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A PEOPLE WITH HISTORY:

ACCULTURATION AND RESISTANCE IN KIMSQUIT

by

Paul Prince
B.Sc. (Honours), Trent University, 1987

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
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in the Department
of
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APPROVAL

NAME: Paul Harvey Prince

DEGREE: Master of Arts (Archaeology)

TITLE OF THESIS: A People with History: Acculturation and Resistance in Kimsquit

EXAMINING COMMITTEE:

Chairman: Jack D. Nance

Philip M. Hobler
Associate Professor
Senior Supervisor

Roy L. Carlson
Professor

Robin Fisher
External Examiner
Professor
History Department, S.F.U.

DATE APPROVED: 

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A PEOPLE WITH HISTORY: ACCULTURATION AND RESISTANCE IN KIMSQUIT

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Paul Prince

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ABSTRACT

This thesis is a study of the process of acculturation among the Kimsquit Bella Coola. It combines an examination of written documents with the analysis of archaeological material from four Kimsquit archaeological sites that show a sequence of relatively short occupations spanning the late prehistoric through historic periods.

The results of the study are as follows. Written records indicate that direct contact with Europeans was infrequent and unobtrusive until the 1870's with little visible impact upon lifeways or values. Attempts at directed change by colonial powers beginning in the last quarter of the nineteenth century were met with selective resistance. Resistance may have carried through to the 1920's when Kimsquit was abandoned. The analysis of the material assemblage shows the gradual incorporation and modification of European items into the indigenous cultural matrix and the retention of much of indigenous material culture until the mid 1800's. In the late nineteenth century Euro-American goods almost completely replaced indigenous materials and locally modified trade goods. Many of those goods involved the adoption of Euro-American practices (i.e. hunting, clothing and building methods) and the loss of traditional craft skills (i.e. lithic technology) but most have ambiguous functions and may have seen uniquely Native usages.

Archival documents indicate that European items were easily
acquired at local fish cannery stores by the end of the century and were adopted for their convenience and prestige, but still many Euro-American values remained actively resisted. In the latter respect the thesis counters the tendency to think of Native societies as static or passive recipients of European traits.
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CHAPTER 1
INTRODUCTION

Introduction to Problem

The study of Native-European contacts across North America, and acculturative changes in aboriginal societies have long been of interest to anthropologists, historians and ethnohistorians, but detailed archaeological studies of historic period Native sites and post-contact changes in material culture have lagged behind. This is unfortunate considering that archaeology has the ability to trace changes from precontact times through the historic period and to fill in many important gaps in the historical documentation of contact and its effects.

The goal of this thesis is to examine the process of acculturation in Kimsquit, British Columbia from an archaeological perspective concentrating on Native efforts to maintain cultural coherency. The approach taken combines ethnohistoric documentation on the nature of European-Native contact and Native responses with a detailed analysis of archaeological material from contact period sites.

Acculturation in its broadest sense is the process of change that occurs when two or more cultures come into contact. This thesis utilizes the theoretical principles of acculturation, focusing on theories that stress the active and selective aspects of Native responses to the European presence to guide investigation into the nature of European contact and the
processes of change in Kimsquit.

The archaeological assemblage from four Kimsquit sites excavated by Hobler in 1971 and 1972 (Hobler 1982a) which span the historic period provides the archaeological focus for this study. The Kimsquit material is well suited to this kind of study as the sites appear to be relatively short occupations within a tightly clustered area, and the samples are comparable in size. It is also likely that the sites were occupied sequentially by the same group of people making them ideal for studying the effects of contact in a single society and reducing the number of variables that might account for differences.

Principles of Acculturation

Several of the general principles of acculturation have direct bearing on the archaeological study of historic Native artifact assemblages. Various theories of acculturation (Linton 1963; Spicer 1961; Bradley 1987) suggest that trade goods are initially sought that have meaning and continuity in the pre-existing culture, and that the criteria of selection is first ideological, and then utilitarian. Given this, foreign status and prestige goods should appear archaeologically before functional tools, and should reflect continuity with the pre-contact culture. Acculturation theory also suggests that foreign items and traits are often modified in form to better conform to indigenous cultural patterns and usages (Linton 1963:476).
Archaeologists have therefore proposed that European goods were originally treated as a source of raw material for the manufacture of traditional artifact forms, followed by the adoption of new artifact forms and finally new functional categories which reflect the affects of long term acculturative pressure and changes in behaviour (White 1974). However, recent studies of contact situations suggest that what appear to be new artifact forms may in fact be consistent with indigenous values and practices, seeing usages unintended or unexpected by Europeans or representing a redefinition of tradition and resistance to assimilation (Roseberry 1989:119; Banta and Hinsley 1986:122).

Because no two contact situations are ever identical, acculturation theory can only be considered a broad heuristic device (Moore 1987) and the above principles are used to address a series of research questions more specific to the Kimsquit data.

Research Questions

A combination of archaeological and historical data was used to address the following questions concerning the nature and effects of contact in Kimsquit:

1) What was the nature of contact and the accessibility of European goods in the Kimsquit area throughout the historic period and how did it change?

2) Can the sites be differentiated chronologically to
correspond with the changing nature of contact?

3) What items of precontact material culture were replaced first and which persisted?

4) What elements of Native technology were transferred to Euro-American material and how were they expressed?

5) What kinds of trade goods were adopted first and what was the criteria of selection?

6) What behavioral changes are indicated by the adoption of items of Euro-American manufacture, or are they strictly functional equivalents of precontact items?

Organization of Chapters

Chapter two elaborates further on the research problem and rationale. Anthropological theories of acculturation are discussed in more detail and the contribution archaeology can make to further our understanding of contact is explored along with the rationale for applying it to the Kimsquit case.

Chapter three addresses the first research question by outlining the nature of contact in Kimsquit, addressing such variables as what cultural actors were in contact, when, where, what their motives were, what items were exchanged, and what effects contact had.

Chapter four discusses the archaeology of Kimsquit and includes descriptions of the physical region, the sites excavated and the derivation of dates for the sites (question two).
The next three chapters present the analysis of the artifactual material. Each chapter proceeds from a description of the typology used to comparative analyses of artifact frequencies in the sites studied. Artifacts are classified primarily according to the "degree of Native intervention" (Pilon 1990:131) involved in their manufacture into artifacts of local material and Native manufacture, artifacts of Euro-American material and Native manufacture, and artifacts of Euro-American manufacture. This permits one to explore the degree to which continuity and change are expressed in the artifact assemblages of each site (Pilon 1990; Bradley 1987).

Chapter five is an analysis of artifacts of local material and Native manufacture and includes a comparison to late prehistoric (Kwatna phase) material from other sites in the Bella Coola region. This serves as a baseline from which post contact changes in the site assemblages can be assessed and addresses question three. Chapters six and seven present the analysis of artifacts of Euro-American material and Native workmanship and artifacts of Euro-American manufacture respectively. Chapter six addresses question four and stresses continuity in Native technology and certain cultural practices and the incorporation of new materials into an indigenous system. Chapter seven deals with questions five and six, discussing the adoption of new material and requisite behaviour by organizing the artifacts into functional groups, as is commonly done with Euro-American artifacts in historical
archaeology. The final chapter, chapter eight, re-examines the research questions and the theory employed in the light of the analysis conducted. Individual artifact descriptions and photographs are included in the appendix.
CHAPTER 2
THEORETICAL BACKGROUND

Introduction

A discussion of the theory of contact and acculturation is presented below in order to provide the background and rationale for the focus of this thesis. This discussion proceeds in historical fashion from the efforts of anthropologists to formulate general acculturation theory in the mid-twentieth century to the recent outgrowth of theory dealing primarily with colonial encounters and forms of cultural persistence and resistance. The contribution archaeology can make to the study of contact situations is discussed, and an approach to the study of change and resistance in Kimsquit that combines anthropological theory with archaeological and ethnohistoric data is presented.

Acculturation Theory

Definitions stressing different aspects of acculturation have been proposed by anthropologists approaching the subject from various theoretical perspectives. Social Science Research Council seminars were held in 1935 and again in 1953 to define and outline the principles of acculturation. The basic tenets proposed by the SSRC seminars, and later in Ralph Linton's edited volume *Acculturation in Seven American Indian Tribes* (1963) which first appeared in 1940, are still cited. After
much deliberation, the 1953 SSRC meetings on acculturation defined it broadly and simply as "a culture change that is initiated by the conjunction of two or more autonomous cultural systems" (Barnett, et al. 1954:974).

Linton defined three more or less distinct steps in the acculturative process as seen in the introduction of a new cultural element: 1) its initial acceptance by innovators (the individuals who first encounter a new element); 2) its dissemination to other members of the society; and 3) the modifications by which it is adjusted into a pre-existing cultural matrix (1963:470). New items are usually accepted or not according to their potential as prestige items, their compatibility with the pre-existing culture and their utility and filter from high prestige people down (Linton 1963:471). Linton realized that no individual represents or interacts with all of their culture or can spread an innovation through all of their population, especially in the case of gender specific roles and innovations, but he felt individuals with high prestige are most likely to be emulated (1963:472).

Linton (1963:476) proposed that originally the only meaning a new element has comes from its connection with particular innovators and its superficial resemblance to pre-existing items. This is the result of the simple fact that it is easier to adopt tangible cultural elements like tools and ornaments than it is to transfer the meaning of patterns of behaviour which requires long term face to face contact (Linton 1963:485).
Therefore, new cultural items or traits are most often used in a manner consistent with the pre-existing culture. This recognizes that European technology and customs were not always superior to those existing indigenously, either in Native perception or in reality. Modifications may be made in the form of new elements to make them more compatible, thus marking a fundamental connection between form and meaning. Linton cautioned, however, that even when borrowed elements retain their original form they may be put to different uses and acquire meanings different from those they had in their original context (1963:489).

The processes described above were considered most characteristic of initial peaceful contacts during which no important elements of Native culture were lost and material and behaviour were freely adopted from the Europeans, and which Linton called non-directed contact. In non-directed contact innovations are free to be accepted and integrated into a culture in accordance with the cultural interests and rules within that society, while in directed contact there is some degree of control by members of one society over members of another, resulting in a series of cultural losses without adequate replacements (Linton 1963:506). In the case of directed contact, there is a clear distinction between a subordinate and a superordinate society with the superordinate society actively trying to instill change within the subordinate society at any level from a single feature to the entire
cultural pattern (Spicer 1961:520). This kind of contact is characteristic of colonial and missionizing encounters in which the goal is to change behaviours and values. However, inhibiting the normal process of retaining old elements until satisfactory substitutes are found by replacing them with traits whose meaning is neither fully comprehended nor acceptable within the pre-existing culture most often produces conflict and dissatisfaction (Barnett et. al 1954:986).

Various attempts have been made to further systematize the forms of change, or what Edward Spicer (1961) called "tradition combination", which result from acculturation. Spicer (1961:529-33) distinguished four types: 1) incorporation, or the transfer of elements into a cultural system in a manner that conforms to patterns already existing; 2) assimilation, or replacement through the acceptance of cultural behaviour without modification; 3) syncretism, or fission, by the combining or mixing of traits from two different cultural systems into a pattern different from either; and 4) compartmentalization or isolation, where traits from the donor culture are held apart from the recipients pre-existing system. Within Spicer's categories, incorporation and assimilation are at opposite ends of a scale with incorporation characterizing non-directed contact and assimilation occurring under conditions of intense, long term directed contact (1961:532). Syncretism and compartmentalization also occur under conditions of directed contact, but in cases where the subordinate culture is able to
be more selective and retain indigenous traits. Spicer realized that these processes do not exhaust the possible forms of change and that in many cases a dominant process can not be identified. It has proven very difficult for most anthropologists to discuss change in such rigid terms and they have been abandoned for the most part except as an heuristic device.

Spicer (1961:542) admitted his failure to identify universal phases or sequences in the acculturation process largely because the treatment of it in the literature had been so uneven. This was in spite of several efforts to establish a methodology for its study. These include most notably the two SSRC seminars, a seminar which resulted in Spicer’s 1961 work, and Linton’s volume. The relevant variables identified by these works for the study of acculturation were concerned primarily with defining the nature of contact, including the ecological and demographic setting, who was involved, what their roles and motives were; the context of contact, such as where it occurred and how often; the nature of the traits or items exchanged, i.e., what was borrowed, in what order, how they were selected and what modifications occurred in their form and meaning; and the results of contact, including rates of change and the psychological mechanisms involved. However, the number of variables to be considered continued to be immense, and while any given study only focused on those relevant to its research goals, it resulted in it being very difficult to conduct comparative studies and establish universal methodologies or
theories (Barnett et al. 1954:992).

Recent Trends in the Theory of Contact Situations

"People With History"

Contrary to what was intended by these efforts at "formulation" no lasting schools of social change theory emerged and the techniques, assumptions and data used to study acculturation ranged widely (Bohannan 1967:xvi). One of the reasons for this was the realization that change is natural, creative and continuous and that the form it takes depends on its historical context.

Perhaps the greatest shortcoming of the acculturation studies of the 1930’s-1960’s was that the notion that cultures in contact were "autonomous" unfortunately tended to mean that they were treated as though they had no histories, but were instead isolated and static prior to contact like "billiard balls" on a table (Wolf 1982:6). One of the basic assumptions within the theories proposed by Linton, Spicer and others was that they could establish a baseline or description of what a culture was like before contact with western influences by using ethnohistorical documents. This unintentionally meant that non-western societies were denied a history prior to contact and the possible effects of indirect contact were ignored (Roseberry 1989).

Recently there has been renewed interest in intersocietal contact. Such studies no longer assume that all the relevant
factors in cultural development can be identified according to a formula and a full explanation derived, nor that aboriginal cultures were static prior to external stimuli such as contact with Europeans (Trigger 1989:337). Most recent studies of contact place greater stress on examining the full historical context of the contact situation, including the possible motivations behind the individuals in contact, in the realization that the trajectory of post-contact change is dependent upon the pre-existing culture patterns and histories of those in contact (Trigger 1985; Sider 1987; Roseberry 1989; Wolf 1982). The SSRC memoranda of 1954 also recognized that contact was between individuals, that what is presented is always filtered through the recipient’s cultural system and values and that change moves in both directions (Barnett et al.1954). But, this early formulation has been criticized for not placing these variables in a historical perspective and for producing a linear understanding of change (Wolf 1982; Sider 1987; Roseberry 1989).

Colonialism and Resistance

Currently there is an interest in how the tendency for colonial powers to dehumanize aboriginal peoples as something "other" has actually contributed to the creation and reaffirmation of ethnic identity rather than to total assimilation (Sider 1987:11; Miller et al. 1989: 23). According to Sider (1987:11), the behaviour of colonial governments with
mandates of directed contact designed to assimilate Native peoples into the dominant society sets up a contradiction in that acculturative programs (i.e., missionizing, education) in themselves treat Natives as something different, or "other", and keep them at a distance from the dominant society, thus allowing them to continue to exercise autonomy. The economic activities Native people are encouraged to participate in also often set them apart from the dominant society and create internal cohesion (Sider 1987:17).

Roseberry (1989:76) stated that "no order of domination is total. There are always sets of relationships and experiences that are excluded and may serve as points around which alternative, perhaps operational, cultural forms can emerge". Histories can be reinterpreted and rewritten (Roseberry 1989:76) and traditions invented to establish or symbolise social cohesion, legitimize institutions and control socialization (Hobsbawm 1983:9). In this manner "artificial" communities (i.e., nation states, Indian reserves) can legitimize themselves (Hobsbawm 1983:9) and foreign practices and goods can be adopted and used within a "traditional" ethnic context (Roseberry 1989:115).

Current studies of colonial encounters share in common with earlier acculturation studies the recognition that acculturation is a complex interconnected process, but they stress that new opportunities for cultural creation and expression continue to exist even under extreme pressures of directed change.
Archaeological Studies of Acculturation

Most of what is known about contact and trade between Europeans and Native people across North America is derived from historical documents. Archaeological studies of historical Native sites have lagged somewhat behind, perhaps due to the absence until recently of a strong tradition of anthropologically oriented historical archaeology (Fitzhugh 1985:4). This has resulted in a heavy reliance on ethnohistory as a means of reconstructing the lives of preliterate peoples and often in the uncritical use of the direct historical approach, ignoring the acculturative effects of contact, the biases of the recorders and gaps in the description of many aspects of life.

The main shortcoming of this approach is that most European chronicles do not describe an aboriginal culture unaffected by white contact. For this reason the traditional concept of the ethnographic present, especially when reconstructed from memory culture, is misleading and suffers from an ahistorical perspective and ignorance of changes occurring in prehistory and protohistory (Trigger 1981; Netherly 1987:261). "The arrival of Europeans may have hastened the process of change and radically altered its direction, but it did not initiate it for most Indian groups" (Trigger 1981:10). Therefore, archaeological data are necessary to understand how the way Indian groups coped with change in prehistoric times shaped their response to the European presence, and to understand to what degree change
occurred in the protohistoric period (Trigger 1981:12).

In a recent archaeological study of Arikara acculturation Daniel Rogers expressed a similar concern. "In the long run, the interaction strategies used by both Euro-Americans and natives resulted in the transformation of peoples and their material culture, but the results were often different and the processes almost never the same. The simple overriding fact of all contact situations is that each culture operates according to its own set of expectations and works to maintain a viable system" (Rogers 1990:4). Archaeology has the advantage over ethnohistory of presenting a less biased baseline based on first hand observations from which to study the effects of contact (Pilon 1990:124; Netherly 1987:261), and the potential to study changes occurring over a prolonged period of time (Wauchope 1956:5; Bradley 1987:5).

Thus far archaeological studies of acculturation have tended to focus on the adoption and modification of trade goods (Vanstone and Oswalt 1967; White 1974), but they have also examined the effects of European contact on intertribal relations, settlement pattern, subsistence and ideology (Bradley 1987; Fitzhugh 1985). Efforts to demonstrate how changes in the meaning and value, or symbolism of objects are related to changes in other cultural spheres are also starting to be made (Rogers 1990). The rationale behind this approach is that because the parts of culture are interconnected changes introduced in one aspect will set off and be reflected in
changes in others, including material culture (Moore 1987:91). Attempts have also been made to systematize the nature of culture change by examining functional group categories of artifacts on Native habitations relative to those on European sites or dwellings, often with the intention of distinguishing ethnicity (Brown 1979; Auger 1990).

Investigations focused specifically on historic period Native archaeology in coastal British Columbia have been few in number relative to those in prehistoric archaeology. Research thus far has concentrated primarily on using a combination of historical and archaeological information to develop interpretive models that could be tested on prehistoric sites, and fleshing out information provided by the historic and ethnographic record (Fladmark 1972). This last concern is the one that has seen the greatest concentration because of a recognition of the biases in the ethnohistoric sources, and the fact that ethnographers of the late nineteenth century often were not interested in many of the mundane details of material culture and relied heavily on informants with imperfect memories.

All of these problems have bearing on the process of acculturation and addressing them represents a significant step towards delineating this process. It is generally agreed that to go beyond changes in technology and study the impact of contact on a variety of cultural institutions requires the consideration of the historical context of contact and a host of
variables that may be revealed in historic documents (Rogers 1990; Bradley 1987). These include the context, function and manner in which trade goods were obtained, modified and distributed within a society (Fitzhugh 1985:6). A combination of historical and archaeological research is thus necessary for a more thorough understanding of historic period Native societies.

American archaeologists, including many culture-historians, have traditionally thought of historical investigation as being purely descriptive, leading processualists to denounce any connection with history. However, there has recently been a renewed interest in the method and philosophy of history in both anthropology and archaeology (Hodder 1987; Moore 1987; Netherly 1987). The historical approach in archaeology concentrates on the explanation of individual situations rather than purporting to develop general laws applicable to a broad class of events and processes (Trigger 1978a:27). In the process of historical explanation general laws may be used but the goal is to build up an understanding of the past from an understanding of particular situations (Trigger 1989:338).

Therefore, the use of historical inquiry means not only using historical data to help establish context and frame interpretations, but also implies a methodology for guiding interpretations. Trigger (1978b) feels that such a methodology may be more sensitive to the feelings and needs of Native people than ahistorical approaches in archaeology which clinically test
hypotheses about cultural development on Native peoples while failing to recognize that they may have had unique histories prior to contact (Trigger 1978b:21).

Application of Theory

The goal of this thesis is to describe and explain as much as possible the effects of European contact in Kimsquit, primarily what acculturative stresses were experienced and what the material response was. In order to do this anthropological theories on acculturation and resistance have been employed as an interpretive crutch. The basic tenets of acculturation theory as formulated by social anthropologists in the middle of the century have been briefly presented. However, as indicated in the above discussion, no coherent body of acculturation theory has ever taken flight and anthropologists continue to debate the weaknesses of those theories formulated. Primary among the criticisms is the difficulty of recognizing all of the variables contributing to a form of change when the direction of change is dependent on the historical context of each case; the seeming futility of ever establishing such a context when the precontact history of non-western societies is either ignored or else reconstructed from ethnohistoric documents; and the assumption that colonialism excludes the possibility of creative change.

Recently the utility of archaeology for obviating these difficulties has become apparent (Trigger 1981; Netherly 1987).
Only archaeology has the benefit of sufficient time depth to study the development of preliterate cultures and to track their trajectory of change after contact with Europeans. Archaeology is limited, however, in the kinds of data it studies, primarily environment, settlement pattern, and material culture. But with the controlled use of inference and analogy derived from ethnohistoric sources and acculturation theory, some life can be breathed into archaeological interpretations.

This thesis employs many principles of the acculturation theories proposed by Linton and Spicer as an aid in addressing some specific research questions (see chapter one). Due caution is paid, however, to the criticisms of this approach (Roseberry 1989; Wolf 1982). The Kimsquit data itself is well suited to avoiding several of these. Three of the sites, Nutsqwalt (FeSr 4), Axeti (FeSr 5) and Nutal (FeSr 7), have a time depth extending into late prehistoric, precontact times, thus providing a fluid baseline for studying the effects of contact and avoiding the problems of relying on an ethnographic present. Additional data is used from other late prehistoric (Kwatna phase) components on the Central Coast to establish a trait list and track changes in it after contact.

The section immediately following places contact and the process of acculturation in Kimsquit into historical context. Ethnohistory is used to define what the contact conditions were, how European goods were defined and used, and what motives were involved. This is a necessary step in defining the nature of
the resulting changes and what their material expression was. A brief synopsis of Fisher's (1977) thesis that indigenous Northwest Coast economic and social systems held up undisturbed through the fur trade until settlement and wage labour began in the late nineteenth century is presented. Kimsquit, however, is a relatively remote part of the coast whose history of contact has not been thoroughly documented. Differences in the timing of changes in Kimsquit from those on the southern mainland and Vancouver Island, upon which most general models of acculturation in British Columbia are based, and their degree of impact upon Native culture are discussed. Keeping in mind that many varieties of cultural change and adaptation are possible even under conditions of intense directed contact, indications that the Kimsquit found means for cultural expression and resistance through to the time of the area's abandonment were examined.
CHAPTER 3
THE CONTACT CONDITIONS

Contact and Change on the Northwest Coast

The most comprehensive study of contact in British Columbia, with the finest grained chronology, is Robin Fisher’s *Contact and Conflict* (Fisher 1977), although other studies are cited here as well. Fisher recognized the following historical periods: The Maritime Fur Trade (1774-1820’s), the Land Based Fur Trade (1820’s-1849), the Transitional Stage (1849-1858) and a Settlement Period (1858-1880’s). Fisher developed a thesis that suggests that the fur trade brought new materials, new technology and new wealth into Native society which stimulated growth in arts, crafts, trade and existing social and economic systems without significant disruptive effects. Only with the advent of settlement, and its corresponding administrative machinery did disruptive change occur.

The journals of the maritime fur trade indicate that Native people drove hard bargains and controlled the quality and price of goods exchanged to a great extent (Fisher 1977:4). However, the fur trader’s presence did result in a heightened competition over the middleman position, by which Natives with direct access to European goods traded to other groups through links that probably existed prior to contact. Because ships mainly stopped at easily accessible places on the outer coast, the chiefs of tribes like the Nootka, Tlingit and Haida were
given such a great advantage that they could demand a 200 or 300% profit from their neighbours (Wike 1951:16).

After the fur trade became mainly a land based operation Indian control of trade continued. Little attempt was made by fur traders to disrupt Native lifestyles other than trying to bypass coastal middlemen in an effort to trade directly with the interior (Fisher 1977:44). Some changes were brought about inadvertently in Native society, such as a reduction in wealth of outer coast peoples, and the clustering and amalgamation of tribes around permanent trading posts like Port Simpson, Fort Rupert and Fort McLoughlin in an attempt to maintain their middleman position in trade (Fisher 1977:44).

In Fisher’s transitional period there were some fundamental changes in Indian – White relations due to a decline in the fur trade and the establishment of Victoria as an important European centre to which Natives came to trade and do wage labour. The major change was an increase in conflict with Europeans due to the beginnings of settlement, which necessitated that agreements be made over the ownership of land and ways be found to get the Indians to conform to laws (Duff 1964:60). This process accelerated with the subsequent onslaught of gold miners and settlers after 1858 which brought along with it agents of directed change – missionaries and government officials (Fisher 1977:97). It was also during this period that European diseases took their greatest toll (Duff 1964:43). Change in Native cultures is characterised as rapid after the fur trade due to
the efforts of missionaries, government agents, disease, an increasingly marginal role for Native people in the Euro-Canadian economy and a loss of wealth, leading to the rapid "demise" of Indian culture (Fisher 1977:209).

Kimsquit in Ethnographic and Historic Context

Fisher recognized that the timing and details of interaction and acculturative stresses were likely to vary according to geographic region and ethnic group (1977:xiv). In the case of the Kimsquit many of the shifts in the nature of contact were felt later because of their remote location, and their effects have not been thoroughly considered. Therefore, a detailed account of the contact conditions Kimsquit is presented below and evaluated against the general trends identified by Fisher and others.

Kimsquit is both a place name and an ethnic sub-group of the Bella Coola. Kimsquit itself is near the head of Dean Channel and the mouth of the Dean River (Fig. 1). Ethnographer Thomas McIlwraith (1948 I) described three subdivisions of the Bella Coola: the Nuxalkmx (Bella Coola), of North Bentinck Arm and the Bella Coola Valley, the Talio of South Bentinck Arm and the Kimsquit of the Kimsquit and Dean River Valleys and the head of Dean Channel. Kennedy and Bouchard (1990) recognize a fourth sub-group, the Kwatnamx of Kwatna inlet, whose villages were abandoned before contact. These groups were not bound together politically, but they shared a common language and were heavily
Figure 1. Map of Central Coast of British Columbia.
intermarried.

The social and political organization of the Kimsquit is difficult to reconstruct. The name Kimsquit itself is derived from the Bella Bella Kimxkwit meaning canyon, referring to the Dean River canyon (McIlwraith 1948 I:16). The Dean River was called Nutal in Bella Coola, and the people of the Dean River were called Sutslimx (McIlwraith 1948 I:16). The people of the Kimsquit River were called Satskwmx in Bella Coola (Bouchard et al. 1988:8) and their main village was Satsk. In the 1860’s the population of Satsk was drastically affected by a smallpox epidemic and the survivors were adopted into the Dean River community, leaving the Kimsquit River abandoned (McIlwraith 1948 I:18). The ethnic composition of these Kimsquit groups is not clear. According to McIlwraith (1948 I:21-22) the Kimsquit had ties with the Kitlope of Gardner Canal, and closer links with their immediate neighbours the Istamx of Dean Channel. Some communities may have been a mixture of Istamx and Kimsquit (McIlwraith 1948 I:21).

The historic period is poorly documented for Kimsquit. For the purposes of this paper, the following chronological periods are defined based primarily on the dominant form of contact. The first is the Protohistoric Period (ca. 1770-1793), during which the Kimsquit felt the influences of Europeans through indirect contact, and whose dates are of necessity loosely defined. The historic period proper begins with the separate explorations of George Vancouver and Alexander Mackenzie in
1793. These explorations were coterminous with the maritime fur trade. A period of Explorations and Maritime Fur Trade is thus defined between 1793-1833. The Land Based Fur Trade began on the Central Coast in 1833 and was the dominant form of contact until the 1870’s, although it continued well beyond then. This period is subdivided according to shifts in the dominant mode and place of exchange into the following sub-periods: Fort McLoughlin 1833-1843, Steamship Trade 1843-1860’s, and Fur Trade Stores 1860’s-1874. Kimsquit never has seen permanent European settlement and did not feel the influence of colonial powers directly until the 1870’s in the form of railway surveyors and the Royal Navy, followed by missionaries and Indian agents in the 1880’s and the canning industry in the 1890’s. A Colonial Period is thus defined between 1874-mid 1920’s and the influence of the powers mentioned is discussed. For each of these periods an effort was made to delineate who was in contact, under what circumstances, what the motives and attitudes of those involved were, what was exchanged, how it was used and what effect it had on Kimsquit culture. Changes in population across these periods were tracked and the observed trend is discussed in a separate section.

Protohistoric Period ca. 1770-1793

Protohistory is generally defined as the interval between the first appearance of European goods and the earliest historical records (Trigger 1985:116). This is a critical
period during which many changes may occur in Native culture, necessitating the use of caution when drawing analogies from early written records to interpret precontact culture. However, we need not assume that every aspect of Native culture was radically altered in the protohistoric period (Trigger 1985:117).

Change can be introduced in the protohistoric period through unrecorded direct contact with Europeans, or indirect contact through diffusion of cultural traits or disease from other Native groups. Hobler (1986:18) suggested that metal may have entered the Central Coast prior to face to face contact with Europeans as fastenings on Asian drift wood, by diffusion from Native Siberian iron users, or through Native trade links to the land based fur trade in the east or the Russian fur trade to the north.

Both Vancouver and Mackenzie remarked on the presence of metal tools in the Bella Coola Valley and neighbouring salt water areas upon first recorded contact (Mackenzie 1967:290-291,296; Vancouver 1798 II:274) providing indirect evidence for a protohistoric period in Kimsquit. Mackenzie did not visit Kimsquit, and although Vancouver did, he did not make close enough contact with any of the inhabitants to observe European goods (Vancouver 1798 II:267). However, the presence of considerable quantities of metal among the nearby and closely related Bella Coola is suggestive that the Kimsquit would have had familiarity with metals and metal working prior to 1793.
For the Bella Coola of Nusqalst in the Bella Coola Valley Mackenzie recorded the following:

Copper and brass are in great estimation among them, and of the former they have great plenty: they point their arrows and spears with it, and work it up into personal ornaments; such as collars, ear-rings and bracelets, which they wear on their wrists, arms and legs ... They also abound in iron (Mackenzie 1967:291).

Quantities of trade goods such as Mackenzie described for the Bella Coola probably came from trade either directly or indirectly with fur traders. Mackenzie was given to understand that the chief of Nusqalst had traded directly with Europeans on the outer coast, perhaps with Captain Cook (1967:292). This chief also possessed "garments of blue cloth, decorated with brass buttons; and another of a flowered cotton", which Mackenzie thought were Spanish (Mackenzie 1967:291).

For the purposes of defining a protohistoric period then Hobler's suggestion (1988:19) that significant unrecorded or indirect contacts began on the Central Coast one or more decades prior to 1793, but not before the establishment of the Russian fur trade in Alaska is accepted.

Maritime Fur Trade and Explorations 1793-1833

Given the structure of Native trade with its middle man relationships, and the difficulty of sailing the inner channels, direct contacts between Europeans and the Bella Coola and Kimsquit, who occupied positions relatively remote from the outer coast, must have been rare.

For Kimsquit, Vancouver is the only known exception.
Vancouver's voyage to chart the Northwest Coast and find a Northwest passage connecting the Atlantic and Pacific Oceans brought him to the Central Coast in 1792 and 1793. In August of 1792 he explored and charted Fitzhugh Sound, Kwatna Inlet and Burke Channel as far as Menzies Point (Menzies 1923:102). The following summer Vancouver's expedition returned and on June 3, 1793 reached the head of Dean Channel and encountered a group of Natives at the mouth of the Kimsquit River.

Having gone about a league we arrived at a point on the western shore [later identified as Raphoe Point], from whence the arm took a direction N.N.W. for about 3 leagues, and then, as was most commonly the case, it terminated in a low marshy land. On a small spot of low projecting land from the eastern shore, 3 or 4 natives were observed, who would not venture near us; and at a little distance from the shore, the trees appeared to have been cleared away for some extent, and a square, spacious platform was erected, lying horizontally, and supported by several upright spars of considerable thickness, and apparently not less than 25 or 30' from the ground. A fire was burning on it at one end, but there was no appearance of anything like a house, though we concluded that such was the use to which it was appropriated (Vancouver 1798 II:267).

Although descriptions of Vancouver's activities in the area are brief, they are suggestive of several things. Vancouver's primary goal was not to encounter or in any way interfere with the lives of Native peoples, but he was interested in establishing peaceful relations with those he encountered in order to assess the future potential for trade and to ensure the success of his explorations. Hence, offers of goods such as copper, iron, knives, nails and beads were made wherever they saw signs of Native activity (Menzies 1923:102; Vancouver 1798 II:267). Even those mariners who came to the Northwest coast
with the express purpose of making a profit from trade with Native people tried for the most part to ensure their goodwill, having neither an interest in, nor the means to impose a new way of life upon the Indians (Fisher 1977:10).

It is also apparent from Vancouver’s description that the Kimsquit were curious but not eager to encounter and trade with the strangers and may actually have been frightened. Vancouver had a similar experience on June 2, 1793 with a group of Natives he encountered at the mouth of the nearby Skowquiltz river. Despite offers of "trinkets", he could not get these people to approach him, and when he approached their habitations they showed "visible marks of fear" (Vancouver 1798 II:266). This is in strong contrast to the response Mackenzie received in the Bella Coola Valley only a month later. Upon descending into the Bella Coola valley at Burnt Bridge Creek, Mackenzie (1967:271) recorded that he immediately approached a group of "huts" and walked into one of them without the least ceremony, threw down my burden, and, after shaking hands with some of the people, sat down upon it. They received me without the least bit of surprise, but soon made signs for me to go up to the large house, which was erected on upright posts, at some distance from the ground.

Mackenzie received a similar warm and casual reception at several villages, accompanied by ceremonial exchanges of gifts (1967:277,280,283,295). The differences in the receptions Vancouver and Mackenzie received may simply mean the Bella Coola were more familiar with Europeans, some of them perhaps having voyaged to the outer coast, and others having encountered
Vancouver's crew (Johnstone visited the mouth of the Bella Coola River in June of 1793). Also, Mackenzie travelled on foot and by canoe with Native guides from the interior and from other Bella Coola villages who probably made his introduction smoother. Mackenzie (1967:286) said the guides who accompanied his party to Nusqalst gave the "the chief a very particular account of every thing they knew concerning us". Vancouver, on the other hand, arrived unannounced aboard a strange craft (longboat, the ships Discovery and Chatham having been left behind in Restoration Bay on Burke Channel).

