

## V DISCUSSION AND CONCLUSIONS

### Summary of Components and Dating

The compositions of the archaeological components of the four house pit sites are shown in Tables 29 and 30. Table 29 lists the components and the architectural features uncovered in the sites, and Table 30 summarizes the distribution by excavation unit of the two cultural phases and one chronological period. Except for the latest component of the Leonard site and the burial sites investigated by Smith (1900), all of the excavated occupations on the Kamloops Indian Reserve at the confluence of the North and South Thompson Rivers belong to the Thompson Phase. It is the sole component in the Kamloops Reserve and the Van Male sites, and is also the earliest component in the Leonard and Harper Ranch sites. The Kamloops Phase, on the other hand, is comprised of only two components, one each from the Leonard and Harper Ranch sites. The proto-historic period is present only in the latest component of the Harper Ranch site.

Four radiocarbon dates from the Kamloops locality possibly signify the commencement of the Thompson Phase and most of the temporal range of Kamloops Phase. They are as follows:

1. sample: EeRb 3: House Pit 19 occupation zone  
date: 1920±100 B.P. (Gak 3902) – A.D. 30  
association: a floor consisting of black loam and charcoal  
culture phase: Thompson
2. sample: EdRa 9: House Pit 7 wood  
date: 400±80 B.P. (Gak 4914) – A.D. 1550  
association: burnt fallen roof structure lying on top of the pit house floor  
culture phase: Kamloops
3. sample: EdRa 9: House Pit 4 carbon lens beneath and predating house pit floor zone  
date: 1950±130 B.P. (Gak 4915) – A.D. 1  
association: Group 2B projectile points, as illustrated in Figure 38*h, i, j*  
culture phase: Thompson
4. sample: EdRa 9: House Pit 4 a lens containing black loam and charcoal  
date: 1140±100 B.P. (Gak 4916) – A.D. 810  
association: the lens lies underneath the house pit ridge and represents the surface of the pit house bench  
culture phase: Kamloops

Table 29. Distribution of cultural components, occupation zones and other features by site.

Site	Components	House Floors	Other Features	
			Sweat Lodge	Cache Pits
EeRb 3	1	4	1	
EeRb 10	1	4		
EeRb 11	2	2		
EdRa 9	3	11		156

Table 30. Distribution of cultural phases by house pit and locus. x' = presence of component associated with a living floor; x = presence of component not associated with a living floor

Site	House Pit	Locus	Cultural Phase/Period		
			Thompson	Kamloops	Proto-historic
EeRb 3	10	19	x'		
			x'		
			x'		
EeRb 10	10	1	x		
			x'		
			x'		
EeRb 11	11	1	x'		
EdRa 9	9	1	x		
				x'	
				x'	
			x	x'	x'
			x'	?	x'
				x'	
EdRa 11	11	1	x		
				x	
				x	
EdRa 11	11	2		x'	
				x	
				x	

The calculation of ages is based on the Libby's half life of C-14, 5770 years, and the indicated ± errors are the years corresponding to the standard deviation (one sigma) of the beta rays counting statistical errors.

The Thompson Phase represents the initial Late Nesikep occupation of pit house villages in the Kamloops locality. It is distinguished from the succeeding Kamloops Phase and from the early periods of the mid-Fraser Late Nesikep by a variety of concrete cultural and inferred subsistence and demographic traits. The Thompson Phase contains most of

the elements that characterize the two early periods of the mid-Fraser Late Nesikep sequence (Stryd 1973b), but no distinctions are evident for division of this phase into sub-phases that might be comparable with the mid-Fraser sequence. The use of the bow and arrow appears to be present throughout most of the Thompson Phase, but with no definite date for its introduction, and with much less frequency than the use of darts. The representative projectile points are corner-notched dart points that exhibit a much wider variety of morphology and more precision and skill in manufacture than the points of the Kamloops Phase. The possibility of a greater reliance upon hunting over fishing in this phase is indicated by its higher percentage of chipped stone implements.

