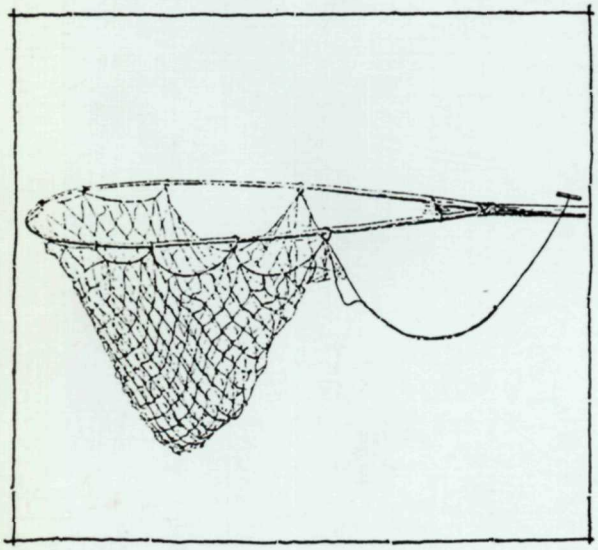
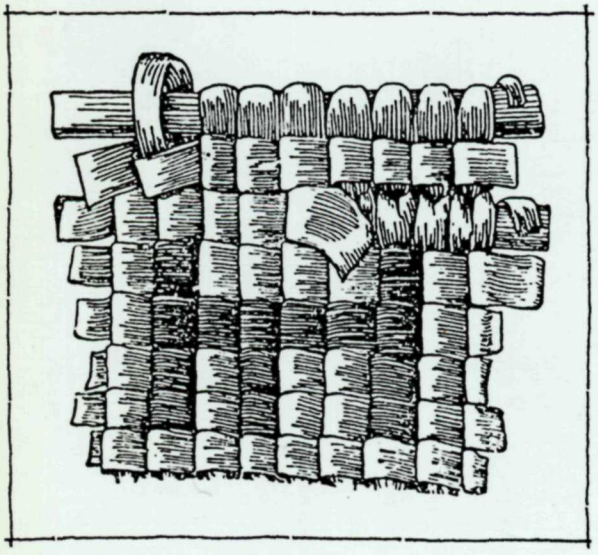


Ethnography of The North Cascades

by Allan H. Smith



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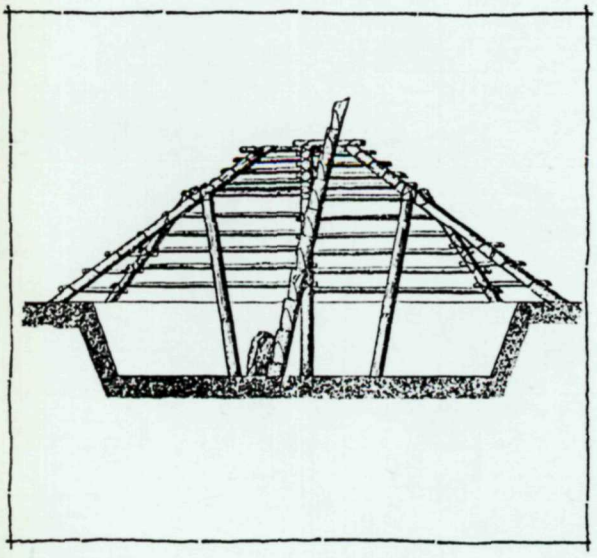

North Cascades National Park Service Complex
and
Cultural Resource Division
Pacific Northwest Region Seattle, WA

ETHNOGRAPHY OF THE NORTH CASCADES

by

Allan H. Smith

Report prepared for the North Cascades National Park Service
in compliance with Contract Number CX-9000-4-E076

Center for Northwest Anthropology
Washington State University
Pullman

March 1987

For S. D. M.: through the turning of countless seasons
a warm, caring, and constant friend.

ABSTRACT

The ethnographic and ethnohistorical data clearly indicate that in late protohistoric and early postcontact times four Native American tribes claimed and made regular seasonal use of segments of the mountainous country now within the boundaries of the North Cascades National Park, the Ross Lake National Recreation Area, and the Lake Chelan National Recreation Area. These were the Upper Skagit of the middle Skagit drainage, including the Ross Lake sector; the Chilliwack of the Chilliwack drainage, astride today's international boundary; the Lower Thompson of the Fraser River canyon and the mountains south into the Skagit River country of Washington; and the Chelan of a short reach of the Columbia River and of Lake Chelan and the Stehekin drainage.

A brief foreword lays the foundation for the report. It makes explicit the more important goals of the study, identifies the native groups involved, and briefly characterizes the four tribes in broad linguistic and cultural terms.

The principal section of the report summarizes in considerable detail the total-culture configuration of each tribe. Each of these four chapters is introduced by a brief, evaluative survey of the main ethnographic and ethnohistorical sources of information, a summary of the names variously used for the tribe, a definition of its territorial borders, a description of its linguistic and cultural affiliations, and a review of the early population estimates for the group. The main body of each chapter describes in some depth the traditional culture of each tribe: its subsistence quest, material culture and technology, settlement characteristics, travel and trade patterns, social and political structure, life cycle, religion, diversions, and what may be termed its cognitive culture. Special attention is paid to data relating directly or indirectly to the group's utilization of the varied resources of the mountainous regions of its homeland and describing the social, religious, and other segments of its life mode in its high elevation country. This information is most complete for the Thompson, though even here far from rich, comprehensive, and detailed, and is most wanting for the Chilliwack and particularly the Chelan. Each chapter closes with a section drawing together and discussing the implications of these scattered mountain data.

A brief epilogue presents the conclusion that the data collected in this present study is insufficient in scope and detail to allow a meaningful comparison of the highland adaptations of the four tribes. They are likewise inadequate to support an assessment of the relative importance of biogeoclimatological factors as against factors of cultural background and orientation in setting the pattern of a group's adaptation to its mountain terrain. A tentative design for further research is suggested.

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FOREWORD

The chapters that follow represent a first attempt to achieve three principal, related goals. In brief, these are:

(a) To determine the American Indian groups—"tribes" in a loose technical sense—that claimed, occupied, and made use of those land areas that today fall within the boundaries of the North Cascades National Park and the Ross Lake and Lake Chelan National Recreation Areas, and to establish their tribal limits within and in the vicinity of this Park Complex as of the early contact period.
(b) To assemble from the ethnographic and ethnohistorical literature and from such other sources as may be located data descriptive of the lifeways of these native groups in late protohistoric and early postcontact days, the "traditional" period as this term is employed in this study, and to present this information in an organized, scholarly, but non-technical fashion.
(c) To ascertain to the degree possible from the data at hand the specific ways in which these tribal entities made use of the natural resources of their high country, in particular those of the Park Complex, and, more broadly, to describe their life patterns when in these elevated valleys and on these lofty mountain slopes.

As the following chapters indicate, it has been found that four different tribes aboriginally claimed territory within the present Park Complex: the Upper Skagit in the Skagit Valley and surrounding mountains from the southwestern corner of the Complex upstream through today's Ross Lake region to the vicinity of the international boundary; the Chilliwack in the upper Chilliwack Valley and the mountainous terrain in its vicinity, including the northwesternmost segment of the Park; the Lower Thompson in the upper Skagit Valley and neighboring high country south to the Canadian line and down through the Ross Lake area almost as far as Big Beaver Creek; and the Chelan east of the Cascade crest in the upper Lake Chelan and Stehekin River sector of the Complex.

The claim of the Chelan to its territory is uncontested and that of the Chilliwack essentially so, though Lower Thompson parties and hunters from other neighboring groups sometimes entered the mountains within the tribal boundaries of the Chilliwack. As intimated above, that segment of the Skagit Valley now under the waters of Ross Lake and the flanking mountain masses, however, represented at least in traditional times disputed hunting and gathering grounds, frequented by parties of both Upper Skagit, coming up the river from Newhalem and below, and Lower Thompson descending the valley from their tribal lands north of today's international border. These overlapping tribal claims in this Skagit region, protected on occasion by hostile action on the part of both groups, call for no adjudication by the ethnographer in terms of time priority, extent and manner of utilization, or any other standard or basis, for the claims of the two groups appear on the surface equally valid, though the Upper Skagit had an appreciably shorter trek to the area than did the Lower Thompson. As noted below, this overlapping multiple land use is simply reported as an ethnographic reality of the traditional time period.

Accordingly, there are four chapters in this report, one devoted to the Upper Skagit, Chilliwack, Lower Thompson, and Chelan respectively, ordered thus rather arbitrarily in a geographically clockwise fashion. To the degree that information is available, each chapter provides the same subject coverage and follows the same data organization and presentation. This comprises a brief "data base" appraisal; a short introductory, background section; a substantially more extended summary of what is known of the life patterns of the tribe with particular attention to its diverse associations with its higher country; and a final, unfortunately necessarily rather brief and general section collecting, integrating, and interpreting such information as is known or can be reasonably inferred regarding the tribal utilization of its mountainous regions and of its homeland inside the boundaries of the Park and Recreation Complex.

It is important to the theoretical interests of this report to note that, though their territories joined or, in the case of the Chilliwack and Chelan, were almost contiguous, these four tribal entities differed in important linguistic and cultural respects. Although all four spoke dialects of the Salishan language family, their dialects were mutually unintelligible. Further the speech of the Upper Skagit and Chilliwack belonged to the Coast Salish division, while the Lower Thompson and Chelan were members of the Interior Salish group. Culturally, the Upper Skagit were an inland Puget Sound people as the Chilliwack were a hinterland Fraser River folk, both

with obvious though rather dilute Northwest Coast cultural affiliations. The Lower Thompson of the Fraser Canyon country followed a basic Plateau life pattern, but with a considerable tilt in certain cultural domains toward a weak and modified coastal life style. The Chelan, in contrast, were an out-and-out Plateau group, but somewhat atypical in their unusual lake and towering mountain environment and in their life mode in adaptation to this special ecological configuration. Yet in spite of these substantial differences, all utilized extensively their part of the highlands of the Park Complex and the nearby mountains and forests. Obviously there are here opportunities for an intensive comparative ethnographic inquiry of some considerable interest.

It is hoped that the data of this report will be useful to the interpretive corps in the Park and Recreation Areas in their continuing efforts to share with the public information concerning the aboriginal life patterns of those Indian groups that identified themselves with geographical segments of the Park Complex, and particularly the ways in which these tribes were intimately bonded in their subsistence quest and many other life domains to the valleys and mountains, streams and lakes, and forests and alpine meadows of the Complex.

I

UPPER SKAGIT

Data Base

The ethnographic information compiled in this chapter has been drawn primarily from June McCormick Collins' (1974a) field study of the Upper Skagit carried out in the 1940s. These data are especially full in the areas of religious and social life, less complete in describing the traditional subsistence base and material culture of the tribe, doubtless because these latter segments of the old ways were both less sharp in the minds of her informants and of a lesser interest to Collins herself.

These data are supplemented by information fragments culled from published ethnographic and ethnohistorical sources. This is particularly the case for those subject areas not dealt with by Collins or considered only cursorily by her.

In this chapter a number of tribes of northwestern Washington and the adjacent British Columbia coast are mentioned. The maps that follow (Figure 1-1 and 1-2) are reproduced here to assist the reader unfamiliar with the local ethnography in placing most of these groups.

Introduction

In this section four matters of a general background nature are briefly considered: the "native" terms by which the Skagit were known, the geographical boundaries of the group's homeland, the cultural and linguistic relationships of the tribe, and such early population data as are available for the group.

Ethnonymy

It is customary to think of the Skagit as comprised of two major population units: (a) the Skagit proper who occupied the area about the mouth of the Skagit River and the offshore islands, and (b) the Upper Skagit whose territory began a short distance inland from the salt water and extended eastward up the Skagit drainage into the high mountains that formed the western flank of the Cascades.

The Upper Skagit are sometimes considered to have had two component segments: the Upper Skagit proper on the upper Skagit River whose subsistence country reached well into the Park Complex, and the Suiattle-Sauk who ranged the Suiattle and Sauk river region to the south of the territory of the Upper Skagit proper. This latter group, however, is at times considered as a third major division of the Skagit or even as a separate tribal entity comparable to the Skagit.

In this study the Upper Skagit and Suiattle Sauk are, for the sake of simplicity, regarded as a single population group. However, because the territory of the latter lay some distance from the Park boundaries, lesser attention is given to it where the data differentiate between it and the Upper Skagit proper.

Whether these three Skagit population components were thought to be individually cohesive units and distinct from one another by the Skagit Indians themselves and possessed their own distinctive names I do not know. Certainly the term "Skagit" has been used in several different ways by Whites as a population unit designator: for example, to refer to (a) the Skagit proper (or Lower Skagit), (b) the Upper Skagit alone, (c) the Lower and Upper Skagit together, and (d) the Lower Skagit and a few of the Upper Skagit villages (Indian Claims Commission 1974:315).

According to Hodge (1910:585) and to Swanton (1952:441) quoting Hodge, the Skagit name for themselves was Hum-a-luh, "the people," information third-hand by the time it reached Hodge. It is unclear whether this designation applied to the Lower Skagit, Upper Skagit, and Suiattle-Sauk or only to some part of this larger unit. All other terms for the Skagit listed by Hodge are obvious variants of "Skagit": e.g., Sachet, Scad-jat, Skagats, etc.

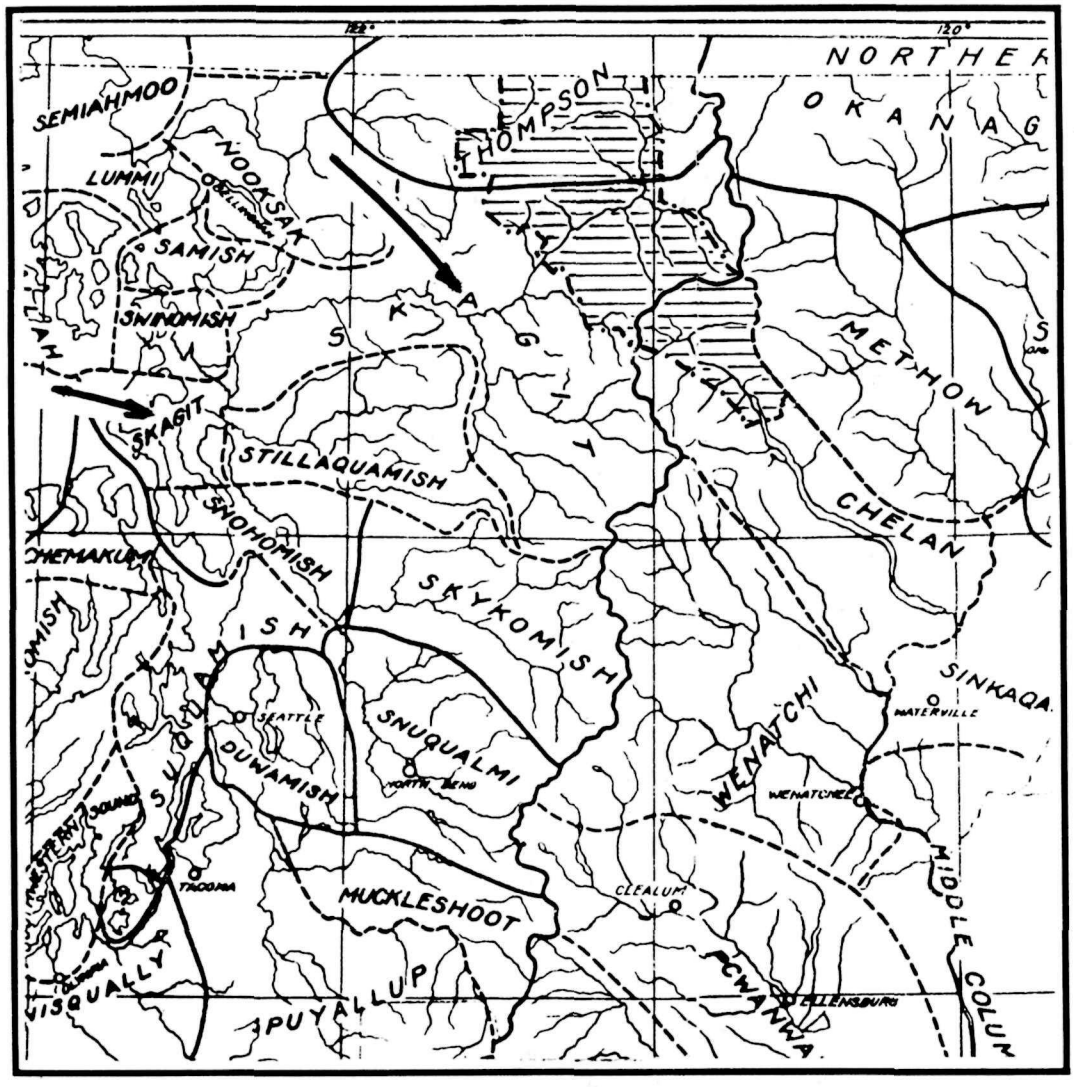
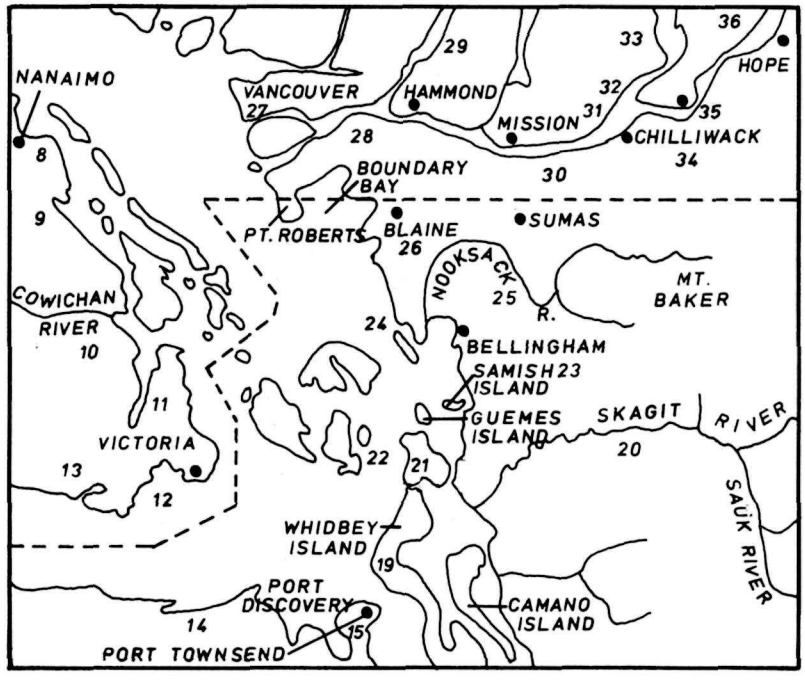


Figure 1-1. Fragment of a tribal distribution map of Washington by Spier (1936:42–43), slightly modified. The two Skagit division are shown, but not differentiated by name (see arrows). This and Figure 1-2 locate most of the tribes referred to in this chapter. Approximate boundaries of the North Cascades Park Complex are marked by a dot-dash line and the area is designated by hatching.



Key:

8. Nanaimo
9. Chemainus
10. Cowichan
11. Saanich
12. Songish (Lkungen)
13. Sooke
14. Klallam
15. Chemakum (non-Salish)
19. Lower Skagit
20. Upper Skagit
21. Swinomish
22. Samish
23. Nuwhaha (Upper Samish)
24. Lummi
25. Nooksack
26. Semiahmoo
27. Musqueam
28. Kwantlen
29. Katzie
30. Sumas
31. Nicomen
32. Scowlits
33. Chehalis
34. Chilliwack
35. Pilalt
36. Tait

Figure 1-2. One of two complementary tribal distribution maps by Suttles (1957:158, 159). This map covers the lower Fraser and Strait of Georgia areas, showing the location of the Lower and Upper Skagit (≠19, 20) and their western and northern neighbors. Tribes designated by the missing numbers appear on the companion map.

Tribal Territory

There seems to be only a single study based on field research that attempts to define in detail the traditional tribal boundaries of the Upper Skagit. This is a map (Collins 1974c:facing 760) printed as an annex to Collins' (1974b) report of 1946 concerned with the nineteenth century shift of the Skagit from their aboriginal religion to Shakerism (Figure 1-3). It shows the territorial limits, settlement locations, and major subsistence use areas of the Upper Skagit as defined in this study, as well as these data for two neighboring tribes. The authorship and date of this cartographic document are not identified with the map, but in the 1960 Indian Claims Commission (1974:317) findings of fact concerning the Upper Skagit land claims litigation, the map is attributed to Collins. As printed, this map is unfortunately a small-scale, reduced, and therefore cluttered cartographic effort. Nevertheless, it must be used as the primary source from which to define the aboriginal homeland limits of the Upper Skagit.

The Upper Skagit, according to this map, were divided into the Upper Skagit proper and the Suiattle-Sauk. The eastern limits of the country of the Upper Skagit proper, following the line between Whatcom-Skagit counties on the west and Okanogan-Chelan counties on the east, coincided with the sinuous crest of the Cascades southward from the Canadian border to the vicinity of Lizard Mountain (USGS *Concrete* quadrangle 1955). In this distance the boundary was broken by a number of roughly east-west passes, among them Castle, Woody (just west of Barron), Harts, McBee, Methow, and Cascade, to mention only those marked on the USGS *Concrete* quadrangle (1955). Just below Cascade Pass the Upper Skagit border left the North Cascades National Park and moved on south to the Lizard Mountain region.