There are indications from Mackenzie's account that the Bella Coola considered Europeans, or at least him, to be powerful and prestigious. The chief of Nusqalst was very interested in his astronomical instruments, offered him his "bed-companion" and implored him to heal his very ill son (1967:286-289). Nearly one hundred years later I.W. Powell was told a story by old Bella Coolas of how when Mackenzie took a reading with his sextant "fire came down from the heavens" (Canada 1883:142). Duff (1964:57) suggested for the Northwest Coast in general that Europeans and their goods tended to be initially perceived as spiritually powerful, but that the novelty soon wore off and they came to be seen as any other trading partner. The reluctance and fear displayed to Vancouver by the people of Kimsquit and Skowquiltz may indicate that the Europeans were perceived of as powerful, or at least mysterious.

In all probability the Kimsquit had been denied direct
access to Europeans prior to this by intermediaries or middlemen in Native trade routes. Access to European goods and familiarity with Europeans seems to have been greater further down Dean Channel towards the Pacific. On June 4 1793, only one day's travel from Kimsquit, Vancouver visited a Native village at the entrance of Cascade Inlet and found the inhabitants to be "keen traders" (Vancouver 1798 II:269). There are also several records of maritime fur traders visiting Fitz Hugh and Millbanke Sounds in Bella Bella territory near the entrance of Dean Channel. For instance, in 1792 Vancouver encountered the British trading vessel Venus in Fitz Hugh Sound (Menzies 1923:102), and Howay (1973:55-56) listed the Boston ships Caroline and Atahualpa as being in Millbanke Sound in 1804 and 1805.

In general the Indians are characterized as being very much in control of the maritime fur trade, being shrewd traders with a long history of aboriginal commerce (Fisher 1977:11). Native people were not yet dependent on European goods. In many cases they refused trade if the goods did not meet their standards or were not of interest. The Europeans on the other hand were dependent on trade, as they only visited the coast seasonally and returning goods meant a loss of profits (Cole and Darling 1990:120).

Working in favour of promoting trade was the general prestige of owning European goods and the potentially huge profits chiefs could make by trading to other Indian groups.
While chiefs did the trading and had much to gain in terms of increased wealth and status, they did not act independently (Wike 1951:55). Wike characterized chiefs as trustees of a group's resources and as being responsible for distributing wealth gained from its sale (1951:60). She, therefore, supposed that much of the wealth received from Europeans was circulated in an indigenous potlatch system and that the choice of goods for potlatches was material easily counted and of uniform quality so it could be kept track of (Wike 1951:90). Wolf (1982:189) further proposed that the fur trade appealed to chiefs because access to most of the indigenous resources was already claimed and a new source of goods to give away in potlatches was in need. At the very least, an abundance of iron tools would have increased the quality and quantity possible in handicrafts, thus translating wealth into Native standards and contributing to the growth and continuity of Native culture (Duff 1964:58).

In terms of trade items themselves, iron tools were popular, primarily adzes, chisels and knives or pieces of metal suitable for working into such tools. These did not require a change in habits as they resembled indigenous tools (Fisher 1977:6). As the market became glutted first with iron in the 1790's, and then by copper by 1800, Native people concentrated their demands on other goods such as rum, tobacco, molasses, muskets and ammunition which became staples of the trade, and on cloth and blankets which became the standard of value (Duff
1964:57). However, Wike (1951) and Duff (1964) found no indications in the written records that the use of items of European technology produced disruptive change. Muskets, for instance had no greater range than a bow and did not completely replace Native weapons of hunting or war (Wike 1951:69). Certain other items, such as thimbles and saucepan handles, were acquired strictly for their prestige value and represent no change in Native behaviour (Wike 1951:95).

Some changes were brought about inadvertently by the maritime fur trade, mainly due to heightened interaction between indigenous groups. It is supposed that a fluorescence of monumental art and crest designs diffused from the northern Northwest Coast at this time (Wike 1951:78; Cole and Darling 1990:128). There was heightened competition between groups over the middleman position in trade, but this is assumed to have occurred along lines that were developing prior to contact (Fisher 1977:19). In sum, the maritime fur trade is assumed to have tapped into a trade network existing prior to contact, and as it was unobtrusive in intent, is assumed to have actually enriched the existing cultural pattern (Fisher 1977).

While the Kimsquit participated in the maritime fur trade primarily through middlemen, they too may have experienced some cultural "enrichment", but not likely to the same degree as those cultures with more direct access to Europeans goods. Mackenzie described a highly developed wood carving tradition (anthropomorphic house posts) already in existence in the Bella
Coola Valley (1967:287). Such an art form may have been in the process of developing indigenously throughout the Central Coast prior to contact and have been further stimulated by the influences described above. In addition, are some changes indicated in oral history that may have occurred around this time.

Oral histories indicate that the Kimsquit had close ties with the Istamx of Dean Channel whose language differed slightly from Bella Bella, and are said to have married freely with the Bella Bella and Kimsquit (McIlwraith 1948 I:21). Recorded origin myths for the Istamx and Kimsquit seem to make contradictory claims to the Kimsquit area and indicate that their may have been some disruption in occupation there just prior to or around the time of contact. Boas (1898) recorded origin myths for Satsq (Satsk) and Sotsl, a village at the mouth of the Dean River, which were recounted to him by Bella Coola people. The tradition of Sotsl accounts for the origin of the Dean River canyon and clearly claims the Bella Coola colonized the mouth of the Dean under the ancestor figure Xe'mtsiwa (Boas 1898:66-67). The tradition that Boas (1898:67) recorded for Satsq suggests that it too was founded by Bella Coola ancestor figures who formed close ties with the Kitlope.

However, Ronald Olson (1955:321;1935:51) collected origin myths from a Bella Bella informant who was descended from the Istamx which claimed the Istamx lived at the mouth of the Dean and the Bella Coola speakers only occupied the Kimsquit and Dean
River valleys. Olson was also told that a group of Istamx fissioned off and established a village at the mouth of Manitoo Creek (Nuxwilst) and then gradually migrated down Dean Channel. McIlwraith (1948 I:21) was also told by a man who claimed descendency from the Istamx (but was "not an ideal informant") that Nuxwilst, which was supposedly still occupied in 1793, was an Istamx village.

The oral histories, however, do not indicate why the Istamx began their retreat down Dean Channel. While these stories cannot be considered to be factual, it is apparent that the Istamx had some connection with Kimsquit and some Istamx probably did live in one or more of their villages, although it may have been through intermarriage. It is also clear from ethnohistoric sources that the Istamx did gradually move down Dean Channel in the nineteenth century from at least as far as Elcho Harbour to Bella Bella (Hobler 1983:11). Perhaps their movement represents an effort to adjust to the flow of goods in the fur trade and to attain a position closer to the source at the outer coast.

Hobler (n.d.) has suggested that shifts in settlement pattern from the channels to the outer coast may have been a natural response to the fur trade. Such efforts to gain access to European trade may in fact represent a more significant change in Native settlement, involving a realignment of territories, than is supposed by anthropologists and historians for the maritime fur trade period.

For the Northwest Coast in general, the maritime fur trade
ends in the mid 1820's with a reduction in sea otter populations, the merging of the Hudson’s Bay and Northwest Companies and the subsequent establishment of fur trade posts concentrating on trade in the skins of land mammals (Duff 1964:56). On the Central Coast, however, a few Boston trade ships continued to visit until the 1840's (Tolmie 1963:304; Work 1945:78) and were the primary source of European contact until 1833 when Fort McLoughlin was built on Milbanke Sound.

Land Based Fur Trade

Fort McLoughlin 1833-1843

After the establishment of land based trade it continued to be in the best interest of the European traders to remain on friendly terms with the Natives, and trade apparently continued on Native terms (Fisher 1977:44). In the case of Fort McLoughlin, the journals of J. Work and W.F. Tolmie indicate that the Hudson’s Bay Company suffered from an active competition with Bostonian ships (Work 1945:78-79; Tolmie 1963:304). Native people on the Central Coast, often refused goods offered at Fort McLoughlin in hopes of getting a higher price, or better goods from the Americans (Tolmie 1963:314,315; Work 1945:79). For instance, in August 1835, Tolmie met "A party of Billichoola - rich in beaver but unwilling to trade for want of Blue Barred Blankets’ (Tolmie 1963:314).

The main difference in the land based fur trade was that the traders were in permanent residence, and therefore, if
anything, were more vulnerable and dependent on Native people to provision them with food and other supplies. This does not mean, however, that the European's attitudes to Native people had improved in any manner. It is clear that many fur traders carried strong Victorian values, resented their position relative to Native people and detested many Native practices, especially warfare and winter ceremonials which they felt disrupted trade, but they were simply in no position to exert change (Fisher 1977:44). The fur traders at Fort McLoughlin continually referred to the Bella Bella and Bella Coola in a demeaning manner, such as Tolmie's complaint that he had no refined intellectuals to converse with, only "the wretched aborigines" (1963:297). A good deal of this dehumanizing behaviour is a result of the vulnerability of the Hudson's Bay Company men's position. They were so fearful of attack in September of 1835 that they would not let their supply ship anchor in front of the fort (Work 1945:77). In spite of an active program by the Hudson's Bay Company to gather detailed information on the Native inhabitants of the Northwest Coast (Tolmie was instrumental in assembling linguistic and census data at Fort McLoughlin) eurocentric attitudes and fears prevailed.

Similarly, Native motives and attitudes seem to have changed little towards Europeans with the establishment of land based trade. There are indications in Tolmie's journal that at least some of the Bella Bella and Bella Coola continued to
consider Europeans prestigious and powerful. Perhaps Tolmie as a doctor was rumoured to command some special power. A group of Bella Coola from KoomKoots who had come to Fort McLoughlin to trade and were given a demonstration of the fort's arms were so impressed that they asked Tolmie "to make the weather moderate for the period of their ensuing voyage - two days!" (Tolmie 1963:301). There were, however, factions among Natives and attitudes towards Europeans as group and as individuals varied. Some Bella Bella were apparently suspicious of Tolmie's intentions and displeased with his presence at ceremonials (Tolmie 1963:294), and some Bella Bella and Bella Coola distrusted the motives of fur traders asking about their numbers (Ross 1842).

However, the desire for wealth and prestige was no less strong and continued to be the primary motive for Native involvement with Europeans. The goods in demand by Native people continued to be primarily those mentioned above for the later stages of the maritime fur trade. Aside from the blue barred blankets mentioned by Tolmie, other popular goods at Fort McLoughlin in 1835 are listed by Work as "an assortment of cheap calico, Handkfs, Vermilion principally, & some other small suitable articles such as fine toothed horn combs" (Work 1945:78). As they were short of such goods, Work authorized Fort McLoughlin to offer "a gallon of mixed liquor with a blanket for a large beaver" (1945:79). The goods the fort took in return were primarily beaver pelts and the fur and skins of
other land mammals (Work 1945:78).

Compared to the earlier journals of Mackenzie and Vancouver who were surprised at the number of trade items they saw in use, there appears to be a dearth of information in the journals of Fort McLoughlin regarding how trade items were used in Native culture. It is assumed that much of it was accumulated to be given away at potlatches, but how the use of trade items affected day to day life was not recorded. The most obvious effect of the establishment of the land based fur trade was to dislodge the Bella Bella from their middleman position in trade. The Bella Bella opposed the construction of Fort McLoughlin from the beginning (Dunn 1845:245). According to Work (1945:77) they continued to be discontented in 1835 due to the "loss of the Interior trade or a considerable part of it, as the Interior Indians dispose of their furs themselves at the fort, and they do not pass through the hands of others as formerly".

The Kimsquit were one of those tribes who took advantage of the chance to trade directly with Europeans and the fort's construction began a period of much more frequent contact. Tolmie recorded visits by the Kimsquit (Kiumuchquetoeh) to the fort on five occasions between November 1834 and April 1835 (Tolmie 1963:292,303,307). His first recorded contact on November 21, 1834 is somewhat inconsistent in spelling and he places their village much closer than possible. "This branch of the Billichoola are called Kummuchquetoeh & their village is one night distant" (Tolmie 1963:292). However, Tolmie was not
always accurate in such details, especially when he had not visited a village personally, and his spellings are inconsistent. Later in his journal Kimsquit is spelled Kyumuchquetock (Tolmie 1963:320).

Wolf (1982:189) proposed that with the elimination of the Bella Bella as middlemen in trade at the source of European goods, the Bella Coola's stock as middlemen in trade with the interior Chilcotin and Carrier rose. The Kimsquit may also have benefited from trade to the interior although there are not direct indications of this until the 1860's (Compton 1869:12).

The year round availability of European goods at Fort McLoughlin also may have stimulated social and economic interaction and the borrowing of cultural traits between Central Coast peoples. Tolmie left many references to people coming to attend Bella Bella feasts and ceremonials, including Bella Coola speakers (Tolmie 1963:300). Such ceremonials not only circulated wealth and increased ranking, but formed and reaffirmed kinship ties and economic and defensive alliances. Tolmie, for instance described links between the Kitlope (Kitloah) and Bella Coola (1963:305), (which is more likely the Kimsquit since Tolmie said communication was by portage between their rivers); trade between the Tsimshian, Bella Bella and Bella Coola (1963:313); and an occasion on which the Kimsquit brought news of a raid on an interior fort to Bella Bella (1963:307).

The Kimsquit can be assumed to have benefitted from
increased profits in trade by dealing directly with Europeans at Fort McLoughlin and perhaps as middlemen with the interior, and from heightened interaction with other coastal groups, while still being able to regulate the frequency and intensity of interactions with Europeans by virtue of being remote from the fort. This situation changed slightly with the advent of trade from steamships.

Steamship Trade 1843-1860’s

Because it was expensive to operate a string of forts on the Northwest Coast, the Hudson’s Bay Company built the steamship the Beaver so that it could contact the entire coast directly and be closer to the source of furs (Hobler 1982b:16). A steamship was ideal for trading on the Northwest Coast because it could navigate the passages and channels that sail ships could not. The operation of the Beaver in Bella Coola territory overlaps slightly with Fort McLoughlin, but John Dunn, who traded aboard her in the 1830’s, and travelled to Bella Coola and Mackenzie’s Rock did not mention Kimsquit (Dunn 1844:267). Fort McLoughlin and Taku were shut down completely in 1843 after an efficient means was found to fuel the Beaver (Hobler 1982b:16).

The motives and attitudes of the men aboard the steamships were essentially the same as those who traded at forts, although they perhaps had more of a sense of exploration and discovery (Dunn 1844). Perhaps the most detailed written impressions of
Kimsquit from any period are from Pyms Nevins Compton’s (1869) An Account of an Early Trip to Fort Victoria and of Life in the Colony, which are based on his experiences as purser on the steamship Labouchere, beginning in 1859 and ending at an unspecified date. Because Compton’s description of Kimsquit is so rich in detail it is quoted almost in its entirety below.

A good sized river runs into the canal at the head of it on or near the mouth of which is the village of the Chatsquit Indians, & about 10 miles further down their [sic] is another river on the eastern side, on which the Kemsquits live. These Indians are in a most uncivilized state having had hardly any communications with whites, except the agents of the Hudson’s Bay Co, who never stop long here. Their village is in a more filthy condition than that of any Indians I have ever met with on the coast, for whether from laziness or what other cause I know not, but all their filth and excrement &c is deposited on each side of a short plank that leads to their doors, luckily for them they live in a cold & pure air for were they in any warmer part of the world they would inevitable [sic] be swept away by some pestilence. The stench as may be supposed in the camp is something frightful, yet they appear to be a moderately healthy and happy race. About 1 1/2 or two miles up the river above the Kemsquit village & following the left hand bank of the river along the trail to the interior the river passes through a canyon, or between two almost perpendicular walls of rocks, & here the trail is taken along the face of one of these precipices about 40 or 50 feet above the boiling torrent below, & consists of some half a dozen small poles of about the thickness of a mans wrist lashed together with cedar twigs & supported on poles of the same size forced into the clefts of the rocks, this extends for some two or three hundred yards to the other side of the canyon.... The Indians here say this is the only bad place on the whole of their trail up to the interior (which joins that from Bella Coola above the worst place on that route) & should such be the case, the road would be very easy to make, as there is a way by going round a short distance which entirely obviates this difficulty (Compton 1869:12).

Compton’s description indicates the shock and perplexity Europeans held for Native lifestyles, but he in no way expressed a wish that they should change. There is no word as to how the
Kimsquit regarded Compton, although his reception seems to have been neither overtly hostile or enthusiastic.

Perhaps most revealing from Compton's account is that contact with Europeans until this time had been sparse, and had little visible impact on traditional culture. Later in his manuscript, Compton described several conservative traits that the Bella Coola speakers shared. "They seldom wear any clothes except a blanket for the men, to which is added for the women, a small apron of the wool of the mountain goat ... or of the bark of the cedar", their villages were "filthy", and they were still dependent on fish, berries, roots, mountain goats and marmots (Compton 1869:28-29).

Compton indicated that the Bella Coola continued to profit as middlemen from "a large trade with the interior Indians for furs" and a few white traders in residence in Bella Coola (1869:11). There is also the first evidence that the Kimsquit had strong connections with the interior in Compton's description of a well travelled trail which joined the trail from Bella Coola to the interior (Alexander Mackenzie Grease Trail). It should be noted that the pole structure Compton described above the canyon was probably not part of the trail, but rather a dip netting platform. This trail and traffic in furs along it were probably in existence sometime prior to Compton's visit, although the bulk of the flow probably did go southward to the Bella Coola before reaching Kimsquit simply because it was closer to market and was perhaps easier to
travel. Therefore, the benefits the Kimsquit would have accrued as middlemen probably still were not as great as those of the Bella Coola.

Fur Trade Stores 1860’s-1874

Trade from steamships continued in conjunction with the operation of small stores on the Central Coast, although primarily as a means of supplying the stores. A small store was built on the site of Fort McLoughlin in 1866 by a petty trader named Morris Moss and went out of business in 1876 (Hobler 1982b:24). The Hudson’s Bay Company then ran the store with a single trader (Hobler 1982b:24). Canadian Pacific Railway surveyor, Marcus Smith (1874:42,68) recorded meeting a group of two Kimsquit families trading at this store in 1874. Of more importance to the Kimsquit was a Hudson’s Bay Company store in Bella Coola from 1869-1882 (Kennedy and Bouchard 1990:337), which continued in operation under private ownership by John Clayton until after World War I (Hobler and Bedard 1989). Independent stores may have been operated prior to 1860 in Bella Coola by Peter White and in the upper Bella Coola Valley by Peter Barron (Hobler and Bedard 1989). These stores were the primary source of European contact for the Kimsquit in the 1860’s up to and perhaps a little beyond the mid 1870’s when Canadian Pacific Railway surveys began in their territory.

Except for correspondence between the fur traders and their superiors regarding business, written accounts pertaining to the
fur trade stores are sparse (Feak 1870; Kennedy 1877). A number of acculturative pressures that Fisher (1977) identified with his transitional and settlement periods are hinted at in the correspondence of these traders in the 1870's. These include the impact of disease, a sharp decline in the fur trade market, and the beginnings of wage labour and sale of goods and services other than furs for cash. Matthew Feak, who ran the Bella Coola store from 1869-1870, began to employ Natives in shipping cargo by canoe (Feak 1870). F.W. Kennedy, who ran the store in 1877 and 1878, also employed Natives as labourers and bought from them blankets and potatoes as well as firewood, which they also sold to steamships (Kennedy 1877).

Despite the decline in the fur trade market, and the need to find alternative means of acquiring wealth, the Bella Coola seem to have maintained cultural coherency and were not yet dependent on European goods to survive. Kennedy communicated that he only needed to be provisioned with goods once a year because there was practically no trading at all in winter - everyone was dancing (Kennedy 1878). The goods Kennedy mentioned as being most in demand were cheap blankets, wash-hand bowls of different sizes, indigo and orange cottons and tobacco (Kennedy 1878). Native people continued to try to control the terms of exchange at the Bella Coola store, leading to occasional disputes. In one incident Kennedy (1878) accepted a copper as pawn and sold it to another individual who potlatched it and refused to pay the balance owing on it.
While the Kimsquit visited these stores and participated in the new means of acquiring wealth, it was to a lesser extent than the Bella Coola did and more on their own terms, as the traders were not living among them. They may thus have maintained an even higher degree of cultural coherency than the Bella Coola.

Colonial Period 1874-mid 1920's

In the last quarter of the nineteenth century the Kimsquit began to feel the effects of colonialism directly. Various plans for Euro-Canadian development including transportation routes, claims made to land, and the necessary establishment of reserves are discussed below, along with the acculturative efforts of missionaries and colonial officials (Indian agents and the Royal Navy) and the effects of participation in Euro-Canadian industry.

Euro-Canadian Development

Although Kimsquit has never seen permanent Euro-Canadian settlement (except fish canneries), as early as 1861 there appear to have been efforts to colonize Kimsquit territory when six entrepreneurs filed a claim with the Lands and Works Department of British Columbia to 960 acres of land on the Dean Delta (B.C. Lands and Works Department 1866). The tract of land was essentially all of Dean Delta from below the canyon to the shore of Dean Channel. No mention was made in the document of a
Native settlement in the area, or negotiating rights to the lands with Native peoples. Similar claims were registered in Bella Coola territory between 1861-1866 at the mouth of the Bella Coola River on North Bentinck Arm, on South Bentinck Arm and at the junction of the Bella Coola River and New Cliff Creek (B.C. Lands and Works Department 1866). The transfer of the Kimsquit lands does not seem to have been carried out as their reserve was later established on this same tract of land (Canada 1881). The intentions of the individuals involved in acquiring this land are not indicated. They may have anticipated the attractiveness these parts of the Central Coast would have as Pacific ports in plans for the development of transportation links between the interior and coast. Several such transportation routes were proposed in the nineteenth century. In the 1870's, Bella Coola, Kimsquit and South Bentinck Arm were all considered as possible termini for the Canadian Pacific Railway.

The Kimsquit did not feel the effects of any of these plans directly until the Kimsquit and Dean river valleys were surveyed in detail by several expeditions between 1874-1876 led by Smith, Horetzky and Cambie (Fleming 1877). These surveys were seasonal and the duration of contact with the Kimsquit was brief, as the parties moved very quickly. Horetzky and two of his men once took up "temporary quarters in the Indian village situated at the mouth of the River Kamsquot" [Dean] due to heavy rains between October 5 and 11, 1874 (Horetzky 1877:142).
Unfortunately, Horetzky's report relates nothing further of his stay there, nor any impression of the Kimsquit. The railway surveyors were not interested in the Natives themselves, except for information they could provide concerning routes through the Coast Mountains, and their impact upon Native culture was minimal. Both Horetzky and Smith employed some Kimsquit as guides, and they seem to have been amenable to the surveyors' presence (Smith 1877b:163,167; Horettky 1877:137). Upon arriving at the mouth of the Dean River in 1874 Smith recorded the following:

Nearly the whole village came out in canoes & part of them were employed in carrying the firewood which they had prepared for the steamer. The women with their children came on board or hung about the steamer in their canoes, and the Indian agent furnished them each with a pipe and plug of tobacco with which they were much delighted. It was evidently a great gale [sic] day with them and they enjoyed it like children - but were well behaved and gentle (Smith 1874:69).

Smith was favourably disposed towards his Kimsquit guide Charlie (although in a patronizing manner), whom he describes as "an excellent Indian" and a "first rate Indian" (Smith 1874:72,78). This, however, can not be considered to be the attitude of the railway surveyors towards all Natives, or even all Kimsquits, as they were constantly worried about Indian hostilities interfering with their work, and Smith asked that the Boxer be sent to arrest a murderer in Kimsquit before they visited (Smith 1874:42,66). Elsewhere, Smith described the Bella Coola of KoomKoots as "the dirtiest and most degraded Indians we have yet seen" and as "great thieves" (Smith
Generally, the Native people were simply tools to be used in aiding development and a hinderance if they resisted. In his evaluation of Kimsquit as a railroad terminus Horetzky (1877:143) described all of the Dean River delta as being "available for either agricultural or other purposes", indicating he did not regard the Native inhabitants as a consideration at all.

For the Kimsquit, any goods the surveyors brought were welcome, but the Native economy and communication networks were not disrupted. Smith and Horetzky travelled along well used Native trails and canoe routes between Dean Channel and Gardner Canal (Horetzky 1877), and Dean River and the interior (Smith 1877b), indicating continued if not heightened contact between the Kimsquit and their neighbours. Smith (1874:69,71) was told that the Carrier chief Annahim frequently made a five day journey from the head of the Black River to visit the Kimsquit.

At the same time as these surveys another incident occurred in which claim was made to land on Dean Channel. In 1876, private entrepreneurs, the Oppenheimer Brothers, applied for a tract of land at the head of Dean Channel "for fishing purposes". Controversy arose when their surveyor took advantage of a publicly funded trip by the Otter to Dean Channel in connection with the railway surveys in order to stake the claim (Daily British Colonist, June 7 1876). Once again, no consideration was given to Native rights or concerns.
Royal Navy

Along with the plans to develop the more remote parts of the coast economically was a policy on the part of government authorities under the regime of lieutenant governor J. Trutch to instill law and order, by force if necessary, and make sure that Natives did not interfere (Gough 1984:198). The Kimsquit experienced this policy in action quite rudely in 1877 when the Royal Navy shelled their village in retaliation for the disappearance of the American steamer the *George S. Wright* in Queen Charlotte Sound in 1873 (Gough 1984:198). Searches failed to find survivors, but uncovered rumours in 1877 that implicated the Kimsquit in the murder of the crew (Gough 1984:199).

In March of 1877, the gunboat H.M.S. *Rocket* was sent to Kimsquit to investigate and apprehend any guilty parties. On March 29 1877 the commander of the *Rocket*, Lt. Harris, demanded of "seven chiefs" that they give up the guilty parties. The Kimsquit told him first that they had "no knowledge of such a wreck, then said two were dead, and one at Victoria, then they admitted that three men, & a woman who had been present were in camp" (Harris 1877a). Two of the men were arrested, one of whom resisted with the help of his father who threatened the officers with a gun. It was then demanded of the chiefs that the two other suspects in the Wright murders and the old man with the gun be delivered to them by 9:00 am March 30 or the village would be shelled. On March 30, Harris found "the village nearly deserted, two chiefs with a few others only remaining, one of
whom was arrested”, (although he was not a suspect in the Wright incident) (Harris 1877a). The village was then duly destroyed by gun fire and the Rocket departed.

This incident reveals an attitude that Natives did not act as individuals and it was therefore acceptable to punish an entire tribe for the actions of a few (Fisher 1977:194). Punishment could be meted out on the basis of suspicion without anything like a formal trial. Harris reported that the resistance displayed by the Kimsquit seemed "to point to guilty knowledge on the part of that tribe" (Harris 1877b).

Four years later the reports of Indian Superintendent Powell indicate the impact of the shelling incident upon the Kimsquit and the emergence of a conscience among government officials over the incident. Powell visited Kimsquit on June 27, 1881 and filed the following report to his supervisors.

... the village was, I think, unfortunately and too hastily shelled.

The chief who was absent at the time, informed me that hearing firing from the ship his people had been greatly frightened, most of them running away. They complained greatly of the injustice by which they had been, without warning, treated in this affair, and as there was no lumber to be purchased in the locality, they had been unable to rebuild their village and were driven to shift as they best could in the bush - a number of them dying from exposure and want during the following winter.

The chief begged for my intercession, and hoped some assistance would yet be granted them.

There is, after all, no reason to believe that the crew of the ill-fated steamer "Wright" had been foully dealt with, and, in this view, their case is certainly a hard one and deserving, in my opinion, of practical and humane consideration. There being no saw mill within three hundred miles they can only hew out building material in a crude manner by hand.

The chief begged that they might be supplied with lumber, nails and an assortment of garden implements, which
would be a great relief in ameliorating their present distressed condition (Canada 1882:142).

Additional correspondence by Powell (1882) suggests that Harris' interpreter, a Tsimshian, may not have been honest because of hostilities towards the Kimsquit, and that the Kimsquit did not fully understand the allegations and demands of Harris. Powell thus set the prisoners free and petitioned Ottawa for twelve hundred dollars to purchase the materials the Kimsquit had requested (Powell 1882). Regardless of whether any Kimsquit were guilty in this incident the community as a whole was certainly treated harshly and they do not seem to have fully understood the European's actions. It would have been abundantly clear to them afterwards that Europeans and their demands could be quite dangerous.

Indian Reserves

Fortunately for the Kimsquit they were not faced with anything like Harris' demands again, and the next White intrusion was not to occur until canneries were established in the 1890's. The canneries were not developed, however, until after reserves had been established for the Kimsquit, leaving other lands in their area open to development. One of the primary concerns of Native people in the negotiation of reserve lands was that fishing areas that were coveted by canneries be protected for Native use (Fisher 1977:206). Unfortunately, there is no record of how the Kimsquit reacted to the initial development of the canneries, or if they were included in
negotiations over the location of the canneries.

Reserves Commissioner O'Reilly visited Kimsquit in August, 1882 and set aside reserves for them in consultation with the chiefs.

The chiefs, Mala-kuse and Yal-touse, after a lengthened conversation, accompanied me, and pointed out the land they wished to have set apart for them, all of which I subsequently declared to be reserves for the use of this tribe (Canada 1883:115).

Two reserves were established: No.1 Kimsquit, 400 acres in size, was established on the delta at the mouth of the Dean River and included "the site of the village"; and No.2 Sedge-co-my or Chats-cah, was situated on the Kimsquit River, about one half mile from its mouth, and contained 480 acres (Canada 1883:116).

In August of 1888, the two reserves were officially surveyed by W.S. Jemmett who reported that the Natives on the reserves he surveyed that season "seemed to be contented and well pleased with the lands allotted them" (Canada 1889:154). The official reserve maps were approved May 18, 1889 (Jemmett 1888-89). There is no indication, however, as to what extent the Natives of Kimsquit understood the legality of the process they were undergoing. According to Fisher (1977:201) the consultations O'Reilly held with Natives were generally of the bare minimum and were frequently misunderstood.

In the early 1910's a Royal Commission was called to investigate and resolve the many disputes that arose over the establishment of reserves in British Columbia. In August, 1913
the “McKenna- McBride” commission visited and reviewed Kimsquit. In addition to approving of reserves No. 1 and 2, the commission allotted a third reserve 80 acres in size at Skowquiltz, which the Kimsquit claimed as a fishing and farming area (Canada 1916 I:255). However, the provincial government and licensees thereof retained logging rights (Canada 1916 I:255).

It might be expected that the shelling of Kimsquit and establishment of reserves broke down the independence of the Kimsquit, making them more dependent on Euro-Canadians and less resistant to attempts at acculturation. However, with the establishment of Indian Agencies in Bella Coola territory we see the beginning of reports detailing explicitly the continued resistance of the Kimsquit to deliberate change.

Indian Agencies

Indian agencies began to be established in British Columbia in 1881. Until 1889 when the Northwest Coast agency was formed, the Bella Coola and Kimsquit had no agent or much interaction with Indian Affairs. In 1910 the Bella Coola agency was established with headquarters at Bella Coola and the acculturative efforts of Indian Affairs were felt much more directly.

The establishment of Indian agencies marked the first serious encounter the Kimsquit had with Whites whose intention was to deliberately induce culture change and ultimately to assimilate them into the dominant Euro-Canadian culture.
Superintendent of Indian Affairs, Powell's agenda in establishing Indian agencies was clearly to "improve their moral and social condition" and "encourage them to be self reliant and self supporting" (Canada 1882:139). This meant primarily bringing Native people into the mainstream economy, (ideally as independent farmers, but more realistically as labourers in fisheries and logging), changing health care, clothing, housing and hygiene to Euro-Canadian standards, and perhaps most difficultly, instilling the morals and values of Christianity through missionizing and policing the use of alcohol and practice of Native religion.

The attitude prevalent in the reports of Indian Affairs is thus very fatherly and superior and there is clear disappointment and frustration when the Natives did not meet their expectations in terms of progress. The Kimsquets seem to have been particularly troublesome children. After his 1881 trip to Kimsquit, Powell reported that they had few economic opportunities due to their remote location and were little changed. They cultivated no crops and lived "chiefly on fish and game" and trading furs with the Hudson's Bay Company at Bella Coola and Bella Bella (Canada 1882:142). Indian Reserve Commissioner O'Reilly, reported similarly after visiting in 1882 that the Kimsquit "have not been brought much in contact with the whites, they therefore retain their primitive habits and customs to a larger extent than most tribes on the coast" (Canada 1883:115). He added, however, to the list of
subsistence pursuits that they did cultivate potatoes and vegetables for their own consumption and were trying to get established in the trade of these (Canada 1883:115). Powell most likely failed to notice the garden plots O'Reilly saw and indicated on his map of the proposed reserve (O'Reilly 1882).

When Indian Agents actively began work in Kimsquit they had to make up much ground in acculturating the Natives. The first report of the Northwest Coast Agency containing any detail is for 1897 and states that the Tallion (Bella Coola) nation as a whole was "the lowest in the scale of civilization learning and morality of any in this agency" (Canada 1898:88). Indian agent C. Todd reported the Bella Coola's chief sources of earnings were from canneries, selling potatoes and working in the River's Inlet sawmill. (Canada 1898:88). The first report on Kimsquit specifically is for the year 1899.

The Indians here are still pagans, professing no kind of religion whatever, and, although kindly disposed, they steadily refuse to accept any kind of religious teaching; hence they have no school for their children... Their houses are old and primitive and the people seem to have little desire to improve (Canada 1900:263).

The Indian Agents continued to report being frustrated by this state of affairs well into the twentieth century. In 1904 most of the Kimsquit continued to live in "old Indian homes", and in a state of "filth", although some European style houses had been built (Canada 1905:270). Two years later Indian agent Morrow was pleased with improvements that they had made in their homes (Canada 1907:249), but a new agent in 1911 (I. Foughner)
stated that the houses continued to be mostly of the old style and that intemperance was a minor problem (Canada 1912:203). The record is silent concerning housing and hygiene after this, but reference to intemperance continued until 1914 (Canada 1915:88).

Missionaries

The most exasperating problem colonial powers faced with Kimsquit was converting them to Christianity. The first missions in the area were established in 1880 at Fort McLoughlin and in 1883 at Bella Coola (Kennedy and Bouchard 1990:337). Other missionizing was done on the Central Coast by Methodists through steamship travel on the "Glad Tidings". The "Glad Tidings" visited Kimsquit at least as early as 1887 with Reverend Calvert aboard. Calvert's missionizing efforts at the village failed and he returned to his ship to find it stranded on the tide and nearly severely damaged (Logbook 1887). In the early 1900's a medical missionary from Bella Coola, Dr. Spencer, paid regular visits to Kimsquit to treat the sick and attempt conversions (Canada 1904:298). In spite of such exposures to missionaries, the Kimsquit steadfastly rejected Christianity and refused to have a missionary in residence (Canada 1900:263;1903:262;1904:298;1905:271;1915:88).

An examination of the Indian Affairs records and journals of missionaries presents contradictory evidence as to when missionizing finally had some success in Kimsquit. Oddly, the
Indian Affairs census of 1909 lists the entire population of Kimsquit as methodists (Table 1). They continued to be listed as such until the 1913, 1914 and 1915 censuses when they were once again listed as being all pagans (Table 1). Some sort of error must have been made in the Indian Affairs enumeration during this period in order to account for this inconsistency.