The Kamloops Phase is distinguished from the Thompson Phase in the Kamloops locality by cultural and temporal criteria. Small side-notched arrow points, ornamentation in bone and native copper, and decorative or functional incising on bone are all diagnostic traits of this phase. The relatively greater percentage of bone tools may indicate a change in technology related to an increased reliance on fishing over hunting. This inference must be made with care however, as differential rates of preservation and the use of nets in fishing must not be ignored as possible influencing factors in relative artifact counts. Whereas the house pits of the Thompson Phase are smaller, saucer-shaped depressions without ridges and often without circumventing benches, those of the Kamloops Phase are wider, circular to oval-shaped depressions, often having steep walls, ridges, and circumventing benches. Larger house pit sizes leads to the inference of larger family sizes, and thus possibly to increases in total population during the Kamloops Phase. Thompson Phase sites may have more house pits per site, but number of house pits in a site is not as indicative of population size as are individual house pit dimensions, because the house pits need not have been occupied all at the same time. Increases in population size are also inferred by the introduction of cache pits in the Kamloops Phase, which might reflect increased food supplies through more efficient means of riverine resource exploitation, and thus the ability to support a larger population. Teit (1900:198) says that caches, or underground cellars, were mainly used for the storage of berries and fish, and not for the storage of meat. Thus the Kamloops Phase may be differentiated from the Thompson Phase by increases in population size and by a shift in subsistence to a greater emphasis on riverine resources. The population increase is also seen in the presence of large complex burial sites such as the Chase Burial site (Sanger 1968) and those excavated by Smith (1900) in the Kamloops locality, all of which belong to the Kamloops Phase.

The date for the transition from the Thompson to the Kamloops Phase is not as important as the transition itself,

and it has been tentatively set at 1400 B.P. This date is based upon the fact that the phase was well established by at least 1140±100 B.P., and that its development in the Kamloops locality was probably a result of a gradual diffusion of Kamloops Phase ideas and/or people from the mid-Fraser region, where it has an initial date of 1800 B.P. (Stryd 1973b).

The proto-historic is very poorly defined in the archaeological record in the Kamloops locality. It should be distinguished however because of the introduction of non-aboriginally manufactured items around 1750, and of the horse as early as 1780 (Teit 1909:533). Of the two, the latter had a much greater disruptive influence upon the socio-economic structure of the Interior Plateau culture, as it radically altered traditional concepts of wealth and leadership. Ray (1939), Browman and Munsell (1972), and Palmer (1974b) all emphasize that the introduction of the horse was the initial primary factor leading to the loss of aboriginal life ways. The historic period commenced with the introduction of Euro-Canadian economic values and demands associated with the building of trading posts at the confluence of the North and South Thompson Rivers in 1812. The introduction of guns and of more horses, and the demand for salmon and furs by the traders led to the disappearance of traditional patterns of seasonal transhumance and of production and exchange. Palmer concludes that following this initial demand for furs:

The subsequent development of ranching, farming and other industries precluded a return to traditional practice by denuding the Interior Plateau of native foods and restricting the movements of the Indians (Palmer 1974b:79).

### Settlement Patterns

A culture's settlement pattern refers to its spatial adaptation to an environment. Following Sanger (1970) and Stryd (1973a) this discussion on settlement patterns in a broad sense incorporates the morphology of individual house types, the relationship of houses within a community, or village, and the spatial relationships between villages.

#### *House Types*

The only house types investigated to date in the Kamloops locality are winter habitation, semi-subterranean pit house dwellings, whose form and dimension can be readily determined from their still extant house pits. The temporal significance of house pit design is one of the concerns in cultural reconstruction in the locality. The trend through time appears to be towards larger house pits, as smaller, shallower, saucer-shaped house pits are succeeded by wider, deeper house pits with steeper walls and circumventing benches. For example, the house pits of the Thompson

Phase average around five metres in diameter and less than 50 cm in depth, while those of the Kamloops Phase average over seven metres in diameter and 75 cm in depth. The opposite trend occurs in other areas in or near the south-central interior in the Lillooet area (Stryd: pers. comm.) as in the Okanagan region (Grabert 1974:71), in the Arrow Lakes vicinity (Turnbull 1973:138), and in the Hope-Yale locality (von Krogh 1976:214–15), where wider, steep-walled house pits predate the simple, saucer-shaped ones.