From the Lizard Mountain area the territory of the Suiattle-Sauk division continued down the Cascades watershed over Ross Pass, now following the Snohomish-Chelan county boundary, and Suiattle Pass, soon bending to the southwest to run just south of Glacier Peak to White Pass, where it veered sharply to the south again until it reached a point about due east of Monte Cristo. There it turned abruptly to the west immediately south of the 48th parallel. Now at last well south of the Park Complex, we need not trace its limits beyond this point.

The northern border of Upper Skagit country, as defined by this map, proceeded along the international boundary to the watershed between the upper Skagit River (now Ross Lake) and the Chilliwack drainage. Obviously to some uncertain degree this following of the Canadian border is painting with a broad brush, for the straight line political separation along the 49th parallel bears no appreciable relationship to the topographic realities that were major considerations in determining the limits of tribal use areas. Leaving the Canadian boundary it proceeded to the southwest along the water-directing crests to circle the headwaters of Baker River, to climb over Mount Shuksan, and then to move southwesterly above the western source streams of Baker River and to pass just east of Mount Baker. Here we are significantly west of the Park limits, making further plotting of the Upper Skagit northwestern boundary, as indicated in this map, irrelevant for this study.

Similarly, the dividing line between the Upper Skagit and Skagit tribes lay well down the Skagit River to the west and so well beyond our Park concerns.

The border between the traditional territory of the Upper Skagit proper and the Suiattle-Sauk ran roughly west and slightly northwest from the general Lizard Mountain environs to reach the Skagit River just east of the mouth of the Sauk River. This means, as already indicated, that the entire country of this small Suiattle-Sauk group lay some distance outside the southwestern perimeter of the North Cascades Complex and that it and the people themselves are of lesser interest to this report.

Especially notable is the fact that there is a considerable territorial overlap between the northeastern country claimed by the Upper Skagit as plotted here and the traditional country of the Lower Thompson as described by Teit (1900:166) (Figure 3-1). As remarked in greater detail below, this overlap region was to some degree subsistence resource terrain of both the Upper Skagit and the Lower Thompson. Yet it is surely not without significance that on Collins' map (Figure 1-3) no Upper Skagit game and fish resources are specifically marked for the region southeast, east, and west of Ross Lake, a portion of which Teit claims for the Lower Thompson. From these map data it is likewise clear that the Upper Skagit maintained no settlements on the Skagit River above Newhalem, some 11 miles downstream from Ross Dam (see Residential and Task Sites section below).

The Upper Skagit boundaries as described by Collins (1974a:5) very sketchily and in a slightly muddled fashion down in the Sauk country do not differ materially from the above delineation. She reports only that the eastern border followed the Cascade divide, that the northern line abutted the territory of the Thompson, who hunted in the upper Skagit River country in Canada, and followed the ridges between the Skagit and Nooksack basins, and that the southern boundary fell along the ridges separating the waters of the Skagit from those of the Stillaguamish.

The boundary of old Upper Skagit territory is also specified in the tribe's 1958 claims petition against the federal government. That portion relating to the back country in and near the Park borders reads as follows:

> . . . [from] the crest of Mount Baker and along the divide separating the waters of Chilliwack River and Skagit River, to the International Boundary line . . .; thence eastward on said . . .

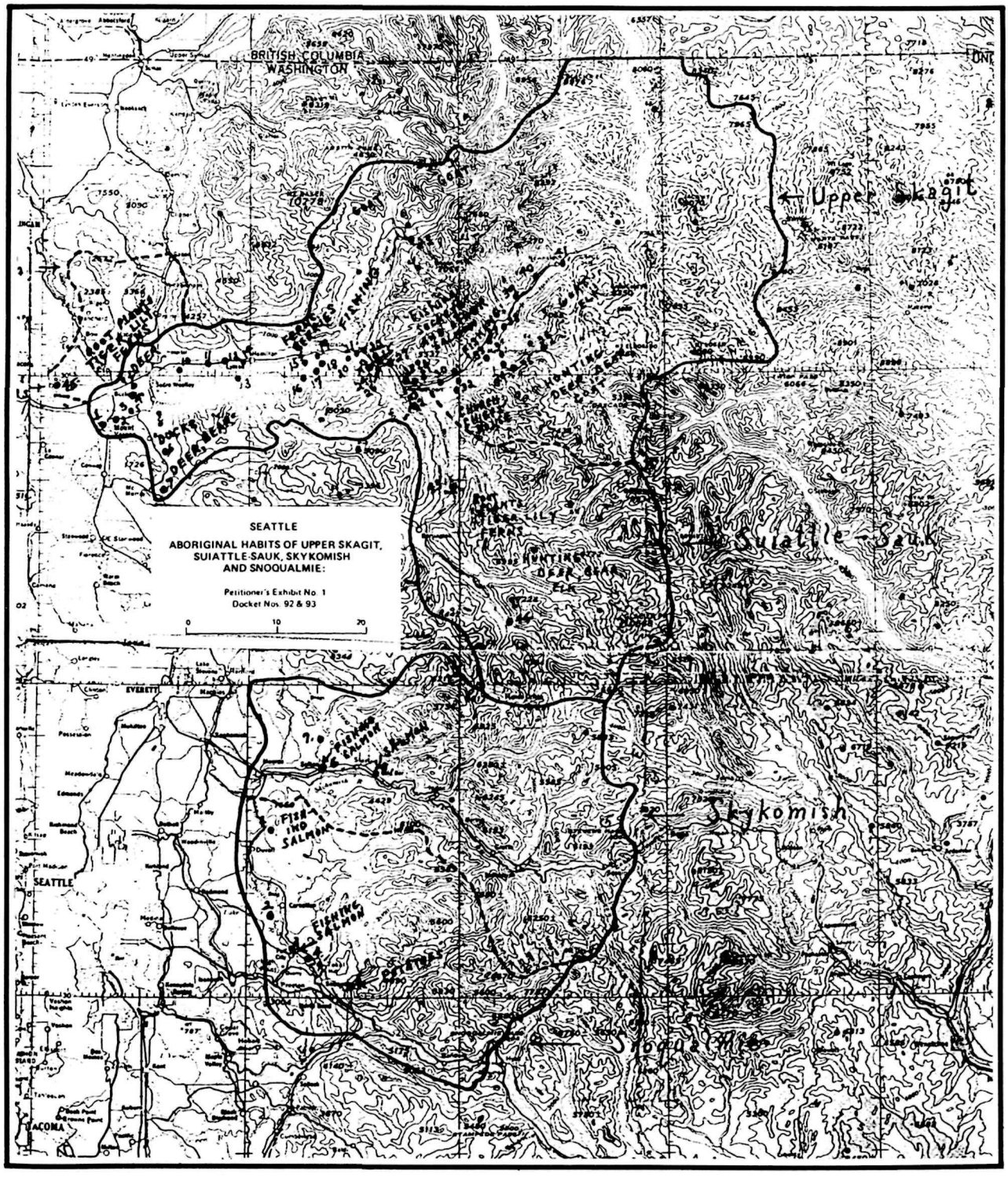


Figure 1-3. Tribal boundaries, settlements, and subsistence areas of the two Upper Skagit divisions (Upper Skagit proper and Suiattle-Sauk) and of the Skykomish and Snoqualmie, comprising a second major grouping. This map, printed anonymously with Collins' (1974c) Upper Skagit religion research, is apparently extracted from her still unpublished study submitted in connection with Upper Skagit early land claims litigation.

> Line to the crest of the Cascades Mountains; thence southward along the crest of said mountains to the most eastern point of the divide separating the waters of Sauk River from the headwaters of Skykomish River; thence westward, northward, and again, westward along said divide, said area including the watershed of the Sauk River and the Skagit River, to a point on said divide approximately due south of the present town of Ehrlich, Washington. . . . (Indian Claims Commission 1974:318-319)

This line, when plotted, follows exactly or as nearly as I can determine the boundary as defined by Collins' (1974c) map (Figure 1-3). This is not surprising since the map was a petitioner's exhibit in this litigation.

Cultural and Linguistic Affiliation

Culturally the Upper Skagit were at root a Northwest Coast group. Still, much of their territory, extending eastward to the very crest of the Cascades, was excessively mountainous. Accordingly, they also possessed traits that were in keeping with the biophysical properties of such interior terrain. Collins (1974a:4, 6-7) summarizes this Janus-like situation as follows.

Like coastal peoples, the Upper Skagit relied on salmon as a staple; used red cedar in making their large winter dwellings, canoes, containers, and other objects; resided in permanent winter villages and in summer camps with smaller movable shelters; carved and painted the inner posts of their houses to symbolize guardian spirits and placed some carved wooden figures in and near their villages; were structured into upper, middle, and slave classes; possessed little political organization; practiced the potlatch; divided the year into a winter season of religious ceremonies and a summer period when the food quest was the paramount concern; and possessed the Raven and Mink as important mythological figures.

Like the people of the nearby Plateau, the Upper Skagit made extensive use of deer, elk, and other land mammals as food and of baskets as containers, and they told myths with Coyote as a principal figure. As with typical Plateau groups, they possessed no secret societies and held few slaves. Especially the people of the villages farthest upriver made coiled watertight baskets, wore skin clothing including moccasins, used snowshoes, and relied strongly on individual guardian spirits though these were inherited within the family.

This special combination of cultural traits, some facing west and some representing high, backcountry adaptations and practices, was recognized as early as the mid-1800s. In 1854 George Gibbs (1855a:432) wrote:

> . . . besides the tribes, or bands, inhabiting the shores and the lower part of the rivers, there are on the headwaters of the latter, along the whole course of the Cascades mountains, another range of tribes, generally independent of the former, who rarely descend from their recesses, but are intermediate in their habits between the coast and mountain tribes; except the Taitinapam [who were Sahaptian speakers related linguistically to the Plateau tribes east of the Cascades], however, they all belong to the general [Salishan linguistic] family upon whose borders they live. Those in the neighborhood of the passes own a few horses, which subsist in the small prairies skirting the base of the mountains.

These cultural differences, comprehended at a general level by Gibbs and specifically for the Upper and Lower Skagit by Collins as already noted, formed the base upon which Smith (1941:205-206) formulated a cultural subarea—the Foothill Culture—distinct from the subareas on the salt-water shores. This proposed subarea consisted of a tier of small tribes against and on the western face of the Cascade Mountains, of the Upper Skagit and their inland neighbors to the north and south. It also had its counterpart among the Plateau Indians on the eastern flank of the Cascades. This formulation is discussed more fully in the later Chilliwack chapter of this North Cascades study. It is sufficient to note here that the Upper Skagit shared with the other foothill people a negligible use of clams, seals, and other salt water products, a hunting pattern almost equal in importance to fishing, cross-country travel by land as well as movement by canoe, social gatherings without the potlatch exaggeration, a prestige pattern based on behavior and achievement rather than on inherited class, and individualized guardian spirit power (Smith 1941:206).

The important point is that the Upper Skagit had, in a way, two lines of cultural affiliation. One was down the Skagit River to the Lower Skagit and other nearby salt-water groups, with whom they shared one block of cultural traits. The second, running north and south, was with other tribes possessing this backcountry "foothill" culture. This foothill proposition has been criticized by Suttles (1957) as poorly documented, as it surely was, and even illusory, as it definitely was as a tightly structured cultural subarea. But certainly these high-area tribes on the western slopes of the mountains shared some special environmental adaptations that brought them into a common cultural fold, and, as a group, lacked some particular maritime adaptations of their western neighbors.

According to Collins (1974a:8), both traditions and linguistic evidence in the form of place names suggest that Interior Salishan speakers once occupied the Skagit Valley. Other traditions tell of recent migrations into the Skagit Valley from the Washington Coast and Vancouver Island as well as from the Plateau. However, linguistic evidence and especially traditions of these kinds should not necessarily be accepted as proof of an historical fact.

Upper Skagit speech was a dialect of Looshootseed (Puget Sound Salish), a language that included the dialects of the Snohomish, Snoqualmie, and other neighboring groups. Looshootseed, in turn, belonged to the large Coast Division of the Salishan language family, one with member languages from southern Vancouver Island south to the Oregon coast. Upper Skagit was mutually unintelligible with Nooksack and with Chilliwack, and substantially more different from the Interior Salishan speech of the Lower Thompson and Chelan (Suttles 1957:163, 1985; Thompson 1979:693). Bilingualism, however, was common in the area (Indian Claims Commission 1974:323).

Slight dialectic differences occurred from one Skagit extended village to another (Indian Claims Commission 1974:323).

Demography

Population estimates for the Upper Skagit made in precensus times must be considered only rough approximations. As George Gibbs (1877:181-182) so perceptively points out for the area tribes in general:

> I am well satisfied that none . . . [of the estimates made to my time] can be taken as . . . accurate calculations. . . . In arriving at any [demographic] conclusion, it is necessary to regard not merely the actual facts of increase or mortality known to us, but the capacity of the country to furnish subsistence, the modes of obtaining it followed by the Indians, their general character and habits, their fecundity, their wars, and various circumstances directly or indirectly bearing upon life.

With these cautions in mind, Gibbs (1855a:433) in 1854 estimated the Skagit (evidently wholly or principally the Lower Skagit) at "about three hundred all told; and there are other bands upon the headwaters of their river plainly wholly or in large part the Upper Skagit, amounting probably to as many more" (cf. also Gibbs 1855a:436). Wilkes' (1841; in Stevens 1855:435) earlier 1841 estimate for the Scatchae (Skagit) tribe was 650. Whether this includes both the Lower and Upper Skagit or only the former is in question, conceivably exclusively the former with the difference between 650 persons and Gibbs' 300 (assuming that both figures were reasonably accurate) being the consequence of population decimation in the 13 year period. At any rate, the figure of about 300 persons has generally been taken as close to the population of the Upper Skagit in the mid-nineteenth century.

Other population estimates for about 1780 and later have been made in which the Skagit—Upper and Lower divisions together—are submerged in still larger tribal groupings, e.g., by Mooney (Swanton 1952:442) in the early 1900s and by Taylor (1963:161-162, 163). There is, however, no way to extricate from these approximations the figures for the Skagit specifically, let alone the Upper Skagit.

The effects of Western epidemic and other diseases—smallpox, respiratory ailments, etc.—upon the Upper Skagit in the late 1700s and early 1800s must have been great. The tribe, incidentally, termed smallpox "Nooksack sickness," because it spread to them from that group (Smith 1950a:332). In 1961 Taylor (1963:162) calculated "that the population of the Puget Sound area declined about 50 percent in the period from 1780 to 1840." In his careful study of the influence of these diseases in the late 1700-early 1800 time span, Carroll Riley arrived at a population reduction estimate for the Puget Sound tribes of between 70 and 90 percent. Based on Gibbs' Upper Skagit approximation of 1854 and Riley's depopulation figure, the Indian Claims Commission (1974:326-327) concluded that the "Upper Skagits may have numbered 880 members at the beginning of the nineteenth century."

Consistent with the focus of this study on the aboriginal and early postcontact Upper Skagit, population estimates and census figures for the period after 1860 are not considered here.

Subsistence

The Upper Skagit food quest involved an extensive exploitation of the fish, game, and plant resources of their territory (cf. Figure 1-3). The data, however, are unfortunately very thin. Especially regrettable is the fact that virtually nothing is said except obliquely about the subsistence use of the higher terrain and nothing at all specifically concerning the streams and mountains within the Park boundaries. I have yet to ascertain how far up the Skagit River anadromous fish were able to negotiate in aboriginal and early postcontact times. We may be certain that they reached at least the Newhalem area since the uppermost Upper Skagit village was sited

there. But whether they ascended farther into the present Ross Lake region I do not know. Chapman and Turner (1956) designate the Skagit as a salmon river only up to about the Newhalem sector, but I am unsure whether this is a pre- or post-dam plotting.

On the evidence of the purportedly factual tradition referred to elsewhere in this study, salmon ascended to the headwaters of the Cascade River (Collins 1974a:14).

The subsistence-quest strategy of the Upper Skagit was patterned in a very special way—quite differently, for example, from that of the Chilliwack—that had its effect upon the group social structure. As Smith (1941:201) explains the situation:

> [The] houses of the local units [of the "extended village"] were erected on suitable sites near important salmon fisheries; the buildings were at the same time homes and smoke houses; and if the population cared to live only on its food staple it needed never leave its headquarters. When the units dispersed, families went in opposite directions and at . . . berry and root fields often joined families from units which belonged to other extended villages. Socially, these people who met during the summer were as closely knit as were those of the contiguous winter quarters of the extended village.

These data seem to underscore the political insignificance of the extended village and also of its component individual villages.

Apparently food was not invariably available in necessary amounts to the Upper Skagit, as it is said to have always been to the Lower division. According to John Fornsby (in Collins 1949:302), an Upper Skagit born in 1855, the Upper Skagit "used to have hard times." He recounted one supposedly specific instance in his grandmother's day when the downriver region was visited by a number of upriver Skagit who were so weak from hunger that they could hardly paddle their canoe. They had come down for clams, because "they had nothing to eat" back home. Fornsby then added:

> [S]ome of those [Upper Skagit] people never did much hunting, and they couldn't get any fish. There weren't many fish up-river. They couldn't catch them. . . . They got berries in the mountains. They generally got meat: they made a trap and caught beaver, bear, deer meat. . . . Just the up-river Indians were poor. They had a hard time to get blankets up there before the White people came. It was pretty hard to catch goats. You had to have a good gun. (Fornsby in Collins 1949:302-303)

Though Upper Skagit born, Fornsby had spent his life among the Lower Skagit. It is hard to know the extent to which he exaggerates the difficulties and country-cousin status of the upstream people. But there is little doubt that their food supply was less secure than that of the downriver Lower Skagit.

Fishing

Of the three principal food sources, fish contributed most to the Upper Skagit diet. This is evidenced, Collins (1974a:45) reports, by the location of most villages "where . . . the maximum amount of fish could be secured during a run." Certain difficulties in understanding this statement are discussed at a later point (see Residential and Task Sites section).

Three fishing areas are plotted by Collins on her subsistence-marked map (Figure 1-3): one on the lower length of Baker River, one on the upper Skagit River in the Marblemount sector, and the third—for "sockeye and other salmon"—in the mountains between these two which I fail to comprehend.

The only fish mentioned ethnographically as having been important to the Upper Skagit are anadromous types: specifically, five kinds of salmon (chinook, pink, sockeye, chum, and coho) and steelhead trout, each with its distinct native name. Of these, the chinook and coho were preferred. Salmon ran from May or June to into the fall; steelhead trout ran as late as November. Trout were also caught, but seem to have been comparatively insignificant in the native diet.

Salmon were netted, taken in weirs and with hook and line, and were speared, all techniques used when the fish were swimming upriver. Three kinds of nets are described.

(a) A seine, with ends attached to poles and long enough to reach nearly across a stream, was stretched vertically by men from two poled or paddled canoes in the light of torches. This was regarded as the most productive fishing method.
(b) A net with a closed end was set for some hours in shallow water near a river bank.
(c) A woven willow-bark or grass (Indian hemp?) dip net was "used to scoop fish from a canoe, a platform, stones in the river, or from the bank." The bag net was suspended from a vine maple hoop attached at right

angles to two long pole handles that were tied together at their upper ends. Between these poles immediately above the bag net was stretched a net baffle to prevent fish from swimming between the handles.

Apparently several weir types were in use. One variety, employed in July and August, was constructed by as many as 20 men, under the supervision of an expert, across a tributary stream where it was narrow and shallow and the riverbed rocks were small. The frame consisted of a row of single fir poles firmly set vertically into the stream bottom and tied together by two or three rows of horizontal cedar poles. The top one, above the water level, served also as a walkway to the weir platform. Between these vertical poles, tripods were placed at intervals, two legs of which were placed so as to assist the vertical poles in supporting the fence. This fence was fashioned on land, and was rolled out against and tied to the vertical poles and tripods. Above an opening in this fence a platform was constructed; on this the fishermen stood with their dip nets. All men who, as volunteers, had helped build the weir were allowed to fish from it. According to Collins (1974a:50), the fishing continued all night, but whether it was exclusively a night activity is not specified. At the close of the season the fence was removed to be used the following year when the weir, carried away in the late spring floods, was rebuilt.

At riffles a watersoaked log was placed diagonally across part of a stream. Salmon, leaping this barrier, fell on an upstream stranding platform from which they could be easily taken.

Other fishing methods involved spearing salmon with a leister, consisting of an ironwood pole and three prongs of ironwood, deer antler, or mountain goat horn, and angling for them with a line twisted of women's hair and baited with salmon eggs.

Although fish were eaten fresh, most were smoke-dried for winter. To be prepared for eating, salmon (a) were covered with wet moss and steam-baked whole in an ash pit; (b) were cut into pieces and stone-boiled in a box or basket; (c) were split, spread with small splints, skewered onto sticks, and roasted in a slanting row around a fire; and (d) prepared in small slices, were grilled over a fire. Salmon eggs were wrapped in alder bark and either roasted in hot ashes or hung over a small fire to dry for later consumption.