The autobiography of William Henry Pierce, who established the Bella Coola mission, stated that the Kimsquit never accepted Christianity despite attempts "to instruct and help them by frequent visits of the missionary from time to time, with but little apparent success. They seemed to have no desire to accept the new teaching, consequently have made no progress and have decreased very rapidly" (Pierce 1933:48). However, the Reverend Thomas Crosby, chairman of the methodist mission program, recorded in his memoirs that at "Kimsquit, up the North Bentinck Arm, we have another little church" (Crosby 1914:194). Neither account specified dates, and although Crosby had to have been referring to sometime before 1914 when he died, he placed Kimsquit in the wrong location. He must have meant to say up Dean Channel because his previous paragraph described the Bella Coola mission at the head of North Bentinck Arm.

The 1917 census of Indian Affairs indicates the start of a gradual conversion of the Kimsquit to Christianity (Table 1).
<table>
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<th>Kisquisit</th>
<th>Houses</th>
<th>&lt; 6 Years</th>
<th>6-15 Years</th>
<th>16-20 Years</th>
<th>21-65 Years</th>
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<td>11</td>
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Note: ## designates males; # designates female.

Use reported data for children and adults rather than specific age groups.
This trend is continued in the remaining censuses of the early twentieth century, the entire population being listed as converted in 1924. Further evidence that the gradual conversion of the Kimsquit began sometime in the mid 1910's is that the Mckenna - McBride commission review of the Kimsquit reserves listed a church among the public buildings in 1913 (Canada 1916 I:228).

**Cannery Work**

While progress in Euro-Canadian terms was slow, the Indian agents were pleased that the Kimsquit made some money fishing and hand logging. They are also reported to have raised a small amount of livestock, including horses, cattle and fowl in the 1910's (Canada 1913:205;1916 I:232). The main source of income for the Kimsquit in this period, however, was from two fish canneries, one at the mouth of Manitoo Creek on Dean Channel and the other on Kimsquit Bay (Hobler 1971:89). The first reference in the Indian Agent's reports to either of these canneries is in 1903 when the Kimsquit are said to spend their summers working at R. Drainey's cannery at the mouth of the Salmon River [actually Kimsquit Bay] (Canada 1904:298).

Correspondence of the chief inspector of fisheries, indicates that in 1910 Drainey's cannery, the "Kimsquit Cannery", employed sixty-four males, thirty-six females and operated thirty-seven fishing boats (Cunningham 1913). In the same summer the "Manitoo Cannery" employed ninety-six males,
twenty-seven females and operated forty-nine boats. In 1913, the Kimsquit cannery employed eighty males, twenty females and operated forty boats, while the Manitoo Cannery employed eighty-eight males, twenty females and operated forty boats. These figures indicate not only that the canneries were a major source of employment, but that they employed more people than actually resided in Kimsquit. Most of the Manitoo cannery workers were apparently Asians with the Kimsquit being employed mainly at the Kimsquit cannery (Hobler 1992, personal communication).

The Inspector of Fisheries' 1922 report (Widsten 1922) indicates that the canneries also operated stores, providing the Kimsquit with more immediate access to Euro-American goods than they had ever experienced. There is little indication of the specific kinds of Euro-American goods entering the Native material assemblage, but it is apparent that they were encouraged to adopt Euro-American material culture in its entirety. Motor boats are one item made particularly popular in Kimsquit in the 1910's by canneries (Canada 1916 I:232).

Cannery work also had the effect of interrupting traditional economic practices to a certain extent. While cannery work was only a summertime activity and the Kimsquit were fortunate in not having to leave home to participate in it, it was an intensive, time consuming endeavour employing the whole family. Men did the fishing and women and children did the packing and cleaning (Canada 1911:201). The Natives own winter supply of salmon had to be caught and cured in the fall.
Many Northwest Coast peoples lost traditional craft skills in the late nineteenth century, such as weaving, because of the amount of time spent in cannery work and the easy availability of Euro-American substitutes (Canada 1898:89).

**Attitudes and Responses of the Kimsquit to Colonialism**

Although acculturative pressures became increasingly intense in the late nineteenth and early twentieth centuries, the Kimsquit’s response can be considered to be one of continuity as much as change and they used every opportunity to manoeuvre contact, if not to their advantage, at least so that they could maintain their autonomy. This can even be said of such seemingly demoralizing incidents as the destruction of their village by the Royal Navy and the continued decimation of their population by disease. One can not help wondering if the Kimsquit did not deliberately take advantage of the sympathy offered by Powell over the shelling to acquire a variety of goods "to rebuild their village", especially when Indian agents continued to report well into the twentieth century that the Kimsquit lived mostly in Native made plank houses and seemed to prefer it that way. And while their population declined rapidly due to disease, the Kimsquit did not resign themselves to extinction, but rather "repeatedly and unanimously requested of the Indian agent to procure for them any orphaned and deserted children that can be found anywhere for adoption into their tribe, white children preferred, but all will be acceptable with
the exception of negroes or Chinese children" (Canada 1901:271).

Such statements indicate that the Kimsquit continued to be selective in what they accepted from White culture. Any opportunity to acquire wealth from encounters with Euro-Canadians was welcome, whether it be by guiding railway surveyors or fisheries officers, selling potatoes, or working for canneries. They, however, quietly but insistently resisted what they did not want, especially Christianity. The Indian agents variously characterised the Kimsquit as "kindly disposed", "friendly", "civil", "quiet", and "harmless" (Canada 1900:267; 1903:262; 1904:298), but "lacking in enterprise" (Canada 1903:262), meaning that they rejected Christianity. Todd's 1899 report is most revealing of the Kimsquit's selectivity. "The two old chiefs, King George and Captain John, manage their peoples affairs in a quiet way and sometimes express a desire for a schoolmaster to teach their few children, but always with the proviso that he be not a priest" (Canada 1900:263).

Despite the outward appearance of having adopted Euro-Canadian material culture and employment, the Kimsquit attitude towards the accumulation of wealth continued. Foughner reported that the Indians of his agency "live extravagantly when they have money" (Canada 1917:85). The late Margaret Siwallace, a trusted ethnographic informant who spent her childhood in Kimsquit, related a story about how Jim Pollard, a Kimsquit chief, received a contract to build a wagon road between the
village and Kimsquit cannery. Instead of paying cash to the villagers he employed to build the road, he used the money he received to stage a potlatch to pay them off, thus converting Euro-Canadian wealth into status (Hobler 1992, Personal Communication).

Pierce (1933:45) indicated that the conversion of the Bella Coola was a slow process, with the older people rejecting it and younger people being more receptive. The gradual conversion of the Kimsquit must have been accompanied by similar factionalism and did not occur until they had been very much weakened by contact with whites and their population had been reduced to a mere handful. This process was accompanied by an increase in drinking and violence which erupted in the shooting deaths of four Kimsquit on September 12, 1913 (Vancouver Daily World, September 13, 1913) and two others on May 18 of 1917 (Bella Coola Courier, May 26, 1917). These deaths were a great loss to the dwindling numbers of Kimsquit. Charles Wilson, one of the 1913 victims, was reportedly "better versed in Indian lore and customs of the old days than any of the band" although he was only 35 (Bella Coola Courier, September 20 1913). By this time Christianity may have seemed a reasonable alternative to the chaos of the changing world. Alternatively, the Kimsquit may have syncretized Native and Christian religion to strengthen and redefine their world view and counter the acculturative stresses. McIlwraith found that many "Christian" Bella Coola merely considered the Christian God as another powerful being to
enrich the Native pantheon (1948 II:521).

Demography, Disease and Abandonment

Tolmie (1963) made the earliest recorded population estimates for the Bella Coola and Kimsquit in 1835. His census was essentially a house count based on information he had gathered from Native informants, (mostly Bella Bella as indicated by the "toch" suffix), and lists village, number of houses and chief's name. Tolmie's entry for Kimsquit (1963:320) was very cryptic.

Kyumuchquetoch - Alqualakash 11 - the River full of rapids & falls near the Deans Canal - the sea navigable above.
Titalzquetoch ------------------------------- 10
communicate with Kitamaats inland
Thalioetoch ------------------------------- 4

This description suggests Kyumuchquetoch was below the canyon on the Dean River. Alqualakash must be the chief and eleven the number of houses. The description of Titalzquetoch is suggestive of Satsk, and Thalioetoch is obviously Talio. Immediately above his entry on the Bella Coola Valley villages, Tolmie entered "supposed number of souls in each house - 25" (1963:319). Whether he used this as a base count for all villages is not clear. If he did, it would produce a population of 275 for Kimsquit and 250 for Satsk.

The figures that Tolmie reported in 1835 can not be assumed to represent precontact populations. There had already been several epidemics by then. Boyd (1990:137) estimated that a smallpox epidemic spread throughout the entire Northwest Coast
in the 1770's, but found no evidence for precontact epidemics. Compensating for the effects of early disease mortality, Duff (1964:39) estimated the aboriginal population of British Columbia to be at least 80,000. Boyd (1990:136) estimated the aboriginal Bella Coola population at 2910.

Another epidemic of smallpox came down the north coast in 1836, just after Tolmie's census, and ran its course until 1838. Boyd (1990:141) found evidence that this reached the Central Coast and reduced the Bella Coola population by as much as 46%, from 1940-1056. Charles Ross (1842) of the Hudson's Bay Company reported Bella Coola census data after this epidemic, but it appears limited to the Bella Coola Valley and is likely low, being 650.

Paul Kane (1859) reported census data from the Northwest Coast for the year 1846 which includes an entry for Kui-much-qui-toch, whose location is given as "Deane's Canal". No village fitting the description of Satsk is reported. This data was likely gathered by traders at Fort McLoughlin. Kane's table also enumerates male and female slaves, guns and canoes, but these are not recorded for Kimsquit. It is more likely that this information was not available to the census takers than that the Kimsquit lacked these.

Compton (1869:17) presented a population estimate for the "Bella Coola, Kemsquit, Tallulet & Tsatsquit" combined of 1500. While this estimate is not very informative about the Kimsquit, it was apparently made at a critical time - between 1859 and the
smallpox epidemic of 1862-63 - as after it the Satskwmx (Tsatsquit) were no longer distinct, having amalgamated with the Kimsquit on the Dean River. This was the biggest single epidemic in the history of the Northwest Coast, killing up to one-third of the population of British Columbia in less than two years (Duff 1964:43). Boyd (1990:142) estimated that the entire Bella Coola population was reduced by as much as 58%, from 950-402. Palmer's survey party in the Bella Coola Valley reported 400 Bella Coola deaths in July of 1862 (Boyd 1990:142).

The next estimate of the Kimsquit population was reported by O'Reilly (Canada 1883:116) and is based on a census by Mr. Clayton of the Hudson's Bay Company. Unfortunately, O'Reilly did not specify when the census was taken. The first consistently reported figures for the Kimsquit population appeared after their inclusion in an Indian agency. Throughout the 1880's all Bella Coola speakers were enumerated along with the Heiltsuk (Bella Bella) by the Department of Indian Affairs' censuses for a combined population of 2500. In 1889 when the Northwest Coast agency was established, the Bella Coola and Bella Bella were enumerated separately, but oddly Heiltsuk continued to be entered among bands with no agent (Duff 1964:45). Even once a band was included in an agency the census and other information could appear contradictory and inaccurate because they may not have been visited every year, especially in the case of large agencies like the Northwest Coast agency (Canada 1898:89). The Indian Affairs censuses are nonetheless
a valuable source of demographic information, and for a period in the early 1900's included detailed age and sex breakdowns (Table 1).

The 1889 census of Indian Affairs indicates a drastic drop in population from the figure reported by O'Reilly for 1882. This may mean that O'Reilly's figure was gathered well before 1882 or is simply inaccurate. Undoubtedly there was a real drop in population. The late nineteenth century continued to see occasional epidemics of measles, flu, tuberculosis and venereal disease (Duff 1964:45). Infant mortality was a continual problem. Todd reported that some of the Bella Coola bands rarely raised their children to maturity "owing to scrofula amongst the whole adult population" (Canada 1895:163). Scrofula was probably a cutaneous manifestation of tuberculosis (Boyd 1990:137). Indian agents tried in earnest to improve hygiene and administer vaccinations to control the spread of disease, but both met with resistance from more conservative members of the Native population (Canada 1898:88). The young especially continued to be vulnerable to epidemics such as the whooping cough which hit the Bella Coola area in 1906 (Canada 1907:249).

The censuses of 1904-1909 are odd in that no change is reported in any categories other than the 21-65 age group, yet one would expect those in the childhood categories to mature and enter other categories (Table 1). The 1910 and 1912 censuses indicate population declines but the births and deaths do not match the change in population. Migration in search of work may
account for the rest of the population loss. Not until 1914 do the censuses begin to list information on migrations, when six people migrated in, perhaps returning after having left to work elsewhere. The four deaths reported for that year could be accounted for by the shootings in September, 1913.

The 1924 census was the last census in which Kimsquit stood alone with a total population of only twenty-four, ten of whom were males between the age of 21-65 and five of whom were females in that age group, hardly a viable population (Table 1). While McIlwraith was doing ethnographic field work in Bella Coola (1922-1923), the Kimsquit requested unsuccessfully of the Bella Coola that they be allowed to live among them (McIlwraith 1948 I:16). Permission must have been granted soon afterwards as by the next Department of Indian Affairs census in 1929 the Bella Coola populations had amalgamated. The general trend on the Central Coast after this was for the Native populations to check their decline and start a gradual increase (Duff 1964:45).

The most obvious effect of population loss on the Kimsquit was the amalgamation of their remaining populations, first on the lower Dean river after the 1862-63 smallpox epidemic and then in Bella Coola in the late 1920's. Both events would have necessitated a number of cultural adjustments. The amalgamation of the Satskwmx and Sutslimx seems to have been somewhat stressful, with the Satskwmx perhaps exerting dominance over their hosts. McIlwraith (1948 I:16) was told one of the Satskwmx refugees apparently said at the time of the move that
"We will take their places and kill even their dogs". The amalgamation also may have resulted in some changes in access to resource areas. A decrease in population would reduce pressure on family owned resource areas, and perhaps allow an increase in catchment area size. In the case of the Kimsquit, the Kimsquit River and the village of Satsk continued to be used as a seasonal fishing camp according to Smith (1877a:113) in 1874, and the McKenna-McBride commission in 1913 (Canada 1916 I:228,232). Hereditary rights to this area continued to be exercised into the 1950's by people who traced their ancestry there and operated traplines in the area (Bouchard et.al 1988:101).

It has been proposed for the Northwest Coast in general that massive depopulation increased competitive potlatching over access to such resource areas and the rights to positions of status (Boyd 1990:147). Disputes over hereditary rights continued with population loss in Kimsquit into the twentieth century. For instance, there seems to have been a rivalry over the office of chief between Joe Saunders, who stood trial for the shootings of 1913, and Jim Pollard, who was a principal witness and chief at the time (Bella Coola Courier, November 15, 1913). This rivalry is said to have centred around the disputed inheritance of the name Smaoan, originally the name of an ancestral figure from Satsk (Hobler, Personal Communication 1992). This rivalry may have contributed to, or been a symptom of, the "serious trouble [which had] been brewing between two
factions of the Kimsquit Indians" (Vancouver Daily World, September 13 1913) which newspaper accounts hint may have been behind the murders. McIlwraith indicated that Pollard gained sole rights to this name, validated it with a potlatch and could therefore recount the associated origin myth to him (1948 I:340).

Continued severe population loss, including that apparently from out migration, eventually disrupted traditional economic and social organization to such an extent that the Kimsquit could not maintain cultural coherency as an isolate. The gradual disintegration of the fish canning industry in Kimsquit due to overfishing also contributed to the abandonment of the area. In 1925 Manitoo cannery was sold to the Canadian Fishing Company and the Kimsquit cannery sold to Gosse Millerd Ltd, but both continued in intermittent operation (Pacific Fisherman Yearbook 1926:54). Both companies sold out to British Columbia Packers in 1928 (Pacific Fisherman Yearbook 1929:55-56), who in turn cut back the number of canneries in operation by 40% by 1931 (Pacific Fisherman Yearbook 1932:56). The Kimsquit, therefore, with their numbers greatly reduced and the source of income which they had become increasingly dependent on removed, exercised their best option once again and fused with the Bella Coola community insuring their physical and cultural survival.
CHAPTER 4
ARCHAEOLOGY IN KIMSQUIT

Physical Setting

Kimsquit occupies a relatively remote geographical position on the Northwest Coast, being more than 100 km from the outer coast. The archaeological sites considered in this study are all on the lower reaches of the Dean River within 2 km of its mouth (Fig. 2). The dominant geographical feature effecting settlement in the area is the river itself. The Dean is a major river draining a large part of the interior plateau and Coast Ranges. Two features of the Dean River are dominant in the vicinity of Kimsquit: a large canyon and a broad forested delta.

The Dean canyon is 3 km from the mouth of the river and is cut into a large mafic dike which extends nearly half way across the valley (Retherford 1972:109). Sometime in the Holocene a huge rock slide from the north valley wall blocked off the river’s natural outlet around the dike causing the river to back up and form a lake (Retherford 1972:109). Water eventually found its way over the dike at its lowest point and began down cutting to form the canyon. Retherford estimated that this event occurred at least "a couple of thousand" years ago (1972:109).

Prior to the formation of the canyon, the river may have had its outlet well to the north, perhaps directly into Kimsquit Bay. Presently the river snakes its way to Dean channel below the canyon and ends in an actively forming delta. The Dean
Figure 2. Map of Kimsquit showing sites in this study.
delta has at least three higher delta levels within close proximity to the present delta and no more than 10 m or so above sea level (Retherford 1972:107). Archaeological sites occur on at least the two lower delta levels (Retherford 1972:108).

The lower Dean is an active stream and is heavily dissected by old river channels, especially on its delta. Baer (1973:12) suggested that degrading and meander in the lower Dean may be a result of post glacial isostatic rebound. Contemporary hydrographic observations concur, suggesting that uplift has been occurring on the inner part of the Central Coast and subsidence on the outer part. The effect these features have had on human settlement, or at least their visibility archaeologically, briefly stated is that no sites are known above the canyon and those below the canyon seem to have been subject to occasional flooding and erosion by shifting river channel courses.

Archaeological Sites

In 1968 and 1969 Hobler visited Kimsquit as part of his archaeological survey of the Central Coast (Hobler 1970). Thirteen sites were recorded in the vicinity of Kimsquit, four of which were occupation sites near the mouth of the Dean River below the canyon (Fig. 2). These four sites (FeSr 1, FeSr 7, FeSr 4 and FeSr 5) appeared to represent a succession of occupations spanning the time just before contact into the twentieth century and were made the subject of substantial
excavations in 1971 and 1972 (Hobler 1982:8). Material from these excavations provides the archaeological data for this thesis.

Identification of Native Village Names

McIlwraith’s informants told him of four villages in the lower reaches of the Dean.

*(36) Anutlitx: the present site of the Kimsquit Indian village near the mouth of the Dean River. The meaning of this name could not be learnt.

*(37) Nutal, 'Canyon': on the shore of Dean River at the bottom of the canyon. This large town was only recently deserted.

(38) Axeti, 'Occupied Mound': on the south side of Dean River about one mile from the sea. This small town was deserted many years ago. The name is derived from the small mound on which it was built.

*(39) Nutsqwalt, 'Many Spawning Sockeye Salmon': on south side of Dean River, about one and a quarter miles from the sea. A large town recently deserted (McIlwraith 1948 I:15).

The location and description of Axeti closely matches FeSr 5 and Nutsqwalt may be FeSr 4. Hobler (1971; 1986) identifies FeSr 1 as Nutal, but FeSr 1 is clearly the village which was occupied during McIlwraith’s tenure in Bella Coola, and on this basis should be Anutlitx. Although McIlwraith’s description of Nutal is vague, it may be FeSr 7 since it is closer to the canyon than FeSr 1. Boas (1898:49) listed only two Kimsquit villages; Satsk and Sotsl, whose location was “At the mouth of Salmon [Dean] River, Dean Inlet”. The origin myth Boas (1898:65) recorded for Sotsl is a more detailed version of one recorded by McIlwraith (1948 I:326) for Nutal and they may refer to the same place.
Anutiltx (FeSr 1)

Anutiltx is a major village site located on the delta on the north side of the Dean, approximately 0.5 km from its mouth. The site is situated at the junction of a slough with the main channel, the entrance to which is protected by a sandbar, and is bounded on its eastern end by a dry slough (Fig. 3). During the time of Hobler’s investigations one cedar plank house was still standing (Fig. 4). This house was constructed of hand adzed lumber with no nails, windows, or stove and had a raised earthen hearth platform in the centre (Hobler 1970:79). There also were the remnants of a row of several collapsed plank houses and a portal pole. Several milled lumber houses were scattered around in a more irregular pattern, along with a barn and several roofed and unroofed storage pits.

A small amount of surface collecting was conducted in 1968 in the vicinity of the houses and from a storage pit designated pit cc (Fig. 3). The site was systematically mapped in 1971, recording 108 architectural features (Hobler 1971:89). Two test trenches were placed in front of the plank houses to determine whether earlier historic or prehistoric components were present (Hobler 1971:89). Test trench 1 was placed in a shallow mound in front of the standing plank house and was 1 x 4 m in dimensions. The cultural deposits were thin and were excavated in 15 cm levels. Dark midden soil with quantities of shell was encountered to a depth of approximately 30 cm below surface in metres 1-3 at the deep end of the mound, and to approximately 15
Figure 3. Map of Anutiltx (FeSr 1).
Figure 4. Interior view of aboriginal style plank house at Anutiltx (FeSr 1).
cm below surface in metre 4 at the shallow end of the mound (Fig. 5). At this depth a thin layer of sterile light brown sand and gravel river deposits was encountered forming a uniform surface across the length of the trench upon which the mound deposits had formed. Below this was a continuous layer of sterile yellow sand. The 30-45 cm level was excavated in this sterile sand in meters 1-3. Metres 1 and 2 were then taken down to depths of 75 and 60 cm respectively at which point large cobbles were encountered (Fig. 5).

Test trench 2 was placed in a similar mound in front of a fallen plank house to the east of test trench 1 and was 1 x 5 m in size. Here the midden soil became mottled with yellowish brown sand and gravel at a depth of approximately 15 cm below surface, but continued to yield artifacts and fauna into the 15-30 cm level. Sterile sand with gravel had been exposed throughout the unit at a depth of 30 cm, except at the highest end of the mound in metre 1 where the sand and gravel had formed a lens at 15 cm which was followed by more midden soil in the 15-30 cm level and continued to yield artifacts in the 30-45 cm level (Figs. 5 and 6).

A large cemetery was associated with the village and given the separate designation of FeSr 3. This site was mapped but not excavated and is not a subject of this thesis. Interestingly, the cemetery shows a transition in burial patterns from circular depressions, representing box burials, to elongate depressions, representing extended burials, as well as
Figure 5. Profiles of trenches 1 and 2 at Anutiltx (FeSr 1).
Figure 6. View of trench 2 excavation and stratigraphy, Anülitx (FeSr 1).
ten small grave houses of milled lumber (Hobler 1971:91).

The artifacts recovered at FeSr 1 were predominantly of Euro-American manufacture and no early historic or prehistoric components were found (Table 2, Fig. 7).

Table 2
Proportions of Major Artifact Classes In Study

<table>
<thead>
<tr>
<th>Artifact Class</th>
<th>Anutilix</th>
<th>Nutil</th>
<th>Nutsqwalt</th>
<th>Axeti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro-American Manufacture</td>
<td>392</td>
<td>95.4</td>
<td>14</td>
<td>8.6</td>
</tr>
<tr>
<td>Euro-American Material/Native Manufacture</td>
<td>15</td>
<td>3.6</td>
<td>63</td>
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<tr>
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<td>4</td>
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<td>86</td>
<td>52.8</td>
</tr>
<tr>
<td>Total</td>
<td>411</td>
<td>100</td>
<td>163</td>
<td>100.1</td>
</tr>
</tbody>
</table>
Figure 7. Proportions of major artifact classes at sites in study.
Nutai (FeSr 7)

This is a small site located about one km upstream from FeSr 1 on the west side of the river. The site is situated between a dry slough immediately to the south east, the Dean River to the east and a small clearing to the north and west (Fig. 8). Exact boundaries of the site were difficult to determine because it was covered in a dense growth of briar. This brush and the cleared area stand in marked contrast to the surrounding forest cover. The surface of the site is undulating with several shallow mounds, one of which had one edge shored up with "a crude stone wall" (Hobler 1971:95) (Fig. 9). Some of these mounds may have been hearth mounds analogous to the one beneath the plank house at FeSr 1 and ones tested archaeologically in the Bella Coola Valley (Hobler and Bedard 1990). Alternatively, they may represent midden accumulations in front of house locations.

Quantities of fire cracked rock, bone, shell, lithic debris and dark midden soil were visible across the surface of the site. Two intersecting trenches were excavated perpendicular to one another to test the midden deposits and one of the mounds. Trench 1 was 11 contiguous 2 metre squares and ran from the edge of the slough roughly north-west through the midden. Excavations were conducted in 15 cm levels to an average depth of 75 cm. Dark midden soil with quantities of mussel and clam shell occurred variously to a depth of 30-45 cm below surface (Figs. 10 and 11). This matrix included a large amount of fire
Figure 8. Map of Nutal (FeSr 7).
Figure 9. View of surface of Nutil (FeSr 7) and mound features.
cracked rock, which in some places formed dense concentrations that were difficult to excavate. A thin dark layer of soil occurred beneath this throughout most of the trench, although it was separated in places from the midden soils by lenses of clay and river sand. A layer of unconsolidated coarse sand lay beneath this across the trench beginning at a depth of 60-65 cm and continuing to a depth of 70-75 cm when sterile coarse sand and gravel deposits were encountered. Dark midden soils continued unbroken to the bottom of the excavated deposits in three places, perhaps representing the placement of posts into earlier deposits (Fig. 10). However, no distinct hearth areas or living floors were found.

Trench 2 ran from unit 8 in trench 1 roughly north-east to intersect a mound longitudinally (Fig. 8). This trench was 1 x 5 m in size and reached a depth of over 1 m at the apex of the mound. The matrix here appeared to be mostly midden deposits overlying sterile river deposits as in trench 1 (Figs. 12 and 13). A large lens of charcoal occurred beneath the apex of the mound at a depth of 35-45 cm, which overlay a lens of clay (Fig. 12). These two lenses are on top of the midden surface upon which the mound was formed, whether it was built intentionally or not. Below the clay the deposits are essentially the same as those encountered in trench 1 with a large amount of fire cracked rock.
Figure 10. Profile of trench 1 at Notal (FeSr 7).
Figure 11. View of trench 1 excavation and stratigraphy at Nutal (FeSr 7).
Figure 12. Profile of trench 2 at Nutal (FeSr 7).
Figure 13. View of trench 2 excavation and stratigraphy in mound at Nutal (FeSr 7).
The material recovered from FeSr 7 included a large number of trade goods and Euro-American raw materials (Table 2), but these were of limited variety. A large part of the assemblage was also of local material and Native workmanship, suggesting that the site spans the late prehistoric and early historic periods.

**Axeti (FeSr 5)**

This is a small site situated atop an isolated steep sided rocky outcrop approximately 1.5 km from the sea and about 70 m up a slough from the east bank of the Dean River. The site is almost directly across from Nutal. The outcrop itself is approximately 22 m high rising to this height over a 3 m horizontal distance abruptly from its base at the slough (Figs. 14 and 15). It is surrounded on three sides by this steep slope and on its fourth side (south-east) by a mountain slope. Topographically it is similar to other axeti, or "occupied mound" sites on the Central Coast such as Mackenzie's Rock (FcSu 1) in Dean Channel and FaSu 1 in Kwatna Inlet. Such locations were apparently chosen for defense (Hobler 1986:20).

The top of the outcrop is approximately 15 x 14 m and is undulating with few flat spots and several large rocks. In spite of this irregular surface, ridging partially visible on the ground indicates a house occupied practically the entire top of the mound in the site's later component. Cultural material visible on the surface included a small amount of shell midden
Figure 14. Map of Axeti (FeSr 5).
Figure 15. View of surface of Axeti (FeSr 5).
on the south side of the mound and a number of pebble tools at its base. Vegetation on the site included thimbleberry and rose bush with hemlock being the dominant tree species, followed by maple, birch, douglas fir and cedar in lower areas of the mound.

In 1972 three 2 x 2 m squares were excavated to a depth of approximately one metre in 10 cm levels. The units were placed on the margins of the top of the mound and the strata thus display varying amounts of slumpage and mixing of components, most notably in unit 1. The general stratigraphy in these excavations consisted of a humus layer about 4-8 cm thick, followed by a layer of brown-black clay loam midden soil mottled in places with orange sandy clay to a depth of about 60 cm below surface. Below the midden soils a golden yellow sand was predominant, becoming very compact with gravel inclusions at about 80-90 cm below surface (Fig. 16). These deposits were sterile in all of the units below a depth of 90 cm, except for a small about of calcined bone in the 90-100 cm level in unit 2. Shell midden deposits were encountered in the south west portion of unit 1 from 40-80 cm below surface.

Material from this site was overwhelmingly of local material and Native manufacture (Table 2, Fig. 7). Only two items of European manufacture were recovered (a gunflint and a glass bead) along with a very few items of Euro-American material and Native workmanship in the upper levels of the site.
Figure 16. View of excavation and stratigraphy, Unit 2, Axeti.
Nutsqwalt (FeSr 4)

Nutsqwalt is a large village site about 0.5 km upstream from Axeti. The site is located up the same slough as Axeti, although it is dry by the time it reaches the site, and is almost half a km in from the river. At the time the site was occupied water probably flowed along the edge of the village (Hobler 1971:92). The site is situated on three old river terrace levels with the houses clustering along their edges but having no common orientation (Fig. 17). Heavy second growth forest covers most of the site with mature forest on the broad flats between the site and the present river channel (Hobler 1971:92).

The site consists of twenty-three rectangular housepit depressions (Fig. 18) and twenty-two smaller non housepit depressions, perhaps cache pits (Fig. 19). The houses typically have burms of raised earth around their edges, probably the result of backdirt from their construction. Sometimes these occur along the sides but not the ends of housepits (Hobler 1971:93). Rocks and boulders appear to have been carried out and thrown further by the Native builders, producing a line of boulders parallel to the dirt ridge in at least one case (Hobler 1971:93; Fig. 18). At least three of the houses have been partially eroded by river action.

The village plan and architectural style are not typical of the Central Coast, but are not unheard of either. At Kwatna a rectangular depression was recorded at FaSu 1 and one was
Figure 17. Map of Nutsqwalt (FeSr 4).
Figure 18. View of non-house pit 4 at Nutsqwalt (FeSr 4).
Figure 19. Surface of house pit 4, Nutsqwalts (FeSr 4) prior to excavation.
excavated at FaSu 10 (Carlson 1971). These depressions are smaller in plan than those at Kimsquit but significantly deeper. At the mouth of Manitoo Creek Hobler mapped a village (FeSr 6, Nuxwilst) similar to FeSr 4 (Hobler 1971). Harlin Smith (1925) also reported a housepit in the Bella Coola Valley, but details of it are sketchy. References to semi-subterranean houses also exist in the oral traditions of the Bella Coola. Boas (1898:64,79,87) recorded mythological references to underground houses in the Bella Coola Valley and interpreted them to have been like the pithouses of the Chilcotin (1898:123). Hobler’s recent excavations in the Bella Coola Valley also indicate that these may be true pithouses, smaller but otherwise not unlike those of the interior. Origin myths for the Kimsquit villages related to McIlwraith by Jim Pollard tell of houses “of the semi-subterranean type” being built by the ancestor figure Smaoan at Satsk (1948 I:334) and by the deity Alquntam for the first people of Nuxwilst (1948 I:341). These houses are probably more similar to those occurring archaeologically at Nutsqwalt and Nuxwilst. McIlwraith’s descriptions suggest that semi-subterranean houses were only one of several architectural styles used, but do not indicate why this particular style would be chosen. However, Kennedy and Bouchard (1990:327) report that rectangular plank houses “were sometimes constructed in excavated pits” by the Bella Colla for winter use.

Excavations were conducted at Nutsqwalt in housepits 2, 4 and 10 in 1971 and in housepits 4, 9 and 16 in 1972. Several
non housepit depressions were tested as well and revealed orange brown sand and fire cracked rock, but produced only one artifact. Excavations in the housepits were conducted in shallow 1 m wide cross trenches extending over the sides of the pits with 50 cm baulks between them (Fig. 20). The general stratigraphy in the housepits consisted of 10 cm of leaf mat and humus, followed by 1-15 cm of brown sand mixed with ash and charcoal. Yellow river sand deposits occur beneath that with many rocks becoming large boulders 50-100 cm below the surface (Fig. 21). Finer laminae of silty and ashy deposits often occurred between these layers but were very difficult to trace horizontally.

Cultural deposits begin almost immediately below the leaf mat in what may be roof fall. Floors were hard to define in the sandy matrix, but were considered to be within the ca. 15 cm thick brown sand layer which was darkened by charcoal and contained quantities of fire cracked rock. The yellow river sand is the layer into which the pits were dug, their depths being limited by the occurrence of the rocks. Original pit side walls were sometimes visible in this layer as well as some obvious subfloor features. Housepit 4 had a large basin shaped hearth and round post hole excavated into the sterile subfloor, and a deep basin shaped pit full of charcoal and two cache pits just outside of the housepit (Fig. 22). Housepits 2 and 9 were double pits, having a ridge of earth running down their centres dividing the pit into two. Excavations in housepit 9 revealed
Figure 20. View of excavation and stratigraphy in house pit 4, trench 1 E-S, at Nutsqwalt (FeSr 4).
Figure 22. Plan view of house pit 4 excavation at Nutsqwalt.
more fire cracked rock and burned hearth areas in the rear pit, suggesting that the two halves of the housepit may have been used for different purposes.

Excavations at Nutsqwalvt recovered remarkably few artifacts (a total of 144) relative to the size of the excavation and most of those found occurred along the sloping sides of the housepit or immediately adjacent to housepit walls. Hardly any artifacts were found outside of the houses, suggesting that no significant refuse deposits had accumulated at the site and occupation was therefore brief. Those artifacts that were recovered were predominantly of local material and Native manufacture, with only two Native made items of European material (Table 2, Fig. 7).

Site Chronologies

Hobler's original impression was that Axeti, Nutsqwalvt, Nutal and Anutlitx were occupied sequentially in that order based primarily on artifact types, the proportion of European to Native manufactured items, and the geological context of the sites relative to the river channel changes (Hobler 1982a:8). Hobler later included the Kimsquit sites along with four other historic Native villages to produce a relative seriation of site occupations using Spearman's rank correlation of a simplified list of artifact types (Hobler 1986). The results of this exercise supported the suggested sequence for Kimsquit, with Anutlitx falling into a late cluster of sites and Nutsqwalvt,
Axeti and Nutil falling into an early cluster of sites; Nutil appearing slightly later than the other two. This still, however, does not represent a very fine grained chronology. Because change in Native culture was very rapid in the historic period it is important that sites be dated as precisely as possible if we are to adequately study its causes and effects. Several means are therefore discussed here that may support and narrow down Hobler's impression of the sequence of occupation.