Reasons for this discrepancy may centre on the fact that house pit designs are influenced by demography, by rates of deposition, by soil conditions, and/or by climate. Both Sanger (1970:114) and Stryd (1973a:76) emphasize that house pit attributes probably reflect the insulative value of the house walls and the thickness and hardness of the strata that must be excavated in the original construction. The enlarging of an earlier house pit for reoccupation would also be easier than digging a new depression, and this might also be a reason for some of the larger later house pits in the Kamloops and Lillooet areas. Lack of comparative data hinders positive interpretation of the specific reasons for change in house pit design, but the author feels that the answer is more closely related to the size of the individual family unit that inhabited each house than to any other single reason.

Two distinctive house pits are present in the Kamloops locality, and they are House Pit 10 in the Harper Ranch site and the house pit outline associated with the Brocklehurst Burial site. The former is a proto-historic house pit and is the only recorded depression in the locality which indicates the presence of a side entrance. Ray states that side entrances to pit houses are unquestionably characteristic of the American Plateau, just as roof entrances are exclusively used in the Interior Plateau (Ray 1939:136). House Pit 10 must therefore either be a local development or a result of diffusion from the south, most probably after the introduction of the horse. The latter circumstance would correspond to its proto-historic content.

The Brocklehurst Burial house pit is the only one in the locality dug into gravel, and it is also the only one that contains a burial. There is a remarkable resemblance between this site and House Pit 1 at the Pine Mountain site in the Lochnore-Nesikep locality, as it too is the only house pit in that locality excavated into gravel and the only one that contains a burial (Sanger 1970). The burial is associated with Zone 1 in this depression and has a date of approximately 1500 B.P. If there is a direct relationship between these two sites, then this date places the Brocklehurst Burial site towards the end of the Thompson Phase. Comparison of the leister point found in the Brocklehurst Burial site with those from Zone 1 of the Moulton Creek site also gives it a Thompson Phase date.

#### *Intra-site Relationships*

House pits within three of the investigated sites are distributed in what appears to be randomly-placed locations in linear alignments that parallel the nearest water source. In both the Harper Ranch and the Leonard sites a line of single house pits parallels the shoreline of the South Thompson River, and in the Kamloops Reserve site the alignment that followed the shoreline of the former slough was several house pits thick. In the Van Male site the house pits are clustered together between two dry sloughs in what appears to be a non-random distribution, with the smaller depressions surrounding the largest one in the middle. This pattern is more comparable to intra-site relationships in the Lillooet area, and may be a holdover from it, as opposed to the linear house pit distribution in the Kamloops Reserve site which is probably a local development to suit local conditions. If this is the case, then we should expect the Van Male site to be the older of the two.

Village design is dependent upon the degree of contemporaneity of the dwellings; that is, the makeup of the village is related to the number of individual houses inhabited at one time. Because of its content and size, the inference is that only the Van Male site was completely inhabited at a single point in time. On the other hand, the number of house pits in the Kamloops Reserve and the Harper Ranch sites indicate that these locations were preferred for habitation over a longer period of time, and that individual village size at any one point in time would not correspond to the total number of house pits still extant today. The smaller artifact assemblage and thinner occupation zone in the Van Male site imply a comparatively shorter occupation than those at the sites with larger numbers of house pits. These data are comparable to the interpretations of village size in the Arrow Lakes vicinity by Turnbull (1973:142–143).

A final comment on intra-site relationships concerns the apparent lack of economic or social specialization associated with any individual habitation structure. The archaeological record implies that each household was self sufficient in the carrying out of everyday activities. Similar conclusions are drawn by Stryd (1973a:80) for sites in the Lillooet area. A possible exception to economic specialization occurs in House Pit 8 in the Harper Ranch site in which several deer had been butchered. This more likely represents however a case of immediate abandonment before the house was cleaned of debris. Non-habitation features in the house pit sites in the Kamloops locality include storage pits in the Harper Ranch site and a sweat lodge depression in the Kamloops Reserve site.

#### *Inter-site Relationships*

Locations of winter house pit sites are most probably

influenced by one or more of many ecological factors, including topography, water supply, soil conditions, wind, sunlight, and proximity to subsistence resources. The four house pit sites investigated in the Kamloops locality are all situated on flat terrain, in relatively loose, well-drained soils, and beside a source of clean water. One of the major differences between house pit sites in the South Thompson region and those in the mid-Fraser region concerns the respective ecologies that influenced site locations.