Shellfish—clams, oysters, mussels, barnacles, and crabs—were secured on the coast when the Upper Skagit traveled there to visit relatives or by exchanging dried venison for them smoked.

There is no ethnographic information reporting Upper Skagit fishing sites within the Park Complex boundaries. Mentioned incidentally by Collins, however, are dip net sites on the Cascade River and on the Skagit near the town of Concrete, a chinook salmon fence-weir locality on the Sauk River, and a pink salmon spearing site on the Skagit above Marblemount.

Special guardian spirit power played an important role in fishing activities. Power was required, for example, in making effective dip nets, and in supervising and carrying out specialized tasks in weir construction. (Collins 1974a:45-52, 76)

Hunting

Collins (1974a:52) states:

> Second in importance in the diet were land animals. The Upper Skagit hunted deer, elk, mountain goat, black bear . . , grizzly bear, beaver, snowshoe rabbit, fisher, raccoon, and land otter. Deer and elk were the most highly sought . . . . Among the Indians of their area, the Upper Skagit maintain that they tended to specialize in hunting.

For what it is worth, on Collins' subsistence map (Figure 1-3) eight hunting areas are shown. The four deer areas are on the lower Skagit River in the Burlington sector, in the stream valley above Big Lake, on the upper Cascade River, and on the middle Suiattle River. The two elk sectors are the mountains southeast of Newhalem and the middle Suiattle. The four mountain goat regions are all in the high mountains: one northwest and one northeast of Baker Lake, one southeast of Newhalem, and one on the upper Cascade River. The areas where bear were killed are shown to have been in the country above Big Lake, in the upper Cascade sector, and once again on the middle Suiattle vicinity. Ducks were taken in the Big Lake district. It will be noted (Figure 1-3) that in four cases more than one animal is shown to have been killed; hence the total number of only eight separate hunting localities.

Game was taken with bow and arrow, though the detailed techniques followed are not reported. Bows were of yew or alder, had recurved ends, and were sometimes sinew backed; they varied in length up to about five feet depending on the size of the game for which they were to be used. Bow strings were of sinew. Arrows had an ironwood shaft, fitted with a two-shouldered point of white stone "obtained from a rock slide at . . . [a] place on the main Skagit" (Collins 1974a:52-53).

Deer and bear were caught in log deadfalls, set in their trails to water. Animals were also taken in baited spring traps. Deer were driven over cliffs or into ravines, both by single hunters and by hunting parties.

Meat was cooked by being cut into pieces and then stone-boiled in coiled baskets made watertight by an

overnight soaking; sometimes roots (e.g., wild onions) were boiled with the meat. Meat was also roasted and broiled. Deer and other meat was dried for winter use, an important cold season food.

Many birds—especially waterfowl including geese and ducks—were hunted. Ducks were shot with bow and arrow and caught at dusk in nets stretched between two vertical posts. Duck grease, particularly valued, was caught in a clamshell as it dripped from a bird cooking on a spit over a fire.

Upriver Upper Skagit rarely if ever hunted sea mammals. But downriver villagers, when visiting relatives near the Skagit mouth, hunted seal and porpoise (but not whales) with harpoons with their shore-dwelling kinsmen.

Mammals and birds were hunted not only as food but also for some of their parts—like deer skins and bird bones—that served other purposes. These will be mentioned in later sections. (Collins 1974a:52-55)

Plant Collecting

Many plant varieties were gathered for food as well as for other purposes. As dietary constituents these were important, providing the starch and sugar otherwise lacking in their high protein foods. Still, vegetable eatables were not available in sufficient quantities for them to be consumed even once daily through the year.

Two root plants—the tiger lily and sweet wild carrot—were to judge from Collins' (1974a:55) data, the most significant food plants. They were semicultivated on the prairie at *bakálb* village on the Sauk River as well as on two meadows in the lower Skagit River area; on Collins' subsistence map (Figure 1-3) tiger lily root grounds are shown on the middle Suiattle River but none on the Sauk. The land was divided into marked plots—each three or four acres in size at *bakálb*—that were owned by women and passed down to their daughters irrespective of where the latter might later live. During "the late summer, women with . . . [harvest] rights came from widely distant villages to the plot of their mother" (Collins 1974a:55). With a three-foot vine maple digging stick sharpened and fire-hardened at both ends, women dug the roots in August when the blossoms died, replanted the stems, and weeded the plots.

Camas also grew in the tiger lily and carrot plots and were collected, but whether these plants were also semicultivated is uncertain.

Roots of several kinds of ferns were also eaten. These plants grew near Birdsview in the Skagit Valley, as well as in lower Skagit River country. Collins' food resource map (Figure 1-3) places a fern root area on the middle Suiattle River. For these plants, however, no individual plots were recognized: any woman with kin at the Birdsview village, for example, was allowed to dig these roots during her summer visit.

Wild onions were dug for food, for they are mentioned by Collins (1974a:53) in relation to their being cooked with meat. They are, however, not otherwise referred to. The wapato root (*Sagittaria* spp., arrowroot [Hitchcock and Cronquist 1981:559]) grew in only one Upper Skagit locality, this near the mouth of the Skagit. Evidently it made essentially no contribution to the Upper Skagit diet. Roots "could be found in certain mountain meadows; [but] women preferred not to dig them there if they had a choice" (Collins 1974a:56). This is a revealing observation in terms of the special interests of this report, but would be far more meaningful if we were told the basis for this statement.

Roots were baked in a deep pit or in ashes of the hearth or were stone boiled with meat in a water-filled basket. "Roots were stored for winter use in a special type of basket which women buried in the ground in September" (Collins 1974a:56).

Tree lichen was gathered and prepared by being placed under ashes all night.

Berries used as food included the blackberry, wild strawberry, salmonberry, blackcaps, thimbleberry, serviceberry, huckleberry, blue elderberry, red elderberry, gooseberry, trailing currant, mountain blueberry, and salal, the list given by Collins (1974a:56-57). Wild crabapples and plums added fruit to the diet. Forest areas were carefully burned to make berries grow more prolifically. Guardian spirit assistance was also sought to encourage berry growth and to control forest burns to improve berry yields. (Collins 1974a:55-57) The only berry ground plotted on Collins' food source map (Figure 1-3) lies on the north side of the Skagit River in the Birdsview district.

Concerning the preparation of berries and fruits for eating we are told very little. All berries were eaten fresh. Elderberries and blackberries were also boiled until they were nearly dry. They were kept by being wrapped in maple leaves and placed in a hole dug in wet sand. Sun drying was regarded as the best method of berry preservation.

The green sprouts of some berries were enjoyed as spring greens.

The cultivation of the white potato among the Puget Sound Indians began early in the 1800s, the seed potatoes having been secured by salt-water groups from trading vessels. As Suttles (1951) has demonstrated, they spread very rapidly among these coastal tribes. Interestingly, the earliest mention of potato cultivation on the part of these groups appears to be a report of Father Blanchet, the first priest among the Skagit, of having stumbled "onto a Skagit potato patch" in 1840. The following year Wilkes found the Skagit growing these tubers. In the 1850s potatoes were again reported for the Skagit. (Gibbs 1855a:433; Suttles 1951:274, 276, 283) The

speed with which this root, together with its simple cultivation techniques, diffused has suggested to some—like Smith (in Rivera 1949)—that the wild root gathering experience of these native groups, the importance of roots in their diet, and their traditional pattern of planting, tending, and harvesting a few native roots, on a small scale, made them especially sensitive to the food potential of the cultivated potato. Moreover, with their traditional concept of family ownership of certain especially valuable wild root grounds, the cultural base existed for ownership of potato patches (Suttles 1951:281).

Food Preparation

Some fragments of information relating to food preparation are reported in the preceding sections. As a supplement to them, the following general data are of interest: fish (salmon and steelhead), game (deer, elk, bear, and other animals), roots (wild carrot, tiger lily, and other forms of the root class), and many different kinds of berries were all dried for winter use (Collins 1977:2).

Technology

The manufacture of canoes and building of the large cedar dwelling are described elsewhere in this chapter. Hunting weapons and devices as well as fishing and plant collecting implements are reported in those sections. In this unit we are concerned with lesser technological processes and the associated items of material culture.

Rigid Containers

Although much less common than baskets used for similar purposes, wooden boxes were fashioned by steaming and bending a flat cedar piece to form four sides; tying the corner joint together with thongs through bored holes; fitting a separate bottom piece in place with corner pegs; and soaking the box until it swelled and the thongs tightened. Water buckets were made by hollowing out a section of a cedar trunk. Rectangular wooden dishes with sloping ends, made of hard wood, were used in serving meals. A canoe answered the purpose of a giant cooking vessel in preparing for feasts. Wooden or cedar bark items were made for religious ceremonial purposes.

Spoons were of hard wood or horn. The horn was softened by soaking in heated water and molded into shape. The handle was sometimes carved into human or animal form (Collins 1974a: 66–67, Figure 4). Horn dishes with "carvings and carved lines traced on them, some of which represent faces," were probably made by the Skagit, "who roamed in the Cascade mountains," Eells (1985:231) notes, writing in the late 1800s.

Basketry, Matting, and Weaving

Baskets were very important to the Upper Skagit. Though they were coiled, twilled, twined, and woven in a checkerboard design, coiled cooking, burden, and storage basketry was a speciality of Upper Skagit women. Of particular importance, it appears, and distinctive to the tribe in some ways were the coiled, watertight baskets of cedar or spruce roots that were used in stone-boiling and storage. These roots were not dug but were commonly collected from eroded river banks, sometimes by men who chanced to discern them when in their canoes. The inner root part served as the horizontal element and the outer part as the stitching element. The latter was passed through openings made in the coil below with deer or elk antler awls. The bottoms of these baskets were always round; cooking baskets were round in cross section.

Basket ornamentation was by imbrication: i.e., by doubling a separate colored element under each sewing stitch on the basket exterior (cf. Underhill 1944:104) (Figure 2-3). Used for this purpose was a cream-colored grass not native to Upper Skagit territory but purchased from the Upper Snoqualmie or people living east of the Cascades: it grew abundantly around Snoqualmie Pass and near a lake east of the divide. Also used was the black top of horsetail root and brown bark of the wild sour cherry. Favorite designs were barbecued salmon back fins, fish gills, fish nets, frogs, butterflies, and a little fly. In this listing by Collins the prominence of water-related motifs seems revealing.

An open-work, stiff, twined basket was used in clam digging on visits to the coast, the water draining through the interstices.

Carrying baskets were provided with holes below the top border to receive small buckskin loops to which were attached the braided wool or buckskin carrying band. This band could be arranged to allow the container to hang from the forehead as a back basket or from the side of the waist as in berrying. Soft cedar bark bags, twilled or made in checkerwork pattern, were made and used (e.g., as a baby bag inside the cradleboard) though they were less common in the Skagit Valley than on the coast.

The Sauk River people were reported not to have manufactured baskets until comparatively recently, but to

have used deer and mountain goat stomachs, turned inside out, as water containers. (Collins 1974a:67-69) This remark smacks of a folk tradition of doubtful authenticity.

Cedar bark and cattail mats were fabricated by some women but the skill was regarded as a specialty of saltwater people. These mats served as camp shelter walls, as inner wall hangings in permanent dwellings, as occasional partitions in dwellings, and as bedding, canoe kneeling pads, rain capes, and caps.

For cattail mats the reeds were pulled in September, dried, trimmed of their ends, and sewed together side by side. This sewing was accomplished with a bone or wooden needle drawing a nettle string through the reeds individually. While the needle was still in place, the reeds were pressed down crosswise above the needle with a special wooden creaser (cf. Underhill 1944:107-108). (Collins 1974a:69-70)

Even though weaving was considered a "principal craft" of the Upper Skagit, not all women practiced the skill. The basic material was mountain goat wool obtained from skins brought home by hunters. Since goats occurred only in the upriver country, weaving was essentially limited to women of the interior villages. The hair of a special variety of dog, bred for their hair and sometimes kept on river islands to maintain breeding isolation, or goose down or even bear fur in the case of blankets was sometimes mixed with the goat wool in fabricating the yarn. The wool was carded with a wooden comb, spun with a spindle consisting of a cedar disk and stick, and twisted into yarn on the woman's thigh as it came from the spindle. If down was used, it was placed loose in a basket and the yarn was drawn "through two holes in the basket so that it passed through the down. When the yarn emerged from the basket it was covered with down which then became part of the completed fabric."

The loom for making large pieces consisted of two wooden uprights and two horizontal bars. The warps ran around these bars and the wefts were woven in place horizontally to create a tubular fabric that was cut to make the flat cloak or blanket (cf. Underhill 1944:110-113). These blankets, which were not plentiful, were valuable as gifts.

A small belt loom—one end suspended from a tree and the other attached to the weaver's waist—was used in weaving narrow belts and shoulder pads from which baskets were hung. (Collins 1974a:70-71)

Clothing and Body Ornamentation

In dressing skins, a woman's task, the hide was soaked for a week in a solution of cooked and mashed deer brains, twisted until pliable, and hung to dry. It was then stretched beside a fire by being pulled this way and that. Finally it was hung over a stick frame and smoked to a golden brown over a small fire of bark from rotten logs.

In the clothing fashioning process, likewise a woman's activity, holes were punched with an awl of a deer ulna split and sharpened on a stone. The sewing was accomplished with an eyed bone needle and thread of deer sinew that had been dried, pounded, and stripped.

Two types of clothing were worn, one a coastal style of cedar bark, furs, or wool and the other a tailored skin style like that of the Plateau. The temporal relationships between these two modes and the extent and specific form of the early post-White influence on them are not wholly clear.

When men wore clothing—they frequently went naked—their garments consisted as appropriate of a sleeveless "vest," a cloak of bearskin or woven goat or dog wool fastened over one shoulder with a bone or wooden pin, and a cattail matting rain cape. Women wore a thick, ankle-length skirt of cedar bark strips, hanging from a woven cedar bark girdle. In summer women preferred a "kind of black apron, presumably woven of bark." Like the men, they protected themselves from rain with the matting cape. Woven cedar bark hats were sometimes worn, but whether by one or both sexes is not reported by Collins. Basketry hats were not made but were occasionally received from kinsmen in the Plateau.

Both sexes also wore skin clothing—buckskin in winter and doeskin in summer—when the weather was cold in the mountains or on trips into the forest. Both sexes wore breechclouts and shirts, the latter (sometime of bearskin) open down the front and sewed up the sides with the sleeves left unsewed, sometimes trimmed with mink and marten. In winter the hair side was against the body. Both sexes wore mink hats; men also affected peaked caps with the animal tail hanging behind. In upriver villages both men and women wore gloves. Moccasins, one-piece and extending up nearly to the knee, were worn only in the woods or mountains. Clothing of some sort was likewise made of fox fur, for men were reported to have captured these animals and kept them for their peltries. (Collins 1974a:71-73)

Upper-class persons had their heads flattened so they "rose from the forehead to a peak at the back." This deformation was achieved by placing a cedar bark pad on the infant's forehead and binding it to the cradleboard. (Collins 1974a:73-74)

Both men and women wore their hair parted in the center, men with theirs tied in the back with a beaver skin thong and women with theirs braided on each side and bound with a thong. Combs were of wood or fish backbone. (Collins 1974a:73)

Body ornamentation was fairly extensive. Red earth mixed with grease and "cooked" served as a facial paint, both for decoration and as protection from the cold. White paint was applied by women to their faces and

to their infants. During guardian spirit dances red paint was put by women in their hair. Black paint was used only by men on raids. While labrets, ornaments worn in the lower lip, were not the custom, a bone was worn through the nasal septum. Women had small tattooed designs pricked into their faces, arms just above the wrist, legs, and ankles. The patterns were made with a bone needle and black scrapings from coal. To their person women applied perfumes of fern and other ingredients secured from groups east of the Cascades. (Collins 1974a:73-74)

The Settlement

As used in this study, the "settlement" consists of four principal elements: (a) the physical units—dwellings and ancillary structures—that comprise the settlement; (b) the grouping of these into villages or communities (winter or summer, fishing or otherwise, and so on), the location of these communities, and the clustering of them into larger "extended villages"; (c) the placement and relationships of the component physical units within the boundaries of the single settlement; and (d) the domestic and tamed animals held within or near the village as living but nonhuman components of the settlement. These matters are reviewed in the pages that follow.

Dwellings and Associated Structures

Of the structural entities of the Upper Skagit only the permanent winter/summer dwelling is reasonably well described. The winter ceremonial house, the small temporary summer shelters erected at certain fisheries both for resident families and for visiting kinfolk, the warm season temporary lean-to, the sweat house, and the girl's puberty shelter are hardly more than referred to. Such common settlement components as food drying racks, food and article caches if these existed apart from the drying and storage areas within the dwelling, and other lesser outside structures of the living community receive no ethnographic attention whatever.

Upper Skagit structures were of three types in terms of the materials from which they were fashioned: wooden houses, mat shelters, and brush sweat houses. Subterranean and semisubterranean houses were not made, though known among other tribes both on the Coast and in the Plateau.

The structures of wood included "permanent" winter and summer dwellings, small temporary summer shelters for relatives visiting to fish, and structures used exclusively for winter dance ceremonials.

Dwellings of wood—at least the largest of them—were built, under the supervision of a hired specialist, by the men whose related families were to reside in them and own them, sometimes assisted by hired workers. Huge cedar trees near a river were felled, trimmed, and floated down to the site. Selected trees were squared for the six posts and their tops grooved to support the roof beams. The two tallest were slipped into holes in the ground about 18 feet apart and fitted with the ridgepole. Two shorter posts were placed about 10 feet in front of the main pair and the two rear posts were slid into their holes about 40 feet behind the main two. These six posts created a rectangular ground plan and a double-pitched roof, a short section in front and a long one sloping from the ridgepole toward the back posts. Although not mentioned by Collins, a cross beam must have joined the two front posts and another the two back posts. Stringers connecting the three post pairs are not mentioned and I gather were not used.

The walls were of wide cedar planks lashed either horizontally or vertically, overlapping, both to one another and to the house frame. Cracks were stuffed with moss. Vertical side planks were kept in place by heavy stones set against the base of each plank. The roof was of similar overlapping planks, laid on the ridgepole and cross beams. Near the ridgepole was a smoke opening that could be closed by a board moveable with a pole from inside the house. A small, round entrance was cut in a plank at one end of the structure, generally facing a river or lake. It was raised slightly above the ground and sometimes closed by a small plank.

The interior of the house was normally without partitions. Fires were on the hard-packed earthen floor and were differently arranged depending on the number of occupant families: e.g., down a center line or one toward each corner if there were four families. A sleeping platform, covered with skin robes, mountain goat wool blankets, and matting, was built against the wall around the open center. Above this platform was a continuous storage shelf and still higher up pegs for hanging clothing. On and hanging from the beams were dried meat and other articles.

House posts were carved and painted with the sacred guardian spirit designs of the dwelling owners. These posts were sometimes inherited as a special honor, the transfer formalized by a potlatch. Occasionally the house front around the entrance was painted to represent an owner's guardian spirit. Outside, self-standing totem poles were not a feature of Upper Skagit culture.

Larger dwellings of this type, as much as 120 feet in length, were provided with more than six supporting posts. Some were built in 40 foot sections with three ridgepoles.

Houses of the above kind were "permanent," the wall planks being moved—by canoe—only to a new "permanent" location. (Collins 1974a:59-63, 83, Figure 3)

Similar but much smaller shelters of this variety but no more than 15 or 20 feet long were erected in two or three days at the best fisheries along the Skagit and its tributaries. Relatives "who came to visit and fish at the height of fish runs were partly accommodated in such houses" (Collins 1974a:64). I gather that this is the small, detached plank house that was, according to Smith (1947:258; cf. Duff 1952:49), the only dwelling "type used on the Sauk River and the upper reaches of the Skagit River. . . . [O]ne of these occasionally held four families, many of them were built for two families, and others were so small as to house but one family."

A second kind of post, beam, and plank house is described by Collins (1974a:63) as "built of separate wooden sections joined together." It is not otherwise detailed and in any event appears to have been rarely in use among upriver villagers. Presumably this was the dwelling, described for the middle Fraser, consisting essentially of small, independent houses erected side by side and against each other.