Traditional methods of dating prehistoric sites on the Northwest Coast, like radiocarbon dating, are not adequate in this context. Three radiocarbon samples from Nutsqwalt and one from Nutil were dated, but all gave dates of A.D. 1950, meaning they fall in the last 200 years or so, but providing no further information (Carlson and Hobler 1971:3). Knut Fladmark (1972) pointed out in his study of the Richardson Ranch site that traditional methods of dating historic period sites, such as tracing the dates of manufacture on Euro-American goods, are somewhat dubious in the context of the Northwest Coast because there may have been a lag between the time of manufacture of items and their introduction to Native people at trading posts. Further, while maritime fur traders returned to Europe regularly and may have had a more up-to-date cargo, they also often carried smiths aboard who may have manufactured hand wrought iron goods well after machine manufacturing was the norm in Europe (Fladmark 1972:72). Fladmark overcame these problems by using the manufacture dates
of historic material to establish the general temporal parameters of the occupation, and supplemented this with historical references to the site.

In the case of Kimsquit an effort was made to trace the dates of manufacture of historic items and the chronological extent of their availability and popularity on the Northwest Coast. This data is presented in Table 3 and graphically in Figure 23. The criteria and rationale used in dating individual artifact types is discussed in the artifact descriptions (Appendix 1). It should be noted that Stanley South’s (1977) sophisticated mean ceramic dating formula was not applicable to this material because the sample size was small and not narrowly defined temporally.

Axeti produced only one item of Euro-American manufacture (a gunflint) in good context from its upper levels and this could date anywhere between 1800 and 1875, and possibly as early as 1750 (Hamilton 1982:291). The upper levels of this site appear to be protohistoric or belong to the early part of the maritime fur trade on the Central Coast, and are certainly not from a time when Euro-American goods were available in large quantities. The lower levels of the site probably date to the Early Period of Central Coast prehistory (10,000-5,500 B.P.) which is typified by pebble choppers, microblade technology and large leaf-shaped bifaces (Carlson 1983a). Because of the steeply sloping banks, the early component is stratigraphically mixed with late prehistoric and protohistoric material.
Table 3
Inventory of Datable Items

<table>
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<tr>
<th>Site</th>
<th>Frequency</th>
<th>Artifact Type</th>
<th>Period of Manufacture</th>
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<tr>
<td>Anultitx</td>
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</tr>
<tr>
<td></td>
<td>188</td>
<td>Cut Nails</td>
<td>1830-1900</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Wrought Nails</td>
<td>pre 1860</td>
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<tr>
<td></td>
<td>21</td>
<td>Wire Nails</td>
<td>1900-present</td>
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<tr>
<td></td>
<td>1</td>
<td>Kerosene Lamp Burner</td>
<td>1873-early 1900s</td>
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<td></td>
<td>1</td>
<td>Lamp Chimney</td>
<td>1875-1915</td>
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<tr>
<td></td>
<td>1</td>
<td>Single Box Woodstove</td>
<td>1830's-1900's</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>.22 Long Cartridge</td>
<td>1871-present</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>.45-70 Cartridge</td>
<td>1872-1930's</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>.44-40 Cartridge</td>
<td>1873-1937</td>
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<td></td>
<td>12</td>
<td>Prosser Buttons</td>
<td>1841-present</td>
</tr>
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<td></td>
<td>1</td>
<td>2 pc Steel Button</td>
<td>post 1870</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Safety Pin</td>
<td>post 1857</td>
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<td>9</td>
<td>Facetted Blue Beads</td>
<td>1830's-1880</td>
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<td>1</td>
<td>Round IVa9 Bead</td>
<td>19th century</td>
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<td>Electric Oil</td>
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<td>22</td>
<td>Maltine WFC co</td>
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<td>Plain Ironstone</td>
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<td>Transfer Print Ironstone</td>
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<td>Sponge Decorated Wares</td>
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<td>Copper Disc Buttons</td>
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<td>Brass Buttplate Finial</td>
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<td>1</td>
<td>Brass Key</td>
<td>post 1840</td>
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<td>Brass Thimbles</td>
<td>18th &amp; 19th c</td>
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<td></td>
<td>1</td>
<td>Iron Cauldron Foot</td>
<td>post 1775</td>
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<td></td>
<td>2</td>
<td>English Gunflints</td>
<td>(1750)1800-1875</td>
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<td>1</td>
<td>English Gunflint</td>
<td>1750-1875</td>
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Artifact Chronology

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Period of Manufacture/Popularity</th>
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</thead>
<tbody>
<tr>
<td>Cut Nails</td>
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</tr>
<tr>
<td>Wire Nails</td>
<td></td>
</tr>
<tr>
<td>Wrought Nails</td>
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<tr>
<td>Lamp Burner</td>
<td></td>
</tr>
<tr>
<td>Lamp Chimney</td>
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<tr>
<td>Woodstove</td>
<td></td>
</tr>
<tr>
<td>.22 Cartridge</td>
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</tr>
<tr>
<td>.45-70 Cartridge</td>
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<tr>
<td>.44-40 Cartridge</td>
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<tr>
<td>Prosser Buttons</td>
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<td>2 pc Steel Button</td>
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<td>Safety Pin</td>
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<tr>
<td>Faceted Blue Beads</td>
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<td>Round Bead</td>
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<td>Fruit Jar</td>
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<td>Bottle Glass</td>
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<td>Ceramics</td>
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</table>

Figure 23. Range in dates of manufacture of Euro-American items.
There may actually have been a hiatus of several thousand years between these components.

No items of Euro-American manufacture were recovered at Nutsqwalt at all and the two Native made metal artifacts are not datable. This appears to be a single component site roughly contemporary with the upper levels at Axeti.

Natal produced a small number of items of Euro-American manufacture, but none with very tight temporal parameters. Most of these probably date from the early to mid nineteenth century, but it is impossible to establish firm beginning and cut off dates for the site’s occupation. The bottom levels of the site are largely devoid of Euro-American artifacts or metals. The site’s occupation may therefore run from the mid eighteenth century (before Euro-American materials were available) to the mid to late nineteenth century.

The Anutiltx assemblage has the greatest number of temporally diagnostic items, but most of these also have loose parameters. There are practically no items in the assemblage, however, that could predate the mid 1800’s, and few that could post date the 1920’s. A slight overlap is possible with the Natal occupation, but evidence presented below suggests that the two sites were not occupied together, at least not for any length of time. I would suggest that a shift from Natal to Anutiltx occurred sometime in the 1840’s or 1850’s, with the population of Satsk joining them there in the 1860’s.

Ethnohistorical references to Dean River sites other than
Anutlitx seem to be entirely lacking. Vancouver's description of the Native settlement he encountered at Kimsquit and its location is vague, but it is clearly in the vicinity of the Kimsquit River, rather than the Dean, as it was 3 leagues (9-10 miles) north north-west of Raphoe Point and at the termination of the channel (Vancouver 1798 II:267). Vancouver did not mention the Dean River or any settlement on it, although his charts indicate the mouth of the Dean. If there had been a village on the delta (ie. Anutlitx) he would surely have mentioned it. The Sutslmx settlements must have been up river at that time.

Compton provided the next first hand description of the area. His visit must date to between 1859, when he joined the Labouchere as purser, and 1863 when Satsk was abandoned, as a permanent village, as he described the still thriving village of Satsk and a single village on the Dean River referred to as "the Kemsquit village" which was 1 1/2 or 2 miles down stream from the canyon (1869:12). If his estimate of the distance to the canyon is correct, the village he described is most likely Anutlitx, Nutal being closer to the canyon (within a mile of it). This accords well with the dates of manufacture information presented above. The Sutslmx may have moved down stream just prior to Compton's visit, perhaps in order to be more accessible to steamship traffic such as the Labouchere or in response to geomorphological factors discussed below.

All of the sources from the 1870's place the Kimsquit at
the mouth of the Dean. Smith (1877a:113) and Horetzky (1877:142) placed the village there and mentioned no other settlements on the Dean River below Salmon House Falls. Anutlitx would also seem to be the village that was shelled by the Rocket, as Harris (1877a) reported that he was able to anchor behind the village, and there are a number of shallow depressions in the vicinity of the remnants of the plank houses, perhaps a result of the shelling.

Archival photos taken in the late nineteenth and early twentieth centuries also closely match FeSr 1. Figure 24 presents the "Kimsquit" village as it appeared in the 1880's in a photograph taken by Edward Dossetter. The village is comprised mainly of a row of aboriginal style plank houses paralleling the river or slough as at FeSr 1, and as indicated in the O'Reilly (1882) and Jemmett (1888-89) reserve maps. The portal pole in front of the painted plank house is identical to one found amongst the remnants of a plank house at FeSr 1 and indicated on the site map (Figure 3). The small roofed structure in the foreground is probably the super structure of one of the many storage pits found at FeSr 1. However, an exact match of structures in the photograph with features recorded at FeSr 1 can not be made due to conditions of preservation and heavy vegetation at the site.

Figure 25 is a photograph of the Kimsquit village taken in the early 1900's from a different angle by Indian agent I. Foughner. A single row of plank houses similar to the one still
Figure 24. Village at Kimsquit as it appeared in the 1880's in a photograph taken by Edward Dossetter.
Figure 25. Village at Kimsquit as it appeared in the early 1900's in a photograph by Ivor Foughner.
standing at FeSr 1 in the early 1970's is indicated.

Oral histories recorded by McIlwraith provide some clues as to the histories of the villages at Kimsquit, but McIlwraith suspected himself that these stories belonged in part to the realm of mythology (1948 I:12). Anutlitx, Nutal and Nutsqwalt were prefaced in McIlwraith's list of villages by an asterisk indicating that they were occupied when Mackenzie visited the Bella Coola Valley (1948 I:12). Axeti was supposedly abandoned before 1793. The Satskwmx were said to have occupied two villages in 1793, Satsk and Nuxwilst, which was on the shore of Dean Channel at the mouth of Manitoo Creek (McIlwraith 1948 I:16). The suggestion that Axeti was earlier than the other sites and that Anutlitx was the latest occupation, fits the archaeological data. Although some Euro-American material was found at FeSr 5 it could well predate 1793. However, McIlwraith's informants also suggested that Anutlitx, Nutal and Nutsqwalt were at least partially contemporary, all of them being occupied in 1793, but there was no component this old found at FeSr 1. McIlwraith may have been in error in placing Anutlitx as early as 1793, or his informant may have been referring to some mythical founding of the village.

The combination of the range in dates of manufacture of historic artifacts, Hobler's seriation of the sites, the ethnohistoric record, and to a lesser degree the oral histories provides good support for the suggested sequence of occupation and the general temporal parameters for the sites proposed here.
The geological context of these sites next to the Dean River was probably the primary stimulus for the shifts in settlement pattern observed providing this ideal situation for looking at discreet components of the historic period archaeologically.

All of the settlement locations may have been chosen for their proximity to sloughs, which allowed easy access to the river while retaining a measure of privacy from potential invaders, protection against sudden flooding of the river bank and a safe place to beach canoes out of the swift current of the river. In the case of Nutsqwalt and Nutal the sloughs which provided access to the sites are now dry. The slough at Nutal is now a couple of metres above the present river level, indicating that the river has been down cutting and that the slough has been dry for some time. At Nutsqwalt there is strong evidence that the site was occupied when the river was active in the vicinity of the site as the edges of some of the houses on the lowest terraces have been eroded by meandering and flooding. This may have been the primary reason for Nutsqwalt's abandonment after only a brief occupation. Other factors contributing to the abandonment of Nutsqwalt may be rock slides which have left talus within three hundred feet of the site, and cold temperatures caused by the proximity of a steep mountain side which shades the site.

Down cutting, channel instability and the retreat of the high tide line as land rebounded upstream must, however, have been major factors contributing to the abandonment of sites as
it caused sloughs to be left dry and left settlements further from the salt water. Axeti and Anutlitx are also situated next to sloughs although the slough in front of Axeti is still wet and the site is high enough not to be affected by channel instability. Some factor other than river morphology must account for its abandonment. Axeti's location well above the river accounts for the survival of the early period component there. Other early sites have probably been destroyed by flooding (Hobler 1990:304).

In the case of Anutlitx there are historical reasons for the abandonment such as population decline and the closure of the canneries.
CHAPTER 5

ARTIFACTS OF LOCAL MATERIAL AND NATIVE MANUFACTURE

Artifact Typology

Distinctions are drawn between artifacts based on raw material and method of manufacture to produce the broad artifact categories of chipped stone, pecked and ground stone, polished stone and worked bone and antler. The artifact type, however, is the basic unit of this artifact classification and most often involves an inference of function.

The artifacts of local material and Native manufacture discussed here are for the most part commonly recognized in Northwest Coast archaeology. However, a word of clarification may be in order for some of the types before embarking on an interpretative discussion of artifact frequencies and comparisons of the sites. More detailed descriptions of the artifacts comprising these groups for each site are discussed in Appendix 1.

Chipped Stone

The pebble chopper category includes both unifacial and bifacial examples (Figs. 46e, 54, 64a). Typically, most of the tool is covered by cortex except for the worked edge from which a short series of flakes was removed. These tools are usually large and heavy, with a somewhat blunt edge, hence their interpretation as chopping tools.
Cortex spall tools are primary flakes struck from cobbles and usually used without further modification (Fig. 46a-d). The dorsal side is typically cortex covered and one or more of the edges has signs of utilization in the form of either chipping or rounding and polish. Although these tools tend to be large and heavy, Ham et al. (1984) suggest they were most commonly used for scraping hides.

The utilized flake category includes flakes other than cortex spalls that show no signs of modification other than use wear or polish on one or more edge (Fig. 55a-c). Flakes were examined for signs of utilization under a hand lens and low powered microscope. It is probable that in many cases flakes were produced specifically to be utilized without further modification, rather than as a bi-product of the manufacture or resharpening of other artifacts. All unmodified and unutilized flakes are discussed as debitage.

Bipolar greenstone objects include a number of items which were undoubtedly adze blanks, and others which cannot be identified to function with the same certainty (Figs. 56a-e, 65). The adze blanks are essentially large bipolar cores of greenstone of a size and shape suitable for grinding into finished tools. Some have partially ground surfaces indicating that they were either discarded in the process of being manufactured into adzes or other ground stone tools, or are tools that only required partial grinding.

The remaining bipolar objects are large rectangular or sub-
rectangular bipolar cores that are too thin for adze blades. They are somewhat similar to objects which are sometimes identified as either bipolar cores or stone wedges (Shott 1989:8), but are larger. Complete specimens from Kimsquit average 7.1 cm in length and 4.0 cm in width. Evidence reviewed by Shott (1989) from ethnographic analogy and lithic experiments suggests that the use of stone wedges is neither common nor efficient, while the reduction of bipolar cores for the production of expedient flake tools is. However, because the rectangular bipolar cores from Kimsquit are so similar to items which were obviously adze blanks, some having partially ground facets, they may have been produced for a similar purpose rather than simply as a source of flakes. Therefore, both "adze blanks" and rectangular greenstone bipolar cores are enumerated together under the general and functionally neutral name of bipolar greenstone objects.

All of the small formed bifaces are classified as projectile points (except for an obsidian drill, FeSr 4:23, Fig. 66a) because obvious signs of hafting and utilization along lateral edges is lacking, although some are asymmetrical and may have been knives (Figs. 47a-c, 56f-h, 66b-d).

Pecked and Ground Stone

The pecked and ground stone category refers to artifacts that are shaped by flaking and/or pecking and finished by grinding, and artifacts that display only pecking or grinding.
Important artifacts within this category are hammerstone grinders, edge trimmed grinders and half edge trimmed grinders which are variations on an artifact type prolific on the inner part of the Central Coast. Most of the hammerstone grinders at Kimsquit are made from elongate cobbles of diorite, gradon-diorite or diabase. They have one roughly flat end and nether surface, one rounded end, a "D" shaped cross section and slightly wedge shaped longitudinal profile (Figs. 48c,e-h, 58a-b, 69a). The flat nether surface is ground smooth, often to the tip of the rounded end. None of the other surfaces is usually ground. Often there is battering at the rounded end of the hammerstone grinder and sometimes at the square end.

Carlson (1970:4) and Hobler (1970:89) originally suggested that hammerstone grinders may have been used in woodworking with the battered ends being formed by driving adzes or wedges, and the ground surfaces being formed by using the tool to abrade or sand wood. However, most of the hammerstone grinders at Kwatna upon which they ventured this interpretation are made of granite which may be too soft and friable for such a purpose. Native informants have no recollection of a practical function for hammerstone grinders and McIlwraith (1948 II:380) was told that they were used as pieces in a game of skill called sksta.

As many as eight or ten contestants could take part, each providing himself with one, two, or three stones, pecked down to the proper shape. Each is about six inches in length, three inches wide, flat on one side, and oval on the other, well rounded at either end. Before the coming of the white man, when the Bella Coola habitually used stone, it is said that one of these could be made in a few minutes (McIlwraith 1948 II:380).
The game was apparently very popular. "Sktsa might almost be called the Bella Coola national game, although it is now (1923) seldom played" (McIlwraith 1948 II:381). However, the abundance and distinct wear pattern of the Kimsquit hammerstone grinders and edge trimmed variants, as well as the choice of harder materials for some, suggests that they may have had some other, forgotten function.

*Edge trimmed grinders* (Figs. 49a-d, 58c-e, 69d) are a variant of hammerstone grinders common at Kimsquit. These are also roughly loaf shaped, but the two lateral edges and one end have been trimmed by percussion flaking. The rounded end is not trimmed and retains its cortex covering. Most often the trimmed end is square, but this is not always the case. Often there is evidence of battering or pecking at the rounded end, although this sometimes occurs at the trimmed end, both ends or along one or more edge. Unlike hammerstone grinders these artifacts typically have two grinding surfaces, top and bottom. They most likely functioned in a manner similar to hammerstone grinders, although many edge trimmed grinders are too small to be efficient mauls.

*Half edge trimmed grinders* have cortex covering one end and one edge, while the butt end and the other edge have been trimmed by percussion flaking (Figs. 49e-h, 58f-h). However, the cortex covered edge does not seem to have been used as a grinding surface, grinding being limited to the top and bottom surfaces.
Polished Stone

Polished stone artifacts have a smooth lustrous surface formed by tribochemical wear during the process of grinding (Adams 1989:261). Most of the artifacts in this category are greenstone adze blades and fragments (Figs. 59a-j, 70a-j). The many polished adze fragments recovered could have been produced through splintering of the adze during use, resharpening of dull blades and by deliberate bipolar percussion when the adze became too small to be used efficiently as such. The resulting flakes may have been used as expedient cutting tools, although clear evidence of edge chipping and use polish is difficult to discern. Several larger pieces of polished greenstone display signs of retouch along one or more edges, perhaps in preparation for further grinding and polishing. New types of artifacts produced from adze blade fragments in the Kimsquit collection include polished greenstone projectile points and fish knives (Figs. 59k-m, 70k).

In addition to the above artifact types each stone artifact category has a miscellaneous group into which artifacts of unidentifiable types are placed. These are most often items which show a minimum of modification, often in a manner insufficient for formal classification.

Worked Bone

Most bone artifact typologies are based on function. The tool types in the Kimsquit collection include awls, points, a
gaming piece, a wedge and a bone tube. Both awls and points are fashioned from splinters of long bone with one or both ends ground to a point. The awls are characterized by polish at the pointed tip and have unshaped edges with no obvious signs of hafting (Fig. 52a-b). The "points" are splinters with a similarly ground tip but have evidence of deliberately shaped shafts or stems around the naturally grooved medullary cavity (Figs. 52d, 62a). The shape of the tip and stem of these artifacts varies and they probably functioned as points for a variety of projectiles (harpoon heads and arrow heads), or as barbs on fish hooks.

Many of the Kimsquit bone artifacts do not fit any finished tool types and are minimally modified splinters from long bones having cut marks indicative of shaping rather than merely butchering, or have use wear without shaping. These artifacts are classified as unidentified worked bone.

Comparisons to Late Prehistoric Period Sites

Carlson (1983a) defined the Late Period of the Northwest Coast as beginning roughly A.D. 500. At Kwatna this period is divided into two sequential phases: the Anutcix phase (A.D. 200 – A.D. 1400) and the Kwatna phase beginning A.D. 1400 (Carlson 1983b:122). The Late Period is marked by a predominance of pecked and ground or polished stone tool types in contrast to the earlier Middle Period (3800 B.C.–A.D. 500) in which chipped stone was common. The Anutcix and Kwatna phases
were defined on the basis of several excavated assemblages in Kwatna Inlet and are considered to contain essentially the same inventory of artifact types. They are differentiated only by the addition of hammerstone grinders and pecked and ground "circular stones" in the Kwatna phase (Carlson 1971:44). Throughout there are large numbers of polished greenstone adze blades and fragments, a large inventory of bone artifact types, small triangular notched projectile points, and a virtual absence of microblade technology (Hobler 1990:304).

Hobler (1990:303) demonstrated that the Anutcix and Kwatna phases were more typical of inner than outer coast sites by using average linkage cluster analysis based on the presence or absence of several key artifact types on Central Coast sites. The Kwatna and Kimsquit sites clustered together and were separate from outer coast sites which were characterized by a small tool industry and sea mammal hunting tools. This probably represents both environmental and ethnic differences.

Table 4 records presence or absence for key artifact types from several late prehistoric and protohistoric sites from the inner part of the Central Coast in an effort to observe differences between the Kimsquit sites and those with which they clustered in Hobler's analysis. The sites included are FaSu 1 and FaSu 2 from Kwatna Bay, and FcSu 1 (Mackenzie's Rock) from the lower part of Dean Channel. FaSu 2 has both Anutcix and Kwatna phase deposits and FaSu 1 is considered to be entirely Kwatna Phase, despite one contradictory radio carbon date.
Table 4
Artifact Types at Central Coast Sites

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>FeSr 7</th>
<th>FeSr 4</th>
<th>FeSr 5</th>
<th>FaSu 2</th>
<th>FaSu 1</th>
<th>FcSu 1</th>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Carlson 1983b:123). Mackenzie's Rock dates from perhaps as early as the late part of the Anutcix phase to just prior to Mackenzie's arrival in 1793.

Differences in sample size may account for some of the differences in the assemblages observable in Table 4, but this is probably only a serious problem at FcSu 1 where the total sample is only 48 and the fewest types are represented. Conditions of preservation is another factor. The large amount of cordage, fibre and wood from the waterlogged component at FaSu 1 has been omitted from analysis. Bone is better preserved in shell middens, partly accounting for the small number of types represented in the Kimsquit sites. Other differences between the sites are assumed to be a result of ethnic, geographic and temporal factors.

The Kimsquit sites are notable for their absence of circular stones, one of the defining characteristics of the Kwatna phase, and for the presence of edge trimmed and half edge trimmed variants of the hammerstone grinder. Kimsquit also lacks ground slate tools but their functional equivalents (knives and points) are represented in greenstone. The Kimsquit sites are also marked by greater numbers and types of chipped stone tools.

The chipped stone artifact types common at Kimsquit seem to be adapted to wood working (choppers, chipped stone adze, drill, and possibly the bipolar objects) and fish and mammal processing (retouched and utilized flakes, cortex spall tools). The early
prehistoric component at Axeti (FeSr 5) accounts for the microblades and emphasis on pebble choppers there. Late prehistoric and early historic components at Nusqalst in the Bella Coola Valley display an even greater emphasis on chipped stone technology and a relative de-emphasis of worked bone (Hobler and Bedard 1989). Expedient flake tools of obsidian and greenstone dominate at Nusqalst, even after the initial introduction of metal tools, due to the close proximity of the site to greenstone sources on Mt. Nusqalst and the Anahim obsidian sources on the interior plateau.

Geographic proximity to the interior may also be a factor in the continued importance of chipped stone at Kimsquit in late prehistoric and early historic contexts. Economic ties continued to exist with the Carrier into the late nineteenth century (see chapter three), and obsidian from the Anahim peak area may have been available at Kimsquit after trade in it declined elsewhere on the Central Coast. Indeed, all of the obsidian from Nusal and Axeti has been sourced to Anahim peak. Most of the obsidian at Axeti may belong to the Early Period component, but the obsidian artifacts and debitage at Nusal were found in contexts dating to the eighteenth and nineteenth centuries.

It is not known how circular stones functioned. Their absence at Kimsquit may mean that whatever activity they performed was not done there; that other means were devised to accomplish the same task; or they date to a time period that is
not represented at Kimsquit. Edge trimming of hammerstone grinders too may represent an ethnic difference peculiar to Kimsquit or an adaptation to activities not performed elsewhere on the Central Coast.

Aside from the above differences, the Kimsquit assemblages (except for Anutilitx and the early component at Axeti) appear at first glance as typical Kwatna phase assemblages with increasing amounts of Euro-American material added. A more detailed look at artifact frequencies in the Kimsquit sites presented below may help assess how they differed from one another and what effect the increasing amounts of Euro-American material had on indigenous technological traditions.

Assemblage Analyses

Axeti

Kwatna phase assemblages are dominated by pecked and ground stone with hammerstone grinders being ubiquitous. Over one half of the large quantity of pecked and ground stone at Axeti and nearly one quarter of the entire assemblage are edge trimmed hammerstone grinders, with the half trimmed variant being the next most common type within the pecked and ground stone category (Table 5). Hammerstone grinders without trimming are relatively scarce. Abraders also form an important type at Axeti which accords well with the relatively large amount of polished stone and worked bone. The largest single artifact
Table 5
Artifacts of Local Material and Native Workmanship

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Anuitlx</th>
<th>Notal</th>
<th>Nutaqwalt</th>
<th>Axeti</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Chipped Stone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pebble Choppers</td>
<td>1</td>
<td>0.6</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Chipped Stone Adze</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cortex Spall Tools</td>
<td>6</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilized flakes</td>
<td>3</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retouched flakes</td>
<td>1</td>
<td>0.6</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Bipolar Objects</td>
<td></td>
<td></td>
<td>9</td>
<td>6.2</td>
</tr>
<tr>
<td>Projectile Points</td>
<td>3</td>
<td>1.8</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Drill</td>
<td></td>
<td></td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Microblades</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cores</td>
<td>2</td>
<td>1.2</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2</td>
<td>1.4</td>
<td>1</td>
<td>0.7</td>
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</tbody>
</table>

Pecked & Ground Stone

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Anuitlx</th>
<th>Notal</th>
<th>Nutaqwalt</th>
<th>Axeti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abraders</td>
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<td>0.6</td>
<td>15</td>
<td>10.4</td>
</tr>
<tr>
<td>Hammerstones</td>
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<td>3.1</td>
<td>7</td>
<td>4.9</td>
</tr>
<tr>
<td>Hammerstone Grinders</td>
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<td>14.7</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Edge Trimmed Grinders</td>
<td>19</td>
<td>11.6</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Half Edge Trimmed Grinders</td>
<td>8</td>
<td>4.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand Mauls</td>
<td>2</td>
<td>1.2</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4</td>
<td>2.4</td>
<td>4</td>
<td>2.8</td>
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</table>

Polished Stone

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Anuitlx</th>
<th>Notal</th>
<th>Nutaqwalt</th>
<th>Axeti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adze Blades &amp; Frags</td>
<td>2</td>
<td>1.2</td>
<td>85</td>
<td>59.0</td>
</tr>
<tr>
<td>Knife</td>
<td>1</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projectile Points</td>
<td></td>
<td></td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Hand Maul</td>
<td>1</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1</td>
<td>0.2</td>
<td>2</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Worked Bone

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Anuitlx</th>
<th>Notal</th>
<th>Nutaqwalt</th>
<th>Axeti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wedge</td>
<td></td>
<td></td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Bone Tube</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaming Piece</td>
<td>1</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awls</td>
<td></td>
<td></td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Points</td>
<td>1</td>
<td>0.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unidentified</td>
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<td>0.5</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>0.9</td>
<td>86</td>
<td>52.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>128</td>
<td>94.5</td>
</tr>
</tbody>
</table>
type at Axeti is adze blades and fragments, also typical of the late prehistoric period. Three greenstone projectile points (Nos. 112, 87 and 67, Figs. 59k-m) recycled from adze blades also occur.

Chipped stone is a more important category at Axeti than at the other sites, reflecting its early component. Microblades are the most numerous chipped stone artifacts at Axeti. They occur scattered throughout the deposits and reflect the mixing of components. The next most numerous chipped stone artifact is the pebble chopper, which is also typical of the Early Period. Carlson (1983; 1990:62,67) has proposed that an early component at Namu between 6500-3000 B.C. represents an "interface" of the Early Period pebble tool tradition, characterized by unifacial pebble tools and leaf-shaped bifaces, and the microblade tradition. A similar situation could be reflected in the early component at Axeti which also yielded a large leaf-shaped basalt biface. Bipolar greenstone objects, which belong to the late component, occur in numbers equal to pebble choppers and are followed in frequency of occurrence by utilized (obsidian) flakes which could belong to either component.

The Axeti debitage analysis (Table 6) underlines the importance of obsidian working technology, it being the second most frequent raw material after greenstone.

Axeti produced a greater quantity of worked bone than the other sites, but this was mostly unidentifiable to type except for a simple bi-point (No. 105, Fig. 62a) and a bone tube (No.1,
## Table 6
### Distribution of Debitage at Sites in Study

<table>
<thead>
<tr>
<th>Site</th>
<th>Level</th>
<th>Basalt</th>
<th>Greenstone</th>
<th>Quartzite</th>
<th>Obsidian</th>
<th>Andesite</th>
<th>Quartz</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wutal</td>
<td>Surface</td>
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<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>0-15</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>15-30</td>
<td>15</td>
<td>1</td>
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</tr>
<tr>
<td></td>
<td>30-45</td>
<td>32</td>
<td>2</td>
<td>1</td>
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<td></td>
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<td>35</td>
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<td></td>
<td>45-60</td>
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<td>6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
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<td>53</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
<td>70</td>
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<td>1</td>
<td>1</td>
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<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>0-10</td>
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<td></td>
<td>1</td>
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<td></td>
<td></td>
<td>1</td>
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<tr>
<td></td>
<td>10-20</td>
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<td>8</td>
</tr>
<tr>
<td></td>
<td>20-30</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>30-40</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>40-50</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td></td>
<td>1</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50-60</td>
<td>5</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
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<tr>
<td></td>
<td>60-70</td>
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<td></td>
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<tr>
<td></td>
<td>Total</td>
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<td>5</td>
<td>12</td>
<td>1</td>
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</tr>
<tr>
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<td>0-15</td>
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<td>26</td>
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<td>15-30</td>
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<td>1</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
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<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>58</td>
</tr>
</tbody>
</table>
Table 7
Frequency of Artifact Categories per Level at Axeti

<table>
<thead>
<tr>
<th>Artifact Category</th>
<th>0-</th>
<th>10-</th>
<th>20-</th>
<th>30-</th>
<th>40-</th>
<th>50-</th>
<th>60-</th>
<th>70-</th>
<th>80-</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surface</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
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<td>80</td>
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<td></td>
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<td></td>
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<td>Native Worked</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chipped Stone</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>2</td>
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<td>28</td>
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<td>Pecked &amp; Ground</td>
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<td>2</td>
<td>5</td>
<td>10</td>
<td>8</td>
<td>3</td>
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<td></td>
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<td>5</td>
<td>14</td>
<td>21</td>
<td>20</td>
<td>8</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

| Euro-American           |       |     |     |     |     |     |     |     |     |       |
| Material/               |       |     |     |     |     |     |     |     |     |       |
| Native Worked           |       |     |     |     |     |     |     |     |     |       |
| Utilitarian             | 2     |     |     |     |     |     |     |     |     | 2     |
| Unidentified            | 2     |     |     |     |     |     |     |     |     | 2     |
| Scrap                   | 1     |     |     |     |     |     |     |     |     | 1     |
| Total                   | 5     |     |     |     |     |     |     |     |     | 5     |

| Euro-American           |       |     |     |     |     |     |     |     |     |       |
| Manufacture             |       |     |     |     |     |     |     |     |     |       |
| Clothing/Adornment      | 1     |     |     |     |     |     |     |     |     | 1     |
| Hunting                 | 1     |     |     |     |     |     |     |     |     | 1     |
| Total                   | 2     |     |     |     |     |     |     |     |     | 2     |

Total 33 8 11 7 14 21 20 8 8 5 136
Despite the mixing of components all of the Euro-American material at Axeti is from the upper levels (Table 7). Both items of Euro-American manufacture are from the 20-30 cm level. All of the artifacts of Euro-American material and Native manufacture are from the 0-10 cm level. The items of local material and manufacture, however, are difficult to separate into components stratigraphically. Pecked and ground stone is common in every level, and is the most frequent artifact category in most. Of these, edge trimmed grinders are common throughout the deposits, and half edge trimmed grinders are scattered from the 60-70 cm level up. Hammerstone grinders, however, occur only in the 40-50 and 50-60 cm levels and on the surface.

Polished stone adzes are also common throughout the deposits and chipped stone bipolar greenstone objects are scattered from 60 cm up. Chipped stone is consistently the third most common artifact category, except in the 10-20 cm level and on the surface where it is second. The large amount of chipped stone on the surface is primarily choppers. Lithic debitage too is common throughout the deposits except for the 60-70 cm level. Nearly one third of the total debitage occurs in the 40-50 cm level.

**Nutsqwalt**

At Nutsqwalt abraders comprise almost half of the pecked
and ground stone and over 10% of the entire artifact assemblage (Table 5). The next most common pecked and ground stone artifact is the hammerstone. Hammerstone grinders and the edge trimmed and half edge trimmed variants are surprisingly few in number.

The dominant artifact type at Nutsqwalt is adze blades and fragments, which comprise nearly 60% of the entire assemblage. The importance of adzes at Nutsqwalt may mean it was an adze production area (explored below) or a loci for wood working. Similarly, the most frequent chipped stone artifact is the bipolar greenstone object, which includes some obvious adze blanks. This is followed in frequency of occurrence by retouched flakes and projectile points of which there were equal numbers.

Thedebitage at Nutsqwalt is almost entirely greenstone (Table 6) reinforcing the interpretation of the importance of adze production and maintenance. Only one worked bone artifact was found at Nutsqwalt, a wedge (No. 143, Fig. 71), which is also a common wood working item.

Analysis of artifact frequencies per level is not illustrative of temporal trends at Nutsqwalt as it is essentially a single component site of very brief duration. Most of the artifacts are from house pit floors, usually in the 15-30 cm level and sometimes in the 0-15 cm level. The proportions of artifacts are essentially the same in all levels with polished stone being the most frequent followed by pecked
and ground stone and chipped stone (Table 8). The greatest amount of debitage was from the surface and the 0-15 cm level, rather than the floor deposits where hardly any was found.