There are few factors restricting the location of winter sites in the South Thompson River region. The water is very drinkable along the entire course of the river, and the floodplain soils are all equally consistent for drainage. Protection from winter winds does not seem to have influenced site location, but there was probably a preference for residence on the north shore of the river to catch a greater amount of winter sunlight. In the mid-Fraser region the much steeper walls of the river valley and the high degree of silt in the river influenced the restriction of house pit sites to the flat terraces above the river beside fresh water creeks or springs. Also, in the Lillooet area, many of the house pit sites lie between knolls on the terraces, and are somewhat protected from the winter winds (Stryd 1973a:86). Ham (1975:211) reports that near the confluence of the Chilcotin and Fraser Rivers, house pits are located on the upper benches to catch the maximum amount of winter sunlight.

The restricting ecological factors in the mid-Fraser would have influenced continual occupation of sites for a much longer time than in the South Thompson region, where there was a greater freedom of choice in site selection. This is exemplified in portions of the South Thompson region floodplains where it is sometimes difficult to distinguish between individual site boundaries. This absence of restrictions to site location is probably the major reason for the comparatively few stratified sites and the much smaller artifact assemblages in the Kamloops locality, in comparison to the relative abundance of cultural material in Late Nesikep sites in the mid-Fraser region.

### Subsistence Techniques

Direct archaeological information on subsistence techniques is difficult to obtain because of its dependency upon preservation conditions. Data for reconstruction of subsistence usually must be inferred by relating the carrying capacity and other ecological traits of the region under concern to the associated levels of technology and social organization. This is attempted in part in the following discussion on the subsistence techniques of the Shuswaps who inhabited the Kamloops locality and surrounding areas. Aboriginally, these peoples exploited a wide variety

of food sources on a semi-nomadic seasonal round of hunting, fishing, and gathering. Palmer describes the nature of their subsistence by stating:

. . . that pre-contact Shuswap populations reached equilibrium with the carrying capacity of a heterogeneous environment by following a strategy of balanced specialization on major resources with sufficient diversification to provide subsistence security (Palmer 1974b:23).

### Hunting

Palmer (1974b:30) describes the South Thompson region " . . . as especially well situated with respect to hunting territory", because of the proximity of vast grasslands and parklands. In these habitats, mule deer (*Odocoileus hemionus*), Rocky Mountain elk (*Cervus canadensis*), and most probably mountain caribou (*Rangifer tarandus*) were the major large ungulates hunted by the Shuswap. Hunting was most often conducted in groups, and frequently involved the use of snares, corrals and dogs (Teit 1909). Both ecological and archaeological evidence implies that elk was more heavily relied upon in the South Thompson region and absent in the more forested mid-Fraser region, where deer was the most heavily exploited mammalian food source (Dawson 1894; Sanger 1968; Palmer 1974b:30). This evidence has important implications in the interpretation of the relatively late introduction of the bow and arrow into the archaeological sequence of the Kamloops locality. Stryd (1973a) hypothesizes that the introduction of the bow and arrow is related to the onset of more heavily forested conditions brought about by the increased rainfall of the Medithermal, and dates this introduction to about 2400 B.P. for the Lillooet area. He bases this upon the inference that a spear or a spear thrower is not as accurate as a bow in a forested habitat because it needs more room to operate. If we assume this hypothesis to be valid, then the heavier reliance in the South Thompson region upon elk would not have led to a similarly immediate adoption of the bow and arrow in early Medithermal times as occurred in the mid-Fraser region. This is because elk prefer the more open parkland country where clumps of conifers provide protection and deciduous trees interspersed with grasslands provide food (McTaggart Cowan and Guiguet 1965:358). Thus an inferred continued reliance upon the hunting of elk in these open parkland is a possible explanation for the emphasis upon corner-notched dart points relatively late in the Kamloops sequence.