Lean-tos covered with cattail mats were used as temporary shelters in summer. When traveling to places where they planned to stay for a time, as when going to the salt water to clam, people took folded mats with them. (Collins 1974a:64)

Sweat houses were far less important and common than in the Plateau. Some Upper Skagit, however, made and used for this purpose small, circular structures consisting of a pole framework covered with brush. (Collins 1974a:64)

Special, small, well-built shelters were constructed for a girl to occupy during a six-week period at the time of her first menses and the three to follow. Typically they were constructed near water where she could dive morning and night. (Collins 1974a:225-226)

Residential and Task Sites

The Upper Skagit occupied a number of permanent villages, most on the Skagit River near the confluence of tributaries. A few, however, were located on the larger lateral streams (e.g., the Sauk River) and a very few were on lakes draining into the Skagit. Villages changed their location only as a river shifted its course. (Collins 1974a:3, 15-16)

Villages were grouped by the Upper Skagit into named "village clusters" (Collins' "extended villages") occupying a stretch of the Skagit River several miles long and in some cases also areas along tributary streams. The section of the drainage system made use of by the people of such a village was ordinarily upriver from the village site (Smith 1941:206). According to Collins, ten of these clusters were recognized by the Upper Skagit. Typically a cluster consisted of one or more winter villages of varying sizes and, in the case of four of the ten clusters, also of one or more summer villages. These summer settlements—more strictly, I presume, warmer weather villages—evidently served as bases for exploiting seasonal subsistence resources in their vicinity. (Collins 1974a:3, 15-20)

Three maps are known to me which plot the settlements of the Upper Skagit, each compiled by Collins: one (1974a:17 map 2) in her Upper Skagit ethnography (Figure 1-4); a second (1974b:622) accompanying her Shakerism paper written in 1946 (Figure 1-7); and the third (1974c:facing 760) evidently prepared as a petitioner's exhibit in the Upper Skagit land claims case of the 1950 period (Figure 1-3). Of these three maps, that reproduced here as Figure 1-3 can safely be assumed to be the most accurate. It evidently incorporates research conducted subsequent to her Shaker study and is the most informative as a cartographic product. On the other hand, the geographically more casual (and even inaccurate) map of Figure 1-4 is accompanied by settlement descriptions, rough demographic data, and seasonal use details. These materials form the basis of the village discussion that follows. All three maps, however, are on so small a scale, at least in their published form, that it would be impossible to locate the individual occupation sites except in the most general manner were it not for Collins' (1974a) textual data.

A total of 47 villages, grouped into the 10 clusters, is enumerated and located by Collins (1974:16-20). An additional village is shown on her map (Figure 1-4) for the Sauk River Valley but not mentioned in her text and so is not included in the considerations that follow. Of these 47, 35 were winter villages; nine were summer villages; and three were settlements for which the season of occupancy is not indicated. Two of the summer communities are reported to have occupied the sites of winter villages, reducing the total number of occupation localities to 45. These winter and summer data raise an interesting problem. Inasmuch as there were so many more winter than summer villages and since at least 25 of the winter settlements were large or very large, as classified by Collins or deduced by me from her descriptive data, and only one of the summer settlements was certainly large—five at most for there are four summer communities the size of which is not noted—one may ask where many of the Upper Skagit were following the seasonal withdrawal from the winter quarters? Further attention will be directed to this question at a later point.

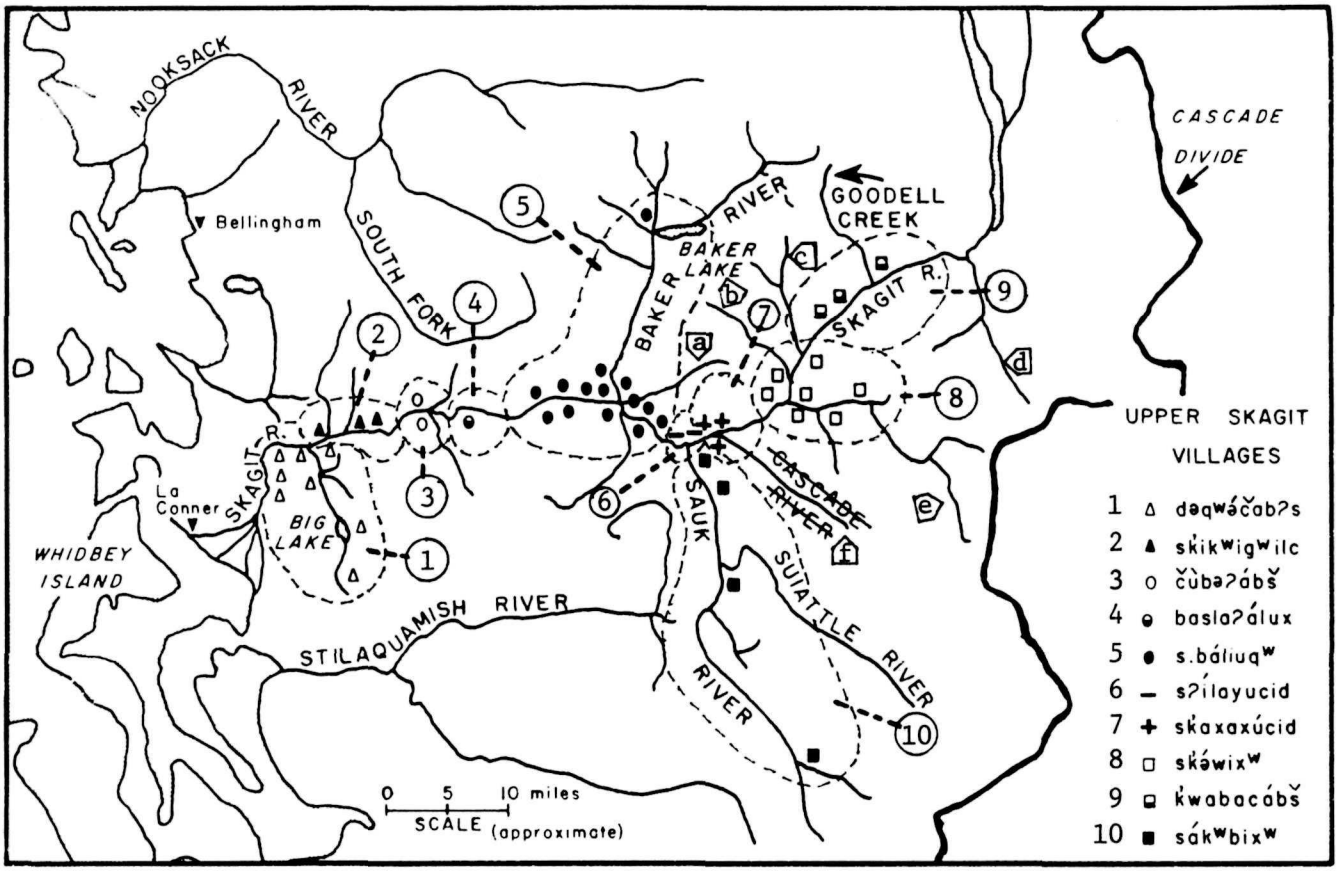


Figure 1-4. Upper Skagit "extended village" ("village clusters") as reported by Collins (1974a:17 map 2 [modified]). Six stream identifications have been added: (a) Jackman Creek, (b) Diobsud Creek, (c) Bacon Creek, (d) Thunder Creek, (e) Cascade River, (f) Illabot Creek. "Cascade River" has been corrected. Village clusters have been numbered and encircled for clarity. The two uppermost clusters of *skáwixʷ* and *kwabacábš* are of particular interest. (Base map reproduced with permission of the University of Washington Press.)

Each village—winter or summer—consisted of one or more wooden dwellings. In fact, 26 of the 35 winter settlements and five of the nine summer villages were made up of only a single structure. Thus 31 of the 44 villages for which season of use is reported were one-dwelling communities, as, indeed, were all three of the settlements for which season of occupancy information is lacking. In sum, 34 of the 47 known Upper Skagit communities were single house villages. Of the winter villages, five consisted of two structures, two of three dwellings, one of four, and one of five. Of the summer settlements, one is reported to have contained three houses, one four dwellings, and two five houses. Obviously the typical Upper Skagit village was one of a very limited number of living structures. From these data it is apparent that village size as discussed in the preceding paragraph relates to population numbers, not to number of constituent residential units. Collins (1974a:19) mentions specifically two dwellings that measured 120 feet in length and 40 feet in width, one of which housed on occasion as many as 20 families, plainly in each case a very considerable number of people.

With these basic settlement data before us, we may now turn to those village clusters and individual communities that were located in and near the North Cascades Complex.

According to Collins (1974a:17 map 2, 19), the easternmost Upper Skagit village cluster—that termed *ḱwabacábš*—lay "deep in the Cascade Mountains" (Figure 1-4). This settlement complex, her data indicate, was wholly within the perimeters of the Park Complex, specifically in the southwestern end of the Ross Lake Recreation Area. It consisted of three villages, all on the north side of the Skagit. In downstream order:

(1) A large winter house at Newhalem.
(2) A "small winter house with three families to the east of Thornton Creek."
(3) A large winter dwelling "at Portage, west of Damnation Creek."

On the basis of these brief data, the locations of the three settlements are plotted as closely as possible in Figure 1-5; to this point I have been unable to locate Portage. A river distance of approximately five miles separated villages (1) and (3) above. No summer settlements are noted as parts of this village cluster. This fact—assuming that there were in fact none such—returns us to the question posed above: where were the occupants of these three winter communities during the spring to fall period? At least part of the time scattered in temporary shelters in small fishing camps, too insignificant and mobile to qualify in the Upper Skagit view as villages, along the Skagit and perhaps lower reaches of tributaries? And at times in the mountains pressing their hunting and gathering activities? If so, they must surely have passed some of these months exploiting the subsistence resources of the nearby North Cascades Complex. We return to this interesting question following a review of other village clusters farther downriver.

The next village cluster on the Skagit downriver from *ḱwabacábš* was that of *sḱəwixʷ* (Collins 1974a:17 map 2) or *bəsq̓íxʷixʷ* as Collins (1974a:14, 19) transcribes the term in her text. Again in downriver order, three separate villages were positioned on the Skagit:

(4) "A large winter house holding ten families . . . on the south side of the Skagit across from the mouth of Bacon Creek."
(5) Two small winter houses with two families each, "a mile below Diobsud Creek on the west side of the Skagit."
(6) A winter village of several families near Marblemount.

On Cascade River, which empties into the Skagit in the vicinity of Marblemount, four villages were remembered by Collins' informants:

(7) A winter house at *bəsq̓íxʷixʷ* on the north side of the Cascade River about one mile west of Marblemount; surely Collins' means "east"—not her only apparent east-west mixup. This structure was 120 feet long and 40 feet wide and housed 20 families at one time.
(8) A summer structure on the south side of Cascade River opposite village (7).
(9) A summer dwelling on "the south side of the Cascade River at Boulder Creek."
(10) A large summer house "on the north side of the Cascade River to the west side of Monogram Creek."

The preceding seven villages are located in Figure 1-5 as accurately as the above data and the markers on Collins' map (Figure 1-4) will allow. Monogram Creek drains Monogram Lake (Green Trails, *Marblemount* n.d.), a stream shown but unnamed on USGS *North Cascades National Park* (1974).

It is notable that this *sḱəwixʷ* cluster included three summer communities, all on the Cascade River, and that all four of its winter villages were either on the Skagit or not more than a mile distant from it. All seven villages of this complex were outside the Cascade Park boundary; however, the northeasternmost winter settlement (4) was less than a mile beyond the point where the southwestern line of the Ross Lake area crosses the Skagit. Whatever may have been the case with the more downriver Upper Skagit village complexes, the people of this *sḱəwixʷ* cluster surely must have made some use of the resources within the North Cascades Complex.

Below the *sḱəwixʷ* cluster was the village grouping known as the *sḱaxaxúcid* with three winter villages (Collins 1974a:18-19) (Figure 1-4):

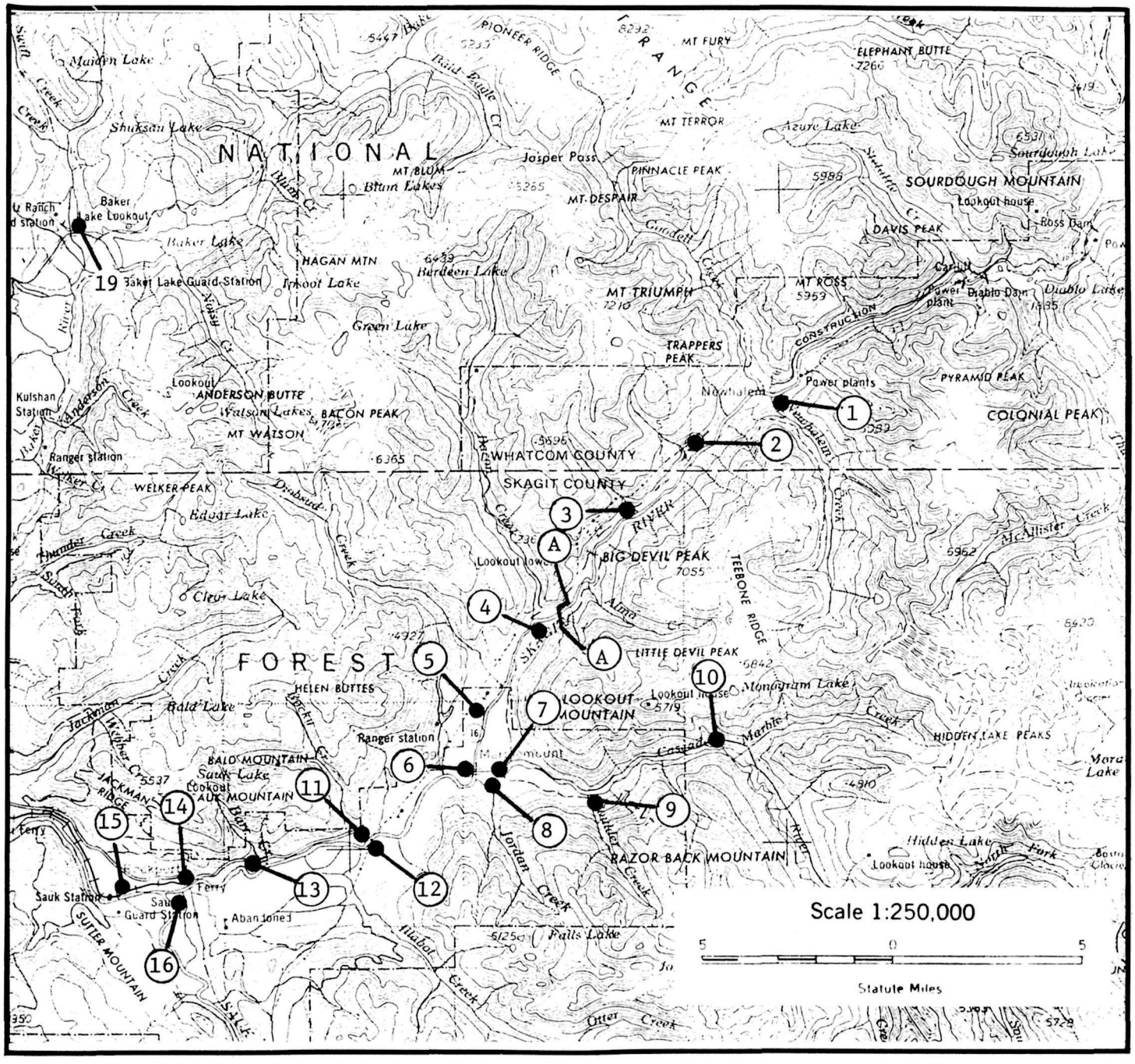


Figure 1-5. Approximate locations of easternmost Upper Skagit villages according to Collins (1974a:17 map 2). Villages 1-3 comprised the *ḱwabacábš* cluster; 4-10 formed the *skȟáwix*^{w} cluster; 16 was a mumber of the *sák*^{w}*bix*^{w} cluster; and 19 was the northernmost of the larger *s.báliuq*^{w} cluster. Line A-A marks the southwestern limit of the Ross Lake National Recreation Area. (Base map: USGS *Concrete* quadrangle 1955)

(11) A winter village (*púk^{w}alicu*) near the mouth of Rocky Creek. (Whether to the east or west of this side stream remains unstated.)
(12) A winter settlement (*saxípəp*) on the south bank of the Skagit opposite Rocky Creek.
(13) A winter house (*sq̓íx^{w}ucid*) at the river bend on the north side of the Skagit "west" of Rockport. (Her village plotting [Figure 1-4] makes it appear that she means "east" of Rockport.) This structure was the largest in Upper Skagit country, 120 feet long and 40 feet wide.

These approximate locations are indicated in Figure 1-5.

Immediately downriver from the village cluster termed *sk̓aẋaxúcid* was the two village complex known as *s?ílayucid*, differing from most in that the first village consisted of a split site (Collins 1974a:18) (Figure 1-4):

(14) Two large winter houses, one east of the town of Rockport and the other west of the town.
(15) A small winter dwelling "at the town of Sauk west of Rockport."

These sites are marked in Figure 1-5.

At this point, roughly 15 miles downriver from the southwestern corner of the Ross Lake Recreation Area, we are sufficiently distant from the Park Complex to make irrelevant an accounting of the numerous Upper Skagit traditional settlements farther downstream. Further, this is a convenient geographical break because we are here at the junction of the Sauk River with the Skagit. The Sauk, with its principal tributary the Suiattle, and the upper Skagit itself served, it appears, as the two main routes from Upper Skagit country eastward over the Cascades.

The southeastern corner of Upper Skagit country includes the drainage basin of the Sauk River and its major tributary, the Suiattle. In the Sauk Valley, Collins (1974a:19, 55) reports, was a village cluster—*sák^{w}bix^{w}*, "people of digging roots"—with houses in three villages (or four according to her map [Figure 1-4]) along the Sauk banks:

(16) A large winter village located "at the mouth of the Sauk on the south bank of the Skagit," very close to a major concentration of villages of other clusters that ran along the Skagit Valley from the mouth of Illabot Creek downstream for miles (Figures 1-4, 1-5, and 1-6).
(17) Four winter houses forming a single village (*bakálb*) situated on Sauk Prairie, where the Upper Skagit folk "semicultivated wild roots," on the Sauk above the entrance of the Suiattle (Figure 1-6). Sauk Prairie lies between the Sauk and the North Fork of the Stillaguamish River.
(18) "One summer house . . . at Bedal near the joining of the North and South Forks of the Sauk River" (Figure 1-6). Bedal fails to appear on contemporary maps (e.g., USGS *Concrete* quadrangle 1955), though Bedal Peak and Bedal Creek are marked. This village in the vicinity of Bedal was on the order of 37 airmiles southwest of the lower limits of Lake Chelan Recreation Area and is presumed to be too distant to be of much interest here.

According to Collins (1974a:19), no winter villages were maintained by the Upper Skagit on the Suiattle River before the 1890 period, although summer camps were made along the stream. However, to how great an extent the region was utilized by hunting, fishing, and foraging expeditions is unclear, except that it is designated a tiger lily and fern root area and a hunting district for deer, bear, and elk on Collins' food resource map (Figure 1-3). In any event, this country, like the Sauk Valley farther toward the coast, was substantially west of the North Cascades Complex border.

Both Suiattle and Sauk were fed from headwater streams on the western slopes of the Cascades crest. At the source of the Suiattle were, for example, Ross and Suiattle passes leading over to the feeders of Lake Chelan, and Buck Creek Pass and High Pass giving access to the upper Wenatchee country (USGS *Concrete* quadrangle 1955). The North Fork of the Sauk, in turn, has its origin in the White Pass sector, which likewise points southeastward to the Wenatchee basin. Native traders and travelers surely passed through some of these cols, if not all of them, in moving east and west between the Plateau and Upper Skagit territory.