Table 8
Frequency of Artifact Categories per Level at Nutsqwalt

<table>
<thead>
<tr>
<th>Artifact Category</th>
<th>Level (cm)</th>
<th>Surface</th>
<th>0-15</th>
<th>15-30</th>
<th>30-45</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Material/</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Manufacture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chipped Stone</td>
<td></td>
<td>1</td>
<td>6</td>
<td>13</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Pecked &amp; Ground</td>
<td></td>
<td>5</td>
<td>10</td>
<td>13</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>Polished Stone</td>
<td></td>
<td>7</td>
<td>31</td>
<td>48</td>
<td>3</td>
<td>89</td>
</tr>
<tr>
<td>Worked Bone</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
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<td>13</td>
<td>48</td>
<td>74</td>
<td>7</td>
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</tr>
<tr>
<td>Euro-American Material/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Manufacture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
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<tr>
<td>Total</td>
<td></td>
<td>13</td>
<td>48</td>
<td>76</td>
<td>7</td>
<td>144</td>
</tr>
</tbody>
</table>
Nutal

The material from Nutal more clearly shows the transition from late prehistoric to historic material assemblages than the other Kimsquit sites. Hammerstone grinders and the edge trimmed and half edge trimmed variants are the dominant indigenous artifact types (Table 5). Only one abrader occurred in the pecked and ground stone category, which is not surprising considering the small amount of polished stone and worked bone artifacts whose manufacture was the main function of abraders.

Only two small adze fragments were found at Nutal and no other polished stone items. Whether the activities associated with adze use died out or some sort of functional replacement was found is explored further below. If hammerstone grinders are indeed an associated item in woodworking, then the abundance of this artifact type would suggest that the woodworking activities continued. Alternatively, the hammerstone grinders may actually have had some other function.

The cortex spall tool is the most common chipped stone artifact type at Nutal, comprising over a third of the chipped stone total and 3.7% of the total artifact assemblage. Other expedient flake tools were also important at Nutal, specifically retouched and utilized flakes, mostly of obsidian. A small amount of obsidiandebitage was also found (Table 6). Projectile points are the only artifacts among the chipped stone tools that can be considered to be deliberately shaped.

The worked bone category, as at the other sites, is
probably under represented. Nutil did produce the only two awls from Kimsquit, but these were probably used at other sites as well.

Interestingly Euro-American material, both of Native manufacture and Euro-American manufacture, is largely limited to the upper two levels where it actually outnumbers items of local material and Native manufacture, but is not accompanied by any decline in their overall frequency (Table 9). Pecked and ground stone is the most numerous artifact category in every level and makes up over half of each level's stone artifact total. Of these items the three variants of the hammerstone grinder overlap in occurrence as at Axeti.

Chipped stone is the second most frequent lithic artifact category in every level, although it is practically nil before 30-45 cm. Obsidian utilized flakes occur in the 15-30 and 30-45 cm levels and heavy chipped stone tools (choppers and cortex spall tools) are scattered from 45-60 cm on up. Nutil also has an interestingdebitage distribution, with none below 60 cm, and the greatest amount in the 30-45 cm level after which it declines (Table 6). Considering the dearth of polished greenstone, a surprisingly large amount of this debitage is greenstone.

There is no clear trend to this distribution except that polished stone disappears, and heavy pecked and ground and chipped stone artifacts continue to be important, although chipped stone technology slowly declines. The impact the
Table 9

Frequency of Artifact Categories per Level at NutaP

<table>
<thead>
<tr>
<th>Artifact Category</th>
<th>Surface</th>
<th>0-15</th>
<th>15-30</th>
<th>30-45</th>
<th>45-60</th>
<th>60-76</th>
<th>Total</th>
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<tr>
<td>Local Material/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Manufacture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chipped Stone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pecked &amp; Ground</td>
<td>9</td>
<td>14</td>
<td>13</td>
<td>20</td>
<td>6</td>
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<td>5</td>
</tr>
<tr>
<td>Total</td>
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<td>23</td>
<td>25</td>
<td>7</td>
<td>1</td>
<td>86</td>
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<td>Euro-American Material/</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Native Manufacture</td>
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</tr>
<tr>
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<td>1</td>
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<td>63</td>
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</tr>
<tr>
<td>Construction/Hardware</td>
<td></td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
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<td>10</td>
<td>63</td>
<td>55</td>
<td>27</td>
<td>7</td>
<td>1</td>
<td>163</td>
</tr>
</tbody>
</table>
introduction of Euro-American materials (metal) and tool types may have had on this distribution is explored in chapter six.

Anutilitx

Anutilitx produced few artifacts of local material and Native manufacture and none of the most important artifact types at the other sites. The only polished stone artifact was a small piece of slate unidentifiable to artifact type (No. 86, Fig. 42m). Aside from two pieces of unidentified worked bone, was a finely made and polished gaming piece (No. 73, Fig. 421). This artifact is remarkable as a last vestige of indigenous bone working technology and for the Native values that the use of this piece represents.

Excavations at Anutilitx uncovered basically only two culture bearing levels, with artifacts of local material and Native workmanship occurring in both.

Site Comparisons

The late prehistoric component at Axeti has a large proportion of pecked and ground stone tools, being the largest artifact category in the entire site assemblage (Fig. 26). This is followed in frequency of occurrence at Axeti by the polished stone of the late component, then chipped stone which may belong mainly to the early component. At Nutsqwaht polished stone is by far the largest single artifact category in the assemblage,
Figure 26. Proportions of artifacts of local material and Native manufacture.
comprising over 60%. This is followed in frequency of occurrence by pecked and ground stone, chipped stone and finally worked bone. Although Nutal has a near complete absence of polished stone artifacts, pecked and ground stone is abundant and nearly as important as at Axeti. Chipped stone too is well represented but less important than at the other two sites. Although worked bone was present in only small quantities at all of the sites, at Anutlitx it is practically the only remaining artifact of local material and Native manufacture.

The pecked and ground stone assemblages of the late component at Axeti displays some strong similarities to that of Nutal (Fig. 27). Both have large proportions of edge trimmed grinders, while Nutsqwal has only one. They are also the only sites with half edge trimmed grinders, having equal numbers of these. However, Nutal has more hammerstone grinders than either Nutsqwal or Axeti. In other respects Nutsqwal and Axeti share strong similarities. Abraders are poorly represented at Nutal, but are the most numerous pecked and ground stone type at Nutsqwal and the second most numerous at Axeti. Hammerstones are well represented at all sites except Anutlitx. Most of the hammerstones are large and heavily battered, probably resulting from heavy bipolar percussion.

The adze blades and fragments of the late component at Axeti make up nearly one quarter of the total site assemblage. At Nutsqwal they comprise close to 60% of the total artifacts (Fig. 28). Items recycled from adze blades are also present at
Figure 27. Proportions of pecked and ground stone artifacts.
Figure 28. Proportions of polished stone artifacts.
Nutsqwalt and Axeti. At Nusal polished stone technology all but completely died out, two adze fragments occurring in the 15-30 cm level with none above that. The one piece of polished slate from Anutilitx indicates that a small vestige of this once primarily important technology held on.

The greater importance of chipped stone artifacts at Axeti than at the other sites may relate to its early component and is not directly comparable to the other sites. The early prehistoric microblades are absent from the other sites and the pebble choppers are rare at Nutsqwalt and Nusal (Fig. 29). Axeti has in common with Nutsqwalt bipolar greenstone objects, which may belong to the late prehistoric/protohistoric period and are absent from Nusal. This is not surprising given their probable connection with polished stone technology. Axeti has in common with Nusal two expedient flake tool types, cortex spall tools and utilized flakes which are not noted at Nutsqwalt. Cortex spall tools are most common at Nusal suggesting such expedient flake cutting, or scraping tools may belong mainly to the protohistoric and early historic periods. Nutsqwalt is set aside from the other two sites primarily by the importance of bipolar objects as well as the occurrence of an obsidian drill (No. 23, Fig. 66a) and a chipped stone adze (No. 86, Fig. 64c).

Nutsqwalt, Axeti, and Nusal each yielded three projectile points or portions thereof (Figs. 47b-d, 56f-h, 66b-d). Leaf-shaped examples were found at all three sites (FeSr 4:97,
Figure 29. Proportions of chipped stone artifacts.
FeSr 5:35 and FeSr 7:141). The leaf-shaped points at Axeti and Nutsqwalt are large basalt specimens (9.35 x 2.5 cm and 7.6 x 2.6 cm respectively) typical of the early pebble tool tradition (Carlson 1983a). The one at Nutsqwalt is therefore out of place and may have been collected by the Native inhabitants from an earlier context. The leaf-shaped point from Nutral is smaller and made of obsidian (3.5 x 1.25 cm). Small triangular points more typical of the late prehistoric period (Hobler 1990:304) are also represented at the three sites (FeSr 4:154, FeSr 7:116, FeSr 5:91). The remaining projectile points are undiagnostic fragments and asymmetrical shapes.

The frequency of occurrence of debitage at the three sites is actually the reverse of the frequency of occurrence of the chipped stone artifact category, with Nutral having the most, followed by Nutsqwalt and Axeti (Table 6). The predominance of greenstone debitage, even at Nutral has already been noted. Figure 30 presents the size grade distribution of greenstone flakes and debris based on measurements of maximum dimension. Axeti displays three peaks so shallow that the distribution is essentially even. The large amount of small greenstone debitage (10-20 mm) at Nutsqwalt may indicate resharpening of adzes with the second peak (25-30 mm) representing perhaps adze production and the reduction of cores for flakes. The frequency declines steadily with increasing flake size thereafter. At Nutral small flakes are less important but still moderately frequent, perhaps relating to adze maintenance. But the greatest frequency is in
Figure 30. Size grade distribution of greenstone debitage.
the size range suitable for expedient flake tools and perhaps adze production (25-30 mm), after which the frequency trails off. Flakes larger than 50 mm are relatively rare at all sites. It is therefore hard to support an interpretation postulating adze production, or at least the primary reduction of greenstone at any of the sites, but it does support the production of flakes for expedient purposes and the maintenance of adzes. This distribution does not include flakes with ground and polished facets. These were analyzed as adze fragments. If included they would inflate the small and medium size categories at Axeti and Nutsqwalt, but not Nural where they do not occur.

Discussion

The analyses discussed here revealed a couple of observable trends. The Kimsquit sites are set apart from the Kwatna sites primarily by a lack of circular stones, trimming of hammerstone grinders and use of harder raw materials, a greater emphasis on chipped stone and a scarcity of worked bone. It is proposed that these differences may relate to ethnic differences and an emphasis on different artifact types and activities, the geographic proximity of Kimsquit to the interior and access to obsidian sources and contact with people having a predominantly chipped stone tool tradition, and the poor preservation of bone in non-shell midden contexts. Differences in the occurrence and frequencies of artifact types between the Kimsquit sites are more closely related to chronological differences and
acculturative change.

In the pecked and ground stone and chipped stone assemblages, similarities were observed between Nutal and the late component of Axeti, not shared by Nutsqwalt, namely the shared importance of edge trimmed and half edge trimmed grinders, utilized flakes, cortex spall tools and obsidian as a raw material. This may reflect some chronological overlap between the late prehistoric/protohistoric components at Axeti and Nutal. The uniqueness of the Nutsqwalt assemblage may mean that it is not exactly contemporary with the other components, or its very brief occupation may have limited the range of activities performed there.

Nutsqwalt and Axeti share in the importance of adzes, adze blanks and recycled adzes. Nutal is remarkable for the near complete absence of polished adze fragments and associated technology, such as abraders, and perhaps small resharpening flakes. A chronological trend is apparent here. With the increasing importance of Euro-American influences and technology, greenstone adzes became entirely absent at Anutlitx. Whether this represents a loss in technology and associated behaviour or some functional replacement was found is explored in the next chapter. There may also be a trend towards increased importance of expedient flake tools observable at Nutal, perhaps partially in response to the decline in polished stone, although chipped stone gradually decreases in importance too, also being entirely absent at Anutlitx. This can be
observed in the debitage distribution at Nutal as well which peaks in the middle levels and gradually decreases in the upper levels.

The difficulty of accounting for the low frequency of worked bone at all of the sites has been discussed elsewhere. Worked bone and antler was generally an important category in Northwest Coast culture and it is significant that it survived into Anutlitx. Bone was an abundant and adaptable material, made if anything easier to work with the introduction of metal tools.
CHAPTER 6

ARTIFACTS OF EURO-AMERICAN MATERIAL AND NATIVE MANUFACTURE

In all four sites a number of artifacts were recovered that were made of Euro-American material but were refashioned into new artifact forms by Native workmanship. These artifacts typically comprise a significant portion of early contact components and represent a bridge between precontact material culture and historic material culture (Deal and Hayden 1987:235).

Various models of acculturation predict that new traits are initially adopted that are consistent with pre-existing cultural practices and values and may be modified to better conform to these (Linton 1963:476; Spicer 1960:532). Introduced items are thus often modified to resemble items with meaning in precontact society, so that artifact forms resemble items previously fashioned of bone, stone or wood. Acculturation models also suggest that items are initially accepted if they have prestige value, although practical utility and compatibility with the pre-existing culture also effect the degree and rapidity with which they diffuse through a culture (Linton 1963:474). It is thus expected that under conditions of undirected contact European goods, especially metals, will be treated initially as a source of raw material for the manufacture of traditional Native items, primarily prestige items like ornaments, or utilitarian items carrying prestige or with a high practical value.
Typology

All of the modified items are metal, mostly thin pieces of copper, brass or iron, and were fashioned using minimal technology. Many artifacts were easily recognizable as being modified based on their form, while others required examination for signs of deliberate cutting (reduction) and shaping. Following Bradley (1987) modified artifacts were classified as being either ornamental, utilitarian or non utilized scrap (Table 10). An additional category of unidentified artifacts was established for items showing signs of deliberate reduction and shaping, but which were fragmentary or enigmatic in form.

In the ornamental category, rolled copper objects (Fig. 44c-e) are those which can not be more firmly identified as to a functional category, but resemble tubular beads and rod armour fragments. Wire beads (Fig. 44m) are tightly coiled lengths of wire resembling a spring which could be suspended or fastened to garments.

In the utilitarian category, formalized blades (Fig. 45c and g) are thin sheets of metal that have been deliberately shaped, ie., rectangular or knife blade shaped, and have a sharpened or utilized edge (Bradley 1987:72). Unformalized blades (Fig. 45d-f) are opportunistically made from irregular scraps of metal and are sharpened on one or more sides (Bradley 1987:72). Patches are rectangular strips of metal that have been perforated around their edges for attachment to another surface (Fig. 42i-j). Vanstone and Townsend (1970:71) suggested
<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Frequency and Percentage of Site Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anutilix</td>
</tr>
<tr>
<td><strong>Ornamental</strong></td>
<td></td>
</tr>
<tr>
<td>Tinkling Cones</td>
<td>4</td>
</tr>
<tr>
<td>Perforated Thimble</td>
<td>2</td>
</tr>
<tr>
<td>Rod Armour</td>
<td>1</td>
</tr>
<tr>
<td>Wire Bead</td>
<td>1</td>
</tr>
<tr>
<td>Nose Ring</td>
<td>2</td>
</tr>
<tr>
<td>Finger Rings</td>
<td>2</td>
</tr>
<tr>
<td>Spirals/Hoops</td>
<td>2</td>
</tr>
<tr>
<td>Rolled Copper</td>
<td>3</td>
</tr>
<tr>
<td>Incised Copper</td>
<td>1</td>
</tr>
<tr>
<td><strong>Utilitarian</strong></td>
<td></td>
</tr>
<tr>
<td>Hooked Objects</td>
<td>2</td>
</tr>
<tr>
<td>Metal Patches</td>
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<tr>
<td>Awl</td>
<td>1</td>
</tr>
<tr>
<td>Projectile Point</td>
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<td>Chisel</td>
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<tr>
<td><strong>Total</strong></td>
<td>15</td>
</tr>
</tbody>
</table>
similar artifacts from nineteenth century sites in Southwest Alaska were used to patch or strengthen traditional wooden artifacts. On the Northwest Coast small copper patches may have been used to rivet together ceremonial coppers, or smaller ornamental coppers. Their placement in the utilitarian category is thus tentative and based largely on a lack of clear indications that they were used as ornaments.

The unidentified category includes rolled and folded copper objects (described below), pieces of copper that have been perforated for unknown purposes and unidentified shaped copper objects (Figs. 44f-g, 53b-c). Items of the last type show signs of deliberate reduction and shaping but have no obvious facets or attachments as ornaments and are too thin to have been utilized as a tool.

Utilized scrap is pieces of unshaped metal with signs of use wear. The final category, non-utilized scrap has no clear signs of deliberate shaping or utilization and probably was generated in the production of other items.

Site Comparisons
Artifact Categories and Types

Table 2 and Figure 7 indicate the relative frequency of occurrence of artifacts of Euro-American material and Native manufacture at each site. Nutal has the largest number of artifacts of Euro-American material and Native workmanship followed by Anutilitx, Axeti and Nutsqwalt. The percentage of
modified artifacts at Anutlitx and Axeti is roughly equal and much lower than at Nutal. The modified artifact assemblage at Nutsqwalt is very small. This may reflect the scarcity in availability of European materials in the protohistoric and early maritime fur trade periods, and a relative waning in importance of Native manufacture of items as fully manufactured items became increasingly available in the late historic period at Anutlitx. The apparently high value of metal in the period to which Nutsqwalt and Axeti date may also have been accompanied by a high rate of curation of metal artifacts.

The high proportion of modified artifacts at Nutal not only indicates an increased availability and reliance upon Euro-American materials, but suggests that most Euro-American material was modified in order to incorporate it into the pre-existing cultural pattern. An attempt was thus made to assess the nature of both continuity and change within this artifact class by examining the frequencies of occurrence of more specific artifact categories and the activities of production and use associated with them.

Figure 31 presents the proportions of the ornamental, utilitarian, unidentified and non-utilized scrap categories at each site. The two earliest sites, Nutsqwalt and Axeti appear surprisingly dissimilar. Nutsqwalt is notable for its complete lack of modified artifacts in any category other than ornamental. However, Axeti completely lacks artifacts in the ornamental category. The small size of the modified artifact
Figure 31. Proportions of artifacts of Euro-American material and Native manufacture.
assemblage at these sites and the process of curation may have effected what is represented. The differences may also represent a difference in site function. However, most of the modified artifacts at Axeti are in the unidentified or unutilized scrap categories, and neither of the utilitarian objects (an awl and a copper rod) imply a site specific function.

The proportions of utilitarian, ornamental and unidentified artifacts are more evenly distributed in the much larger sample from Nutal, and there is a relatively large amount of unutilized scrap, suggesting the importance of metal working. Most of the scrap is very small pieces of copper (averaging 2.81 x 2.32 cm), which were probably recycled several times before being discarded or lost. The single piece of scrap at Axeti is also very small (2.75 x 1.45 cm).

The next most abundant modified artifact category at Nutal is ornamental, and includes more items and more artifact types than any of the other sites. This corresponds with the heightened competition over positions of status and wealth which occurred in the early to mid-nineteenth century throughout the Northwest Coast. Ornamental artifacts are especially common in the upper levels of Nutal which date to the mid-nineteenth century (Table 9). The unidentified artifact category at Nutal is comprised of items that may have been ornaments as well - two perforated copper objects and two shaped copper objects. The utilitarian category at Nutal also contains a greater variety of
artifact types and more items than the other sites.

Very few artifact types appear within the modified artifact categories at Anutiltx - only two each in the ornamental and utilitarian categories. However, the persistence of the modified artifact class at Anutiltx suggests some important continuities with the past. The ornamental and utilitarian categories seem to be of equal importance, as at Nutal (Fig. 31). The remaining modified material at Anutiltx is unutilized scrap. This category, however, is not nearly as large as at Nutal and may reflect a decrease in the importance of metal working as fully manufactured items became more readily available.

An examination of individual artifact types also points out some interesting differences between the sites. Tinkling cones appear on all three of the sites with ornamental artifacts, but are most numerous at Anutiltx (Table 10). Nutal, however, also contains two perforated thimbles (Nos. 95 and 96, Fig. 44k-1), which typically were hung from garments and functioned the same way as conical tinkling cones. Aside from tinkling cones, Nutal shares no other ornamental artifact types with the other sites. In addition to the single tinkling cone at Nutsqwal was a copper nose ring (No. 60, Fig. 63b), an item used to display status and wealth in Northwest Coast cultures.

Apart from tinkling cones, which were popular throughout the historic period on the Central Coast, the Anutiltx ornamental artifacts include spirals/hoops (Nos. 27 and 31, Fig.
42e) which are not represented at any of the other Kimsquit sites. Since tinkling cones were manufactured by white fur traders as well as Native peoples, they cannot be proven to represent continuity of Native technology, but they do at least indicate continuity in taste and presumably in the activities in which they were used — as fringes on ceremonial dance costumes. This supports ethnohistoric evidence that at least some Native ceremonials survived intact into the late nineteenth and early twentieth centuries.

An examination of the kinds of artifacts in the utilitarian category is also informative of the differences between the sites (Table 10). No utilitarian artifact types are shared between sites. Axeti contained a piercing implement (an awl) and a length of copper rod suitable for shaping into such an implement or an ornament. With the exception of an iron projectile point, all of the utilitarian modified artifacts at Nutal probably functioned as cutting tools of some sort. The only item for which this interpretation is not clear is a relatively thick piece of utilized scrap copper (No. 55, Fig. 45h) which shows signs of having been beaten on one end and may have been used as a wedge of some sort. This along with Nutal’s cutting tools could have been used in woodworking. This suggestion is strengthened when the scarcity of greenstone adze blades at Nutal is considered.

Neither type of utilitarian artifact at Anulitx is represented at the other Kimsquit sites. Both of the hooked
objects appear to be improvised parts for other items of European technology - one being a boat hook (No. 100, Fig.42g) used on commercial fishing boats, and the other being a latch hook (No. 47, Fig. 42f) for closing doors. In contrast to all of the other artifacts of Euro-American material and Native manufacture, these were not imitations of indigenous items rendered in new material, but were manufactured locally in imitation of other items of Euro-American technology. Metal patches may in some cases be substitutes for items made of wood or hide aboriginally, or be fragments of larger ceremonial objects (i.e coppers).

Methods of Manufacture

In many cases the method of reduction is undeterminable and it can not be stated with certainty that edges were intentionally broken. However, given the importance placed on the acquisition and use of metal in the late eighteenth and early nineteenth centuries (Mackenzie 1967:291), it is likely that most of the metal occurring archaeologically was worked. Whether some of these items were worked by Natives or maritime and land based fur traders who sometimes refashioned metal into items marketable for trade to Natives is difficult to determine (Fladmark 1972:72). However, the use of simple freehand fold breaking and the production of somewhat irregular artifact forms may indicate the work of unpractised Native workmen rather than professional coopers and blacksmiths, although Native people in
many parts of the Northwest Coast quickly became adept at metal working (Wike 1951:32). Large amounts of unutilized scrap and items discarded in the process of manufacture are further indications of Native metal working.

The most common methods of reducing metal to a manageable size at Kimsquit were by folding it back and forth until it weakened and broke, and by cutting with metal sheers or scissors. Fold breaks produce somewhat jagged edges, sometimes slightly down turned. Cutting produces straight and even edges with a slight bevelling on one or both sides caused by the shearing action. Shallow cut lines may occur just inside the edge. In some cases both cut and fold broken edges are visible on a single artifact. Saw made edges appear on rod shaped artifacts as a very straight edge most of the way through the cross section to a point where it snaps.

The most common methods of shaping a piece of metal into its final artifact form included sharpening edges by abrasion; drilling or punching holes for suspension or attachment to another surface; rolling sheet metal into tubes; or a combination of the above methods. Two interesting variations on the rolled copper technique are represented in the assemblage. One is to fold one edge of the sheet over and pound it flat producing a thick even edge. This may have been done to reinforce edges and lend structural support to artifacts made of thin metal (Vanstone and Townsend 1970:71). Another possibility is that these would have been folded over and flattened.
repeatedly by cold hammering and annealing as was done in the production of rod-like strands of copper at Nusqualst in the Bella Coola Valley (Hobler and Bedard 1989). This technique was used to produce the rolled and folded items and a copper rod at Axeti (No. 40, Fig. 53e), and a ring (No.15, Fig. 44i) and an unidentified item (No. 45, Fig. 44c) at Nusal. The nose ring at Nutsqwalt may have been manufactured in a similar manner, with the individual folds being obliterated by hammering and annealing.

The other variation on the rolling technique is to roll a thin rectangular sheet of copper into a narrow tube and then to coil this into a hoop shape. Bradley (1987:72,134) calls protohistoric Onondaga artifacts made this way spirals or hoops.

Table 11 summarizes the methods of reduction for each site, and Table 12 summarizes the methods of shaping. Of the items with recognisable methods of reduction, those with simple fold broken edges are most numerous. More sophisticated methods of reduction involving cutting with metal tools do not occur until the fully historic assemblages at Nusal and are most frequent at Anutiltx. Anutiltx also has the only instance of a saw made edge, visible in a thin brass rod (No. 61, Fig. 42k). This suggests that metal cutting tools were rarely used until well into the nineteenth century, perhaps because they were not commonly available or because of some conservatism among Native craftsmen.
Table 11
Methods of Reduction of Locally Made Metal Artifacts

<table>
<thead>
<tr>
<th>Site</th>
<th>Folding</th>
<th>Cutting</th>
<th>Folding</th>
<th>Sawing</th>
<th>Unidentified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anutiltx</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Nutal</td>
<td>13</td>
<td>6</td>
<td>3</td>
<td></td>
<td>39</td>
<td>63</td>
</tr>
<tr>
<td>Nutsqwal</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Axeti</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>46</td>
<td>85</td>
</tr>
</tbody>
</table>

Table 12
Methods of Shaping Locally Made Metal Artifacts

<table>
<thead>
<tr>
<th>Site</th>
<th>Folding &amp; Flattening</th>
<th>Rolling</th>
<th>Drilled Holes</th>
<th>Punched Holes</th>
<th>Abrading</th>
<th>Other</th>
<th>Unshaped</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anutiltx</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Nutal</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Nutsqwal</td>
<td>2</td>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Axeti</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>15</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>46</td>
<td>85</td>
</tr>
</tbody>
</table>
The use of metal cutting tools also produces an increase in uniformity in individual artifact types as is easily visible in the regularity in size and form among the Anutiltx tinkling cones. Perhaps obscuring the importance of metal cutting tools at Nutal is the high proportion of unutilized scrap, most of which is either too small or too corroded to distinguish the method of reduction used.

Methods of shaping metal appear less affected by increased availability of European technology (Table 12). Only one item, a perforated object at Nutal (No. 94, Fig. 44g), has a drilled hole with highly regular bevelling around its edges. The rest of the perforations on artifacts have been rendered by simply puncturing them with a sharp object. The methods of shaping that most clearly show continuity throughout the assemblages are rolling sheet metal and folding and flattening. Abrasion as a method of shaping occurs only at Nutal where the edges of blade tools have been sharpened, and at Axeti in the production of an iron awl.

Comparisons to Indigenous Technology

All of the modified items are of metal and it is hard to recognize elements of either chipped or ground stone technology in their manufacture. A small amount of native copper was worked on the Northwest Coast by cold hammering and annealing prior to the introduction of European metals, but it does not seem to have been commonplace. The working of metal is similar to working ground stone in so far as the shaping of the objects,
especially of sharp edges, often involves heavy abrasion. Cook and other Europeans (Wike 1951:32) observed abrading stones like those used on bone and ground stone being used for this purpose.

Most of the objects of Euro-American material and Native manufacture have functional equivalents in stone or bone that have been found at Kimsquit or the Kwatna sites (Table 13).

Table 13. Locally made metal artifacts with identifiable analogues in indigenous materials from late prehistoric Central Coast components

<table>
<thead>
<tr>
<th>Locally Made Metal Artifact</th>
<th>Indigenous Stone and Bone Analogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinkling Cone</td>
<td>Perforated Shell</td>
</tr>
<tr>
<td>Perforated Thimble</td>
<td>Perforated Shell</td>
</tr>
<tr>
<td>Wire Bead</td>
<td>Bone Pendent</td>
</tr>
<tr>
<td>Nose Ring</td>
<td>Bone Ring</td>
</tr>
<tr>
<td>Finger Ring</td>
<td>Bone Ring</td>
</tr>
<tr>
<td>Rolled Copper Object</td>
<td>Bone Tube</td>
</tr>
<tr>
<td>Incised Copper Object</td>
<td>Incised Tooth\Bone</td>
</tr>
<tr>
<td>Iron Awl</td>
<td>Bone Awl</td>
</tr>
<tr>
<td>Iron Projectile Point</td>
<td>Chipped\Ground Stone Projectile Point</td>
</tr>
<tr>
<td>Iron Chisel</td>
<td>Bone Wedge</td>
</tr>
<tr>
<td>Formalised Blade</td>
<td>Chipped Stone Biface\Retouched Flake</td>
</tr>
<tr>
<td>Unformalised Blade</td>
<td>Retouched\Utilized Flake</td>
</tr>
<tr>
<td>Utilized Scrap</td>
<td>Utilized Flake</td>
</tr>
</tbody>
</table>
However, there are surprisingly few similarities in style or form between artifacts made of metal and artifacts made of indigenous material. The single iron projectile point from Nutal (No. 10, Fig. 45b) is roughly similar in form to the leaf-shaped bifaces of Nutsqwalt, Axet and Nutal in so far as it tapers gradually towards its base. It is most similar to a polished greenstone point from Axet (No. 68, Fig. 591). The iron awl from Axet (No. 34, Fig. 53a) roughly resembles bone awls (FeSr 7:104, 103, Fig. 52a-b), and the iron chisel from Nutal (No. 107, Fig. 45a) is similar to the bone wedge from Nutsqwalt (No. 143, Fig. 71). Other utilitarian items, such as metal patches, may have been fashioned aboriginally of perishable material.

Several ornaments of bone and antler have been recovered from late prehistoric Kwatna sites, mostly in the form of pendants and rings (Table 4) (Carlson 1983b:122). Several of these are zoomorphic or anthropomorphic in form or decoration and have been fashioned using grinding, drilling and incising methods (Carlson 1983b:122). While these methods were also used to a certain degree on metal ornaments at Kimsquit, strong stylistic similarities can not be demonstrated. Artifacts more closely resembling the Kimsquit ornaments do not survive archaeologically.

Discussion

The appearance archaeologically of artifacts manufactured
locally from Euro-American materials is related to efforts by Native people to "incorporate" elements of Euro-American technology into their own cultural matrix (Spicer 1961:532). This process occurs most often under conditions of non-directed contact (Linton 1963:470). Modified artifacts were found to occur at all of the Kimsquit sites, although in small numbers at either end of the temporal scale. The small numbers of these artifacts at Nutsqwal and Axeti is proposed to relate to a scarcity and high curation rate of Euro-American material. Significantly, all of the Euro-American material at Nutsqwal, and all but two items of Euro-American material at Axeti, were modified by the Kimsquit in order to fit into their own cultural terms. The high relative frequency of modified artifacts at Nusal reflects the continued selectivity the Kimsquit were able to exercise in the early to mid nineteenth century towards Euro-American culture. The relative frequency of modified artifacts at Anutlitx is low because of acculturative change and an increase in the availability of fully manufactured Euro-American items. However, even under the extreme pressures of directed contact experienced in the late nineteenth and early twentieth centuries, a small number of European items continued to be refashioned to conform to the Kimsquit's own cultural matrix.

Resemblances in the form of Native-made metal artifacts to indigenous stone and bone ones are surprisingly weak since artifact form is usually considered to be more resistant to change than material preference (Bradley 1987:174; Quimby and
However, functional equivalents in indigenous materials did exist prior to contact on several Central Coast sites. Their reproduction in metal represents the persistence of familiar aboriginal practices until the late nineteenth and early twentieth centuries at Anutlitx when many items of aboriginal culture were lost completely (see next chapter).

All of the ornamental artifacts (except for two iron tinklers) were fashioned from copper or brass and would have signified the wearer's prestige. In several cases they may have adorned ceremonial costumes. It was expected that early components would have more ornamental than utilitarian items. While this was the case at Nutsqwalq, Axeti was just the opposite. However, the small sample sizes and the process of curation may have obscured the prestige factor in the adoption and modification of European items at Axeti. Those locally made metal artifacts at Axeti that are identifiable were compatible with traditional activities but are made superior by the substitution of metal for local material. Hence, their occurrence conforms to Linton's predictions on the importance of practicality in the adoption of foreign traits (1963:474).

Ornaments were slightly more numerous than utilitarian items at Nusal. The utilitarian artifacts at Nusal include hunting implements (a projectile point); implements for cutting and scraping wood, hides or meat (blades); and a chisel for wood working. Significantly, Nusal has other hunting and food and hide processing artifacts represented in stone, but no wood
cutting tools (adzes). Metal may have been perceived as functionally superior for wood working.

Ornamental and utilitarian artifacts were recorded in equal numbers at Anutilitx reflecting a continued concern with status, prestige and ceremonials. Two of the utilitarian artifacts at Anutilitx (a boat hook and a latch hook) are of an introduced form, function and material, indicating that the Kimsquit adapted themselves to meet the demands of the introduced trait rather than the reverse. White (1974:158) felt that artifacts like these imply a greater degree of culture change than fully manufactured Euro-American artifacts of a new form.

An examination of the methods of manufacture used in the local production of artifacts of Euro-American material indicates a continuity of many elements of indigenous technology. Some new techniques were required by the constraints of the new material, but the Kimsquit continued to use primarily what they had on hand prior to contact to manufacture metal artifacts well into the late nineteenth century. This represents a conservatism not only in what they chose to manufacture, but in how they approached the task of making it.
CHAPTER 7
ARTIFACTS OF EURO-AMERICAN MANUFACTURE

Typology and Implications for Acculturative Change

Historical archaeologists dealing with large quantities of Euro-American artifacts most often divide them into functional group categories in order to reveal patterning that may be related to economic and social activities (South 1977). The categories selected are variable depending on the problems being addressed and the particulars of the assemblage under consideration (Auger 1990:37). The functional categories employed in this study are kept broad and general in order to aid in comparison of the sites and allow the inclusion of artifacts of aboriginal manufacture which are not directly comparable to specific European artifact types. Artifacts of Euro-American manufacture are identified according to how Euro-Americans would classify them (Table 14). The problem of how Natives may have construed these same items is discussed below.