### Fishing

It is generally assumed by researchers of Interior Plateau prehistory that the exploitation of Pacific salmon was the dominant force behind the creation of traditional Plateau culture. The seasonal round of economic activities

was based upon the annual return to the major river valleys each autumn to fish the Pacific salmon runs. The Pacific salmon, chiefly the sockeye (*Oncorhynchus nerka*), provided a guaranteed annual food supply of high nutritive value, that could be stored for long periods of time. This subsistence pattern led to the establishment of permanent settlement for part of the year in winter villages, and to the gradual development of "Plateau" social institutions and economic trade patterns that persisted until contact times.

Concrete evidence of fishing activity in the assemblages of the Interior Plateau is scanty because of poor preservation of the fish remains and of the technology used to obtain the fish. Fishing implements mainly included nets, weirs, hooks, and spears, made from wood and fibres, and were not subject to high rates of preservation in archaeological sites. Butchering and drying techniques used in the processing of the salmon before its storage or consumption would also have tended to leave few traces in the archaeological record.

The amounts of salmon that were caught by the Shuswap are dependent firstly upon the abundance of salmon, and secondly upon its accessibility. Using data from the International Pacific Salmon Fisheries Commission, New Westminster, B.C., Palmer (1974a:6) states that the Shuswap living along the Fraser and Thompson Rivers and their tributaries would have had access to a low estimate of about ". . . 3,900,000 sockeyes in a low year and 96,000,000 sockeyes in a dominant year" based upon the quadrennial cycle of salmon runs of one dominant year followed by three low years. He continues to state that this would ". . . yield an average of about 160,000 pounds of salmon per year". Other species of anadromous salmon probably doubled the carrying capacity of the river system, and thus doubled the potential catch (Palmer 1974a:6).

Availability and accessibility of salmon constitute separate entities however in trying to estimate numbers of fish caught. Kew (1976:9) states that accessibility of salmon is dependent upon two sets of factors: natural conditions and technology. Natural conditions include features of the water and natural habits of the salmon. In relating technology to access, Kew hypothesizes that technology will be highest where the value of the resource is the greatest and where the accessibility is the most difficult. This situation is very well represented by the salmon fishing on the Fraser River from its mouth to Soda Creek, north of Lillooet. Technology, nutritive value, and difficulty in accessibility all increase on the way downstream to the river's mouth. The fishing of salmon on the South Thompson River can also be incorporated into this hypothesis. In comparison to the mid-Fraser, there was less accessibility of fish on the South Thompson, because of the lack of turbulence and of dip-net stations. The fishing technology

was thus more complex in the South Thompson region, utilizing more complicated weirs and traps instead of simple dip-nets, and also fishing at night from canoes with spears and torch light. This greater inaccessibility of salmon and the resulting need for more complex fishing technology may be one of the explanations of why there was a greater reliance upon hunting in the South Thompson region than in the mid-Fraser region.

A third aspect to be considered in analyzing fishing subsistence techniques is one expressed by Frederica de Laguna in a comment made at the Northwest Coast Studies Conference, Simon Fraser University, May, 1976. She emphasized that it was not how many fish were caught, but how many fish were processed by women and slaves that should be the important consideration in relating subsistence techniques to actual numbers of fish consumed. Thus it can be seen that even though fishing developed in a major subsistence activity in the Interior Plateau, the calculation of total fish consumption is hypothetical, and that most data on fishing technology must be derived from ethnographic sources.

#### *Gathering*

Gathering of vegetal foods was also a principal subsistence activity of the aboriginal Shuswaps, but again because of poor preservation, evidence of gathering technology must be derived from the ethnographies. Digging stick handles, mortars and pestles, are implements commonly associated with the gathering and processing of roots and berries, but they are absent in the excavated components of the Kamloops sequence. Stone mortars and pestles are recorded by Smith (1900) however and are also present in small amounts in local private collections in the Kamloops area. Their absence in the excavated components may be explained by the use of wood as their principal raw material. Appendix C lists most of the ethnographically-recorded plants utilized by the Shuswaps.

The presence of shell remains throughout some of the Thompson Phase and most of the Kamloops Phase components indicates that fresh water mussel shell was relied upon to a greater degree than one expects to find in winter habitation sites. The shell remains are *Margaritifera sp.*, the most common shellfish found in sites in the south-central interior. In the southern Okanagan, shellfish found in association with other food sources implies an early spring to early summer period of occupation (Copp 1976:35). Further study is necessary to interpret a similar situation for occupations in the Kamloops locality, such as that of House Pit 9 in the Harper Ranch site, that contain relatively large amounts of freshwater shell.