With the eastern and southeastern sectors of aboriginal Skagit territory considered, we may now turn to the northern region. According to Collins' (1974a:17 map 2, 18) (Figure 1-4) data the village cluster known as *s.báliuq^{w}* occupied the Skagit Valley both upstream and downriver from the confluence of Baker River, settlements of no essential moment to this study. But one winter village (19) comprised of a single small dwelling "was located at Baker Lake connected by a tributary to Baker River." On its face this is a perplexing statement if taken literally, since Baker River flowed through Baker Lake. But Collins' village distribution map makes clear what is intended (Figure 1-4). The village in question was, in fact, situated slightly northwest of Baker Lake on the west side of Swift Creek, which in earlier years flowed into Baker River immediately downstream from Baker Lake (USGS *Concrete* quadrangle 1955; for the contemporary post-dam construction topography see USGS *North Cascades National Park* 1974). This village was only about four miles west of south from the southwestern corner of the Park jog around Mount Shuksan; it was approximately 5.5 miles east of the north-south line of the Park east of Baker Lake. More to the point, the people of this rather isolated winter

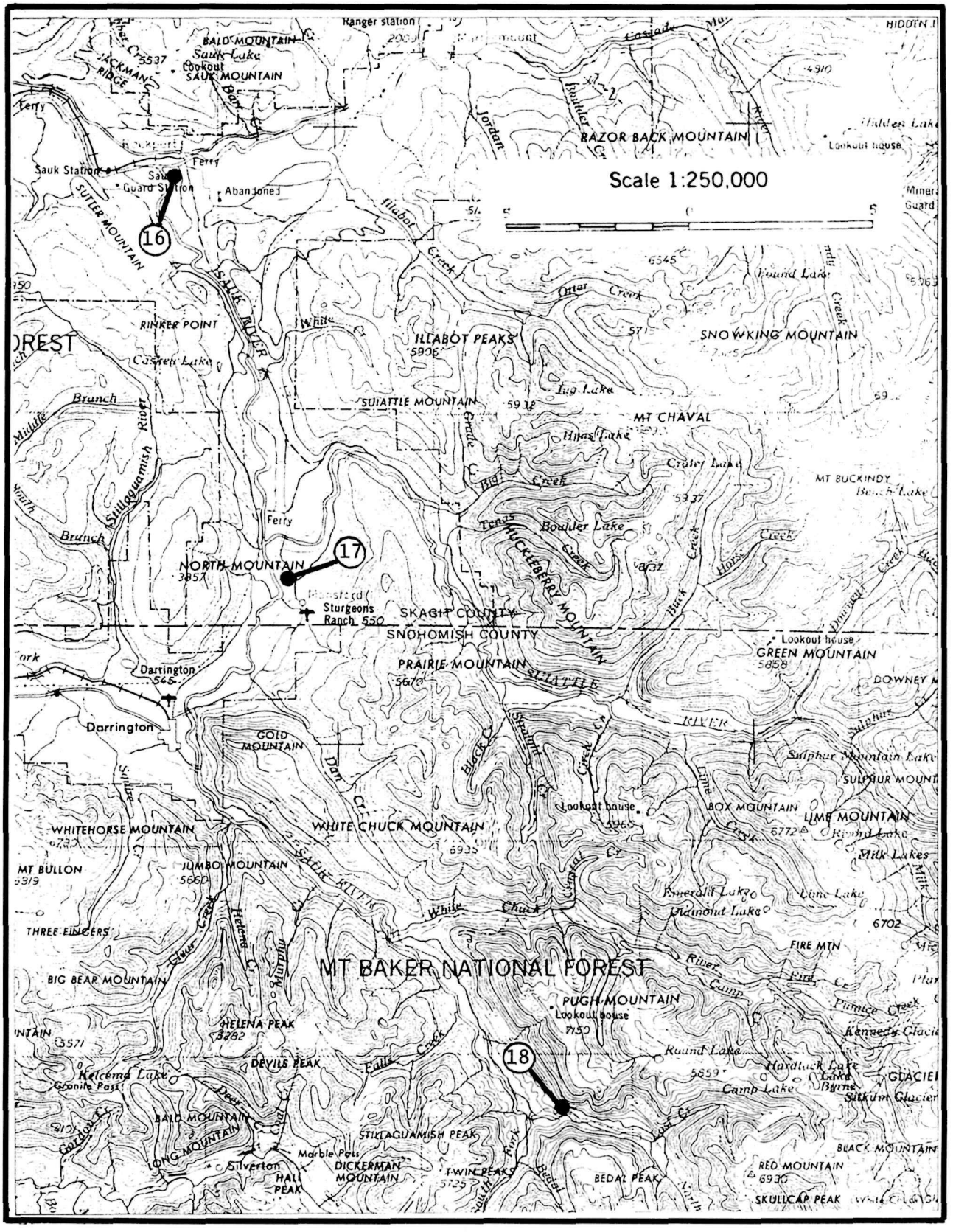


Figure 1-6. Approximate locations of Upper Skagit villages (16-18) on Sauk River, according to Collins (1974a:17 map 2). These formed the settlement cluster termed *sák^{w}bix^{w}*. (Base map: USGS *Concrete* quadrangle 1955.)

settlement had only to ascend Baker River Valley to reach the Park or, alternatively, to follow the Swift Creek and then Shuksan Creek courses to reach the Mount Shuksan vicinity of the Park from a southerly direction. It would be curious indeed if the occupants of this winter community failed to visit the Shuksan region of the Park Complex.

What were the factors governing the division of the individual winter and summer villages into village clusters, Collins' "extended villages"? A glance at the situation for the second cluster—the *sḵə́wix*^{w}—suggests an answer. This village complex extended along the Skagit for some four miles and up the Cascade River for approximately 6.5 miles. Its uprivermost Skagit River village, that opposite Bacon Creek (4), was about four miles below the southwesternmost village of the *ƙwabacábš* cluster, that near Damnation Creek (3), and roughly 2.5 miles upstream from its nearest fellow *sḵə́wix*^{w} village below Diobsud Creek (5). Phrased differently, the river distance between villages (3) and (4) was somewhat greater than the river mileage between any neighboring pair of villages within the *ƙwabacábš* cluster and also between similar pairs within the *sḵéwix*^{w} complex. Similarly, the uprivermost settlement of the next village cluster—the *sḵaxaxúcid*—below *sḵə́wix*^{w} was about four stream miles below the latter's Marblemount village (6), a river gap rather greater than any separating the individual communities of the *sḵə́wix*^{w} cluster and, as inspection of Figure 1-4 will reveal, than any dividing the settlements of the *sḵaxaxúcid.* All of this suggests the possibility that a proximity factor may have played a role in determining the boundaries of the village complex. Except for the village clusters from the *sḵaxaxúcid* down to the Birdsview area, a river stretch in which villages formed an all but continuous chain of communities, this hypothesis seems to be generally supported by the spatial separation of the individual downriver complexes.

To what extent do the other two village distribution maps support or offer data differing from the village location information of Collins summarized above? First, Collins' (1974b:622) map (Figure 1-7), printed with her 1946 Skagit religious change paper, is patently a rough effort. It is difficult to read, at least in its published form, mixes unclearly drainage, village cluster (her "extended village"), and individual settlement terms, and is without accompanying text discussion. To some degree, however, it is possible to match village locations with those in her later map (Figure 1-4) and her terms with the village cluster and individual settlement designations provided in her Upper Skagit ethnography (Collins 1974a:17-20).

In this 1946 sketch map no villages of the *ƙwabacábš* cluster are shown. Indeed, the easternmost Skagit River village is marked at Marblemount. This settlement is said to have been termed *basqéqwiuq*^{u} (Figure 1-7, village [13]), which, in this early and less skillful transcription, is surely equivalent to her later *bəsqíx*^{w}*ix*^{w} (Figure 1-5, village [7]), which was on the Cascade River about one mile "west" (Collins means east) of Marblemount. Even she plots it on the west bank of the Skagit northeast of the present town. This is the only settlement reported on this 1946 map for the *sḵə́wix*^{w} village cluster of Figure 1-4, doubtless called to Collins' early attention because of its size (see above).

The next village (Figure 1-7, village [12]) downstream is shown to be on the east side of the Sauk River just above its mouth. It appears from Collins' map key to be given the name *tcáqwalq.* No village with a designation approximating this transcription is found in Collins' (1974a) settlement roster in this general area. Nonetheless, it is placed in about the same location as village (16) (Figure 1-6) of the *sák*^{w}*bix*^{w} cluster. Another settlement (Figure 1-7, village [14]) is located on the east side of the Sauk perhaps 2.5 miles north of Darrington (USGS *Concrete* quadrangle 1955); its name is given as *sábkiuq*^{u}. The later Collins' (1974a) study fails to report the native designation of the individual Sauk Valley communities, but this term looks suspiciously like a somewhat mangled cluster term *sák*^{w}*bix*^{w} (see above) with a transposition of the -k^{w}- and -b- sound sequence. I suggest that it is to be equated with village (17) of Figure 1-6, unless the settlement placed by Collins (1974b:622) (Figure 1-7, village [15]) on the lower Suiattle and called *suyátl'biuq*^{u} is intended to be this village (17). At any rate, one community (Figure 1-7, village [14]) appears to be located on the upper Sauk—but not nearly as far upstream as village (18) in Figure 1-6—and one (Figure 1-7, village [15]) on the lower Suiattle River. No traditional village is shown on the Skagit between the mouth of the Sauk and the present town of Concrete, where we are clearly beyond our geographical area of interest. And no settlement is marked in the Baker Lake region.

We now turn to the Collins' (1974c:facing 760) map that was printed as an adjunct to the 1960 report of the Indian Claims Commission (1974). Although the map (Figure 1-8) identifies no authorship, Commission comment credits Collins. In addition, circumstantial evidence points strongly to a Collins source. This is essentially proved by the data that follow, the perfect matching of the villages of this map, at least in the geographical region of concern here, with those reported by Collins (1974a) in her Upper Skagit ethnography.

Although this map is unaccompanied by descriptive material, it plainly identifies 44 "villages and house sites," to follow the phrasing of the Commission's (1974:317) findings of fact, in Upper Skagit territory together with several other sites that remain for some reason unnumbered. Of these, 41 (settlements 1-41) were in the country of the Upper Skagit proper and three (42-44) were located in the Suiattle-Sauk drainage (Figure 1-8).

As in the case of the second Collins' (1974b) map, we find of interest here only those villages in the eastern segment of the Skagit River region (those numbered 28-41), in the Suiattle-Sauk area (42-44), and in the Baker

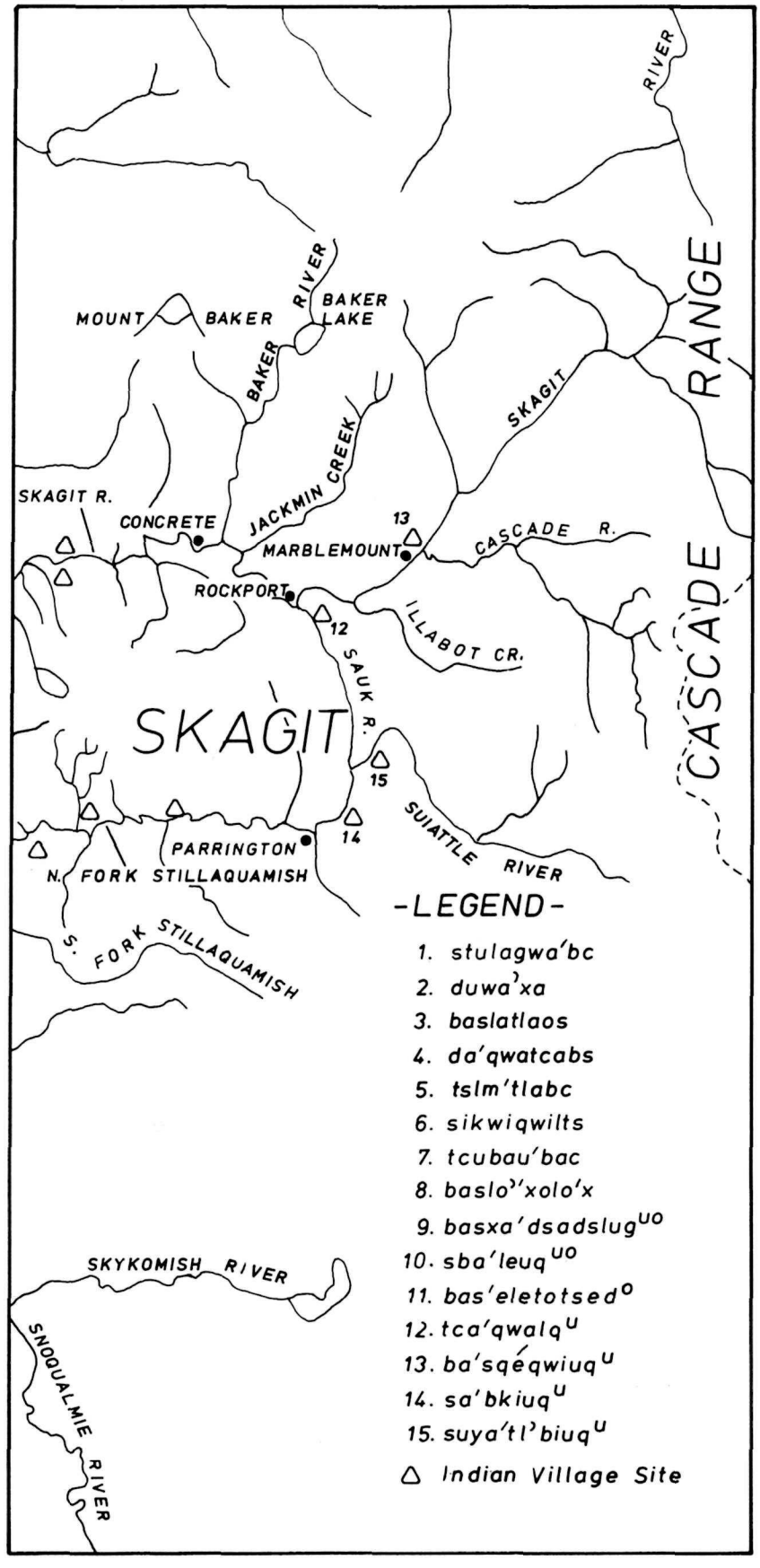


Figure 1-7. Fragment of a rough sketch map of Upper Skagit village sites, "extended villages" (village clusters), and drainage terms, published in Collins' (1974b:622) 1946 study of tribal religious change. For readability Collins' number designating separate villages and clusters 11-15 have been replaced by larger numbers.

Lake country (23), three portions of the aboriginal Upper Skagit territory nearest the borders of the North Cascades National Park Complex. The simplest way of examining the details of this map, none too clear in its reproduced and doubtless reduced form, is to compare its village locations with those marked on Collins' 1974a map and to tabulate the correspondences (Table 1-1). The two sets prove to be in a simple one-to-one relationship.

To the results of this matching exercise, only three particular observations seem called for:

(a) the locational dot for village site (41) appears on the south side of the Skagit, not on the north bank as with the identical settlement described by Collins (1974a:19) in her general ethnography and shown on her 1974a map (Figure 1-4, village [1] in my text). In addition, it is placed slightly upstream from the town of Newhalem not "at Newhelem" (Collins 1974a:19). How meaningful these minor discrepancies are is uncertain.
(b) Village (30) is sited more precisely than in Collins' 1974a description of village (13) as numbered in my text. Here it is placed at or close to the mouth of Barr Creek, while in 1974a Collins wrote simply of its being "at the bend in the river on the north side of the Skagit west of Rockport." The position of this settlement marker confirms my earlier supposition that Collins' "west" should be read "east."
(c) Village site (23) appears to be placed on Baker River just below the pre-dam lake, not on the small northern affluent of Baker River as shown for site (19) in Figure 1-4 (village [19] in my text) and as described in Collins' (1974a:18) Upper Skagit ethnography.

On the basis of her Upper Skagit village roster, Collins (1974a:20) states that:

> . . . part of the pattern of the seasonal round of activities can be identified. Other than the winter houses at Sauk, the permanent winter houses were nearly all situated at fishing sites near the mouth of tributaries of the Skagit with a few on the main branches of the river and a few on lakes linked by rivers or creeks to the Skagit. Small wooden houses were built at sites where the fishing was particularly good, to house the visiting relatives who came when the fish were running.

In her village roster, however, Collins makes a point of explicitly locating at or very near creek entrances only 13 of the 49 villages. Perhaps she considered her generalization sufficient on the point to make specific geographic information largely unnecessary. More oddly, she calls attention in her village listing to only one winter village (*wáċal?əl*) at a fishing site and two summer communities (*súsutiya* and *scácuks*) at fisheries, all three in the downrivermost village cluster in the Mount Vernon-Sedro Woolley neighborhood. This is difficult to explain unless again, having made her statement regarding village locations and fisheries, she thought it redundant to report such information for most specific villages. Further, only one winter village (*qʷə́qʷqʷəqʷ*) of the 37 total is specifically reported to have been occupied as well during the summer months, the fishing season; and only one summer village location (*kabálah*) of the nine total is said to have been lived in during the winter. This apparent noncorrespondence between winter and summer village sites requires some further examination.

Attention has already been called to the absence of summer settlements in Collins' record for the eastern-most Upper Skagit village complex (*ƙwabacábš*) and likewise to their relatively small numbers in comparison to winter villages farther downstream. The question has been raised as to the possible significance of this fact for a comprehension of the warm season subsistence and population distributional patterns of the Upper Skagit. In this light, it is of interest to review Collins' (1974a:15-20) "house" data more fully and to attempt some rough population estimates for the entire Upper Skagit group.

Table 1-2 presents a compilation of dwelling data extracted from Collins' descriptive text. For the purpose of this present analysis, the five village clusters down the Skagit through the *s?ílayucid* (Figure 1-4; Table 1-2, 4) and the *sákʷbixʷ* cluster on the Sauk River (Figure 1-4; Table 1-2; 5) may be rather arbitrarily regarded as the upriver Upper Skagit. The five clusters beginning with the *s.báliuqʷ* cluster (Figure 1-4; Table 1-2, 6), located from Faber Ferry (USGS *Concrete* quadrangle 1955) westward down the Skagit, may be considered to comprise the downstream division of the Upper tribe. This arrangement not only divides the village clusters into two groups of five each, but also places the division line near the geographical midpoint in the cluster distribution along the Skagit.

From the data of Table 1-2, it is apparent that, assuming the essential accuracy and completeness of Collins' information, there were 19 winter dwellings—large, small, and of unspecified size—in the upriver area and 33 in the lower. Likewise that there were relatively more large winter dwellings than small—in a 2:1 ratio—in the eastern region than in the downriver sector (virtually a 1:1 ratio). The situation in regard to the summer dwellings was different: only one summer "house," a large one, in the entire upriver area (plus three of undefined size) as against 17 small and no large summer dwellings in the downriver division (plus one of undescribed dimensions).

In summary, this dwelling catalog tells us that there were only about one-fifth as many upriver summer

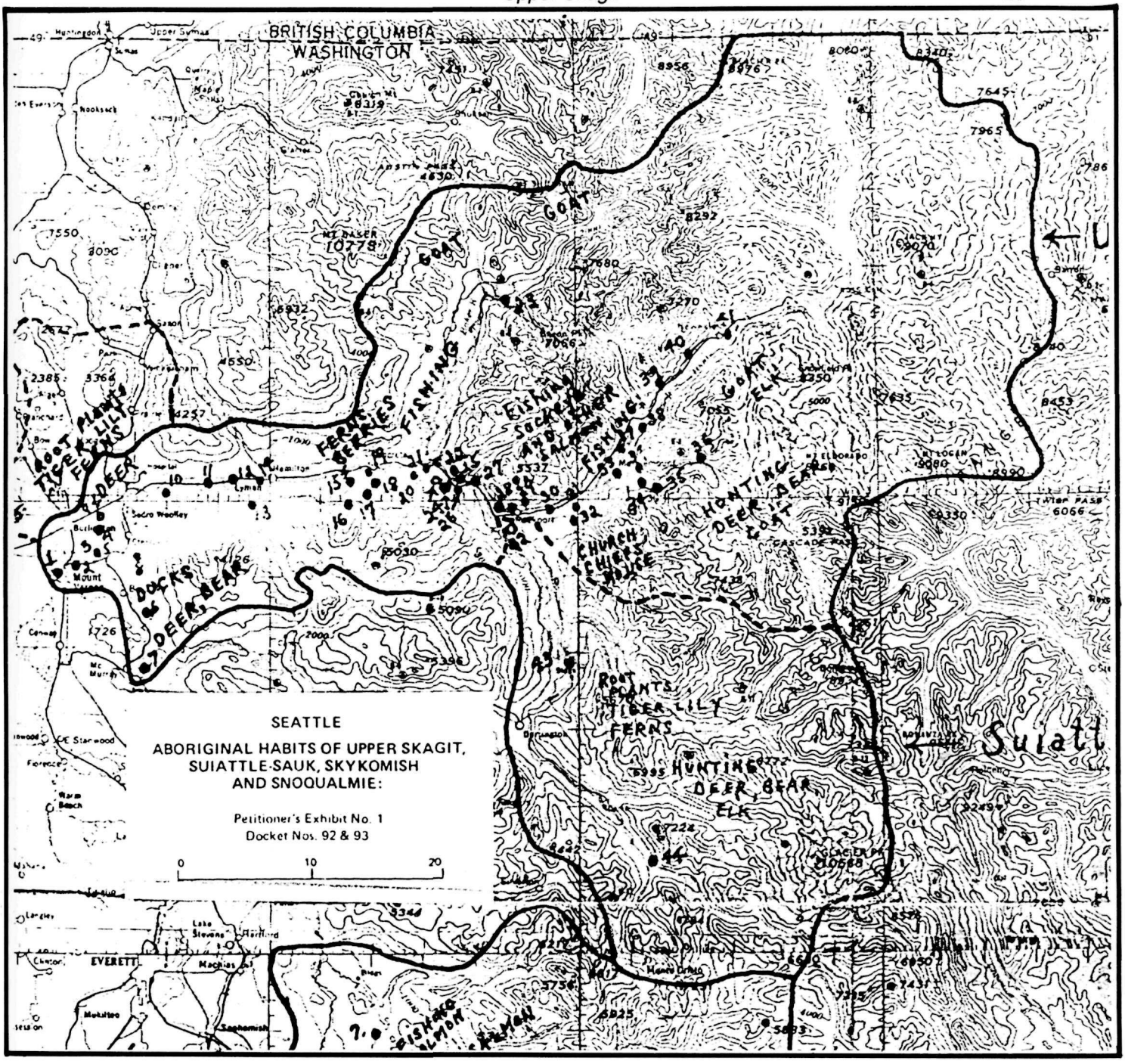


Figure 1-8. Upper Skagit (and Suiattle-Sauk) section of Figure 1-3, enlarged to show more clearly the village and village clusters of primary interest. These clusters are marked in Figure 1-3. This map, printed anonymously with Collins' (1974c) Upper Skagit religion research, is apparently extracted from her still unpublished study submitted in connection with Upper Skagit early land claims litigation.

Table 1-1. Upper Skagit Village Locations Reported in Collins (1974c) (Figure 1-3) Compared with those indicated in Collins' (1974a:16-20, 17 map 2) Upper Skagit Ethnographic Study (Figures 1-5 and 1-6).