The domestic group includes items designed for general household functioning and maintenance, and food preparation and consumption. The construction-hardware group includes building materials, hand tools and furnishings. The hunting group is essentially gun parts and ammunition; and clothing and adornment is both functional and ornamental items which were designed to be fastened to clothing.
<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Nutall</th>
<th>Nutal</th>
<th>Axeti</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottle Glass</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>33</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Perfume</td>
<td>2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Fruit Jar</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Davis Finish</td>
<td>3</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Cobalt Finish</td>
<td>2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Unidentified</td>
<td>10</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Undiagnostic</td>
<td>6</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Ceramics</td>
<td>33</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Spoons</td>
<td>3</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Clock Parts</td>
<td>2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Woodstove</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Iron Cauldron</td>
<td>2</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Kerosene Lamp</td>
<td>2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td><strong>Construction-Hardware</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut Nails</td>
<td>188</td>
<td>45.7</td>
<td></td>
</tr>
<tr>
<td>Wire Nails</td>
<td>21</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>Wrought Nails</td>
<td>2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Screws</td>
<td>2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Tacks</td>
<td>5</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Axe Head</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Bail Fastener</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Saw Blade</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Flat Glass</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Lock Plate</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Key</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Door Knob</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Hinge</td>
<td>3</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Barrel Strap</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td><strong>Hunting Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cartridge Cases</td>
<td>3</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Gunflints</td>
<td>3</td>
<td>1.8</td>
<td>1</td>
</tr>
<tr>
<td>Butt Plate</td>
<td>1</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td><strong>Clothing-Adornment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buttons</td>
<td>20</td>
<td>4.9</td>
<td>2</td>
</tr>
<tr>
<td>Beads</td>
<td>16</td>
<td>3.9</td>
<td>1</td>
</tr>
<tr>
<td>Boot Eye Ring</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Brooch</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Safety Pin</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Buckle</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td>23</td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>392</td>
<td>95.4</td>
<td>14</td>
</tr>
</tbody>
</table>
Native-made items, both of Euro-American and local material, are put into the same broad functional categories as the items of Euro-American manufacture (Table 15). This aids in delineating the acculturative processes guiding the adoption of Euro-American items, and its effects on indigenous material culture.

Based on archaeological studies of the Onondaga, Bradley (1987:174) suggests that the acceptance of Euro-American artifact forms occurs later than changes in material preference or object form. In a theoretical paper, White (1974:157) proposes that the acceptance of unmodified Euro-American artifact forms for which there is no Native equivalent indicates an even higher degree of acculturative change involving the adoption of new activities. Neither paper takes into full enough consideration the possibility that Euro-American manufactured items could be put to uses contrary to what they were designed for without modification but totally consistent with Native values and practices.

Linton notes that material items and behavioural customs (such as hand shaking) are easily passed from one culture to another, but the transference of the intended meanings and uses behind the traits is much more difficult and usually requires long term face to face contact (1963:485). According to Linton this is because "the culture of an alien group presents itself to the potential borrowers as an aggregation of forms stripped of most of their meanings and all but the most elementary of
Table 15. List of Euro-American functional group categories with corresponding Native-made artifacts.

<table>
<thead>
<tr>
<th>Functional Group Category</th>
<th>Native-Made Equivalent</th>
<th>Euro-American Material</th>
<th>Local Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>Awl</td>
<td>Bone Awl</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Blade</td>
<td>Microblade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polished Stone</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knife</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cortex Spall</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Utilized Flake</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Retouched Flake</td>
<td></td>
</tr>
<tr>
<td>Construction-Hardware</td>
<td>Hooked Objects</td>
<td>Pebble Chopper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patch</td>
<td>Chipped Adze</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chisel</td>
<td>Bipolar Object</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blade</td>
<td>Drill</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Abrader</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hammerstone</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hand Maul</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polished Adze</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bone Wedge</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Utilized Flake</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Retouched Flake</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polished Point</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bone Point</td>
<td></td>
</tr>
<tr>
<td>Clothing-Adornment</td>
<td>Metal Ornament</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous-Unknown</td>
<td>Copper Rod</td>
<td>Misc Chipped St</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Utilized Scrap</td>
<td>Misc Ground St</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unid Metal Object</td>
<td>Misc Polished Stone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scrap</td>
<td>Unid. Bone</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bone Tube</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hammerstone Gr.</td>
<td></td>
</tr>
</tbody>
</table>

Note: * indicates artifact types which could have been used in more than one functional group.
their functional relationships" (1963:487). There are many examples in Northwest Coast ethnohistory of introduced traits and items which were put to uses which were unusual by Euro-American standards. Wike (1951:95), therefore, cautions that we would be incorrect if we "hypothesized a revolution in cooking or sewing methods on the basis of the demand for sauce pan handles and thimbles, which were actually used for ornaments".

The use of Euro-American goods in such a manner, and often even the adoption of Euro-American practices, can represent an affirmation or redefinition of Native identity (Banta and Hinsley 1986:122; Miller et al. 1989:23). Therefore, archaeologists studying historical Native components need to carefully establish the contexts of exchange and use of Euro-American goods before interpreting their presence archaeologically as indicating drastic socio-cultural change (Brown 1979:154). It also must be realized that because the adoption or rejection of Euro-American goods is not simply guided by notions of technological superiority, indigenous items may not be replaced in all of the spheres in which they functioned (Rogers 1990:10,20). Therefore, some artifacts appear in more than one functional group in Table 15.

Site Comparisons

Figure 32 presents the proportions of Euro-American made items in each of the functional group categories. This graph not only illustrates the temporal seriation of the sites, but
Figure 32. Proportions of Euro-American items in functional group categories.
also helps to indicate trends in what Euro-American items were accepted over time. Euro-American artifacts are entirely absent from Nutsqwaft, while at Axeti they appear only in the hunting and clothing-adornment categories. Euro-American goods related to domestic and construction-hardware activities do not appear until the upper two levels of Nusal (Table 9) and only in small quantities.

Figure 32 also illustrates the drastic difference in the relative frequencies of Euro-American artifacts between Nutal and Anutlitx. The full scale acceptance of Euro-American goods without modification, and presumably for more functions, was very sudden. This is undoubtedly related to the availability of Euro-American goods in the late nineteenth century with the opening of the Hudson’s Bay Company store at Bella Coola, and then of fish cannery stores at Kimsquit, but it may not indicate as great a change in Kimsquit economic and social activities as it would appear to. A series of graphs comparing the proportions of Euro-American artifacts with their Native-made functional counterparts, and a consideration of the context in which both kinds of items were used, helps to illustrate more precisely the nature of change.

Figure 33 presents the proportions of artifacts made locally from indigenous material compared to reworked and unmodified Euro-American goods in the same functional group categories at Axeti. The stone and bone miscellaneous-unknown category may be somewhat inflated by the inclusion of
Figure 33. Proportions of functional group categories at Axeti.
hammerstone grinders and their trimmed variants, which may have functioned in construction-hardware activities. Only Euro-American manufactured material (a single glass bead) is represented in the clothing-adornment category, but as discussed in the previous chapter, ornaments and clothing of indigenous material probably are perishable and do not survive archaeologically.

The only other item of Euro-American manufacture is a gunflint which appears in the hunting group. European firearms and their associated paraphernalia were desirable trade items early on and apparently used in the manner they were intended for (Wike 1951:44). They were, however, used alongside aboriginal weapons of hunting and war for some time. This seems to have been in large part because muskets had limited practical utility, being noisy, unreliable and of short range (Duff 1964:43; Wike 1951:69). For these reasons they do not seem to have made a significant impact on hunting practices, and whether they offered an advantage in warfare is not agreed upon (Duff 1964:43; Wike 1951:69; Cole and Darling 1990:122). They may have been desired primarily as symbols of power (Wike 1951:69) and as items of exchange at potlatches (Cole and Darling 1990:122). In the late component at Axeti a bone point and two small obsidian points occur and the use of such Native-made projectiles may not have been seriously affected by the introduction of muskets.

A Native-made iron awl appears in the domestic category.
As discussed in Chapter 6, its form and use are perfectly consistent with aboriginal culture. In sum, Euro-American artifacts did not have any visible impact on indigenous technology at Axeti. They exist alongside their Native-made counterparts, but in far smaller numbers and in association with a limited range of activities.

At Nutal Euro-American artifacts appear in small numbers in all functional categories (Fig. 34). All but one item (a gunflint fragment from the 30-45 cm level) were found in the upper two levels (Table 9). Euro-American made hunting items appear equally as important as stone and bone, but did not replace them entirely. The Euro-American made clothing-adornment category consists of two large brass buttons (Nos. 105 and 106, Fig. 43d-e). Their presence, however, need not suggest a conversion to European dress. Buttons such as these, and sometimes military uniforms to which they were attached, were popular prestige items (Duff 1964:58). Compton observed in the 1860’s that the Bella Coola and Kimsquit still wore clothing made of bark, hide and mountain goat wool rather than European garments or fabrics (1869:28).

The stone and bone miscellaneous-unknown category may again be somewhat inflated by the inclusion of hammerstone grinders. Nutal marks the first appearance of Euro-American material, either reworked or unmodified, in this category. This may relate to a gradual perception of metal as being functionally superior for these activities, but all of the unmodified Euro-
Figure 34. Proportions of functional group categories at Nutal.
American items of construction-hardware could also have had ornamental functions. These include a brass key (No. 1, Fig. 43b) and five pieces of flat glass (Nos. 58, 2, 22, 27 a&b). The glass lacks the silver backing indicative of mirrors fragments, which were popular prestige items, but Cook apparently found Chief Maquinna of the Nuchalnuth to be desirous of clear window panes as well (Cole and Darling 1990:123). One piece of clear glass may be a watch crystal fragment (No. 58), another popular prestige item.

The only Euro-American made items in the domestic category are two iron caldron fragments (No. 60, Fig. 43a) from the 15-30 cm level, which may have simply been cut up for manufacture into other items, rather than being used for cooking. If iron cauldrons were used for cooking at Nutal, it may represent a significant change in Native values and behaviour, involving not only the replacement of Native boxes for cooking, but perhaps the abolishment of a taboo against cooking in iron. In 1793 Mackenzie was prohibited from preparing his own salmon and from fetching water in an iron kettle, which he felt was because the Bella Coola thought the use of an iron knife would offend the salmon and the iron kettle would contaminate the river (Mackenzie 1967:283-284). Baker (1972:35) interpreted this to mean that iron was not generally used for domestic purposes, but the taboo may have been limited to salmon and perhaps to certain rites associated with the salmon runs (McIlwraith 1948 I:761).

Nevertheless, there are no firm indications that Euro-
American made items, except probably gunflints, were used in a Euro-American fashion or that they significantly replaced Native-made equivalents at Nutal.

At Anutlitx Euro-American items appear to have replaced non-perishable Native-made ones altogether in the domestic and hunting categories (Fig. 35). However, many of the domestic items could have functioned as items of adornment rather than as domestic tools. Cutlery for instance was sometimes worn as an ornament (Cole and Darling 1990:121). Ceramics, while new to Northwest Coast culture could also have "traditional" functions such as gifts at potlatches (Blackman 1976:407). Ceramics were also used as food containers and eating surfaces, and Luegar (1981) interprets their presence in the Yuquot excavations in increasing numbers and variety to represent changes towards European methods of food preparation and eating practices rather than merely a replacement of indigenous trough-like dishes by European items. McIlwraith, however, remarked with dismay that in 1923 many Bella Coola continued to "scoop up food from a common dish" (1948 II:528).

Bottle glass makes up a large part of the domestic artifact group at Anutlitx, and of those identifiable, medicine bottles are most numerous (Table 14). The Bella Coola were introduced to patented medicines early when Mackenzie gave some "Turlington's Balsam" to two people at Nusqalst (Mackenzie 1967:288). At this stage the medicine may have been associated in the Bella Coola's minds with some new magic. European
Figure 35. Proportions of functional group categories at Anultitx.
medicine by no means replaced Native medicine, even in the early twentieth century. Margaret Siwallace of Kimsquit was treated with a traditional brew of Devil's club and gooseberry by her grandfather during a flu epidemic in 1918 (Edwards 1980:10). The resistance of the Bella Coola to European medicine, including a "prejudice against vaccination" (Canada 1897:88) has already been noted. Patented medicines may have been used for other purposes by the Kimsquit. Intemperance is mentioned as a problem in several Indian agent's reports (Canada 1904; 1906; 1912).

A small number of Native-made metal artifacts appear in the construction-hardware group, but as noted in the last chapter, two of these are improvised European type artifacts. A large amount of the Euro-American made construction-hardware material is nails, which ethnohistoric evidence suggests were not adopted until late. A conservative segment of Kimsquit society seems to have resisted the adoption of Euro-American building materials and styles until the 1910's (Canada 1911). A number of metal furnishings and tools also occur, one of which is an axe head (No. 50) which has had its butt end flattened and eye-hole deformed from use as a wedge.

Rifle cartridge cases are the only items in the hunting group. Native warfare had disappeared by the 1860's (Bouchard and Kennedy 1990:336). Rifles were much more efficient for hunting than muskets or Native-made projectiles, and quickly replaced both.
The Euro-American items in the clothing-adornment category include a number of rather plain buttons, a boot eye ring and a buckle (Fig. 41). All of these are pieces of everyday work clothes which probably came into common use in the late 1870's or 1880's through the acculturative efforts of Indian Agents, missionaries and cannery operators who wanted Natives to at least look White. More strictly ornamental artifacts in this category include a number of glass trade beads and a brass brooch (No. 58, Fig. 41). Trade beads were inexpensive and rather expendable items, but the brooch may have been as valued or prestigious as traditional ornaments.

Notably, the miscellaneous Native-made artifacts of local material includes a bone gaming piece, an item equated with the survival of Native enthusiasm for gambling (McIlwraith 1948 II:379).

Discussion

Originally Euro-American trade goods were items that were not essential to the survival of Native people and were incorporated in small numbers into a cultural matrix meaningful to them. Even at Anutlitx where items of Euro-American manufacture dominate the assemblage, they have an ambiguous meaning. Blackman (1976:435) observed that the large quantities of Euro-American goods in late nineteenth century Northwest Coast culture gave the outward appearance of complete material acculturation, "but the tables and chairs were not the scene of
family meals and the regulator clocks did not keep time to the White man's world". Many alternative functions and meanings have been proposed for the fully manufactured trade items at Kimsquit. This is not to say that they did not function in the manner for which they were made, but many had other functions too, defined by traditional Native values and interpretations of meaning.

By the late nineteenth-early twentieth century at Anultiix most items of Native technology had been replaced by Euro-American material culture because of the efforts of missionaries and Indian agents and the convenience of the new items. Many traditional craft skills became extinct in this period (ie., lithic technology) and others nearly so (ie., basketry). Regardless of whether Euro-American items are used as substitutes for lost indigenous ones, the loss of craft skills can have a drastic effect on the social relations surrounding their production and maintenance (Mason 1986:210; Rogers 1990:20). Likewise the breakdown of social relations can contribute to the loss of elements of indigenous technology and their replacement with Euro-American material culture.

Severe population loss and increasing participation in the wage labour economy led to a gradual erosion of the extended family household as the basic social and economic unit and contributed to the wholesale adoption of Euro-American material culture at Kimsquit. However, ethnohistoric evidence indicates that the Kimsquit maintained an ethnic identity of their own.
Participation in the local cannery industry allowed them to remain autonomous and the use of Euro-American goods did not dissolve their cultural identity, but rather in many cases may have been used creatively to enhance it.
CHAPTER 8
CONCLUSIONS

The goal of this thesis is to examine the process of acculturation and Native resistance resulting from European contact in Kimsquit from an archaeological perspective. This includes defining what historical pressures towards change were experienced and what the material response was. A body of general theory regarding acculturation proposed by social anthropologists has been used to support the interpretations.

Acculturation theorists proposed that contact between Native Americans and Europeans usually initially resulted in non-directed change, with Native people choosing elements to borrow which had meaning in their pre-existing culture (Spicer 1961:532). Linton (1963:471) further proposed that pre-existing ideological notions of prestige guide what elements are borrowed most strongly with considerations of practical utility being secondary. Archaeologically, one would therefore expect to find foreign items which are consistent with precontact prestige or luxury goods (i.e., ornaments) appearing before strictly utilitarian tools in contact situations. Acculturation theory further proposes that under conditions of non-directed change the borrowing of new elements often involves some adjustments of the borrowed elements in order to make them better conform, or "incorporate" them into indigenous patterns of meaning and usage (Linton 1963:471). The archaeological appearance of trade items
that have been modified in form may therefore relate to this natural process of incorporation and be an indication of non-directed change.

Some archaeologists (White 1974) have considered unmodified trade items with no indigenous functional analogues to be indicators of deliberate and successful acculturation. More recent theorizing on contact situations has suggested that Native cultural values continue to define the nature of cultural borrowing even under intense pressures of directed contact, and that these cultural values themselves are continually redefined as part of a natural process of change (Roseberry 1989).

Because indigenous values and practices and the specifics of the contact situation define the trajectory of change, contact can lead to a diversity of responses. Acculturation theory, therefore, is only considered a broad heuristic device, rather than a body of laws, suggesting principles for the study of the adjustments and realignments that occur as cultures seek to survive in contact situations. A series of more specific questions regarding the nature of contact in Kimsquit (including as much as possible the motivations and attitudes of the parties involved) and the sequence of adoption, modification and adaptation to European goods are thus addressed using ethnohistoric and archaeological data. The results of these questions are evaluated below.
Ethnohistory of Contact and Responses

A currently popular model suggests that the fur trade maintained or stimulated indigenous Northwest Coast economic and social systems while settlement and wage labour were disruptive and lead to the rapid "demise" of Indian culture (Fisher 1977:209). Because the timing and details of interaction with Europeans varied for different parts of the Northwest Coast, a chronology specific to Kimsquit is devised based primarily on the dominant form of European contact as follows: Protohistoric Period ca. 1770-1793; Explorations and Maritime Fur Trade 1793-1833; Land Based Fur Trade 1833-1870's; Colonial Period 1874-mid 1920's. The land based fur trade was subdivided as follows according to the dominant location of trade: Fort McLoughlin 1833-1843; Steamship Trade 1843-1860's; Fur Trade Stores 1860's-1874; and actually continued well into the colonial period.

In the protohistoric period small quantities of goods probably entered Kimsquit through indirect contact. The fully historic period on the Central Coast began with the maritime fur trade and explorations, but unfortunately there are no detailed first hand accounts of Kimsquit because it was remote from the centre of European trade and probably barred from direct access to it by middlemen in Dean Channel. Accounts of the European presence in the Kimsquit area that do exist indicate that relations were peaceful and unobtrusive (Vancouver 1798; Menzies 1923; MacKenzie 1967). Northwest Coast peoples seem to have been motivated in contact with maritime fur traders and
explorers by indigenous values concerning wealth and trade (Fisher 1977; Wike 1951). Europeans were prestigious trading partners and a great source of wealth (Duff 1964:57). The goods Native peoples desired primarily in trade were consistent with Native values, such as metal tools similar to indigenous implements, raw metal suitable for reworking, and muskets, cloth and other prestige goods.

In the land based fur trade period Native control of trade continued. Bigoted attitudes of superiority were often apparent among fur traders, but they were in a vulnerable position and needed to maintain the cooperation of Native peoples and could not enforce their own cultural values. The goods Native peoples sought were primarily blankets, muskets and cloth — items which could be accumulated in bulk to display status — and alcohol. The shift in location of trade to a permanent trading post at Fort McLoughlin, and an emphasis on land mammal furs, disrupted Native trade patterns. The Bella Bella were cut out as middlemen and the Kimsquit and Bella Coola could visit Europeans themselves (Work 1945:77). Contact was more frequent, although brief in duration and on the Kimsquit’s terms, and they were able to profit as middlemen themselves in trade with the interior.

With the closure of Fort McLoughlin in 1843 the dominant mode of contact was with traders aboard steamships. The steamship trader Compton (1869) indicates that in the early 1860's contact between Europeans and the Kimsquit was still
infrequent and the Kimsquit were therefore less acculturated than most Northwest Coast groups. They continued to benefit as middlemen in trade with the interior, although to a lesser extent than the Bella Coola who had resident traders nearby (Compton 1869:11). The operation of Hudson's Bay Company stores at Bella Coola and Bella Bella after 1866 allowed the Kimsquit to resume more regular trade with Europeans, although it continued to be occasional and on their own terms. The goods in demand by Natives at the Bella Coola store continued to be essentially potlatch goods (Kennedy 1878).

An intrusive European presence was not felt by the Kimsquit until Europeans began to consider their territory as a transportation route and a seaport to aid in the colonization of British Columbia. The first indications of such plans may be as early as 1861 (B.C. Lands and Works Department 1861-1865). This was followed by a series of Canadian Pacific Railway surveys between 1874-1876 (Fleming 1877), and another purchase of land at the head of Dean Channel for "fishing purposes" in 1876 (Daily British Colonist, June 7, 1876). Native concerns were not a consideration in any of these plans and it is not known how they felt about them, or if they were even fully informed. The Kimsquit did take advantage of the presence of the surveyors to work as guides and to sell them firewood for their steam ship (Smith 1874:69). The European presence was fleeting, however, and its impact on the Kimsquit was minimal.

The Kimsquit began to feel deliberate efforts at directed
change from a patronizing colonial government which wanted to
develop more remote parts of the province and demanded the full
"cooperation" of Native people when their village was shelled by
the Royal Navy in 1877. The next intrusion upon Kimsquit by
colonial powers was the establishment of two tiny reserves in
1882, which were made official in 1889, and paved the way for
Euro-Canadian development. Although there was some consultation
with the Kimsquit regarding which lands "they wished to have set
apart for them" (Canada 1883:115), it is not clear whether they
fully understood the intention of this exercise. Euro-Canadian
development was eventually to come in the form of fish
canneries, rather than permanent White settlements.

Indian agents became concerned with acculturating the
Kimsquit in the 1890's but were not very effective before 1910
when the Bella Coola Agency was established with headquarters at
Bella Coola, because Kimsquit was remote from other agency
headquarters (Canada 1911). It was the Indian agent's goal to
bring Native people into the mainstream economy, impress Euro-
Canadian standards of health care, clothing, housing and hygiene
upon them, and to enforce the Indian Act banning the potlatch
and ceremonials.

The Indian agent's reports provide the best information
regarding the Kimsquit people's resistance to efforts by the
colonial government to assimilate them. They indicate that the
Kimsquit continued to be selective in what they adopted and to
manoeuvre contact, even with agents of directed change, to
maintain a sense of cultural identity. By the end of the nineteenth century the Kimsquit were still all pagans, living mainly in Native plank houses and had no teacher (Canada 1900:263). They made bold requests of Indian Affairs, such as providing their children with a western education but not by a missionary (Canada 1900:263), petitioning for the adoption of children when their population was in danger of dwindling away and even specifying which racial stocks would be acceptable (Canada 1901:271), and playing up sympathy over the shelling of their village (Canada 1882:142). Cash earnings from wage labour in canneries and sawmills and from the sale of potatoes were acceptable and desirable. Efforts at missionizing, however, consistently failed until the 1910’s.

Contrary to Fisher’s (1977) generalization, wage labour and encounters with colonial forces did not lead to the immediate “demise” of Kimsquit culture. Cannery work may not have been as disruptive to the Kimsquit community as it was to some other Northwest Coast groups because two canneries were operated locally and they did not have to leave their community to work. Wage labour was a new source of wealth and the cannery stores brought an abundance of Euro-American goods. Cannery work did interrupt traditional subsistence and contribute to the loss of Native technology, because time was no longer available to invest in craft production and Euro-American substitutes were readily available to be purchased with cash. The uses to which Euro-American items were put, however, were still in large part
consistent with Kimsquit culture (see below)

Acculturative pressures were intense in the early twentieth century at Kimsquit and drastic changes did occur. Population declined rapidly, mainly due to the long toll of European diseases, but also due to out migration, and may have affected social organization. Severe population loss tended to weaken the structure of descent groups which regulated hereditary rights and positions of influence, and along with wage labour, eroded the importance of the extended family household as an economic unit (McIlwraith 1948 II:522). The Kimsquit became gradually dependent on a cash economy. Violence and drunkenness became problems when people were no longer motivated to conform to ideals of traditional behaviour by the scrutiny of their extended family (McIlwraith 1948 II:522). It was under these conditions that Christianity was finally accepted, although it was likely syncretized with Native religion by more conservative Kimsquits, as it was among the Bella Coola (McIlwraith 1948 II:521).

Population decline and the closure of the canneries finally lead to the abandonment of Kimsquit. The Kimsquit, however, did not abandon their sense of cultural identity along with their homes. The move to Bella Coola insured their cultural survival as Bella Coola speakers. The combined peoples of Talio, Kimsquit and Bella Coola have worked together to define an identity as the Nuxalk nation, and families continue to trace their roots to Kimsquit. A small number of people continued to
exercise their rights to resources there by operating seasonal traplines in the 1930's-1950's (Bouchard et al 1988:10). Appropriately, the modern Nuxalk nation operates a rediscovery program for its youth at Kimsquit in a continued effort to resist complete assimilation into Euro-Canadian culture.

Archaeological Questions

In the introduction acculturation theory is used to guide the formulation of the following questions about the archaeological data:

Can the sites be differentiated chronologically to correspond to the contact periods?

What items of precontact material culture were replaced first and which persisted?

What elements of Native technology were transferred to Euro-American material and how were they expressed?

What kinds of trade goods were adopted first and what was the criteria of selection?

What behavioral changes are indicated by the adoption of items of Euro-American manufacture, or are they strictly functional equivalents of precontact items?

Dating

A wide range of information was used to date the sites including relative seriation of the assemblages conducted by Hobler (1986), tracing dates of manufacture of Euro-American
artifacts, and a search for ethnohistoric and oral history references to the sites. It was suggested that Axeti, Nutsqwalt, Nutal and Anutlitx were occupied sequentially, perhaps with some slight overlap. Axeti has the greatest antiquity, with an early component falling somewhere in the Early Period of Central Coast prehistory and a later component belonging in the protohistoric or early maritime fur trade and explorations period. There is some stratigraphic mixing of the components on the margins of the site which are steeply sloping. Nutsqwalt saw very brief occupation probably in the protohistoric or early maritime fur trade periods.

Nutal may overlap with both Nutsqwalt and Axeti, with its earliest deposits appearing to belong in the late Kwatna phase or the protohistoric period. Dates of manufacture of historic goods fall mainly between the mid-eighteenth and mid-nineteenth centuries, indicating that the influences of the maritime and land based fur trades were felt here. Anutlitx is a fully historic site with no archaeological component prior to the mid 1800's recognized. Ethnohistoric evidence indirectly suggests that a shift from Nutal to Anutlitx occurred in the 1840's or 1850's. Anutlitx is the site of the community which Compton visited in the days of the steam ship trade and which felt colonial pressures prior to its abandonment in the 1920's.

Replacements and Persistences in Material Culture

The protohistoric and maritime fur trade components of
Axeti and Nutsqwalt display strong continuity with the precontact Kwatna phase of the Central Coast. Pecked and ground stone and polished stone artifacts dominate with no visible replacements by Euro-American artifacts or materials. The artifacts of local material and Native manufacture at Nutsqwalt and Axeti are very similar with some minor differences in the frequency of occurrence of individual artifact types, most of which can be accounted for by the presence of the early component at Axeti. A small amount of Euro-American material reworked by Native technology occurs at both sites, representing an additive incorporation (Rogers 1990:106).

Nutal also has a large proportion of artifacts of local material and Native workmanship throughout its deposits indicating that stone and bone working technology and use survived until the mid-nineteenth century. However, the stone and bone artifact assemblage here shows some significant differences from the Kwatna phase, some elements of precontact material culture being lost or replaced along with the addition of Euro-American items and materials. Heavy pecked and ground stone artifacts continued to be important, although chipped stone technology declined and became simplified in favour of expedient flake tool types (i.e., cortex spall tools, retouched and utilized flakes).

Startlingly, polished stone adzes disappeared. In contrast to the Kwatna phase and protohistoric period when polished stone adzes were so prolific, Nutal has no polished stone whatsoever
above the 15-30 cm level in deposits which date to the land
based fur trade. Nualal also has no greenstone adze blanks and
few abraders, both items used in the manufacture of polished
stone adzes. Corresponding with the decrease in polished stone
adzes is an increase in the amount of Euro-American material,
most of which was metal reworked by Native craftsmen. Metal
cutting tools (ie., blades, chisels), however, are not present
in any great quantity. This is either because there was a
decline in woodworking in the early to mid-nineteenth century at
Nualal, or because metal is durable and does not break as easily
as greenstone and hence did not enter the archaeological record
in the same quantity as greenstone adze fragments. Because
contact in the maritime and land based fur trade was undirected
and unenforced, the replacement of greenstone adze making and
using technology with substitutes in Euro-American material must
have been a Native decision, probably guided by the qualities of
the new materials.

Very few items reminiscent of precontact material culture
survive archaeologically at Nualalitx. A single item of polished
slate is the last vestige of the once important polished stone
technology. Among the few pieces of worked bone is a gaming
piece, representing the survival of an aspect of Native values
as well as technology. Chipped stone and ground stone
technology are not represented in the assemblage at all. Here,
under intense pressures to give up Native material culture, it
appears as though White material culture was suddenly adopted in
its entirety. However, examination of the remaining questions suggests that aspects of Native technology and artifact use did survive.

**Transference of Native Technology to Euro-American Material**

The appearance archaeologically of artifacts manufactured locally by Native people from Euro-American materials is taken to indicate the incorporation of elements of Euro-American material culture into a pre-existing cultural matrix. Such elements must have been endowed with traditional meaning (Spicer 1961:532). Spicer proposed that this is a natural process in cases of non-directed change. At Nutsqwalt both items of Euro-American material have been reworked by Natives, and at Axeti all but two pieces of Euro-American material have been reworked. This is consistent with Fisher's model and general theories of acculturation, indicating that in the protohistoric and early maritime fur trade periods Native people were not only selective in what they chose to adopt of European culture, but that they actively modified it to conform to pre-existing categories of meaning and function.

Natal is marked by large quantities of reworked metal indicating that the Kimsquit continued to be selective towards European traits and to adapt them to their own culture well into the land based fur trade period. Considering the proposed correlation between form and meaning (Bradley 1987:174; Quimby and Spoehr 1951:147), the forms of Native-made metal artifacts
show few similarities to indigenous stone and bone artifacts, although functional equivalents for most do occur in local materials.

Locally reworked metal artifacts are rare at Anutlitx because of the increase in availability of fully manufactured items and a shift away from Native manufacture altogether. However, there are more reworked metal artifacts than artifacts of stone and bone. This represents some continuity in efforts to incorporate Euro-American elements in an unobtrusive manner. Some of the ornamental forms produced (i.e., tinklers) support the ethnohistoric evidence for the continuance of "pagan" religion and ceremonials. Some artifact forms entirely new to the Kimsquit were also produced in metal at Anutlitx. These represent efforts to copy items of Euro-American material culture, rather than adapting the new material to Native material culture.

For the most part the methods of manufacture used in the reworking of metal are similar to technologies evolved prior to contact, such as abrasion, puncturing, and perhaps even a limited amount of annealing and cold hammering. Entirely new European technologies (metal scissors) are only recognizable at Anutlitx. In most cases the reworked metal artifacts could be clearly divided between ornamental and utilitarian objects and scrap. However, the notion that prestige items are adopted before utilitarian items (Linton 1963:474) was not supported. Artifact curation and the small sample sizes of the early
components may be confusing factors. In sum, the items of Euro-American material and Native manufacture illustrate the transference of indigenous activities or artifact types and certain techniques of manufacture to introduced materials, but not in imitation of stone and bone artifact forms.

Adoption of Trade Goods

Euro-American trade goods were originally not essential to the survival of Native peoples and were incorporated in small numbers into a cultural matrix meaningful to them. Initial trade goods surviving archaeologically are mainly those suitable for reworking into Native artifacts as discussed above. At Nutsqwait items of Euro-American manufacture are entirely absent. At Axeti they occur in very small numbers in association with a limited range of activities, only one each in the hunting and clothing-adornment functional group categories. At Nutral Euro-American artifacts appear in small numbers in all functional categories, but they do not necessarily indicate European usages had been adopted and do not replace Native-made artifacts in the same categories. Practically all of the artifacts of Euro-American manufacture at Axeti and Nutral could have been selected because they conformed to indigenous values of prestige and power. More than 95 % of the artifacts at Anutlitx are of Euro-American manufacture, showing a drastic increase in frequency over Nutral, but perhaps not indicating as great a change in behaviour as would be expected.
Behavioral Change or Functional Equivalents

The functions and meanings of trade goods in historic Native sites are typically ambiguous. An effort was therefore made to examine the functions of artifacts in historical context and in comparison to indigenous artifact categories. Euro-American artifacts appear in the hunting and clothing-adornment categories at Axeti, but they by no means replace Native artifacts and their importance is not clear. Firearms may have been mainly valued as prestige-power symbols rather than for their practical uses (Wike 1951:69). Nor is there any indication at Nutral that European activities or practices had been adopted. Buttons and uniforms, for instance, were popular as prestige items while typical Native dress among the Kimsquit continued to be made of indigenous fabrics and furs into the 1860's (Compton 1869:28). Keys and clear glass may also have had prestige.

At Anutlitx we see a complete replacement of Native items in the domestic and hunting categories. Rifles at this point were probably adopted as the only weapon for hunting because of their superiority over muskets and Native projectiles, but hunting itself can be considered a traditional activity. The domestic material in many cases (i.e., ceramics) may have served as items for exchange at potlatches and as replacements for indigenous artifact types in "traditional" domestic activities, rather than indicating the adoption of the values and practices associated with these artifacts in White culture. European
clothing was adopted for everyday wear in the late nineteenth century, but Native-made metal ornaments continued to be fashioned. The Euro-American construction-hardware artifacts are predominantly nails, but also include metal furnishings and tools, some of which (ie., an axe head used as a wedge) may have been used in a manner consistent with Native practices.

In sum, all of the items of Euro-American manufacture from Axeti and Nutal may have fulfilled functions consistent with aboriginal practices and values. Many of the Euro-American items at Anutilitx involve the adoption of new practices (ie., hunting methods, clothing and building methods), but most have ambiguous meanings and could have seen uniquely Native usages.

Conclusion

The ethnohistoric record indicates that the Kimsquit were very selective and conservative towards European culture. Due to their remote geographical location, the Kimsquit were distant from the centre of European activities throughout the maritime and land based fur trade periods and they may have been content with that situation. Europeans were kept at arms length and the Kimsquit were able to control the frequency of interaction and select what they wished from White culture without seeming to significantly interrupt the precontact culture pattern.

When faced with an intrusive Euro-Canadian presence in the late nineteenth century, including efforts to develop their land, missionize and ultimately assimilate them, the Kimsquit
continued to manoeuvre contact as best they could to pick and choose elements of the dominant culture that they felt would benefit them. By the 1920's population decline and economic collapse had taken such a toll that the only chance the Kimsquit had for physical and cultural survival was to join their kinsmen in Bella Coola.

The archaeology of the three earliest sites in this study, Axeti, Nutsqwalt and Nutal closely corresponds to this interpretation. The amount of trade goods gradually increased. Many were reworked, transferring Native technology and artifact categories to the new materials. There was only one major replacement in the indigenous stone and bone assemblage (metal for greenstone adze blades), which was probably guided by the superior qualities of the new materials.