In summary, aboriginal Shuswap subsistence utilized a variety of techniques adapted to the exploitation of several seasonally abundant food sources. Palmer regards

Shuswap subsistence as taking the form of a balanced economic strategy of exploitation with equal emphasis upon the similar carrying capacities of deer and elk and of Pacific salmon and that "The figures indicate that ungulates and salmon would have rivaled one another in importance in the Shuswap diet" (Palmer 1974b:28). The archaeological record seems to imply that for a variety of ecological, cultural and demographic reasons, the Shuswap of the South Thompson region emphasized a continued exploitation of a wider variety of food sources than the inhabitants of the Lillooet area, who relied much more heavily upon the single resource of the anadromous salmon. This is probably one of the principal reasons for the differences that exist in the respective archaeological sequences.

### Origins of the Kamloops Archaeological Sequence

The origins of the Kamloops archaeological sequence are represented by the initial intensive occupation of the locality's floodplains in association with the introduction of the Late Nesikep Tradition into the South Thompson River region. There is no evidence to date for the Early Nesikep Tradition in the region, and the only evidence for the Old Cordilleran Tradition appears in Zone II in the Moulton Creek site, which lies to the east of the boundaries of the locality. The Kamloops sequence dates to *ca.* 2000 B.P., and this section discusses the data that support the archaeology for the initiation of the sequence at this time. Hopefully, further research will not concentrate solely on pit house sites, but attempt to locate and recover data on components that might predate the Late Nesikep Tradition in this locality.

The origins of the Kamloops sequence can be related to Elmendorf's analysis of the glottochronology of the Interior Salish languages (Elmendorf 1965). Elmendorf hypothesizes that the proto-Interior Salish originally represented a single speech community that separated from the other proto-Salish speech communities around 6900–6000 B.P. This community developed without any marked internal divisions for a long period of time in a fairly limited region near the northwestern corner of the present Interior Salish territory, until it experienced two periods of expansion and differentiation. The first period reflects a primary dialectic split between easterly and westerly sections of the speech community, and was caused by a slow expansion eastwards and southwards between 4000–3000 B.P. This period was followed by internal divergences, which in the western group were characterized by a separation of pre-Lillooet from pre-Thompson-Shuswap in association with gradual territorial spread. Elmendorf states that much of this expansion ". . . may have proceeded rapidly after 1000 B.C." (Elmendorf 1965:76). The second and final

period of expansion and differentiation involves the Shuswap language becoming fully differentiated from the Thompson language around ". . . the beginning of the Christian era" (Elmendorf 1965:76). The earliest radio-carbon dates for the Kamloops locality correspond exactly to this second period, indicating that from the first, the semi-permanent inhabitants of the Kamloops locality's floodplains have always been Shuswap-speakers.

There are several related factors that might explain the cause and/or nature of this territorial expansion of proto-Interior Salish speakers, one of which is a change in climate from the warmer, drier conditions of the Altithermal to the wetter, cooler conditions of the Medithermal, which had already commenced by 3000 B.P. This ecological change must be related to both the technological change from the Early Nesikep to the Late Nesikep Tradition, which Stryd (1973b) dates at 2800 B.P. for the mid-Fraser region, and also to the oldest estimated date for house pits of 3500 B.P. or earlier for the same region (Sanger 1969:196).

The gradually increasing exploitation of the anadromous salmon throughout the Early Nesikep Tradition made possible the use of pit houses for sedentary winter residence towards the end of this tradition. Even though the earliest date for seasonal pithouse villages on the Columbia Plateau is no earlier than 2000 B.P., the change from residence in isolated pit houses to that in permanent pit house villages reflects increases in population size (Browman and Munsell 1972:548), and might be closely related to the beginning of the Late Nesikep Tradition in the mid-Fraser region around 2800 B.P. Demographic pressures within the mid-Fraser region associated with changes in adaptive strategy to the new climatic conditions must both be considered as primary reasons for the eastward expansion of pre-Thompson-Shuswap speakers at this time. Stryd (1973b) suggests that the possibility of external pressures, such as applied by southward-moving Athapascans, might also be a related causal factor.