Village Clusters per Collins (1974a)	Villages per Collins (1974c)	Villages per Collins (1974a)*
ƙwabacábš	41	1
	40	2
	39	3
sƙ̓wix^{w}	38	4
	37	5
	3?	7
	36	10
	35	9
	34	8
	33	6
sƙaxaxúcid	32	12
	31	11
	30	13
s?ílayucid	29	14
	29	14
	28	15
sák^{w}*bix*^{w}	42	16
	43	17
	44	18
s.báliuq^{w}	23	19

*Number as in my text.

dwellings as winter. And approximately one-half as many summer houses as winter among the western segment of the Upper Skagit, but practically all of these summer structures were small, whereas only half of the winter dwellings were of small size. Probably some upriver people moved downstream to take advantage of summer fisheries in the lower river sector. At least according to Collins (1974a:20) as noted above, some Upper Skagit visited their tribal kinfolk "where the fishing was particularly good" and "small wooden houses were built at [these] sites . . . to house the visiting relatives who came when the fish were running." I would suppose that the downriver fisheries were, on the average, more productive than those upstream, causing in summer a predominately downriver population movement, though I have no hard evidence that this was the case. If this fisheries supposition is correct, it would also mean that any upriver flow of people from the lower Upper Skagit villages would probably have gone back into the high country and so not show up to a significant extent in the summer settlements in the eastern Upper Skagit territory. At any rate it is obvious that there were not nearly enough summer villages and dwellings to take care of the entire upper Skagit winter population in the lower segment of the tribal homeland. This would surely seem to be so even considering the temporary housing constructed to accommodate the visiting kinfolk mentioned above. Certainly there is nothing to argue for any considerable downstream summer flow of the Upper Skagit population.

It is also probable that some Upper Skagit from the eastern villages left their tribal territory during at least part of the warmer months for the country of other nearby tribes. For example, Upper Skagit with wives from the Lower Skagit and from the Nooksack, Swinomish, Upper Samish, Stillaguamish, and other coastal tribes both to the north and the south and those who were partly from these tribes in descent, visited their relatives in those groups in the summer. Others went to these nearby tribes to trade, especially for marine foods, but also in some cases to dig roots (Curtis 1974a:9-11, 32). Presumably people from the upriver Upper Skagit villages were at times involved in these journeys. But the downstream attraction of better fishing localities and visits to neighboring tribes could hardly have drawn away from the eastern Upper Skagit winter villages a large enough segment of the population to account for their small number of summer settlements. And as already observed, even the lower reaches of the Skagit River had too few summer settlements to account for its winter population.

One of the most obvious explanations for the facts revealed by Table 1-2 is that among both divisions people spent a considerable part of the summer season away from the river and that this was notably more so for the eastern group. This seems consistent with what might be supposed to have been a relatively rich supply of anadromous fish downriver and the relative abundance of game upriver. The people simply were not congregating during the fishing period at a few especially favorable fishing sites.

This conclusion is made still more obvious by converting the dwelling data to population approximations (Table 1-3). Unfortunately, Collins describes houses only as "small" or "large" and provides no average or range

Table 1-2: Number of Dwellings by Season and Size, Compiled from Data Provided by Collins (1974a:15-20)

Village Clusters*	Winter			Summer			Season Unspecified			Total
	Small	Large	Size Unstated	Small	Large	Size Unstated	Small	Large	Size Unstated	
1 *Ḱwabacábš*	1	2								3
**2 *sḵ'ə́wix*ʷ	2	2	1		1	2				8
3 *sḵ'axaxúcid*		1	2							3
4 *s?ílayucid*	1	2								3
5 *sakʷbixʷ*	—	1	4		—	1				6
Totals	4	8	7		1	3				23
6 *s.báliuqʷ*	12	5		7			2		1	27
7 *basla?álux*		1								1
8 *čubə?ábš*		2								2
9 *sḵikʷigʷilc*	3	4								7
10 *dəqʷə́čab̓s*	1	5		10		1	—		—	17
Total	16	17		17		1	2		1	54
Subtotals:	20	25	7	17	1	4	2		1	—
Totals:		52			22			3		77

*Because the interest in this study is principally on the upriver settlements, Collins' sea-to-headwaters order is reversed. Dwellings on the Sauk River tributary appear as cluster 5.
**In some cases Collins' term transcriptions differ between her village map (Figure 1-4) and her text, and even in different places in her text (e.g., *sḵ'ə́wix*ʷ [map] vs. *bəsq̓íxʷixʷ/basq̓íxʷixʷ* [text]).

numbers for families or persons occupying these two classes of dwellings. Nor does she give average person/family data. The best we can do is to examine the following specific family/dwelling information, some of which is used to illustrate social organizational patterns (Collins 1974a:83-84) and so must be matched with her separate village roster information (Collins 1974a:16-20).

"Large" winter dwellings by Collins' definition:

(1) *q^{w}ə́q̓^{w}q^{w}əq̓^{w}:* four families. (Collins 1974a:18, 83-84)
(2) *bəsqix^{w}ix^{w}:* house 120 x 40 ft; once 20 families. (Collins 1974a:19)
(3) *bəsqix^{w}ix^{w}:* to judge from the location given by Collins (1974a:84), she is again referring to village (2) above, though she here terms it *k̓^{w}abacábš*, which was considerably farther up the Skagit. Five families, which I take to be the occupants in more recent years (Collins 1974a:84).
(4) *sqix^{w}ucid:* house 120 x 40 ft; therefore presumably about 20 families as in (2) above. (Collins 1974a:19)
(5) Native name ?. Opposite mouth of Bacon Creek; 10 families. (Collins 1974a:19)

"Small" winter dwellings by Collins' definition:

(6) Native name ?. Near Diobsud Creek; two houses with two families each. (Collins 1974a:19)
(7) Native name ?. East of Thornton Creek; three families. Collins 1974a:19)
(8) Apparently *wáwalah:* three dwellings sheltering one family, three families, and four families respectively. (Collins 1974a:16, 84)

No comparable data are given for "large" and "small" summer dwellings.

From these sparse and not entirely unambiguous data we conclude that "large" dwellings housed from about five to 20 families and "small" dwellings from one to four families. These data translate into approximately 30 to 120 (average 70) people and five to 25 (average 15) persons respectively. Probably these figures are smaller than they were in earlier times before population reduction occurred. But if both estimates are too low, the results of the rough computations that follow and their implications would not be appreciably altered by adjusting them proportionately upward. Where the dwelling size is not reported by Collins, an intermediate population average of 42 people is estimated. Lacking any evidence in the matter, summer large and small dwellings and those of undescribed size are tentatively assumed to have housed populations about equal to those of winter villages. The three dwellings of undesignated seasonal occupation are omitted in this compilation; since at least two of them were small, their exclusion from the data base can hardly affect the results significantly. It turns out that, using this relative size formula (Table 1-3, formula A), approximately 21.4 percent of the winter population (196 divided by 914 persons) among the eastern Upper Skagit is accounted for during the summer months and about 20.8 percent of the winter population (297 divided by 1,430 persons) among the downriver Upper Skagit.

But perhaps the population difference between the small and large dwellings was somewhat greater than in the above approximation. If the estimate for the small house occupant number is increased to 25, that of the large dwelling to 125 persons, and that of those few houses of unreported size to 75 people (Table 1-3, formula B), then the summer/winter ratio for the eastern Skagit segment becomes approximately 21.5 percent (350 divided by 1,625 persons) and that for the downriver segment drops to about 19.8 percent (500 divided by 2,525). From these rough computations it is plain that only about 20 percent of the people of the winter dwellings are accounted for in the warmer seasons.

There is certainly nothing in these data at either formula level to argue for a meaningful movement of upstream people to summer locations downriver. It is likewise apparent that, assuming Collins' findings are substantially accurate, the Upper Skagit did not occupy as many fishing camps along the Skagit as might be expected in view of the reported abundant salmon supply in the river and the importance of anadromous fish as a food resource (Collins 1974a:45-52).

The answer to this problem is not entirely obvious. Having reported that winter villages were generally at fishing sites (Collins 1974a:20), did Collins think it unnecessary to mention the summer settlements at these same localities? But if so, why distinguish between winter and summer communities in her village listing and why call specific attention to one winter village site that also supported summer dwellings and one case of the opposite sort? Indeed, why were nearly all cold season communities at fisheries as she avers, when the fishing season was during the summer months?

And still more questions are raised by the winter/summer population problem just discussed. Were many Upper Skagit scattered too widely along the Skagit during the fishing season and in too small groups to be considered as comprising "villages"? Did many of the people occupy structures too insubstantial and impermanent to be classified as "houses" by Collins—and presumably also by the Upper Skagit themselves—while at summer fishing centers? Evidently it was not that their fishing season was too brief, in view of both the Fraser River salmon data presented in the following chapter and Collins' own information to be reviewed presently, for

Table 1-3. Population Estimates for Large and Small Dwelling Aggregates and Aggregates of Dwellings of Indeterminate Size by Season, Divided into Upriver and Downriver Groups*

Village Clusters		WINTER				SUMMER		
	Dwellings		Population Estimate**		Dwellings		Population Estimate**	
	Size	Number	Formula A	Formula B	Size	Number	Formula A	Formula B
Upriver Group								
1-5	Small	4	60	100	Small	0	0	0
	Large	8	560	1,000	Large	1	70	125
	Unstated	7	294	525	Unstated	3	126	225
	Totals	19	914	1,625		4	196	350
Downriver Group								
6-10	Small	16	240	400	Small	17	255	425
	Large	17	1,190	2,125	Large	0	0	0
	Unstated	0	0	0	Unstated	1	42	75
	Total	33	1,430	2,525		18	297	500

*Three dwellings of unknown season are excluded.
**Formula A: small dwelling = 15 persons; large dwelling = 70 persons; dwelling of unstated size = 42 persons.
Formula B: small dwelling = 25 persons; large dwelling = 125 persons; dwelling of unstated size = 75 persons.

settlements of some permanence to form. But perhaps the people were typically drifters in the warmer months, moving back and forth between river fishing localities and food quest grounds up in the hills and mountains back from the Skagit River. At a later point these questions, bearing directly or at least peripherally on the Upper Skagit utilization of the Park Complex area, will be addressed more fully.

In addition to these maps with their village plots, several village cluster or "extended village" lists exist. Collins herself has produced three different versions. Two appear on maps reproduced here as Figures 1-4 and 1-7 and have been already discussed; the third is a text roster. The listing on Figure 1-7 is a mixture of extended villages, individual villages, and geographical designations and is, in addition, too indistinct in its published form for me to read with confidence. Consequently, these data are not considered further here. The third appears in the Indian Claims Commission (1974:316-317) case document. This catalog is a particularly informative contribution because the Skagit terms are reduced to their more popular equivalents. These terms, as well as the ten-item list in Figure 1-4, are given in Table 1-4.

Another recent catalog of Skagit extended villages is that of Smith (1941:209-210). No differentiation is made between Lower and Upper Skagit village complexes, but the separation between the two divisions is clear from Collins' data. In some respects Smith's list differs from that of Collins on Figure 1-4, as shown in Table 1-4. Specifically, it includes two extended villages not reported by Collins: i.e., *basxádsadsiuq^{u}*, on the south bank of the Skagit from Hamilton to Birdsview, and *suyátl'biuq^{u}*, in the Suiattle River region. On the other hand it omits two in Collins' series (see Figure 1-4). Since we are concerned only with the uprivermost extended villages of the Upper Skagit, the complete data from Smith's settlement catalog are not reproduced here. Her four upstream communities are as follows, lettered as in her roster: (I) *bαsélelotsɛd* on the Skagit River from Van Horn to roughly three miles above Rockport and on the Sauk River almost to the mouth of Suiattle River, with the village of *tcágwalq'* at the mouth of Sauk River; (J) *bαsqéqwiuq^{u}* on the Skagit River above Rockport with a settlement of the same name at Marblemount at the mouth of the Cascade River; (K) *sábkiuq^{u}*, the Sauk River above the confluence of the Suiattle, with a village of the same name on Sauk Prairie below Darrington; and (L) *suyátl'biuq^{u}*, Suiattle River with a village of the same name not far above the Suiattle River mouth (Smith 1941:210). Of special interest is the fact that the differences between the Collins and Smith rosters are almost entirely concentrated in the Upper Skagit back country.

Two nineteenth century attempts to itemize the Skagit village groups are known to me. The earliest is that of Gibbs (1877:180) who states, surely based on his 1854 field findings, that the "Skagits" include the "Kikiallu," Nūkwatsamish, Tow-ah-ha, Smali-hu, Sakumehu, Miskaiwhu, Miseekwigweelis, Swinamish, and Skwonamish" (cf. Gibbs 1877:241). The Samish were a separate non-Skagit people. Several of the remaining Gibbs' groups may be identified more or less certainly. The Kikiallu were on one of the northern Skagit River mouths and so are too far from the Park to be of interest in this study (Spier 1936:36). Perhaps the Nūkwatsamish were a subunit of the Samish and the Tow-ah-ha may be equated with the Huwhaha (Upper Samish); if so, these groups likewise fall beyond our concerns. The Smali-hu, however, appear to be Collins' *s.báliuq^{w}* around the mouth of Baker River, an Upper Skagit "extended village." The Sakumehu are surely Collins' *sák^{w}bix^{w}* village

Table 1-4. Upper Skagit Village Clusters, Ordered East to West.

Collins 1974a:16-19, 17 Map 2	Collins in ICC 1974:316-317	Smith (1941:210)	Gibbs 1877:180[a]	Eels 1985:19
Skagit River Groups				
1. *ƛ̓wabacábš*	Kwa-bats-absh			
2. *sƛ̓əwix*^{w}	Shay-wih	*bɑsqéqwiuq*^{u} (J)		
3. *sƛ̓aẋaxúcid*	Shay-ay-ot-sid			
4. *s?ilayucid*	Say-lay-ot-sid	*bɑsélelotsɛd* (I)		
5. *s.báliuq*^{w}	Sabaliuhk	*sbáleuq*^{u}	Smali-hu	sab-li-hu sba-le-hu
		bɑsxádsadsiuq^{u}		
6. *basla?alux*	Baosloh-a-loh	*bɑslo''xɑlo'x*		
7. *čubə?ábš*	Cho-bah-ah-bish	*tcubɑábɪc*		
8. *sƛ̓ikʷigʷilc*	Seek-weeg-gweelts Mee-see-qua-quilch	*sikwigwílts*	Miseekwigweelis	
9. *dəqʷə́čab?s*	Nook-wa-cha-mish Nookachamps Dook-wa-shabs	*dʊkacábɪs* *dɑ'qwɑtcabs*		do-kwa-tcabsh
Suiattle-Sauk Groups				
10. *sákʷbixʷ*	Sah-ku-mehu	*sábkiuq*^{u} (K) *suyátl'biuq*^{u} (L)	Sakumehu	sak-wi-be-hu

Note: One Collins listing, that on her map reproduced here as Figure 1-7, is too difficult to read with confidence. It is omitted in this table.

[a]A number of Gibbs' groups cannot be matched with Collins' extended villages.

cluster of the Sauk River country (Spier 1936:36). Gibbs (1855b:472) terms the Sauk River the Sah-kee-me-hu. The Miseekwigweelis are undoubtedly Collins' *sƛ̓ikʷigʷilc*. The remaining groups itemized by Gibbs defeat me. The population units identified appear in Table 1-4.

Eells (1985:19), who was aware of the Gibbs listing, learned of four Skagit "bands," excluding the Swinomish as with Gibbs above: the *do-kwa-tcabsh* at the Skagit mouth; the *sba-li-hu* on the middle Skagit River; the *sba-le-hu* whose country was on the Baker River; and the *sak-wi-be-hu* on the southern branch of the Skagit. The first must be Collins' *dəqʷə́čab?s* close to the river mouth; the second and third Collins' *s.báliuq*^{w} on the Skagit River in the Baker River area and up that stream (Spier [1936:36] suggests that these two groups must be the same); and the fourth, Collins' *sákʷbixʷ*, the Sauk River people. These equivalences appear in synoptic form in Table 1-4.

Village and Camp Arrangement

As already noted, cold season communities consisted most notably of one or more large plank dwellings and a ceremonial plank structure. Warm season settlements were principally made up of these same dwellings if they were located at good salmon fisheries, or of smaller wooden houses if the site was not occupied also during the winter. Often in summer villages were small temporary dwellings for visiting relatives. Associated with settlements of both seasons were sweat lodges and sometimes women's puberty shelters. Presumably in all communities whatever the time of year were food drying racks, food and artifact processing areas, perhaps caches for food and articles, and canoe beaching areas. But how these structures and task centers were spatially positioned winter and summer into integrated, functional living complexes we are not told.

Even less is known of the typical temporary hunting, plant collecting, and other task-focused camps of the Upper Skagit. Even the shelters and other structures that stood in these camps are undescribed. How these and their related work areas were spatially organized into cohesive social and economic configurations remains likewise undisclosed.

Domestic and Tamed Animals

In the traditional period, the Upper Skagit possessed only two domestic animals: the horse and the dog.

A few horses were held by groups with sufficient pasturage (Gibbs 1855a:432; Smith 1941:199). They were of particular value as pack animals on cross-Cascades trading trips to the Plateau.

Dogs of two varieties were kept in far greater numbers. Hunting dogs were of great importance in the

constant search and killing of game. The wool-bearing dog was in its way as important, for it yielded, through being periodically shorn, a wool-like hair that was widely employed in weaving blankets and clothing. These dogs, it is reported, were sometimes kept on river islands so they could not interbreed with hunting and camp dogs.

Foxes were captured by Upper Skagit men and kept until killed to convert their pelts into clothing (Collins 1974a:73). Whether other wild animals were likewise held captive in this fashion or were tended, at least for a time, in tamed status is not reported.

Travel and Transportation

The Upper Skagit lived predominately along rivers and to a lesser degree on lakes. They were therefore preeminently a canoe people, carrying out as much of their travel and transportation by watercraft as possible.

Three types of cedar dugouts were manufactured. Of these the shovel-nosed, river form "was by far the most important." Typically it was about four feet wide, two feet deep, and sometimes long enough to provide transportation for ten people. A tree was cut, trimmed, and floated to the maker's home. There, on uprights, it was hollowed out by careful adzing, burning, and steaming. The two ends were identical, both blunt. It was fitted with thwarts to insure that the sides maintained their shape. The second type was a small, one-man canoe with bow and stern sharply cut away. This was used exclusively on swamps in duck hunting. The third canoe was a three-piece saltwater craft, made by some Upper Skagit for sale to shore people. It was not employed on the Skagit River and is therefore of little interest to this study.

Paddles of vine maple with a T-shaped handle were used less frequently than poles in moving canoes. The latter were always employed in propelling canoes upstream. Paddlers knelt on the canoe bottom, sometimes padded with mats. Young people sang, keeping time with their paddle strokes (Fornsby in Collins 1949:310; cf. Mayne 1962:61 for the middle Fraser Indians).

Occasionally when a ceremonial guest had many gifts to distribute, two canoes were "united with a platform of planks placed over them to hold them together" (Collins 1974a:66). The objects were thrown from this platform to the shore where people scrambled for them. (Collins 1974a:64-66)

According to Upper Skagit tradition, Collins (1974a:66) reports, people who once lived in far upriver villages (e.g., on the Sauk) were unacquainted with the making and use of canoes. When the river level was below their heads, they crossed "by carrying a heavy stone on the shoulder. They had trails in the Sauk River for fording in this manner." One must give such "traditions" little credence: they seem preposterous on the surface. It is of special interest that tales of mythical "foolish folk" were widespread in the nearby Plateau, where informants reported that they were commonly believed—or half-believed—in the old days (cf. Smith 1936-1938).

The Skagit are described by Gibbs (1877:180), drawing upon data probably collected in 1854, as having no horses in the 1850s, as being "altogether canoe Indians." This is undoubtedly wholly or essentially correct for the Lower Skagit. However, the Upper Skagit groups, or at least those closest to the mountains, almost surely had a few equines in the 1825-1850 period, used primarily on over-the-mountains journeys to the Plateau. But for this view I have not yet found historical or ethnographic evidence beyond Gibbs' (1855a:432) general statement already noted that the peoples near the western end of the Cascades passes owned a few horses.

Snowshoes were used by upriver Upper Skagit men and women, though not by the downriver and saltwater villagers. Their form and use are not described except that these headwater people wore them in winter in getting about in the mountains and when crossing the Cascade divide. (Collins 1974a:66, 74)

Trails

In regard to the travel patterns and preferences of the Upper Skagit, Collins (1974a:6) provides a brief but very informative statement. She writes:

> [The forests of Upper Skagit country were] so dense that travel through them was extremely difficult. Land travel was confined for the most part to places near timberline where the vegetation was relatively sparse. The Upper Skagit making the long trip across the Cascade Mountains to visit relatives in the Plateau preferred to travel on the snow itself.