The archaeology of Anutlitx is more difficult to corroborate with the ethnohistoric record of continued resistance to Euro-Canadian culture, as Native material culture appears to have been almost completely rejected in favour of manufactured items. However, the artifacts comprising the Anutlitx collection were recovered from midden deposits outside of two aboriginal style plank houses and their usages are ambiguous. Life inside of the plank houses was probably conducted according to values evolved prior to contact and redefined since, with the manufactured items being adopted for convenience and prestige, but the people using them still behaving uniquely like Kimsquits.
APPENDIX 1

ARTIFACT DESCRIPTIONS

FeSr 1 Anutiltx

Artifacts of Euro-American Manufacture

Domestic Artifacts

Ceramics

The FeSr 1 ceramic collection consists of 33 sherds representing portions of at least 22 vessels. The classification system used here first identifies sherds to a broad ware type (white earthenware or whiteware, ironstone and stoneware) based on characteristics of paste and glaze. Secondly it identifies the method of decoration. These traits are only diagnostic to broad temporal periods, which in many cases begin before and persist until after the general temporal parameters of the site's occupation. All of the ceramics are of cheap and durable types typical of nineteenth century frontier sites. The two most common types are ironstone and white earthenware (whiteware). Whiteware is a broad term applied to earthenware with an off-white paste, and a somewhat porous texture (Chance and Chance 1976). It will stick to the tongue and can be scratched with a knife, although it is harder and whiter than the earlier pearlware from which it evolved, becoming most common after 1820 (Hume 1970:130). The glaze is clear but appears to be white and before 1850 commonly has a blue tinge in the gathers (Collard 1967:131).

Ironstone is intermediate between earthenware and
porcelain, but is technically an earthenware (Collard 1967). The paste is harder than earthenware and is vitreous and nonporous with a deep white glaze that adheres well. It will not scratch with a blade and will not stick to the tongue. It is most easily distinguished from porcelain by its opaqueness (Godden 1964:xv11). Ironstone was invented in an effort to imitate Chinese porcelain in 1805 by Josiah Spode who called it "stone china", and became popular after Charles James Mason came out with essentially the same product in 1813 called "ironstone china" (Collard 1967:129). It was not common in Canada until after 1820 and was originally relatively expensive and showy, but became plainer and cheaper after 1850 as it was shipped to the furthest frontiers (Collard 1967:130). It also began to be made with a grey-white tinge to its glaze at this time in imitation of French porcelain (Collard 1967:130). Stoneware is also a hard nonporous ceramic, but it is coarser grained and buff to grey in cross section (Chance and Chance 1976:61).

Essentially the same decorative treatments were used on ironstone and other earthenwares. The 1820's saw the first use of transfer prints under the glaze (Luegar 1981:121; Collard 1967) which quickly became the most popular decorative treatment. "Flown Blue" transfer prints, where the pigment is allowed to bleed out to form blurry images, were introduced in the 1830's but reached their peak of popularity in the 1840's and 1850's in Canada and lasted until the 1890's (Collard 1967:118). Stamped or sponge decorations, where the pigments
are applied in simple motifs, or "garish colour combinations" with a stamp or stencil, were most common on the Northwest Coast between 1890-1910 (Luegar 1981:129).

**Undecorated Ironstone n=6**

Catalogue Nos. 12, 117, 120, 54, 80 and 44 (Fig. 36) all represent fragments of heavy and simple ironstone vessels characteristic of those post dating 1850. No. 120 is the base of a vessel and bears portions of the maker’s mark "TAYLOR AND C., ENGLAND", of the Mellor Taylor and Co. England, which Luegar dates between 1891-1904 (1981:125).

The only other ceramic sherd with a maker’s mark is a base fragment from a plate (No. 54) reading "OYAL", "IRONSTON". This may be from the labels "Royal Ironstone" or "Royal Ironstone China", which were commonly used on ironstone produced after 1850 (Collard 1967:130). No. 44 is the base fragment of a thick ironstone vessel, perhaps a wash basin or heavy bowl. No. 80 is an undecorated fragment from a more delicate ironstone vessel (teacup) with a blue tint in the glaze at the handle wall juncture. The delicateness of this fragment and the blue tinge are traits most common on ironstone produced before 1850 (Collard 1967:131).

**Decorated Ironstone n=2**

Decorated fragments from two ironstone vessels are represented. No. 36 (Fig. 36d) is a heavy rim fragment from a
Figure 36. Ceramics from Anutiltx.
a) Mellor Taylor and Co. Ironstone (No. 120); b) Royal Ironstone base fragment (No. 54); c) Plain ironstone base fragment (No. 44); d) Sponge decorated ironstone rim fragment (No. 36); e) Ironstone teacup fragment (No. 80); f) Transfer printed ironstone (No. 110); g) Undecorated whiteware rim (No. 93); h) Undecorated whiteware teacup (No. 94); i) Transfer printed whiteware (No. 9); j) Transfer printed whiteware (No. 35); k) Flown blue decorated whiteware (No. 11); l) Flown blue decorated whiteware (No. 13); m) Sponge decorated whiteware (No. 119); n) Sponge decorated whiteware (No. 8); o) Transfer printed stoneware (No. 14).
wash basin and is sponge decorated in purple with a floral design, dating it from 1870-1910 (Luegar 1981). No. 110 (Fig. 36f) is a cup fragment with an unidentified brown transfer print under the glaze.

Undecorated Whiteware n=4

Nos. 93, 94, 109 and 91 are undecorated fragments of white earthenware vessels with an off-white paste and greyish glaze. Nos. 93 and 94 (Fig. 36g-h) represent different vessels from a matched set, and have a blue tinge in their gathers, suggesting that they predate 1850.

Decorated Whiteware

Transfer Prints n=13

Nos. 77, 9, 35, 11, 13 and 98 bear portions of underglaze transfer prints in red, brown, green and blue. These prints are common on late nineteenth century Native sites but are not identifiable like earlier Spode-Copeland patterns. Nos. 11 and 13 (Fig. 36k-1) are fragments of the same cup and are decorated in "flown blue".

Sponge\Stamp Decorated n=6

Nos. 7 and 8 (Fig. 36n) are fragments of two separate vessels (a cup and a bowl respectively) representing a set with identical stamp decoration over the glaze in the form of a red flower and leaf pattern. No. 119 (Fig. 36m) is a portion of a
plate saucer with a green band and a portion of another design applied under the glaze. The stamping technique of decoration places these ceramics between 1870 and 1910 (Luegar 1981; Collard 1967).

Stoneware n=2

No. 14 (Fig. 36o) is a mottled grey cup sherd with a blue underglaze transfer print. No. 37 is a saucer sherd with brown transfer print under the glaze, blue over the glaze and a scalloped edge.

Bottle Glass N=57

Fifty-seven fragments and whole specimens of bottle glass were recovered representing twenty-six containers. The specimens were examined primarily for traits diagnostic of their function and dates of manufacture. The traits examined include vessel form, glass colour, embossed labels and maker's marks, mould seams and the method of forming the finish.

The first fully automatic glass blowing machine was not invented until 1903, and was not in wide use until 1914 (Watson and Skrill 1971), although mouth blowing continued until 1925 (Jones 1981). The diagnostic marks of machine manufacturing are a seam that goes to the top of the lip and "ghost" lines in the body and base areas (Jones 1981:28). Prior to this bottles were either freeblown (until about 1860), producing bottles with no seams, or else were blown in one of several types of moulds,
each with a distinctive seam, and the lip was applied afterwards while the glass was still hot (BIMAL).

None of the bottles from Anutlitx were free blown. Mould seams and lip forms were thus important traits in identifying the bottles. Most of the bottles or fragments had two seams, one on either side of the body, running vertically from the base to a point somewhere on the shoulder or neck. This indicates that the vessel was blown in either a two piece open mould (used from ca. 1800-1860\80), or some form of a two piece body mould with a third base part, as was common from 1850-1920 (Jones and Sullivan 1989:28). The main point of distinction between the two methods is the presence of a seam across the bottom on the base of two piece open moulds, and the presence of a seam around the base of two piece body moulds with separate bases (Jones and Sullivan 1989:28). None of the bottle glass in this study displayed the seam across the bottom of the base characteristic of two-piece open moulds, and in most cases the base was identifiable as being formed in a cup bottom form of two piece mould with separate base.

In the case of fragmentary bottles where the base is missing the two techniques may be indistinguishable and other traits must be examined. Lips began to be applied to mouth blown bottles in 1840 and improved in sophistication and symmetry until completely machine manufactured bottles were common (Vienneau 1969:14). Therefore, blown in mould bottles with applied lips range in date from 1840-1914. This range in
dates can be narrowed further if finishing tool marks can be seen in the neck. These are faint horizontal lines in the neck-finish area made by a tool that was applied to remove seam lines and smooth the neck. This tool was not common in North America before being patented in the U.S. in 1856 (Jones 1981:29). Several fragments in this study lack neck and base fragments and can only be said to be blown in mould, as indicated by bubbles in the glass and the presence of portions of seams, placing their date somewhere between 1800-1904.

Somewhat less reliable traits include the presence of recessed panels which start to appear in the mid nineteenth century (Beaudet 1981:110), vent marks or small embossed dots on the glass surface which indicate the mould had vent holes, which were used from 1860-'70-1920's (Jones and Sullivan 1989) and glass colour. The chemical constituents used in glass in the nineteenth century tended to produce a bluish/green or aqua tinge, most commonly found in glass between 1850-1870 (Chance 1974). Late in the nineteenth century clear glass was produced by adding manganese oxide to the formula, but when exposed to the sun for long the glass took on an amethyst tinge. This decolorant was used between ca 1875-1914 (Jones and Sullivan 1989:11). Amber coloured glass was most common after 1876 (Chance 1974).

The most diagnostic traits of bottles are labels and maker's marks, and where these exist an effort has been made to identify their origin. The use of embossing itself post dates
the mid nineteenth century (Beaudet 1981:10).

The range in dates of manufacture of the bottles is summarized in Table 3. A brief description of the artifacts and their traits follows.

**Medicine Bottles n=33**

**Perry Davis Vegetable Painkiller (n=5).** The Davis Vegetable Painkiller label was patented by Perry Davis in 1845 and was produced until the 1950's (Holbrook 1959). One complete bottle and fragments of three others are represented. The complete bottle (No. 141, Fig. 37a) has an amethyst tinge, and four recessed panels, with the words "Davis" embossed in the front panel, "Vegetable" on one side panel, and "Painkiller" on the other side panel. The four other fragments have an aqua tinge (Fig. 37b).

**Hamlin's Wizard Oil (n=1).** No. 25 (Fig. 37c) is a complete BIMAL, two piece mould with cup base bottle of clear glass. The words "Hamlin's Wizard Oil" are embossed on the front, "Toronto, Ont." on one side, and "Canada" on the other. Tibbetts (1972) dates Hamlin's product between 1880-1910.

**Eclectric Oil (n=2).** Two complete bottles (Nos. 142 and 143, Fig. 37d-e) of clear glass bear the embossed label "Dr S.N. Thomas", "No. 5520 The Propriety or Patent Medicine Act, ECLECTRIC OIL" on the front, "Northrop and Lyman Co. Limited, Toronto Ont." on the back in a recessed panel, "EXTERNAL" on one side and "INTERNAL" on the other. This label apparently began
Figure 37. Bottle glass from Anultitx.
a) Complete Perry Davis Vegetable Painkiller bottle (No. 141); b) Perry Davis Vegetable Painkiller fragment (No. 3); c) Hamlin's Wizard Oil bottle (No. 25); d) Eclectic Oil bottle (No. 142); e) Eclectic Oil bottle (No. 143).

Figure 38. Bottle glass from Anultitx.
a) Maltine MFC Co. bottle fragment (No. 144); b) Eno's Fruit Salt bottle fragment (No. 145); c) Langley's Balsam of Aniseed bottle No. 146); d-e) Unidentified perfume bottle fragments (Nos. 147 and 5); f-g) Cobalt blue bottle finishes (Nos. 32 and 43); h) Davis type bottle finish (No. 4); i) Ballneck type bottle finish (No. 41).
use in the 1870's (Benjamin 1982). Both bottles are of machine manufacture, one having a screw top lid, seams reaching the top of the lip and an Owen's suction scar on the base placing it post 1904. The other bottle has the same seams but a cork top finish, placing it at least post 1890 (Vienneau 1969:14).

Maltine MFC Co (n=22). Twenty-two sherds from a brown BIMAL bottle bearing the embossed name "THE MALTINE MFC CO., CHEMISTS, NEW YORK" were recovered (Fig. 38a). Although the fragmentary state of the bottle makes the method of manufacture difficult to determine, the use of this label apparently post dates 1878 (Tibbetts 1972).

Langley's Balsam of Aniseed (n=1). This is a complete amethyst tinged bottle embossed on the front by a lettered plate mould and having vent marks on the body (No. 146, Fig. 38c). These traits suggest a date between 1860/70 and 1914 (Jones and Sullivan 1989:47-49).

Eno's Fruit Salt (n=2). Two sherds from a large aqua coloured bottle with the words "ENO'S FRUIT SALT" embossed on the front and "WB2" on the bottom were found (No. 145, Fig. 38b). Bubbles in the glass indicate that it was blown in a mould but the type of mould is indeterminable

Davis Type Bottle Finishes n=3

Three aqua coloured bottle finishes (Nos. 1,152 and 4) of a form similar to the complete Davis Vegetable Painkiller bottles are represented, but none can be shown to match the above bottle
fragments (Fig. 38h). Jones (1989:79) describes the Davis type as a common two-part finish of the late nineteenth and early twentieth century, distinguished by a lip with rounded profile and flat or rounded top and a rounded, down tooled, or pointed string rim.

**Fruit Jar n=1**

A portion of a large amethyst tinged jar embossed with the letters "CROW", characteristic of the Crown label was found. Unfortunately, the most diagnostic traits of these jars are the form of the crown emblem and lip, which are missing. Because it is blown it may predate 1892 when machine made jars were introduced (Jones 1981), while the amethyst tinge places it before 1915 and after 1880. The crown label itself was introduced around 1867 (Bird et al. 1971:24).

**Perfume Bottles n=2**

Fragments of two ornate bottles that may be perfume bottles are represented. No. 5 (Fig. 38e) is the bottom of a small amethyst tinged bottle that was diamond shaped in cross section and had recessed front and back panels. Jones (1981:45) identifies a similar diamond shaped bottle as a perfume bottle. The other specimen (No. 147, Fig. 38d) is a portion of the finish and shoulder of an amethyst coloured bottle with frilly embossing on the front.
Cobalt Blue Finishes n=2

Two finishes (Nos. 32 and 43, Fig. 38f-g) of a deep blue colour from long necked bottles form this category. Both appear to be BIMAL, with no seams present. The lip of no. 32 is down tooled in a cruder fashion.

Unidentified n=10

This category is comprised of sherds that are too small to identify vessel form, but do bear some traces of their method of manufacture. No. 41 (Fig. 38i) is the neck, shoulder and finish of an unidentifiable BIMAL bottle. The finish is of a ballneck form which Jones (1981) places between the late nineteenth and early twentieth centuries.

No. 33 is an aqua coloured fragment from the base of a bottle with the characters "TO" on the bottom. However, this mark is undiagnostic, and all that can be said is that it is blown in mould. Eight sherds representing portions of vessels that were blown in mould comprise the rest of this category.

Undiagnostic n=6

This class consists of a curved fragment of amethyst tinged glass with no seams but many bubbles indicating it was blown in a mould; a thin angular blue glass fragment with an exterior patina (No.53); two deep blue sherds (No.76) without diagnostic traits and two sherds of very thin clear glass that is free of bubbles.
Kerosene Lamp Parts n=2

No. 124 (Fig. 39f) is the base plate of a kerosene lamp burner with the wick-wheel shaft, thumbwheel and wick tube in tact. The wick tube is flat in cross section, as is common from 1873 into the twentieth century. The fact that the chimney holder and baseplate were separate pieces also places it after 1870 (Russel 1968:154).

In addition were three conjoinable amethyst tinged sherds from a single lamp chimney. Glass chimneys became common in the late 1850's with the introduction of the kerosene lamp. These fragments resemble one found at Yuquot with a roughly ground lower rim about 5 mm high (Jones 1981:20). Its purplish tinge and straight rather than flaring rim place it from 1870's-1915 (Jones 1981; Russel 1968).

Clock Parts n=2

Two toothed cogs (Fig. 39d-e) from clocks were recovered from separate parts of the site. No. 72 appears to be a main spring made of brass, while no. 90 is a cog of iron.

Spoons n=3

Fragments of three spoons were recovered. No. 68 (Fig. 39a) is a complete table spoon with an ovate shaped bowl and upturned fiddle pattern stem end with dog nose. All of these traits were introduced in the late eighteenth century and continued into the nineteenth century (Wade 1979). Nos. 65, 66
and 67 (Fig. 39b) are conjoinable fragments of a single table spoon with a variant of the fiddle pattern stem end, an ovate shaped bowl and ears on the stem above the mouth. Ears also became popular at the end of the eighteenth and beginning of the nineteenth century. No. 49 (Fig. 39c) is a portion of the handle and mouth of a smaller table spoon.

**Woodstove n=1**

A portion of a small single box cast iron stove lacking maker’s marks was recovered (No. 123). Such stoves were common HBC items and remained popular into the early twentieth century.

**Construction and Hardware**

**Furnishings n=6**

This category includes a heart shaped iron chest lockplate (No. 69, Fig. 40a) with an ornate brass escutcheon; an iron skeleton key with the teeth broken off (No. 113, Fig. 40b), making it difficult to determine what kind of lock it fit; a large fragment of a white porcelain door knob (No. 55, Fig. 40e), which was common throughout most of the nineteenth century on EuroAmerican sites (Preiss 1979); and three small iron hinges. Nos. 95 and 22 (Fig. 40c-d) are halves of two different simple H style hinges, perhaps from a cupboard or chest rather than a door.
Figure 39. Domestic artifacts from Anutiltx.
a-b) Fiddle Stem End table spoons (Nos. 65-68); c) Table spoon fragment (No. 49); d) Kerosene lamp burner (No. 124); e) Clock cog (No. 90); f) Clock mainspring (No. 72).

Figure 40. Construction and hardware artifacts from Anutiltx.
a) Iron chest lockplate (No. 69); b) Iron skeleton key (No. 113); c-d) Hinges (Nos. 95 and 22); e) Ceramic door knob fragment (No. 55); f) Saw blade fragment (No. 70); g) Bucket/kettle lug (No. 112); h) Tack (No. 148).
Saw Blade n=1

One short segment of saw blade (8.2 x 1.6 cm) was found having teeth of irregular height, and notches of uneven depth suggesting that it may have been hand made (No. 70, Fig. 40f). However, it is very corroded and may be a piece of a manufactured keyhole saw.

Axe Head n=1

This category consists of one iron axe head (No. 50) with battering on the butt end indicating that at some point in its life it was used as a wedge.

Bucket/Kettle Lug n=1

One complete T-shaped iron bucket/kettle lug (No. 112, Fig. 40g) with two rivets in place was found.

Barrel Strapping n=1

No. 20 is a piece of barrel strapping with a rivet in place holding two sections together. Such strapping was often refashioned into other items, but since this item has no signs of deliberate modification it is enumerated here rather than among the modified artifacts.

Flat Glass n=1

One fragment of flat aqua coloured glass was recovered. Window glass is usually indistinguishable from mirror glass
unless there is silvering on the back which this fragment lacks. Efforts have been made to date flat glass based on its thickness (Roenke 1978), but it is not always reliable and the results from a single sherd are not likely to be very convincing.

**Nails**

The method of manufacture of nails is easy to determine if the specimen is not too corroded and it can be diagnostic to a particular time period, although the dates vary regionally. The FeSr 1 nails were classified simply as either handwrought, machine cut or wire, with machine cut nails making up the bulk of the collection.

**Machine Cut Nails** n=188

Machine cut have a rectangular cross-section and head and two opposite edges tapering to a point. They were first invented ca. 1790 (Hume 1970:253) but did not appear in the northwest until 1830 (Quackenbush 1990:217), and were probably not common before 1850 (Fladmark 1972:65). They continued in use until wire nails became popular around 1900 (Quackenbush 1990). The cut nails at Kimsquit are taken to post date 1830 and probably fall between 1850 and 1900. Two of them have handwrought heads, one a rosehead (No. 116) and one an L shaped head (No. 31), which places them early within this time range.
Wire Nails n=21

Wire nails are characterized by a round head and shaft. They were not manufactured in North America until the 1850's and were not common in Canada before 1900. During excavations at Fort McLoughlin in an area of the site known only to have been used from 1880-1900 only cut nails were found (Quackenbush 1990:218). Therefore, wire nails on the Central Coast are considered to post date 1900.

Handwrought n=2

Handwrought nails are distinguished by having a continuous taper to a point with a square shank cross section and irregular head. Handwrought nails generally predate cut nails (ca. 1860), but in some cases continued to be manufactured.

Screws n=2

Two machine manufactured screws were recovered. One has a standard head and the other head is too corroded to identify.

Tacks n=5

Portions of five tacks with large brass heads 1.82 cm in dia. and rectangular cut iron shanks (2.91 cm in length) were found. One intact tack is perforating a thin strip of iron strapping (No. 148, Fig. 40h).
Guns and Ammunition/Hunting Group

Cartridge Cases \( n=3 \)

This category consists of three brass rifle cartridge cases. The most temporally diagnostic traits of rifle cartridges are head stamps. The only cartridge case bearing a stamp is no. 64, stamped "H", which along with its dimensions indicates that it is a .22 long shell, first introduced by Remington in 1871 and used until present (Barnes 1985). In the absence of head stamps measurements were taken of the other shells to determine their calibre and style. No. 48, although crushed, matches the dimensions of a .44-40 which was used from 1873-1937 (Vanstone and Townsend 1970:115). No. 28 matches the dimensions of a .45-70 which was developed in 1872 and used until the early 1930's. Both .44-40 and .45-70's were very common and serviceable rifles in the late nineteenth century. The .45-70 was of military origin while the .44-40, a much smaller calibre, was developed for the newer magazine loaded repeating rifles.

Clothing and Adornment

Buttons \( n=20 \)

The dating of buttons is very difficult and the FeSr 1 collection of buttons is not very diagnostic. White porcelain or milk glass buttons from 1.1-1.2 cm in diameter with four holes in a depressed centre panel (Fig. 41a) were the most frequent (\( n=11 \)). In addition was one blue glass button of the
same style. Storm (1970:116) identifies such buttons as "Prosser" buttons, which were patented in 1841 and commonly used on utilitarian clothing until present. The collection also includes one milk glass button 1.0 cm in diameter with concentric rings on the face and a broken shank attachment at the back, and one large button of synthetic material with four holes in a depressed centre panel (Fig. 41c), both of whose dates of manufacture are undetermined.

Metal buttons include two ferric buttons of a rivet style (No. 63 and 150, Fig. 41e-f)(1.3 and 2.6 cm in diameter respectively) and a variation on the rivet type with the back piece wired on to a front stamped with the words "TOWER’S WIRE FASTENER" (No. 149, Fig. 41d). This label however is not dated.

Nos. 62 and 106 (Fig. 41g-h) are machine stamped copper faces of buttons with perishable backs, but neither button is dated. A fragment of a two-piece stamped steel button of a type that Olsen (1963) indicates became common after 1870 was also found.

Beads n=16

A total of sixteen beads were recovered and classified according to Kidd and Kidd (1970). The most common beads in the assemblage are drawn, tubular, cornerless, hexagonal, transparent, bright navy coloured beads (Fig. 41i-k). Karklins (1981:91) places these between 1780 and 1880, while Woodward (1963) says they were popular on the west coast from the 1830’s
to 1880. Eleven of these beads were layered (Kidd category 111f2) with a light aqua blue core, and ranged in diameter from 5.5-8.4 mm, while four were monochrome (Kidd category 1f) and ranged in diameter from 4.0-7.1 mm. In addition was one layered tubular, hexagonal, transparent, bright navy, drawn bead (No. 87) 6.4 mm in diameter without faceted corners of a type that Karklins places in the 1a* category.

The circular beads include one layered drawn bead with a transparent, scarlet outer layer and opaque white core (Kidd category 1va9, 6.2 mm in dia)(Fig. 41n). These small red and white beads are sometimes called HBC beads because they were used in the western fur trade, but this only dates them broadly to the nineteenth century (Woodward 1963). The remaining four beads are monochrome circular wound beads. No. 121 (Fig. 41m) is a large (8.9 mm in dia) transparent bright navy bead (W1b16) and the others (Nos. 56, 87 &103) are very large (11.4-13.1 mm in dia) transparent amber beads (W1b7)(Fig. 41l). However, these circular beads are useless for dating because they were introduced early in the fur trade and continue to be made (Karklins 1981).

Miscellaneous Clothing and Adornment n=4

This category includes a brass boot eyelet (Nos. 26, 1.42 cm in dia), a brass safety pin (No. 71), an ovoid shaped brass brooch with flowers applied at either end (No. 58) and a buckle (No. 23) with an iron frame and brass central pivot (Fig.
Figure 41. Clothing-adornment and unidentified Euro-American artifacts from Anutlitx.

a) White Prosser button (No. 57); b) Blue Prosser button (No. 57); c) Large synthetic button (No. 57); d) Tower's Wire Fastener button (No. 149); e-f) Rivet type buttons (Nos. 63 and 150); g-h) Copper buttons (Nos. 62 and 106); i-k) Tubular hexagonal navy blue beads (111f2) (No. 56); l) Amber coloured wound bead (W1b7) (No. 121); m) Navy coloured wound bead (W1b16) (No. 121); n) Scarlet and white layered bead (1va9) (No. 121); o) Brass brooch (No. 58); p) Brass boot eyelet (No. 126); q) Iron buckle with brass pivot (No. 23); r) Brass safety pin (No. 71); s) Unidentified copper/brass (No. 59).

Figure 42. Reworked Euro-American material and artifacts of local material and Native manufacture from Anutlitx.

a-b) Copper tinkling cones (Nos. 96 and 105); c-d) Iron tinkling cones (Nos. 115 and 74); e) Spiral/Hoop fragments (Nos. 27 and 31); f) Latchook (No. 47); g) Boathook (No. 100); h-j) Patches (Nos. 60, 127 and 88); k) Unutilized scrap/brass rod (No. 61); l) Polished bone game piece (No. 73); m) Polished slate fragment (No. 86).
41o-r). Hume (1970) states that protected pointed safety pins were not manufactured before about 1857, and that brass eyes were introduced before the second quarter of the seventeenth century.

Miscellaneous Artifacts

Unidentified Copper/Brass n=1

No. 59 (Fig. 41g) is a narrow brass strip (9.8 x 0.9 cm) with an offset constriction at one end. It may be a bolt from a lock mechanism, or perhaps a door spindle. The edges are irregular and worn.

Scraps of Iron n=21

Eighteen fragments of thin iron or steel and two thin strips of iron strapping were recovered from pit cc, perhaps representing a metal container or stove pipe. The rest of this category is comprised of one thin unidentifiable fragments.

Artifacts of Euro-American Material and Native Workmanship

Ornamental Artifacts

Tinkling Cones n=4

Two copper and two iron tinkling cones were recovered. The copper tinkling cones (Nos. 105 and 96, Fig. 42a-d) display uniformity in size and shape. Both are conically rolled from thin copper sheets .07 cm thick, have straight even cut edges and a hole punched in the proximal end for suspension. No. 96
has a piece of leather thong preserved in the hole. No. 115 is very similar in size and shape to the copper tinklers but is cut from thin iron sheet metal and has no perforation for suspension. No. 74 is somewhat different being a tightly rolled tube of iron, rather than a cone, with the proximal end pinched tightly shut and the distal end broken off.

Spirals/Hoops n=2

Two spiral/hoop fragments were recovered, probably from the same object although they are not conjoinable (Fig. 42e). These were formed by first rolling a thin strip of cut copper and then coiling it into a hoop. No. 27 has a small perforation drilled in the top, perhaps for suspension or from a previous life.

Utilitarian Artifacts

Hooked Objects n=2

No. 100 (Fig. 42g) is a complete cut nail with its distal end bent sharply upwards to resemble a hook. It may have functioned as a boat nail, clinched over to prevent loss when the boat works. No. 47 (Fig. 42f) is a headless wire nail formed into a loop at one end to resemble a latchook.

Metal Patches n=4

These are sheets of metal punched with holes at irregular spaces, probably for the purpose of attachment to a wooden object. For instance, No. 127 (Fig. 42i) is a large copper patch
with two original machine made edges, one fold broken edge and one irregular break. A large hole is punched in each of four corners, one of which has a short cut nail still in situ, and there are four smaller perforations along one edge. It was used, opportunistically perhaps, to patch a split in what was originally a painted house plank, photographed by Harlin Smith in the 1920’s and later collected by Hobler. No. 88 (Fig. 42j) is a thin strip of iron with unintentional breaks at either end, and punched holes visible in three of the corners.

**Unutilized Scrap n=3**

This category consists of two thin fragments of iron whose edges appear to have been intentionally broken, and a length of brass rod with saw marks at one end and the other end snapped off (No. 61, Fig. 42k).

**Artifacts of Local Material and Native Manufacture**

**Polished and Incised Slate n=1**

No. 86 (Fig. 42m) is a small piece of slate (3.2 x 2.2 x 0.3 cm) with polish on one surface and incised cut marks along one edge (perhaps from a metal tool). All other edges are unworked.

**Gaming Piece n=1**

This is a short length of dense bone (6 x 1.1 cm) sawn part way through at both ends and then snapped so that a little nub
appears in the centre at each end (No. 73, Fig. 421). There are two parallel deeply incised lines around the centre and numerous faint knife cut marks in the shaft. The entire surface is highly polished.

**Unidentified Worked Bone n=2**

This category consists of a section of mammal long bone (No. 38, 4.6 x 2.2 x 1 cm) with one end cut diagonally by a metal tool and three metal made incisions at right angle to the shaft, and a triangular piece if sea mammal bone (No. 151) with cut marks at one end and a point at the other end.
FeSr 7 Notal

Artifacts of Euro-American Manufacture

Domestic Artifacts

Iron Cauldron n=2

The only artifacts in this category are a foot from an iron cooking pot or cauldron (No. 60, Fig. 43a) and a curved piece of iron that is probably from the body of a cauldron. Small, stubby triangular legs such as this became common on iron cauldrons by the last quarter of the eighteenth century, having bifid or trifid feet prior to this (Hume 1970:176).

Construction and Hardware

Flat Glass n=5

These sherds are tentatively identified as window glass. One sherd (No. 27) has both a concave and convex curvature and may be a watch or clock crystal. All of the remaining sherds are very small and have an aqua tinge and no signs of silvering on the back.

Key n=1

One brass key (No. 1, Fig. 43b) approximately 6.0 cm in length and encrusted with organic material was found. Cast brass keys do not seem to have been introduced before 1840 (Hume 1970:246). Closer identification is not possible because the teeth are indistinguishable.
Hunting Group

### Brass Buttplate Finial n=1

One ornate brass buttplate finial (No. 140, Fig. 43c) engraved with the design of a tulip was recovered. A similar buttplate finial is illustrated by Hamilton (1982:95) from a big Osage Site in Missouri which he dates from 1750-1815. Hamilton suggests that the tulip is a Spanish motif (1982:96).

### Gunflints n=3

One complete gunflint (No. 64) of the dark grey "black" prismatic form common on English Brandon gunflints first produced around 1750, and one small fragment of the same material (No. 158) were recovered (Fig. 43f-g). English flints were rare in comparison to French gunflints until 1800, and became predominant in the first half of the nineteenth century, although perhaps at different rates across North America (Hume 1970:220; Hamilton 1982:291). Gunflints continued to be manufactured in Brandon until just after World War One (although often for strike-a-lights). Therefore, this gunflint could date broadly between 1750-1918, although it most likely falls between the time English gunflints gained preeminence to the end of musket manufacture (ca. 1800-1875).

A third fragment of a gunflint of a blonde colour was recovered (No. 157, Fig. 43h). It is too small to identify with certainty and resembles a flake. However, no other flaked stone of this material occurs and it is not locally available.
Figure 43. Artifacts of Euro-American manufacture from Nutal.
a) Iron cauldron foot (No. 60); b) Brass key (No. 1); c) Brass buttplate finial (No. 140); d-e) Copper disc buttons (Nos. 106 and 105); f) Brandon gunflint (No. 64); g-h) Gunflint debris (Nos. 158 and 157).

Figure 44. Ornamental and unidentified modified artifacts from Nutal.
a) Copper tinkling cone (No. 145); b) Rod armour fragment (No. 92); c-e) Rolled copper objects (Nos. 45, 43 and 100); f-g) Unidentified perforated copper objects (Nos. 30 and 94); h) Unidentified shaped copper object (No. 56); i-j) Copper finger rings (Nos. 15 and 29); k-l) Perforated thimbles (Nos. 95 and 96); m) Wire bead (No. 88).
Clothing and Adornment

**Buttons n=2**

Two flat copper disc buttons with eyes soldered directly onto the back rather than to a foot or shank were recovered (Fig. 43d-e). Both are 3.1 cm in diameter. Olsen (1966) places this style between 1785-1800, although he says they had a long period of use. Woodward suggests they continued to be made with a wire eye until around 1850 (1966:26). No. 105 is gilded on the front with silver or tin, which Hume (1970:90) indicates became common in the early 1800's, although no. 106 may once have been gilded as well. Such buttons were common on civilian and military uniforms and were often passed onto Indians after the uniform became obsolete and have thus survived into later contexts. These buttons therefore most likely date between 1785-1850, and perhaps later.

**Artifacts of Euro-American Material and Native Workmanship**

**Ornamental Artifacts**

**Perforated Copper Thimbles n=2**

Two copper thimbles (Nos. 95 and 96, Fig. 44k-l) with holes punched in their crowns were recovered. They have no other signs of modification and were probably suspended from garments as bells or tinkling cones. Brass thimbles were common artifacts from the sixteenth century onwards, but their evolution is not well documented. By the eighteenth century the crowns were pattern stamped with the indentations being
straight lines, as are both specimens. However, this practise continued into the nineteenth century as well and is not a good chronological indicator (Hume 1970:256).

Tinkling Cone n=1

One conically rolled copper artifact (No. 145, Fig. 44a) with a fragment of wood inside is interpreted as a tinkling cone. It is too corroded to distinguish the method of reduction.

Rod Armour n=1

One short fragment of tubular rolled copper (2.5 x 1.0 cm) wrapped around a fragment of wood may be a segment of rod armour (No. 92, Fig. 44b). The copper is very thin (.04 cm) and has an irregular edge formed by fold breaking.

Rolled Copper Objects n=3

Three artifacts (Fig. 44c-e) fall into this category. No. 43 is a short fragment of tubularly rolled copper (2.7 x 1.36 cm) and may be a tubular bead or the proximal end of a tinkler. One end of the tube is pinched shut and the sides do not meet. One edge is very even and appears to be cut while the others were broken by folding. No. 45 is a rectangular sheet of copper longitudinally rolled part way down its length. This may represent an unfinished tinkling cone or rod armour fragment. The edges indicate reduction by folding. No. 100 is a small
section of a rolled copper object but it is too fragmentary to identify its original form or method of reduction.

**Rings n=2**

Nos. 15 and 29 (Fig. 44i-j) are fragments of finger rings. No. 29 is a thin strip of partially rolled copper and was probably discarded during manufacture. No. 15 is small and more finished, being a thin strip of copper folded over and flattened and then rolled into a loop.

