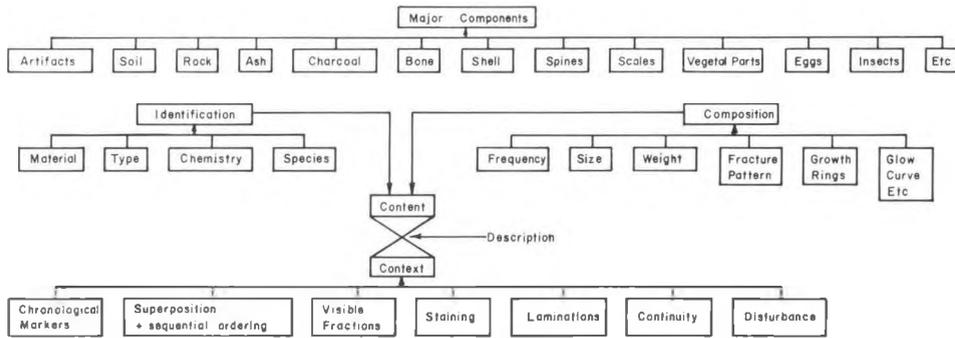


Fig. 4 Methodology - The intersection or concordance of these lines of evidence provides the basic referents for the identification of prehistoric cultural patterns, *i.e.* trade, technology, etc. Description is based on the combination of content and context data. Content data are the specific components as identified in the laboratory. Context refers to the conditions of their occurrence in the site.

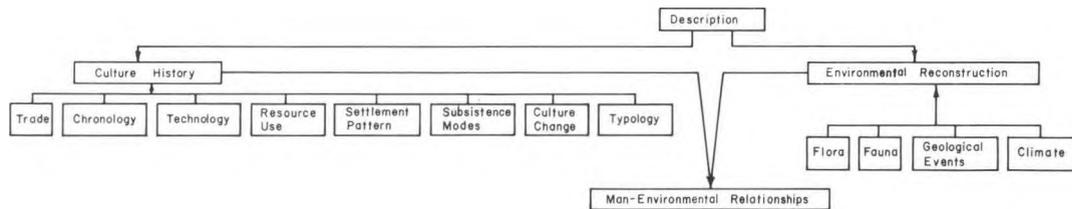


Fig. 5 Cultural-historical integration.

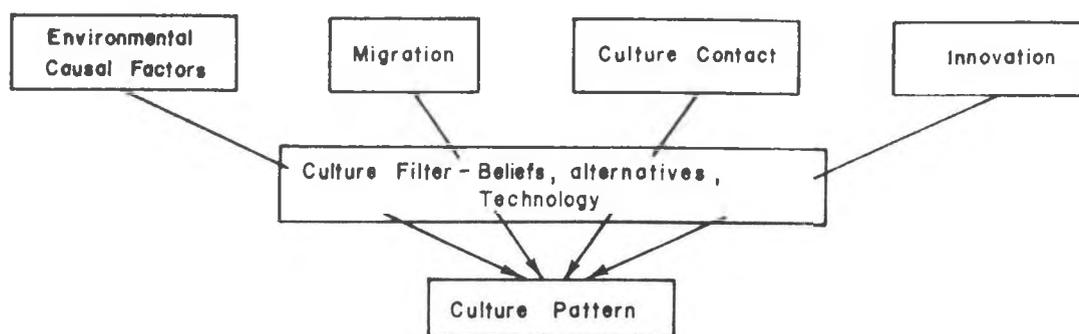


Fig. 6 Causal factors filtered by beliefs, technology, etc. lead to the establishment of the cultural pattern.

2. Archaeological research through survey and excavation provides a wealth of problems suitable for investigation. This concept leads to the development of specific methodologies to recover data related to specific problems. It further negates the concept of "the archaeology" of a site. There are many archaeologies or archaeological reconstructions and they are in large part the result of the interests and research design of the investigator. In this volume the major emphases of Luebbers are site stratigraphy, identification of stratum boundaries, burial patterns, artifact types and artifact wear patterns. Conover's approach focuses on the acquisition of matrix sample content data in the laboratory and the correlation of these data with the context in which these samples were found in the site. Both authors describe the methodologies they employed in some detail and

I will not paraphrase their views here.

The present volume includes several major aspects of the regional prehistory, the description of excavations, research methodology, artifactual and burial analyses, matrix context analysis, and preliminary regional chronology. A multitude of problems are revealed by the collection of these data. Our publication of these papers is viewed as a necessary expedient. Most of the included works pertain to the actual data recovered rather than to the resolution of research problems. This approach meets the needs of our colleagues to have access to the material for comparative studies while it is yet reasonably new. In addition, much relevant Northwest Coast archaeology has yet to be published even in preliminary form. We will have at least made this effort to report our basic findings.