In light of the above, Gibbs' (1877:169-170; also 180) observations of the mid-1850s are especially informative. Concerning the cross-Cascades trails in general in the Upper Skagit neighborhood and on south, he writes:

> In former times, before the diminution of the tribes and the diversion of trade to the posts, there were numerous trails across the Cascades by which the Indians of the interior obtained access to the western district. Of late many of these have fallen into disuse, becoming

> obstructed with timber and underbrush which they have not industry enough to clear out. In fact all their trails through the forest, though originally well selected, have become excessively tortuous, an Indian riding around the fallen trunks of tree after tree sooner than clear out a road which he seldom uses. . . . The northern trails from the Winatshapam [Wenatchi] and Tselann [Chelan] Lake to the Sto-luch-wha-mish [Stillaguamish] and Skagit seem to be altogether so [abandoned].

These comments suggest at least a three time-level trail-condition sequence: (1) narrow, prehorse, winding trails suitable for foot travel in which obstacles—like fallen trees—were generally detoured around, since the labor of clearing them away with stone tools would have been altogether too great; (2) wider trails required by burdened horses, running over terrain suitable for mounted horses and cleared to some extent with metal axes; and (3) the very difficult trails described by Gibbs, associated with population reductions through epidemics and other adverse conditions and the diversion of trade to the posts.

The preceding statement by Gibbs speaks of Plateau people visiting the Skagit. The extent of Skagit movement on visits for trade and other purposes eastward over the Cascades is not specified. Referring evidently to the 1850 time frame, Gibbs (1877:180) remarks only that the Skagit "formerly had some communication with the Indians beyond the mountains; but it is supposed to have been discontinued in consequence of obstructions to their trails." I find this observation ambiguous as to the identity of the journeying parties.

While some Upper Skagit certainly traveled as the data of this section clearly demonstrates, some persons, if Smith (1941:199) is correct, were non-journeyers. For the inland tribes as a whole, she reports the "territory visited by one individual in his life-time was normally limited and old men and women of inland villages who have never visited the Sound are still living." In fact, this may well have been correct for many Upper Skagit. John Fornsby, himself an Upper Skagit by birth, reported that the people of the middle and upper Skagit River areas "never wanted to go down to salt water. [These folk] . . . were scared that somebody would take them for slaves or kill them. Oh, sometimes they went down and dug clams and took some up the river. They were just like wild fellows and stayed up there [on the upper river] all the time." (Collins 1949:302) Still, considering the extent to which the mountain uplands of Upper Skagit territory had to be scoured for game and other resources, it would surely be inaccurate to view these inland Skagit as stay-at-homes. But they evidently moved mainly about within the limits of their own country, not much as traders or subsistence seekers into the homeland of other groups, even of the Lower Skagit.

Certain scraps of information exist in regard to specific overland routes, though these are not always well located. They certainly provide a far from complete listing of the total network of Upper Skagit trails to the territories of the other groups of interest to this study.

One overland trail, Collins (1974a:11) reports, led from a village on the upper Skagit River to a Nooksack community, thus avoiding a long descent of the Skagit River to the salt water, moving along the shore to the Nooksack mouth, and then moving up that stream. Unfortunately neither of these settlements is identified nor are any of the details of the route between the two furnished. Perhaps this trail is that described by Smith (1950a:339) as having run from the uppermost Nooksack village on the South Fork of the Nooksack River above the present town of Acme "over to the upper Skagit River country." This trail is said to have been six miles long. This distance figure, assuming its approximate accuracy, together with the "upper Skagit River country" observation suggest that the route led up the Nooksack fork to about its closest point to the Skagit River and then southward, perhaps to the neighborhood of Lyman or Hamilton, though this is hardly more than guesswork. At any rate it could not have proceeded south from the Acme area to the lower Skagit River sector. Unquestionably there were other cross-country Upper Skagit-Nooksack trails as well (Smith 1950a:331).

Some Upper Skagit went to salt water by ascending the Sauk River, making the short portage over to the Stillaguamish River, and then following it downstream. For some Upper Skagit villages this was a shorter route then straight down the Skagit. Furthermore, the Skagit was blocked in the 1800s by a log jam upriver from Mount Vernon, which required a portage at that point (Collins 1974a:10, 11, 38). Evidently this Sauk-to-Stillaguamish trail is the one referred to by Gibbs (1855b:472): "The Indians state that they have a short portage for their canoes . . . from the north fork of the . . . [Stoluckwamish (Stillaguamish)]to the Sah-kee-me-hu [Sauk] branch of the Skagit."

A land trail evidently ran up the Skagit River to its headwaters, although most Upper Skagit travel was by canoe. How difficult it was to negotiate I do not know, but the upper reaches of the river plainly presented real problems for canoe navigation. On this matter Collins (1974a:38) is worth quoting:

> . . . in 1852, . . . [an improved] trail was cut [apparently by or partly by Whites] along the Skagit River. Where it began is not certain but it extended to Ruby Creek [at the southeastern corner of Ross Lake] and also beyond into British Columbia. Here at the head of the main channel of the Skagit, the trail crossed the Niccolum Trail. Even after the trail had been made along the

Skagit River, miners used the Nooksack River rather than the Skagit route in order to reach the mines because of the difficulties of navigation in the latter.

Further information concerning the Niccolum trail is not available.

The Upper Skagit are known to have made occasional trips over the Cascades into the Plateau and parties from the eastern slopes of the mountains journeyed westward to the Upper Skagit country. A number of trails obviously united these two regions. Several can be enumerated with reasonable certainty, although hard data describing their early use, by the Skagit or their westside neighbors heading to the Plateau or by Plateau peoples moving westward, cannot yet be cited. Nor can the incentives that led traveling parties to undertake this difficult cross-mountain journey be specified beyond the obvious desire to exchange goods (see following Trade section). (Collins 1974a:13; Suttles 1957:177)

The trip over "the passes which was made in winter on snowshoes took about six weeks. A man or woman (and women took this route less frequently than men) might make this trip only once in a lifetime. (Collins 1974a:13)

The following trails are certainly among those that must have been used to some extent by both Upper Skagit and Plateau parties:

(a) People living in the villages farthest up the Skagit traveled through at least two passes into eastern Washington (Collins 1974a:13). One must have been that which ascended the Skagit River and then Granite Creek to cross over Rainy Pass to the Methow country. A second trail went up the Cascade River and the North Fork of that stream and over Cascade Pass to the Stehekin headwaters in Chelan country. The Upper Skagit are known to have "kept a canoe hidden on Lake Chelan for their use" when they arrived at its shores (Collins 1974a:13).

The second of these passes (Cascade) is the one crossed in late August of 1882 by Lt. Pierce (1973:22-24) and his party. As he reports, he made his way over a wide snow bank at the crest of the divide and, heading westward, began a very rapid, winding, and precarious descent through loose rock and a tangle of high alders. Reaching a creek, a headwater of the Cascade River, he wound downward in and out of the stream for "a considerable distance." He came then to giant cedars and a "powerful waterfall." His night's camp was in a magnificent forest of white pines, red firs, and cottonwoods. Over the next four days he followed the Cascade River toward the southwest and then northwest along a serpentine trail through heavy forest, by cliffs, up bluffs, and down canyons to the Cascade River mouth where he found a salmon fishing camp of an old Skagit Indian and his son and their families.

(b) A trail evidently went up the Suiattle River and over Ross or Suiattle Pass or one or more other passes in the area to the headwaters of streams that flowed northeastward to the Stehekin River or eastward to the west side of Chelan Lake. "Harry Moses, whose father was from Entiat . . . made the trip overland by foot three times during his life" (Collins 1974a:13). Access to the upper Wenatchee drainage from the Suiattle may well have been via Buck Creek or High Pass or some other mountain break in their vicinity.

(c) A trail ascended the Sauk and over White Pass to the upper Wenatchee area. Presumably it is to this route that Collins (1974a:80) alludes when writing of William Moses' itinerary. In 1852 Moses, "who lived at Sauk or one of the other upriver villages, together with other men took a load of furs to Portland, Oregon, to trade, . . . They went by canoe up the Sauk River, crossed the Cascade divide and went down the Wenatchee River and the Columbia River to Portland."

Similarly Plateau peoples, with different motivations, occasionally went west to Skagit country. Some small groups, attracted by the salmon available in the Skagit River headwaters, crossed with the idea of settling in the area. Collins (1974a:13-14, 66) sees an early settlement of parts of Skagit Valley by Plateau people in search of salmon as the explanation for Upper Skagit traditions reporting that certain toponyms in their country were Interior Salishan in origin. Unfortunately, no examples of these place names are provided by Collins, making impossible a linguistic test of this hypothesis.

The Upper Skagit report a case of a Nespelem man, fearing a Nespelem shaman, who came west over the Cascades in the early 1800s to live among the Snohomish south of Upper Skagit territory. Some time before 1855 his son married an Upper Skagit woman from a downriver village and settled in her country. "Like some other Indians on the Skagit River he occasionally went to see his relatives among the Interior Salish." (Collins 1974a:32-33)

Sometimes Plateau parties traveled the cross-Cascades routes for brief visits, doubtless partly to trade.

What is known of travel by Thompson and Chelan parties over the mountain crest to the Skagit Valley is to be found in those sections of this report dealing with these individual Plateau tribes.

Trade

A general statement regarding cross-Cascades goods exchange is made by Gibbs (1877:170). The trade between the western and eastern sides

> . . . was once considerable. The western Indians sold slaves, haikwa [shells], kamas, dried clams, &c., and received in return mountain-sheep's wool, procupine's quills, and embroidery, the grass from which they manufacture thread, and even dried salmon, the product of the Yakama fisheries being preferred to that of the sound.

Writing of trade over the Cascades between the middle Columbia people and their nearest coastal neighbors, Teit (1928:121) states:

> A great impetus was given to trading by the introduction of the horse. Root-cakes, dried berries, buffalo robes, and many other heavy or bulky packs, which in former days it did not pay to carry, were now transported across the mountains. Before the introduction of the horse, the trading with Coast tribes was chiefly in light and valuable articles. Pipes, tobacco, ornaments of certain kinds, Indian-hemp, dressed skins, bows, and some other things, were sold to the Coast tribes, the chief articles received in return being shells of various kinds. Some horses were also sold to the Coast people.

Without question, the Upper Skagit were active participants in this trade network.

A very early report of the regular exchange of valuable coastal shells for wild hemp is that of Alexander Ross, on information secured from the Sinkaietk (South Okanagan) in 1814. In the years preceding his arrival, parties from this tribe were accustomed to cross the Cascades to carry on this trade. The shells were secured from the Skagit, or at least the journeying parties passed through the Upper Skagit country en route to the salt water. Ross (1956:37) puts the matter this way:

> The Red Fox [to whom the "Red Fox road" over the Cascades refers] . . . was the head chief of the Oakinacken nation and had formerly been in the habit of going to the Pacific on trading excursions, carrying with him a species of wild hemp which the Indians along the Pacific make fishing nets of; and in exchange, the Oakinackens bring back any marine shells and other trinkets, articles of value among the Indians.

The Skagit were also visited by Chelan trading parties (Walters in Spier 1938:77). Undoubtedly these, as well as visitors from other neighboring Plateau tribes, brought to the Upper Skagit the bow string—most probably of the Indian hemp referred to by Ross (cf. Ray 1932:89)—to which John Fornsby (in Collins 1949:295) alluded: the Upper Skagit "used to have good string from east of the mountains for . . . [their bows]." They also, it may be supposed, carried to the Upper Skagit the cream-colored grass—it grew "near a lake east of the divide" (Chelan Lake?)—for use in imbricating designs on their baskets, the basket hats worn by some women, and the plant perfumes used to enhance appearance (Collins 1974a:68, 72, 74).

In regard to downriver trade there appears to be little specific information. It is reported, however, that the Upper Skagit took dried salmon to the Lower Skagit country to exchange for blankets (Fornsby in Collins 1949:297).

Intertribal Relations

We are concerned here with Upper Skagit relations at a rather general level with other tribes, particularly those who held or at least used on a frequent basis the territory within the Park Complex and its neighboring areas. Relations involving intertribal marriage and hostilities are dealt with in the following two sections.

On the north the Upper Skagit were on a particularly friendly basis with the Nooksack and even the salt-water Swinomish. Similarly with the Stillaguamish immediately to their south. In fact, with this latter group the Upper Skagit shared their root grounds at Sauk Prairie between the Sauk and the North Fork of the Stillaguamish Rivers. (Collins 1974a:9, 11) In the neighborhood of Darrington the two streams, the former turning to the south as one ascends it and the latter bending sharply to the north, are within no more than 2.5 miles of each other. And they are separated here by a lowland area devoid of travel obstacles (USGS *Concrete* quadrangle 1955).

Occasionally crossing the Cascades to the Plateau, the Upper Skagit visited in a friendly fashion both interior Salishan-speaking groups (e.g., Okanagan, Methow, and Wenatchi) and Sahaptian-speaking groups (e.g., Kittitas and Yakima) (Collins 1974a:9, 13). Some of the Northwest Coast cultural influences that reached the Southern Okanagan came over the mountains from the Skagit (Spier 1936:3). However, the extent to which the Skagit were the travelers and carriers of these coastal objects and ideas and the degree to which it was the Southern Okanagan—or Chelan or Wenatchi, for example—who crossed the Cascades to Skagit territory is not stated.

To some extent Plateau tribes traveled the passes westward into the territory claimed by the Upper Skagit.

Upper Skagit made chance contact with these peoples sometimes in Skagit homeland and at times on the cross-mountain routes followed by these foreign groups in traveling to the Skagit area; typically the relationship was an amicable one. To the degree that data are available, these contacts are discussed in the Chelan chapter of this study. Upper Skagit contacts with the Thompson, on the other hand, are described in the following Hostilities section, to the extent that the data are derived from Upper Skagit informants and are described from their point of view.

Intertribal Marriage

Intermarriage not only between certain Skagit villages but also between Skagit and certain villages of other tribes occurred in a strongly patterned way, decade after decade. Parents preferred their children to live after marriage in some village where they already had relatives. Sometimes the residence-changing spouse was the man; not infrequently it was the wife. The Skagit had such regular marriage arrangements with the Nooksack, the Musqueam and Chilliwack and other Halkomelem peoples, the Stillaguamish, Snohomish, Upper Snoqualmie, and occasionally even more distant Coastal Salishan groups. Upper Skagit also entered into marriage alliances with nearby Swinomish and Upper Samish (Nuwhaha) persons to the northwest, but whether these were under the patterned structure or less formal in character is not known. (Collins 1974a:10, 11, 98-99) In addition, Smith (1940:11, 1950a:337) knew of one Skagit man who, in the late prehistoric or very early postcontact period, lived by choice in Puyallup country and married a woman of that tribe.

Some intermarriage occurred with nearby Plateau tribes on the eastern side of the Cascades, at least by the mid-1800s. These included the Okanagan, Methow, and Wenatchi as well as other nearby Salishan-speaking groups and Sahaptian-speaking peoples like the Kittitas and Yakima. (Collins 1949:291, 1974a:13)

Hostilities

The Upper Skagit were basically peaceable, fear of retaliation keeping hostilities at a minimum, even though "warrior" guardian spirits appear to have been quite important. They are specifically reported to have been at peace, for example, with the Snohomish (Haeberlin and Gunther 1930:12). And also with members of the Upper Stalo Tait tribe of the middle Fraser Valley just above Seabird Island. Tait hunting parties were accustomed to go back into the mountains several days' travel east of the Fraser. There they frequently met Skagit hunting groups without conflict (Duff 1952:21). These encounters must have taken place in the upper Skagit drainage which suggests that Skagit hunters may well have gone into the country some distance above Ross Lake, surely north of the present international boundary, and that Tait as well as Lower Thompson and Skagit made subsistence use of this mountainous back-country on occasion. It may be assumed that the Upper Skagit also maintained peaceful relations with the various peoples with whom they frequently intermarried (see preceding Intertribal Marriage section).

Raids, however, were occasionally carried out by Upper Skagit parties against other groups in response to raids by members of those tribes. They were mounted primarily by, or at least led by, men with guardian spirits relating to hostile activities. Such a "warrior" gathered interested men and a few strong women (wives of the men?) to comprise his party. The role of the women was to cook and perform other noncombatant services. No dances were held prior to the raid. The party usually went by canoe to a point some distance from the village to be attacked, hid during the night, and, leaving the women to guard the canoes, attacked just before dawn with bows and arrows, spears, and clubs. They killed all except those they wanted to enslave. Sometimes they burned the dwellings. Heads were taken to prove the success of the venture; usually they were not publicly displayed for any length of time. There was no victory dance. (Collins 1974a:115, 118)

Since raids were typically retaliatory in nature, hostilities tended to continue, back and forth, though at a very low level. The downriver Upper Skagit were most exposed to raids by other people, since most fighting occurred with coastal groups. Some of these lower Skagit Valley villages were palisaded. (Collins 1974a:114-115, 118) The Lower Skagit are described in the 1850s as having been "long at enmity with the Clallams, who have attempted to encroach upon their lands" (Gibbs 1855a:433). Presumably it was against raiding parties from this tribe—perhaps among others—that these village protections were constructed.

What little fighting was carried out by the upriver Upper Skagit was, according to tradition, mainly against the Thompson (Collins 1974a:115, 118-119). In fact, in early days their relations with the Thompson were apparently almost uniformly hostile. They considered the Thompson to be "different in language . . . , physical type, and culture from other visitors to Upper Skagit territory" (Collins 1974a:15), an appraisal which is essentially accurate on all scores (see, e.g., Thompson 1979:693; Boas 1895:547-549; Teit 1900).

There is nothing in the literature to suggest Upper Skagit raids into Thompson territory above the international border and no information, so far as I am aware, to indicate frequent early Thompson raids down into that part of the Skagit Valley where even the uppermost of the Upper Skagit settlements were situated. Rather the hostile encounters appear to have occurred in the upper Skagit River region—i.e., in the Ross Lake area and

the mountainous country within the Park limits—territory that was utilized by both Upper Skagit and Thompson in their subsistence quest. The Thompson came into this area, country that the Upper Skagit considered to be theirs, in winter and sometimes remained through the spring and summer to hunt and fish. It was during these periods that the Thompson, encountering Upper Skagit in the forest, killed the men and women, and captured the babies for slaves. (Collins 1974a:15)

Owing to our special interest in this group as rival claimants to the upper Skagit Valley (see Thompson chapter) and rival hunters in that region, the following summary by Collins (1974a:118-119) deserves quoting:

> The major enemy with whom the Upper Skagit were concerned was not . . . saltwater peoples, but the Thompson, . . . The northern headwaters of the Skagit River were in British Columbia not far from the Fraser River and its junction with the Thompson. The Thompson came south along the river, traveling on land.
>
> The Upper Skagit . . . feared the Thompson and regarded them as strange in a very different way from other Plateau peoples like the Methow, the Okanogan, or the Wenatchee. The Thompson earned this reputation by camping in the woods in a secretive way and not openly approaching the nearest Upper Skagit village and identifying themselves. They captured a few Upper Skagit as slaves and killed some others by torturing them, that is, running the living person through with a pointed stick and then placing him upright as though he was sitting on the ground for his relatives to find.
>
> The Upper Skagit tell of many warlike encounters with the Thompson. Finally they made friends with them. There were some intermarriages with them, and some Upper Skagit at the time of writing [date unclear but between 1942 and 1974] are part Thompson.
>
> Again the role of the Upper Skagit in this relationship was that of defenders of their own villages. They retaliated when forced to do so for their own protection. Some Upper Skagit still fear the Thompson and feel bitterness for children captured by them.

Among the Plateau tribes known to them, the Upper Skagit fought only with the Thompson (Collins 1974a:13). On the other hand, up in this same back country, Skagit hunting parties sometimes came upon Chilliwack hunting groups of the middle Fraser country, with hostilities as a consequence (Duff 1952:21). One may assume that these chance encounters took place on the northwestern side of the upper Skagit Valley or in the uppermost Nooksack drainage, in either case in territory assigned by Teit (1900:166) to the Lower Thompson (Figure 3-1).

The Upper Skagit had no memory of hostilities among their own settlements (Collins 1974a:13). Relations within the tribe are considered in the sociopolitical sections that follow.

Social Structure

Kinship Bonds

According to Collins (1974a:83), each large house was occupied by related families and, I gather, comprised a single household. Whether this was invariably true—after all some houses measured as much as 120 by 40 feet (Collins 1974a:19)—and precisely how the families interlocked in daily operational terms to form an integrated "household" is not made clear.

Residence following marriage was determined by the husband, who generally chose to continue to live with his father's household, thus continuing to hunt and fish with his own kinsmen. But when he considered it to his own advantage, he agreed, sometimes under pressure and persuasion of his wife's family, to join her household. Residence, however, tended to be impermanent: e.g., it changed with deaths and remarriages and sometimes with persons visiting relatives for long periods as parents visiting children and vice versa. (Collins 1974a:83-84)

Kinship was at the very core of the social system. Relatives, no matter how distant and whether by birth or marriage, were basically friends while non-kinsmen were *ipso facto* outside the group—suspected if not actual enemies with whom one competed in potlatching and of whom one thought the worst. As Collins (1974a:86) states: "The principal basic features of the [kinship] terminological system are that it is descriptive and bilateral and distinguishes relatives, according to generation, sex, age, and whether the intervening relative is dead or alive." (Collins 1974a:84-90)

In functional terms the central kin unit was that consisting of adult siblings: it was they who formed the core of the household. It was typically a male group of this kind that jointly erected and owned a dwelling, built weirs and set snares, sponsored potlatches, and cooperated in winter dances. These were joined by their sisters' husbands if resident with them and by their own male siblings who might be living in other households or even villages. The female side cooperated in a similar fashion, as in berry-picking, though because of predominant

patrilocality sisters after marriage were less likely to be members of the same household and so in a position allowing the perpetuation of a close relationship. However, because sisters often married into the same household or village, close cooperation of married sisters was by no means unknown. Close cooperation between brothers and sisters likewise continued following marriage to the extent permitted by the situation. (Collins 1974a:90-91)

In Upper Skagit society relations between close kinsmen were fairly well formalized.