**Wire Bead n=1**

One short length of square copper wire wound around a natural fibre was found (No. 88, Fig. 44m). It may be what Strong (1967) calls a wire trade bead, or a Native copy of one.

**Incised Copper n=1**

One small scrap of copper (No. 37) exhibits faint incised lines regularly spaced horizontally on one side. It may be a fragment of a larger decorated object.

**Utilitarian Artifacts**

**Iron Projectile Point n=1**

One very symmetrical iron projectile point (No. 10, Fig. 45b) with a contracting stem and straight cut edges was recovered. It is small (3.1 x 1.2 cm) and was probably an arrowhead.
Formalized Blades n=2

Only two artifacts were classified as formalized blades (Nos. 20 and 119, Fig. 45c and g). Both are thin sheets of copper cut into elongate strips. No. 119 resembles a knife blade 12.8 cm long with a gradual taper from 1.6-0.56 cm wide. The proximal end is broad and curved upwards and the distal point is broken off. None of the edges are sharpened or show signs of use wear. No. 20 is only tentatively identified as a formalized blade because it is very thin, 0.1 cm thick, and curved upwards at the tip. Its shape, however, is reminiscent of a wood working knife and the bottom edge appears sharpened at the tip.

Unformalized Blades n=3

Three scraps of copper were classified as unformalized blades because of characteristics of their edges. No. 47 (Fig. 45f) is the only one that can be seen to be deliberately sharpened. It is irregularly shaped (trapezoidal) by folding and breaking with two opposite edges being sharpened by abrasion. One edge is bifacially sharpened and the other edge is unifacially sharpened.

No. 24 (Fig. 45e) is a larger (9.5 x 5.7 cm max.) trapezoidal piece with irregular edges formed by folding and breaking, and use polish and rounding along one edge. No. 93 (Fig. 45d) is an irregular shaped scrap with one bevelled edge formed by abrasion.
Figure 45. Utilitarian modified artifacts from Nutal.  
a) Iron chisel (No. 107); b) Iron projectile point (No. 10); c)  
Formalized blade (No. 20); d-f) Unformalized blades (Nos. 93, 24  
and 47); g) Formalized blade (No. 119); h) Utilized scrap copper  
(No. 55).

Figure 46. Cobble chopper and spall tools from Nutal.  
a-d) Cortex spall tools (Nos. 152, 67, 12, 159); e) Bifacial  
pebble chopper (No. 147).
Chisel \(n=1\)

This is a long narrow (8.2 x 2.7 cm) heavy strip of iron with a concave dorsal surface and a flattened end, perhaps from beating (No. 107, Fig. 45a). However, the object is heavily corroded and its original form can not be firmly identified.

Utilized Scrap \(n=1\)

One irregular shaped scrap of copper (No. 55, Fig. 45h) with broken edges, perhaps formed by folding is classified as utilized scrap because of flattening of one edge - apparently from pounding. It is encrusted in one corner, perhaps with solder.

Unidentified

Perforated Copper \(n=2\)

No. 30 (Fig. 44f) is a large (6.3 x 3.5 cm) keystone shaped piece of copper with a straight cut edge at the top and fold breaks along the other edges. A small hole was punched in one corner, possibly for suspension, but it would have made the artifact hang askew. It may therefore be a fragment of a larger artifact having two or more holes originally.

No. 94 (Fig. 44g) is smaller and thicker with a drilled hole in one corner as indicated by bevelling around the hole. The top and bottom edges have been cut and the side edges are irregular fold breaks, although it is not certain that they were formed deliberately. The bottom edge in one corner is folded
over to the back. Like no. 30, it would not hang straight and may be a fragment of a larger pendant with more holes. Alternatively, these may be fragments of small coppers that have been cut up and riveted back together, or perhaps portions of metal patches.

Unidentified Shaped Objects n=2

Two copper artifacts were classified as unidentified shaped objects. No. 14 is a small fragment of a copper sheet that has been folded over and flattened, but the form of the artifact it was made into is no longer distinguishable. No. 56 (Fig. 45h) is a short, thin strip of copper with three straight edges formed by cutting, an irregular broken edge and an upturned end. It is probably a fragment of an ornament that was perforated above the break.

Unutilized Scrap n=40

Forty artifacts were classified as unutilized scrap because they lack working surfaces or a distinctive shape. Of these, three have one or more deliberately cut edges and five have edges formed by folding and breaking, indicating that they were deliberately reduced. The remainder have edges that may have been formed by breakage in the ground.
Artifacts of Local Material and Native Manufacture

Chipped Stone

Pebble Chopper  \(n=1\)

One bifacial cobble chopper (No. 147, Fig 46e) was recovered. It is a mostly cortex covered diabase cobble with two narrow angle flakes taken off of one side and one off of the other. The working edge is heavily battered.

Cortex Spall Tools  \(n=6\)

Six large cortex covered bipolar flakes ranging from 11.2 x 8.8 to 9.1 x 6.3 cm were recovered displaying use wear chipping and rounding on one or more edge characteristic of spall tools (Nos. 67,152,12,159,162 and 163, Fig. 46a-d). No. 162 has a negative bulb of percussion immediately below the striking platform and chipping along two adjacent edges.

Utilized Flakes  \(n=3\)

All three utilized flakes are of obsidian and average 2.6 x 2 cm with utilization chipping occurring along one or more of the long lateral edges suitable for cutting. The amount of wear is limited, suggesting that they were utilized only briefly.

Retouched Flake  \(n=1\)

One large bipolar greenstone flake (No. 122) has steep angle unifacial retouch along its two longest edges. A short portion of one of the retouched edges displays signs of
battering, perhaps due to crushing during bipolar reduction.

**Projectile Points n=3**

Three complete formed bifaces are classified as projectile points. Nos. 19 and 141 (Fig. 47a-b) are small obsidian bifaces, 2.7 x 1.1 cm and 3.5 x 1.25 cm respectively. Both are shoulderless and roughly leaf-shaped, although no. 141 is close to lanceolate shaped. No. 19 (Fig. 47b) is poorly made from a flake that was minimally retouched to make it into a point. One half of the dorsal side is cortex covered with step fractures along the edge. The other edge on the dorsal side has been formed by steep angle retouch. The ventral face has been more evenly worked, but has no long thinning flake scars. No. 141 is also poorly thinned but is more extensively shaped than 19. No. 116 is a small triangular side notched basalt point (2.2 x 1.2 cm). Like no. 19 it is minimally retouched from a triangular flake. It is slightly curved and its edges and corner notches have been formed by removing a series of short flakes from the outer margins.

**Cores n=2**

This category consists of one small bipolar obsidian core (No. 128, Fig. 47d), and one bipolar greenstone core (No. 160).
Figure 47. Projectile points and cores from Nutral.  
a-b) Lanceolate shaped obsidian bifaces (Nos. 141 and 19);  
c) Triangular side notched basalt biface (No. 116); d) Small obsidian bipolar core (No. 28).

Figure 48. Pecked and ground stone artifacts from Nutral.  
a) Abrader (No. 3); b) Hammerstone (No. 146); c) Hammerstone grinder (No. 143); d) Hammerstone (No. 32); e-h) Hammerstone grinders (Nos. 136, 73, 133, 125).
Pecked and Ground Stone

Abrader n=1

Only one abrader (No. 3, Fig. 48a) was recovered from the excavations. This is a slab of sandstone smoothed and slightly concave from abrading on both of the flat surfaces.

Hammerstones n=5

Four of the hammerstones are oblong cobbles of diabase or grano-diorite with battering on one or both ends. They average 13 x 5.2 x 4.5 cm. No. 146 (Fig. 48b) has had one end bashed off through heavy battering. The fifth hammerstone (No. 32, Fig. 48d) is a fire fractured fragment of a diabase cobble (6.4 x 4 x 3.6 cm) with battering along the unbroken end. The bottom surface is smooth but is most likely river rolled rather than ground.

Hammerstone Grinders n=24

The hammerstone grinder category at FeSr 7 displays a certain amount of variability. Most are of the classic loaf shaped form with a "D" shaped cross section, often with a wedge shaped longitudinal profile and grinding along the bottom surface, but the location and extent of battering varies and several are charred and fire fractured. Pecking occurs at the rounded end (No. 6), the square end (No. 136, Fig. 48e) or both (No. 73, Fig. 48f). Some have been heavily battered so that one or both ends is missing (No. 133, Fig. 48g). In some cases
pecking and grinding occurs along the edges as well (No. 84), usually along the margins of the grinding surface. Often grinding extends over the rounded nose (No. 143, Fig. 48c), while in one case it occurs on both the top and bottom surfaces (No. 125, Fig. 48h). In general the hammerstone grinders show signs of heavy use wear.

**Edge Trimmed Grinders n=19**

The edge trimmed grinders also display a certain amount of variability in the location and severity of battering, occurring along the rounded end (No. 113, Fig. 49b), the squared end (No. 75, Fig. 49d), both ends (No. 65,) or along the edges near the grinding surface (No. 154, Fig. 49c). They range in size from a very large green diabase edge trimmed grinder (17 x 8.8 x 7.3 cm, No. 150) to small and light (4.6 x 4.8 x 4.1 cm, No. 154). Diabase seems to be the preferred raw material.

**Half Edge Trimmed Grinders n=8**

Half edge trimmed grinders are also made of igneous material, mostly grano-diorite or diabase, except for one of vesicular basalt (No. 149, Fig. 49h). The location of battering again varies. Nos. 111 and 4 have battering along the untrimmed edge, and No. 128 (Fig. 49f) and No. 68 have had large flakes removed from the untrimmed side by battering. No. 117 (Fig. 49e) is battered at the rounded end and has only one ground surface. They range in size from 8.4 x 4.5 x 3.1 cm to 12.9 x
4.6 x 5 cm and average 11.13 x 5.2 x 4.0 cm.

**Cylindrical Mauls n=2**

The poll ends of two heavy diorite hand mauls were found (Fig. 50b-c). No. 127 (8.1 x 6.8 x 6.1 cm) is roughly square in cross section with one concave and three convex surfaces. It is pecked and ground on the three adjacent convex surfaces while the butt end and other surface are only partially pecked and ground. The distal end is broken off. No. 138 is roughly D shaped in cross section and resembles a hammerstone grinder except that the butt end is pecked and ground to form a concavity.

**Miscellaneous Pecked and Ground Stone n=4**

This category consists of two irregularly shaped pieces of fire cracked rock with one flat ground surface (Nos. 7 and 25); a rectangular piece of diabase with its edges pecked, the ends bashed off and abrasion on the top and bottom surfaces (No. 124, Fig. 50a); and an extremely large, roughly flat river cobble (No. 69, Fig. 51) with a well worn concave grinding surface. The dish shaped grinding surface is stained with red ochre from grinding pigments, but is very shallow and little modified so that it can not be properly classed as a mortar or bowl.
Figure 49. Edge trimmed and half edge trimmed grinders from Nutal.
  a-d) Edge trimmed grinders (Nos. 63, 113, 154, 75);
  e-h) Half edge trimmed grinders (Nos. 117, 128, 4, 149).

Figure 50. Hand mauls and miscellaneous pecked and ground stone from Nutal.
  a) Miscellaneous pecked and groundstone (No. 124); b-c) Hand mauls (Nos. 138 and 127).
Polished Stone

**Adze Blades and Fragments n=2**

Both items in this category are small pieces of greenstone with one ground and polished facet but no other attributes diagnostic of adzes.

Bone and Antler

**Awls n=2**

Two sharpened bone splinters (Fig. 52a-b) are tentatively identified as awls. No. 104 is flat in cross section with an unusually broad tip, but use polish over the tip and the lack of evidence of hafting (most of the shaft is unshaped with rough edges) are more suggestive of an awl than a projectile point. No. 103 is also a minimally shaped bone splinter with polish near the tip and rough edges along the shaft. The tip itself, however, is broken off so that it cannot be identified with certainty.

**Unipoint n=1**

No. 102 (Fig. 52d) is flat in cross section and tapers at both ends, although only one end is pointed. It probably functioned as a composite point with a shaft being accommodated by the groove on the dorsal side from the medullary cavity.

**Unidentified n=2**

No. 87 (Fig. 52e) is a splinter of cortical bone with faint
gouges and striations on the surface and straight cut marks on a portion of each end, suggesting that the ends were once square and that it has not just been modified during butchering. No. 23 (Fig. 52c) is a thick cortical bone splinter utilized at one end so that the edges converge at an oblique angle to form a blunt point.
Figure 51. Ochre stained cobble/paint pallet from Notal (No. 69).

Figure 52. Worked bone from Notal.
a-b) Bone awls (Nos. 103 and 104); c) Unidentified utilized bone (No. 23); d) Bone uni-point (No. 102); e) Unidentified worked bone (No. 87).
relatively modern. It is roughly similar to size 4.5 x 3.5 mm.
Artifacts of Euro-American Manufacture

Guns and Ammunition n=1

One piece of gunflint debris from an English Brandon gunflint was recovered (No. 47, Fig. 53a). It is of the same material as the complete gunflint from FeSr 7, although much smaller in size, probably due to use.

Clothing and Adornment

Bead n=1

This is a small orange glass bead of a type that does not match any of the Kidd and Kidd classifications and appears relatively modern. It is roughly tubular being 4.5 x 2.5 mm in size. It was found in the 20-30 cm level but does not have precise 3-dimensional provenience and may represent intrusive twentieth century material.

Artifacts of Euro-American Material and Native Workmanship

Utilitarian Artifacts

Copper Rod n=1

No. 40 (Fig. 53e) is a short length of copper wire which when viewed end on can be seen to have been formed by rolling and hammering a thin sheet of copper. It may have been intended for manufacture into a spike or a thin perforating implement.
Figure 53. Reworked and non-reworked Euro-American artifacts from Axeti.
a) Iron awl (No. 34); b-c) Unidentified rolled and folded copper objects (Nos. 31 and 33); d) Unutilized copper scrap (No. 32); e) Copper rod (No. 40); f) Gunflint debris (No. 47).

Figure 54. Pebble choppers from Axeti.
a-b) Bifacial pebble choppers (Nos. 23 and 20); c-e) Unifacial pebble choppers (Nos. 14, 133, 2).
Awl n=1

No. 34 (Fig. 53c) is a long thin iron awl which is square in cross section all the way to a tapering point and appears to have been manufactured from a wrought iron nail.

Unidentified

Unidentified Rolled and Folded Copper n=2

Two unidentified objects (Fig. 53b-c) shaped from thin gauge copper comprise this category. No. 31 is a thin strip of copper with one cut edge and one fold break. The ends are pinched and twisted in opposite directions to each other. No. 33 is a thin keystone shaped object reduced by fold breaks and with one edge folded over and hammered flat. These were probably discarded during the manufacturing process, perhaps having been intended to be rolled and beaten flat in a manner similar to the hoops and rings at FeSr 7, or the rolled copper spikes/punches found at sites in the Bella Coola Valley.

Unutilized Scrap n=1

This category consists of a thin triangular piece of sheet copper (No. 32, Fig. 53d) with fold broken edges.

Artifacts of Local Material and Native Manufacture

Chipped Stone

Pebble Choppers n=5

This category includes two cobbles with bifacial flaking on
two adjacent edges and cortex on the other edges (Nos. 20 and 23, Fig. 54a-b), and three large igneous cobbles with steep angle unifacial flaking along one edge only (Nos. 141, 133 and 2, Fig. 54c-e). No. 133 is a very large cobble (18 x 11.1 cm) and may have served as a core rather than a chopper because it is so heavy, although it has battering along its flaked edge.

**Utilized Flakes n=4**

Four obsidian flakes are classified as utilized based on use wear chipping (Fig. 55a-d). Two are utilized along one of the lateral edges, one along two lateral edges and the other on two edges near the distal end.

**Cortex Spall Tools n=2**

This category is comprised of two large primary flakes of quartzite with a negative bulb of percussion immediately below a striking platform on an otherwise cortex covered ventral side and a clear bulb of percussion on the dorsal side. No. 130 is 13.5 x 9.85 cm in size and has use polish and rounding on the edge opposite the striking platform. No. 131 is 10.9 x 9.7 cm in size and has edge damage in the form of chipping on two adjacent edges, although it may be unintentional.

**Bipolar Greenstone Objects n=5**

No. 52 (Fig. 56a) is a small (4.0 x 3.4 cm) bipolar greenstone adze blank. Partially ground facets occur on both
faces, especially near the bit edge. It tapers slightly laterally from the bit to the poll end. Nos. 4, 128 and 129 (Fig. 56c-e) are end fragments of greenstone adze blanks, biconvex in cross section and lacking ground facets.

**Projectile Points n=3**

Three projectile points of radically different styles were found (Fig. 56f-h). No. 35 is a large leaf-shaped basalt biface; no.72 is a small asymmetrical obsidian biface with one corner notch and a notch in the base of the stem; and no.91 is a small poorly made triangular obsidian point with short steep angle flakes removed from its margins. The butt end is thick and would be difficult to haft.

**Microblades n=7**

Seven thin microblades were recovered. Two were shattered during trace element sourcing and could provide no further information. Three of the intact microblades have had their distal end snapped off square (Fig. 55f-h). Hester (1978:40) suggests from the Namu collection that distal-proximal squaring may be intentional for hafting. Two (Nos. 86 and 37) have use wear chipping along one of the lateral edges. All have parallel lateral edges and a faceted dorsal face.

**Core n=1**

One small bipolar obsidian core (1.5 x 1.6 cm) was found.
Figure 55. Obsidian microblades and utilized flakes from Axeti. a-c) Utilized flakes (Nos. 134, 135, 136); d-h) Microblades (Nos. 110, 22, 37, 86, 103).

Figure 56. Bipolar greenstone objects and chipped stone projectile points from Axeti. a) Complete bipolar greenstone object (No. 52); b-e) Bipolar greenstone object fragments (Nos. 78, 4, 128, 129); f) Lanceolate shaped basalt biface (No. 35); g-h) Small obsidian bifaces (Nos. 72 and 91).
Miscellaneous n=1

No. 26 is a very large (18.5 x 15 cm) diorite cobble with one large flake removed from either end on opposite sides. It may have served as a core for cortex spall tools.

Pecked and Ground Stone

Abraders n=8

Seven unformed and one formed abrader were recovered. No. 56 (Fig. 57a) is a slab of slate like material with a deep broad groove in both sides, a bevelled facet with striations paralleling it along one edge and the opposite edge abraded straight. This pattern of wear may have been produced by sharpening metal. No. 19 (Fig. 57b) has a shallow groove abraded into both sides. No. 13 has a shallow groove on its upper surface and polish on its bottom surface. The remaining abraders are utilized on one side only.

Hammerstones n=6

Four of the hammerstones are large oblong cobbles with battering at both ends. No. 11 (Fig. 57c) is a fragment of a large flat cobble with battering along one end and part of one edge. No. 116 (No. 57d) has battering at one end and red ochre staining at the other, perhaps from grinding pigments.

Hammerstone Grinders n=4

All but one of the hammerstone grinders are severely
battered at one or both ends. No. 82 (Fig. 58a) has some battering along the lateral edges near the grinding surface as well.

**Edge Trimmed Grinders n=30**

Battering occurs at one or the other end or both ends (No. 8) and in some cases not at all. The butt end of several is pointed rather than trimmed off square. No. 115 (Fig. 58d) is made of granite and exhibits grinding on the rounded end and one lateral edge in addition to the top and bottom surfaces. A large piece has been struck from the butt end and grinding appears on the exposed surface. No. 88 (Fig. 58e) has a wedge shaped longitudinal profile and one slightly concave grinding surface. Several of the smaller edge trimmed grinders display this same pattern. No. 64 (Fig. 58c) is unusual in having cortex covering both ends and one concave grinding surface. The specimens range in size from 5.5 x 3.4 x 2.25 to 11.9 x 5.1 x 4.4 cm.

**Half Edge Trimmed Grinders n=8**

Battering occurs most often on the rounded end of the half edge trimmed grinders (No. 76, Fig. 58f). No. 48 (Fig. 58g) is battered along the trimmed edge and is made from a flat cobble with minimally ground surfaces, one of which is slightly concave. In No. 7 (Fig. 58h), battering occurs along the upper margin of the untrimmed edge. No. 81 is unusual, with slightly
Figure 57. Abraders and hammerstones from Axeti.
a-b) Abraders (Nos. 56 and 19); c-d) Hammerstones (Nos. 11 and 116).

Figure 58. Grinders and miscellaneous pecked and ground stone from Axeti.
a) Hammerstone grinder (No. 82); b-e) Edge trimmed grinders (Nos. 46, 64, 115, 88); f-h) Half edge trimmed grinders (Nos. 76, 48, 7); i) Hand Maul (No. 57); j) Miscellaneous pecked and ground stone (No. 24).
slightly concave grinding surfaces on top and bottom.

**Cylindrical Maul**: n=1

No. 57 (Fig. 58i) is the poll end fragment of a fire fractured handmaul of granodiorite. Rough pecking and grinding occur over the butt end and intact surface. A complete cross section is not present making it impossible to tell if it tapers.

**Miscellaneous**: n=1

No. 24 (Fig. 58j) is a fragment of an elongate greenstone cobble bifacially flaked on the intact end and unifacially flaked on the broken end. Flakes appear to have been removed by bipolar percussion as both ends exhibit crushing. Most of the surface is unworked and covered in cortex except for one partially ground facet. It may have been a blank intended for manufacture into an adze or maul.

**Polished Stone**

**Adze Blades and Fragments**: n=32

Thirteen items in this category have polished facets characteristic of adze blades. These include one complete adze, four bit end fragments, four poll end fragments, two mid section fragments and two fragments with both bit and poll end. No.90 (Fig. 59a) is a complete adze blade with battering at the poll end and lateral edges and use chipping on the bitt edge. The
blade is uniform in width and tapers gently in profile towards the tip. The upper and lower faces are unevenly ground and polished. No. 92 and 55 (Fig. 59d and g) have been fractured longitudinally and have one ground and polished face and portions of the poll and bitt facets intact.

Nineteen polished greenstone fragments lacked facets diagnostic of adzes. Several of these display what may be use wear chipping along one or more of the lateral edges and in some cases obvious signs of crushing from intentional bipolar reduction into flakes (Nos. 51 and 79, Fig. 59i-j). No. 78 has the original adze polish along one edge. The opposite edge and one end have been bifacially retouched and both surfaces partially reground. No. 39 has a portion of the original adze polish on its ventral surface and unifacial retouch on all four edges.

**Projectile Points n=3**

No. s 87, 112, and 68 (Fig. 59k-m) are fragments of polished greenstone artifacts reworked into stemless projectile points. All three are ground and polished to a point on two, lateral edges. No. 87 has a bevelled ground and polished facet on one side of the converging lateral edges and no grinding on the dorsal and ventral faces. Part of the edge and base are snapped off. No. 68 is asymmetrical and the edges taper at different angles towards a missing tip. A ground and polished facet appears at the base and one corner is snapped off, adding to the
Figure 59. Polished greenstone adze blades and projectile points from Axeti.

a) Complete adze blade (No. 90); b-e) Poll end adze blade fragments (Nos. 95, 122, 92, 12); f) Bitt end adze blade fragment (No. 124); g) Adze blade fragment with portions of bitt and poll ends (No. 55); h) Bitt end adze blade fragment (No. 102); i-j) Adze blade fragments with bipolar crushing (Nos. 51 and 79); k-m) Polished greenstone projectile points (Nos. 87, 68, 112).

Figure 60. Ground slate object from Axeti (No. 69).
asymmetry. Both dorsal and ventral faces are partially ground and polished. No. 112 also appears asymmetrical with its base and part of one corner snapped off.

Miscellaneous n=1

No. 69 (Fig. 60) is a narrow ground slate object with a deep groove incised along one edge and another part way across the shaft diagonally. Narrow ground facets occur along the edge opposite to the lateral groove, on the upper and lower faces and parallel to and behind the groove. This is most likely a partially completed object, perhaps having been intended for manufacture into a point.

Bone and Antler

Bone Tube n=1

This is a hollow section of long bone from a large bird, cut and polished at right angles to the shaft at one end and fractured at the other end (No. 1, Fig. 61). A nearly identical artifact was found at Mackenzie’s Rock on Dean Channel that is roughly contemporary. They may have been ornamental or ritual items, or they may have functioned simply as drinking tubes.

Bipoint n=1

No. 105 (Fig. 62a) is a slender bone splinter with a slightly 's' shaped shaft worked to a point at each end. The points are asymmetrically ground and the medullary bone has been
removed so that there is a groove on the dorsal side. This may be a barb from a composite tool.

**Unidentified n=5**

This category consists of three pieces of cortical bone with one or more cut and ground edge (Fig. 62b-c,e) and two pieces of small mammal long bone with longitudinally cut facets in the shaft (Fig. 62d). The two pieces catalogued as No. 125 are probably portions of the same bone, although they are not conjoinable. It appears as though the shaft was being fashioned into a tool when it was discarded.
Figure 61. Bone tube from Axeti (No. 1)

Figure 62. Worked bone from Axeti.
  a) Bone bi-point (No. 105); b-e) Unidentified worked bone (Nos. 137, 5, 125, 41).
Figure 61. Bone tube from Axeti (No. 1).

Figure 62. Worked bone from Axeti.
1) Bone bi-point (No. 105); b-e) Unidentified worked bone (Nos. 37, 5, 125, 41).
FeSr 4 Nutsqwalt

Artifacts of Euro-American Material and Native Workmanship

Ornamental Artifacts n=2

Only two artifacts of European material were recovered from FeSr 4, both of which are copper and have been shaped by Native workmanship (Fig. 63). No. 61 is a tinkling cone rolled from a thin piece of sheet copper with rope fibre preserved inside of it. The edges are too fragmentary to distinguish the reduction technique. No. 60 is a copper nose ring formed by hammering a thick piece of wire into an elliptical shape and leaving the two ends unjoined. The wire is flat on the inside surface and rounded on the other sides.

Artifacts of Local Material and Native Manufacture

Chipped Stone

Pebble Chopper n=1

No. 74 (Fig. 64a) is a basalt cobble covered with cortex except for the working edges where a short series of steep angle flakes have been removed unifacially. The resulting chopping edge is battered and blunt from use.

Chipped Stone Adze n=1

No. 86 (Fig. 64c) is a small oblong greenstone cobble (6.7 x 2.9 cm) bifacially worked at one end and part of an adjacent lateral edge. The other edge is unifacially worked over part of its length. The poll end is severely battered, perhaps from
Figure 63. Artifacts of Euro-American material and Native manufacture from Nutsqwalt.
a) Copper tinkling cone (No. 61); b) Copper nose ring (No. 60).

Figure 64. Chipped stone artifacts from Nutsqwalt.
a) Unifacial pebble chopper (No. 74); b) Retouched flake (No. 16); c) Chipped stone adze (No. 86).
use. There are no ground facets and much of it is covered with smooth cortex.

**Retouched Flakes n=3**

Two of the artifacts in this category are large primary flakes struck from igneous cobbles (Nos. 2 and 16). Their dorsal surfaces are covered with cortex and steep angle unifacial retouch occurs along one edge. No. 16 (Fig. 64b) is a small piece of quartzite flake shatter with steep angle unifacial retouch along one edge.

**Bipolar Greenstone Objects n=9**

This category includes five adze blanks and four large bipolar cores that because of their thinness were not likely prepared to be ground into adzes. Nos. 8,1,147,104 and 26 (Fig. 65a-e) are all greenstone cobble cores, reduced by bipolar percussion to a size and shape suitable for grinding into an adze. No. 8 has one partially ground surface but is very thick and was probably discarded rather than spend the energy grinding it to a thickness suitable for an adze.

The other bipolar objects (Fig. 65f-i) resemble the adze blanks described above, and were perhaps produced to be worked into similar artifacts, or used as is although none have use polish along their edges. No. 4 and 22 have been flaked along their two longest edges, while Nos. 138 and 148 have been flaked along all of their margins, although No. 148 appears to have
snapped at one end.

**Projectile Points n=3**

One large leaf-shaped basalt biface (No. 97), a thin basalt biface tip (No. 24) and the mid section of a thin basalt biface (No. 145) comprise this category (fig. 66b-d). The leaf-shaped point is thick in cross section with a high central ridge. No. 145 appears to have been triangular in form but is missing its tip and base. No. 24 has the same flaking patterns and thickness but is not conjoinable and is missing a portion at the very tip.

**Drill n=1**

No. 23 (Fig. 66a) is a small key shaped obsidian drill. The bit is thick in cross section and slightly curved laterally. Flakes have been removed from its margins by pressure flaking. The proximal end shows no signs of special preparation for hafting and the bitt has no visible use wear. Stewart (1981:86) indicates that these tools were used in the hand without hafting for woodworking.

**Core n=1**

No. 146 is a small metamorphic cobble with flakes removed from both faces by bipolar percussion. It retains most of its cortex covering and therefore is not a shaped core tool.
Figure 65. Bipolar greenstone objects from Nutsqwalt.
a) No. 1; b) No. 8; c) No. 26; d) No. 147; e) No. 104; f) No. 4; 
g) No. 138; h) No. 148; i) No. 22.

Figure 66. Projectile points and drill from Nutsqwalt.
a) Obsidian drill (No. 23); b-c) Small basalt biface fragments 
(Nos. 24 and 145); d) Lanceolate shaped basalt biface (No. 97).
Miscellaneous n=2

No. 82 is a thin river cobble of coarse sedimentary material with flakes removed from two opposite edges on one side and another flake struck from between the two worked edges on the other side. No. 25 is a large bipolar sandstone flake with crushing at each end and additional battering on one end. It may have been in the process of being prepared for grinding into another artifact form.

Pecked and Ground Stone

Abraders n=15

This category is comprised of one shaped and fourteen unshaped sandstone abraders. No. 98 (Fig. 67a) is a fragment of fine grained slate-like material with a slightly concave upper surface, a smooth lower surface from abrasion and a bevelled edge. Most of the unshaped abraders are fragments of soft sandstone slabs with a single broad shallow groove abraded into their upper surface, except for No. 110 (Fig. 67b) which has grooves in its top and bottom surfaces, No. 75 (Fig. 67c) which has two parallel grooves on its upper and lower surfaces, No. 141 (Fig. 67d) which has a deeper V shaped groove in its upper surface and a shallow groove on its lower surface, and No. 3 (Fig. 67d) which is two conjoinable fragments of hard metamorphosed sandstone with a ground and polished surface but no grooves or striations.
Figure 67. Abraders from Nutsqwalt.
a) Shaped abrader (No. 98); b-f) Unshaped abraders (Nos. 110, 75, 141, 3, 79).

Figure 68. Hammerstones from Nutsqwalt.
a) No. 66; b) No. 142; c) No. 144; d) No. 112.
Hammerstones n=7

Aside from large oblong cobbles with battering at one or both ends, this category includes two fire fractured fragments of igneous cobbles with severe battering on their ends (No. 144 and 142, Fig. 68b-c) and a large flat cobble with battering around all of its edges and both ends (No. 66, Fig. 68a). All of the hammerstones are heavy implements.

Hammerstone Grinders n=2

No. 137 (Fig. 69a) is an unusual hammerstone grinder fragment roughly oval in cross section and split diagonally with battering on one corner of the intact end. Grinding facets occur on the upper and lower surfaces, the butt end and a portion of the intact lateral edge.

Edge Trimmed Grinder n=1

The proximal end of one edge trimmed grinder was found with battering on the intact end (No. 76, Fig. 69d).

Cylindrical Mauls n=2

Pole end fragments of two roughly cylindrical igneous hand mauls were found (No. 12 and 78, Fig. 69b-c). No. 78 is charred and more coarsely finished with peck marks over its surface and small vesicles in the raw material. It is uniform in thickness throughout its length, while the lateral edges and front and back of no. 12 taper towards the butt.
Figure 69. Hammerstone grinders and mauls from Nutsqwalt.
a) Hammerstone grinder (No. 137); b) Hand maul (No. 12); c) Hand maul (No. 78); d) Edge trimmed grinder (No. 76); e) Polished hand maul (No. 14).

Figure 70. Polished greenstone adze blade fragments and knife from Nutsqwalt.
a) Complete adze blade (No. 129); b-c) Poll end adze blade fragments (Nos. 11 and 123); d-f) Bitt end adze blade fragments (Nos. 102, 63, 39); g-j) Mid-section adze blade fragments (Nos. 125, 122, 9, 135); k) Fish knife (No. 108).
Miscellaneous  n=4

This category includes a very large diabase river cobble (17 x 9.85 cm, No. 87) whose upper surface is ground concave and marked with grooves and striations; two large split cobbles, one of which has battering along one edge and a partly ground and polished facet on the split face (No. 89), and one (No. 18) with a ground facet along one edge and a portion of its dorsal face; and an elongate diorite cobble with battering at either end and grinding along one lateral edge (No. 67).

Polished Stone

Adze Blades and Fragments  n=85

Eighteen of these items have facets characteristic of adze blades. This includes one small (5.1 x 2.1 cm) complete adze blade (No. 129, Fig. 70a). The lateral edges constrict toward the poll end which is very thin and could not have withstood battering. The dorsal surface is only ground at the bitt, while the ventral side is also partially ground and is marked by flake scars. It appears to have been fashioned from a fragment of a larger adze and probably would not have been functional. No. 11 (Fig. 70b) is a nearly complete adze from the poll end to a point just behind the tip. The remainder of this category is comprised of one poll end fragment, eleven bitt ends, and four midsection fragments (Fig. 70c-h).

Sixty-four fragments are polished greenstone pieces without facets diagnostic of adzes. Several are flakes, some of which
bear signs of crushing along their edges from bipolar percussion. Some may have been utilized as is but none exhibits the rounded edges characteristic of heavy use wear polish on greenstone.

No. 9 (Fig. 70i) has polish on its ventral surface and one lateral edge indicating that it was once an adze. The mid portion of the polished edge was heavily battered by bipolar percussion. No. 39 (Fig. 70f) is the bit end of an adze with bipolar crushing on the edge opposite the bit and bifacial retouch along both lateral edges. No. 135 (Fig. 70j) has polish on the ventral surface and unifacial chipping along one edge.

**Groundstone Knife n=1**

No. 108 (Fig. 70k) is a long polished greenstone adze fragment reworked into a knife. The polished ventral surface and square lateral edge of the adze are intact and would have made a suitable surface for gripping. The dorsal (interior) surface was ground and polished during the sharpening of the anterior edge. The cutting edge is long and roughly crescent shaped, terminating at a rounded tip.

**Cylindrical Maul n=1**

This is the poll end of a very large fine grained green diorite handmaul (No. 14, Fig. 69e). This specimen is distinguished from pecked and ground stone examples by having a highly lustrous polished surface. It tapers slightly from the
midsection to poll end, but like the pecked and ground mauls has an oval cross section and no constriction or flange for gripping.

**Miscellaneous n=2**

This category consists of a rectangular slab of slate with a polished upper surface (No. 105) and a blocky piece of quartzite with one polished surface (No. 90).

**Worked Bone n=1**

The only artifact in this category is a bone wedge (No. 143, Fig. 71). It is nearly flat in cross section and tapers gradually laterally to a tip with polish along its edges. There are several incised cut marks in the top at the poll end.
Figure 71. Bone wedge from Nutsqwalt (No. 143).
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