These ecological and linguistic hypotheses are used to explain the origins of the archaeological sequence in the Kamloops locality, and are summarized as follows:

- the development of intensive fishing techniques for the anadromous salmon in the mid-Fraser region led to increases in population size and to the establishment of semi-permanent pit house villages by 2800 B.P.
- demographic pressure was being applied to this region at this time forcing gradual territorial expansions eastwards.
- the expansions were oriented towards the distribu-

tion of salmon and ungulates, and thus followed the floors of the major river valleys and the adjacent edges of the newly-expanded forests.

- the subsistence emphasis was on hunting, possibly because of the need for more complex fishing technology once away from the mid-Fraser.
- winter residences were established in locales, such as

the confluence of the North and South Thompson Rivers, by 2000 B.P., where abundant supplies of both salmon and ungulates were available.

The archaeological record of the Kamloops locality indicates that intensive fishing probably remained of somewhat secondary importance to the emphasis placed upon hunting until the end of the Thompson Phase, at approximately 1400 B.P.

#### Summary of Archaeological Relationships between the Kamloops Locality and the mid-Fraser Region

The area which is the most closely related to the Kamloops locality is the mid-Fraser region. The origin of the Kamloops sequence is directly linked to the history of cultural change in the mid-Fraser, and subsequent historical developments of culture in the two areas were heavily influenced by the constant exchange and common sharing of resource items that assured a continual diffusion back and forth of cultural elements.

There are however particular differences between the two archaeological sequences, and these reflect the distinctions that exist between the areas' ecologies, demographies, adaptive strategies, and the nature of their respective external contacts. Habitation of the mid-Fraser region occurred for a much longer period of time, and we should expect this duration of cultural accumulation to be responsible in part for the more permanent residence patterns and the slightly more varied technologies in the mid-Fraser region. Other factors that would influence the difference in mid-Fraser traits include:

- the easier accessibility of Pacific salmon, making it the principal food staple,
- the possibility of a larger and more accessible deer population, because of the more forested vegetation,
- the restriction of winter habitation sites to terraces above the Fraser River where fresh water streams or springs are located,
- and the much closer proximity to the influences of coastal cultures.

The archaeological sequence of the Kamloops locality begins much later and reflects a more nomadic settlement pattern with a more balanced exploitation of seasonal resources. Early in this sequence, subsistence emphasized

the hunting of large ungulates, mainly elk, and was later supplemented by an emphasis on salmon fishing and the hunting of deer, associated with a noticeable increase in population size. The Thompson Phase represents a cultural development initiated by the introduction of Late Nesikep Tradition elements into what is inferred to be an Old Cordilleran cultural pattern. Old Cordilleran elements are thus present in the Thompson Phase to a much higher degree than in the contemporary early periods of the Late Nesikep Tradition in the mid-Fraser region. The subsequent change to the Kamloops Phase also therefore occurs later in time in the Kamloops locality.

The Kamloops Phase components of the mid-Fraser appear to be more numerous and richer in content. This is most likely a function of greater coastal influences in this area, and the tendency towards year-round settlement in one location as a result of obtaining subsistence needs solely by trading and by acting as "middlemen" in the exchange of goods between the coast and the interior (Teit 1909:535). The Kamloops Phase in the Kamloops locality is restricted to a few components, and this is probably due to limited sampling to date. Even though the locality acted also as one of the important trading centres in the Interior Plateau, the nature and amount of the trading never allowed for permanent year-round settlement. There was also little direct contact between the coast, or the lower Fraser canyon and this locality because of the filtering effect of the cultures in-between. Thus the South Thompson region probably had little to do with the contribution of interior traits into the cultural pattern represented by the Skamel Phase of the Fraser canyon sequence, and conversely received little direct influence from the cultures of the canyon's succeeding Emery and Esilao Phases, which is so evident in the mid-Fraser region. Even if direct contact occurred, the more nomadic subsistence patterns in the South Thompson region would not have been conducive to the adoption of coastal culture elements.

### Summary of Conclusions

The archaeological analysis discussed in this report attempts to reconstruct the culture history of the aboriginal Shuswap peoples who inhabited the Kamloops locality. Emphasis is placed upon the adaptive values of the material culture, and how this culture was initiated and changed through time in response to changing cultural ecologies. The principal purpose of the research is to interpret a chronological framework and to provide adequate data to be used as a basis for new avenues of research.

The archaeological materials in this study represent approximately 2000 years of continuous occupation of the Kamloops locality, and they reflect two major adaptive strategies. The earlier one, from *ca.* 2000–1400 B.P., is referred to as the Thompson Phase, and is characterized by hunting, fishing and gathering subsistences. The archaeological evidence implies that subsistence emphasis at this time was placed upon the hunting of large ungulates, principally elk. The succeeding adaptive strategy is referred to as the Kamloops Phase, and dates from 1400–200 B.P. It is associated with population increases, and emphasizes the fishing of Pacific salmon as its principal source of subsistence.

The aboriginal culture of the Shuswap evolved in a true "Plateau" sense without influence from the Coast or the Plains. It evolved out of a territorial expansion eastwards from the cultures of the mid-Fraser region approximately 3000 years ago. The two cultural areas subsequently developed somewhat similar adaptive strategies in response to similar ecologies. Major distinctions exist however between the two cultures, and these are reflected in the slightly divergent archaeological chronologies. In describing this divergence, the Kamloops locality may be regarded as peripheral to the comparative cultural affluence of the mid-Fraser region, but this is only due to the former's lack of cultural time depth, its more nomadic subsistence patterns, and its absence of coastal influences.

Due to lack of previous archaeology in the locality,

several assumptions have been used in this study, and selected ones are listed as follows:

- settlement in pit house villages implies intensive fishing of Pacific salmon;
- projectile point functions are related to their neck widths;
- house pit size reflects the size of the family that inhabited it;
- cache pits were primarily used for the storage of salmon;
- the Early Nesikep Tradition is absent in the Kamloops locality;
- Elmendorf's glottochronology of the Interior Salish is valid.

Using these assumptions in the analysis of the archaeological data, several inferences and interpretations have been proposed to aid in the description of the archaeological chronology. The principal ones concern the elements that mark the change from the Thompson Phase to the Kamloops Phase. They include the introduction of small side-notched projectile points, cache pits, large house pits, bone technology, ornamentation, the inferred change in subsistence emphasis from hunting to fishing, and the inferred increases in population size. Another proposed inference is that sites with fewer house pits were inhabited for shorter periods of time than larger house pit sites.

Hopefully, future research in the locality will test some of the hypotheses proposed here, in order to further our understanding of the cultural adaptation and change that was experienced by the Shuswap peoples of the Interior Plateau of British Columbia.

### ACKNOWLEDGEMENTS

This report was originally a masters thesis in the Department of Archaeology, Simon Fraser University.

I would like to thank the following for their assistance in the research and preparation of this work, the Department of Archaeology, Simon Fraser University and the Archaeological Survey of Canada for providing financial assistance; the Kamloops Indian Band for their continued cooperation throughout the investigation; Mr. Raymond Curr for allowing us to camp and work on his land; and Mary Balf of the Kamloops City Museum for informing us of threatened archaeological sites and for providing laboratory and storage facilities. Studer Brother Construction and Walter Cabott Construction delayed their operations so that the two burial sites could be salvaged. Trans Mountain Pipe Line Company assisted in backfilling.

My thanks goes to the members of my committee,

Dr. R.L. Carlson, P.M. Hobler, and Dr. A. Stryd for their advice, and also to Dr. H.L. Alexander and Dr. K. Fladmark who also contributed suggestions and criticisms.

I thank the following for their assistance in the preparation of the thesis: B. Hodgson, B. Seymour, D. Lundy, M. Bedarnski, and J. Alperin-Wilson for the artifact drawings; O. Beattie for the artifact photographs; and B. Galdikas-Brindamour, J. Williams, and N. Boucher-White for the faunal analysis.

I thank all the crew members for their participation in the field work, and especially Linda Mitcham who directed the excavation of the Leonard Site.

Finally I am indebted to Joan Alperin-Wilson who encouraged and inspired me to persevere. I would also like to thank my parents who have been so patient.