(a) Parents were responsible for providing their children with the essentials of life and for disciplining and training them in the ordinary patterns of their society and in such special skills as they themselves possessed. Children were expected to respect their parents, to avoid joking with them, and to solicit and consider seriously their advice even when they had attained adulthood and had begun families of their own. Bonds between parents and children were very close and affectionate, particularly between those of the same sex. (Collins 1974a:92-94)

(b) Throughout life older siblings exercised authority over and assumed certain responsibilities of care and instruction for younger siblings of the same sex. And male siblings to some degree over female siblings. (Collins 1974a:90-92)

(c) The brother and sisters and the cousins of a man and his wife were expected to take great interest in the latters' children—their "nephews" and "nieces" according to the Upper Skagit kinship structure: "to train them, to discipline them (although the parents might not like this [for they were inclined to be especially strict]), and to assist them at ceremonies of their life cycle." These responsibilities increased if a parent of the children died. Nephews and nieces visited their uncles and aunts, were respectful to them, obeyed them, and eschewed joking with them as children. (Collins 1974a:94-96)

(d) Grandparents and grandchildren maintained a very warm and close relationship. The latter could speak more familiarly with them than with their own parents, even joke with them. Should a parent die, the children were most often brought up by the grandparents, frequently in the same house with the remaining parent but as a member of different family group. (Collins 1974a:96-97)

(e) The relationship between husband and wife, unless they were tied by earlier affinal links, was an uneasy one, at least until a union had endured for some years. Having come from unrelated families and generally different villages, they felt themselves as strangers and even feared the guardian spirits of their new partner. Their primary loyalties remained with their own individual kin groups. Often the wife sorely missed her relatives and earlier acquaintances. One's rights and obligations to one's natal family frequently conflicted with those to one's spouse. It is not surprising that a married couple for a time acted toward one another with something other than trust and real attachment.

Husband and wife shared the burdens of maintaining the new family, but the products of one's labors belonged to that person alone. Neither spouse inherited from the other. (Collins 1974a:106-107)

As Collins (1974a:107) reports, "parents-in-law were regarded as substitutes for the parents," especially in the case of women, who lived with their in-laws more frequently than did men. A woman was expected to show them the same respect and obedience as her own parents: she sometimes invited them to eat with her own family; she exchanged gifts with her mother-in-law. Some friction occasionally developed between her and her mother-in-law, but less often then with sisters-in-law. (Collins 1974a:107-108)

It was much the same for a man living with his wife in her parental home. He gave part of his game to his in-laws, and cooperated in the food quest with his father-in-law. The father-in-law, in turn, was expected to have the economic interests of his daughter's husband in mind: to teach him techniques, provide canoes and tools, even help him develop his skills as a shaman. (Collins 1974a:108)

Siblings-in-law were expected to treat one another like brothers and sisters. A man was in many ways dependent on the assistance of his wife's brothers: he often visited their village to secure food as their special seasonal resources became available or, if he lived in their village, relied on them to guide him in local hunting. A woman worked closely, as in berrying, with her brothers' wives before her marriage and, because of the usual patriolocality, with her husband's unmarried sisters after marriage. (Collins 1974a:108-109)

Siblings-in-law of the same sex were supposed to maintain a friendly, cooperative relationship in which joking was allowed. Often, however, tensions of rivalry and jealousy developed between them. As noted above, siblings-in-law of the opposite sex were potential mates as, when the connecting relative died, through the levirate or sororate. Theoretically they treated one another like brother and sister, but, as possible spouses, their behavior toward one another was inclined to be more constrained. (Collins 1974a:109)

The parents of a married couple showed respect to each other, exchanged gifts, and worked together to help their married children. (Collins 1974a:109-110)

Property and Inheritance

Individual ownership of land seems to have been limited to that by certain women of the root plots at Sauk Prairie and in the lower Skagit Valley to which reference has already been made. With this exception the

country in the vicinity of each village cluster—the fisheries, mountains, berry-grounds, and meadows—was common property of the villagers. These rights extended from the Skagit River up to the Skagit-Nooksack watershed on the north, to the Skagit-Stillaguamish divide in that direction, and to the Cascades on the east. But they became progressively weaker as these divides were approached.

> Nevertheless, Upper Skagit did not expect to find unrelated Nooksack, Stillaguamish, Thompson, Methow, or Okanogan on their sides of the divides. Persons who wished to hunt and fish in the locales of neighboring villages were expected to visit their relatives there first to announce their presence, their intentions, and to be given tacit permission. This was never withheld. Part of the objection to the Thompson incursions into Skagit territory was that they did not behave in these accepted routines. (Collins 1974a:80-81)

The key to the character of the Upper Skagit subsistence round is hinted at in the above quotation. Different parts of the tribal territory had their special food resources or varied in the abundance of the same resources. These were "owned" by the village clusters nearby. However localized in their occurrence, the foods came in fact to be widely distributed through the tribe by individuals and families visiting relatives as the latter's food resources became seasonally available and exploiting these sources with their kinmen owners. Under these conditions, the worth of large extended families and of village cluster outmarriage becomes at once apparent. Reciprocity was the key element in this arrangement.

Just as a person had the right through inheritance or by marriage to secure his food and necessary natural resources in the territory considered "owned" by his village, so he had the right on these same grounds to live in a particular dwelling. This right could not be sold or given away.

Individuals and families varied in their wealth, but, save for whatever differences in resource availability might come as the result of linkages with more or fewer kinfolk and belonging to different village clusters as mentioned above, each person and family had approximately the same opportunities to become wealthy. Inheritance of property was of minimal importance. Industry was highly esteemed and in general wealth was related to hard work and, in part, to the development of specialist skills. Abstemiousness in food consumption, care in using material objects, and downright hoarding were all culturally encouraged, partly because these traits led to good marriages and promoted the accumulation of property that could be manipulated in gift exchanges to augment family prestige. Certain guardian spirits, however, were thought to convey power to acquire material possessions and others to grant power—as in fishing or craft skills—that more indirectly led to wealth.

Slaves were very few and their effect on wealth and the economy was negligible. Multiple wives, on the other hand, were common and an advantage to a man because they produced many more baskets, blankets, and mats and so allowed the giving of potlatches which raised the status of the family and its relatives. (Collins 1974a:79-81)

Property passed from family to family in several ways. Visitors brought gifts for their kinsmen and in return received presents of equal value when the former became hosts to the latter. These formalized presents tended to be the specialities of the giver's village:

> People from upriver villages brought prepared skins, dried venison, mountain-goat wool blankets, and coiled baskets as gifts. In return those on salt water might give smoked clams, oysters, saltwater fish, and cattail matting. (Collins 1974a:77-78)

Formal gift exchanges occurred between parents-in-law and between them and the newly married couple. Potlatches distributed manufactured articles, raw materials, and prepared food. In the midwinter guardian spirit ceremony, sponsors and guests exchanged gifts. At death most of the property of the deceased—heirloom-type objects were held back—was taken by more distant relatives who hastened to the house and appropriated what they especially wanted; they were expected, however, to give the bereaved family something in return.

Through the operation of these exchange patterns, property was kept "circulating from family to family. Portable, durable items like baskets circulated widely, reaching villages many miles from their origin." There were no trading centers in Upper Skagit territory. On the other hand, people sometimes journeyed to the mouth of the Fraser River where there were "frequent opportunities for [property] exchange." (Collins 1974a:77-80)

Social Classes

Among the Upper Skagit there were two classes: a wealthy upper class and a poor lower class. In addition there were a few slaves, who were considered to be outside the class structure. (Collins 1974a:123)

The upper class comprised people whose parents had been upper class and most of whose relatives were of the upper class group. When they lacked the expected wealth, this was attributed to their lack of the proper

guardian spirits. The inheritance of property was an insignificant element since virtually all valuables of the deceased were given away; certain rights to natural resources, however, were inherited, as already noted. Many members of the class, especially if they were the oldest children in their family, had "honored names," acquired from an ancestor, particularly a grandparent, because of some physical or aptitude similarity. Its acquisition had to be publically celebrated either by or in a gift-exchange potlatch and witnessed and certified to by those in attendance. Upper class persons had to act as a potlatch sponsor at least once in their life. A few held slaves, a right limited to the upper class. (Collins 1974a:123-126; Suttles 1957:174)

Upper class people also strictly observed the recognized code of etiquette, as in eating in small bites, in being quiet, dignified, and unaggressive in public, in being truthful and even-tempered, in not engaging in loud quarrels or fighting with other family members, and so on. They were expected without fail to return a gift with one of greater value. (Collins 1974a:123-126)

Lower class people, it is said, starved in the winter through lack of stored food and "begged for dried fish from people who had them" (Collins 1974a:123). Even when, as a result of industry and daring—the consequence of possessing the proper guardian spirits—persons of this class accumulated wealth, they never fully mastered the behavioral patterns, the good breeding, required of upper class people. (Collins 1974a:123-126)

By and large, the Upper Skagit disapproved of slavery. "Everyone was the same," according to Fornsby (in Collins 1949:303), and so it must have seemed to one who, though Upper Skagit born, had lived his life with the Lower Skagit and other nearby coastal groups, where class distinctions were stronger than with the Upper people and slaves far more numerous. The few slaves of the Upper folk were obtained, Collins reports, either by purchase or capture; according to Fornsby, however, the Upper Skagit never went raiding for slaves. Surely Fornsby comes close to being correct: Upper Skagit parties did not often set out for slaves. In any event, they were supposed to come from distant groups to reduce the possibility of escape to return home.

Slaves were not supposed to marry free persons, though it occasionally occurred much against the will of the free person's relatives. Children of such marriages, though not slaves, had to live with the disgrace of their slave ancestry and could not take "honored names" or sponsor potlatches. Slaves were allowed to marry other slaves, their children also being slaves. They were sometimes able to accumulate property, but their behavior, it was felt, remained that of slaves.

Many village clusters (Collins' "extended villages") had one or two dwellings that "were regarded as 'low class,'" the others being 'high class.' Their origin is in doubt: perhaps they were established by men of partial slave descent or possibly they represented village expansions into locations less desirable for securing food. This information regarding their limited assessibility to subsistence resources makes it reasonably clear that Collins means that one or two *villages* within the larger village cluster were low class villages, not that one or two houses of a larger number in a single village were low class in their ranking. (Collins 1974a:129)

Concerning these class distinctions and possible Plateau relationships, Collins (1974a:129) states:

> This basic equality of the members of the society and the ordering of social relations by kinship and household groupings is characteristic of their nearest Plateau neighbors. It may reflect an old type of society found among Salish speakers, which at one time may have been characteristic of much of the inland and coastal area. The place names along the Skagit River in Interior Salish rather than Coast Salish . . . also suggest this possibility.

In addition to these two class and the slave distinctions, the Upper Skagit also recognized status differences between individuals within the same class. Certain persons, because of their higher level of achievement as, for example, having hosted a potlatch, were seated at ceremonies in the more prestigious places, received gifts first in potlatches, and were served food first at meals. But these were not firm, locked-in positions of prestige. It was up to the hosts on these occasions to establish their own order of precedence. These might differ somewhat according to the host and through time. (Collins 1974a:130)

Potlatches

While serving several less direct functions, the potlatch had as its principal objectives the validation of membership in the upper class and improvement of the social status of their sponsors and their families. They were also given to mark special events, such as the bestowing of an "honored name" and the passing of significant points in a person's life cycle: e.g., the termination of a girl's seclusion following her first menses to announce her marriageability and increase her eligibility, a wedding, a woman's first visit home after marriage, and a funeral. The most common of such occasions, however, was as a memorial to a dead ancestor, particularly on the reburial of the bones, the final tribute to the person's memory. They were not often given when one was named, the naming ceremony being commonly incorporated into a potlatch given for some other purpose.

Potlatches were held in the late summer or early fall when the chum salmon were running. They possessed a strong competitive aspect, especially overt in those in which guests vied physically for blankets and other

valuables thrown to them. But they were also happy, gay affairs, for they included gambling games and athletic contests like canoe and foot racing and wrestling. During them all persons were supposed to put aside the enmities which were certain to exist since guests came from various tribes. To give vent to these inappropriate feelings at the outset and promote amity during the rest of the occasion, the host customarily arranged a contest between guests already at the place as one team and each newly arriving group in turn as the other team. Persons who were pulled over a plank marker were expected to give gifts to the winners. Though this game sometimes became rough, all were supposed to put aside their differences during the potlatch ceremonies that followed. (Collins 1974a:131-137, 141)

Both sexes sponsored potlatches, but both a man and his wife as well as their relatives were intimately involved in a cooperative fashion in the event. The planning of such an occasion required as long as two years, during which time all gathered materials and made objects to be distributed and accumulated food for the feasts. When the ceremony was held, each participating family group came dancing into the potlatch structure, bringing their contributions. As the master of ceremonies distributed these materials, he named the contributor as he called the name of the person to receive the object. In this distribution upper class people could not be slighted; lower class people sometimes were. Receiving a gift at a potlatch erased any hurt feeling that a person might have acquired against the donor on some earlier occasion, but it also entailed a return gift of equal or greater value at some future time. (Collins 1974a:137-139)

People felt proud to participate in these ceremonies, even if only distant relatives of the sponsor, and to give objects away in them. In actual fact the Upper Skagit had little to give in traditional times, principally baskets, a few mountain goat and dog wool blankets, possibly a canoe or two, cedar bark, and unworked cedar and spruce roots for basketry. Furthermore, there was very little wasting of things and no intentional property destruction as farther north on the coast; the Upper Skagit simply had too little of everything. (Collins 1974a:137-139, 141)

Additional costs were involved in payments to the master of ceremonies, "who had a special guardian spirit in order to speak publicly," the male and female cooks, and the men who drummed with sticks in accompaniment to the singing and dancing.

Another sort of property distribution accompanied both the potlatch and the guardian spirit ceremonial. In this instance only men were participants as donors and recipients. The gifts were thrown from a house roof or from a plank platform across two floating canoes onto the shore or bank or into the shallow water. The property was scrambled for.

Still another form of gift giving occurred when a young man wished to improve his social status and enter the potlatch system without the expense of a full potlatch. Selecting a wealthy old man at the time of a potlatch, he woke him in the middle of the night and piled gifts on and around him, while the man taunted him to make him even more generous. Under pain of lowering his own status, the man was obligated to return to the young man property of still greater value at a later time. Awakened, the potlatch visitors enjoyed the scene and devoted the remainder of the night to singing. Women had a similar gift exchange, which, however, was apparently not part of the potlatch ceremony. (Collins 1974a:140-141)

Among the Upper Skagit hilarious "joking" potlatches were also held. In these the boastful speeches of the serious potlatch were mimicked and broken articles and spoiled foods were given away. Sometimes in these the women potlatched the men. (Collins 1974a:141-142)

The social and economic importance of potlatching was considerable, especially since, as noted above, property was not willfully destroyed. It resulted in a continual flow of articles and food through the population. While more and better goods went to the wealthy, the "scramble" and other distribution occurrences brought things and foods to people of lower status and class. As Collins (1974a:142) observes: "People who did not hunt in the mountains still could get blankets of mountain goat wool; women who did not know how to make the coiled baskets still received them." At the same time it developed in the people a lack of attachment to a particular object, for it was realized that sometime it might have to be given away. Similarly potlatch feasts were greatly anticipated: they brought an abundance of food and various kinds of food to people who ordinarily could not enjoy these luxuries.

Potlatches encouraged industry on the part of persons and families and stimulated the manufacture of articles of quality. They brought together people from distant villages and different tribes, even from enemy groups under a kind of safe conduct understanding, thus broadening the cultural and social horizon of all of the participating groups. Owing to their geographical isolation, this must have been of particular importance to the Upper Skagit. Through sponsoring potlatches, persons and families became well-known by name far beyond their own village and tribe. And potlatches provided a welcome period of social interaction: at the close of the event a guardian spirit dance was commonly held in which the host and his family members sang their wealth and warrior songs, these spirits, unlike others, being summonable during this warm season. (Collins 1974a:134, 142-143)

Intragroup Relations

Life within the community was "relatively peaceful" in traditional times. A pattern of consideration for and cooperation with others and of mild and inoffensive behavior was inculcated in the young. Most offenses that

occurred were handled by the individual or immediate family, if retaliation in any form occurred, without involving the larger community. In the case of serious injury or death to another, payment of an acceptable amount of "blood compensation" was generally agreed to by the heads of the two households involved and the perpetrator was compelled to undergo a period of seclusion in the forest, fasting, and bathing. Failing this peaceable resolution, a blood feud erupted. Similarly, smaller property payments erased guilt in lesser quarrels and offenses.

Every effort was made to avoid the inception of a blood feud. Because of widespread and complex interlocking consanguinous and affinal relationships, all people had divided loyalties. Feuds also severely interfered with the holding of religious ceremonies and potlatches and the pursuit of the subsistence quest, this latter requiring much seasonal travel along the river to fisheries and to root and berry grounds. Even after a conflict had been technically settled by proper payments, people feared to travel widely because of residual ill-will. (Collins 1974a:119-122)

One and perhaps two offenses, however, were regarded as so serious as not to be resolvable at the individual or single family level. This was sometimes so in the very rare case where a shaman was thought to have caused the death of several people through his supernatural powers. Members of the aggrieved families collaborated in ambushing him and striking him fatally at the same time to distribute the onus. Those involved in exacting this revenge paid no "blood money." Since ill-will lasting for generations was created by killing a shaman in this way, a more usual method of securing justice was by a family member or hired shaman bringing about the death of the offending shaman by supernatural means. (Collins 1974a:119-120)

Incest—sexual relations between persons with any known consanguineal bonds—was likewise considered an especially reprehensible crime, since such a union was thought to be barren or to produce children who would die young. Relatives of both the offending man and woman joined in killing the man. In any event, incest was a rare occurrence. (Collins 1974a:119-120)

Economic Structure: Division of Labor and Specialization

Tasks among the Upper Skagit were divided along two dimensions: between the sexes and between specialists, both male and female. Men hunted and fished, worked wood, stone, and bone, made the dwellings and canoes, and were the warriors and most shamans. Women dug and gathered the plant foods, "assisted in fishing and the drying or smoking of foods, prepared skins, made baskets, wove, and carried wood and water. They cared for children, cooked food, and kept house." (Collins 1974a:75) Rather informally, women also cured by supernatural power and recovered lost souls. This labor division, was, however, not entirely rigid. Men sometimes cooked, as on ceremonial occasions and when out hunting; helped the women of their family in gathering berries in the mountains, in carrying wood and water when women were busy, and even to some extent tended children. Similarly, women occasionally aided in canoe fishing, even to manning a canoe in a netting operation. Collins was told of one women who had been a famous hunter and another who had made canoes.

No specialists applied their skills on a full-time basis, but the amount of time devoted to them was proportional to the importance placed on the tasks by their fellow villagers, others having to discharge their normal daily tasks—like acquiring food—while they were otherwise occupied. Among the male specialists were shamans who cured and led the ceremonials; carpenters who made canoes and supervised the building of dwellings; men who directed the construction of the larger fish weirs; and warriors (a small group). Women specialists included those with particular aptitudes in weaving, coiling baskets, serving as midwives, and recapturing the souls of infants.

Specialists were hired for a fee by those requiring their particular services. Persons who performed occasional duties like those of cooking, making canoes and dwellings, drumming, leading songs at ceremonies, diagnosing and curing illnesses, and performing certain tasks at funerals were also paid. Payment was usually in goods—especially baskets, mats, and blankets—since the Upper Skagit had very little shell "money."

"Within the joint household, a head woman organized the labor of all the women." One might tend the children and another make baskets or prepare the food while most were out securing food. (Collins 1974a:75-77, 80)

Political Organization

Concerning what might be loosely considered the political structure of the Upper Skagit, Collins makes two summary statements: (a) each village cluster (Collins' "extended village") was politically autonomous; and (b) the only authority extending beyond the village cluster existed in the kinship system according to which "the oldest active man or woman in each generation of brothers and sisters and cousins [in the Upper Skagit extended sense] was the head of this generation" irrespective of where this individual resided. This leaves much untold. For example, whether the individual generations were somehow linked in some sort of older-

younger hierarchical system, though one might guess from other evidence that this was probably the case. Further, how affinal kin and nonrelatives resident in the village cluster—the first were obviously present and at least a few of the latter presumably so—were placed within this consanguineal kin-directed "political" system. Whether there was invariably only one set of these generational tiers in a village cluster, all residents being descendents of a single actual (or hypothetical?) ancestor, save for the affines and occasional residents of known outside origin. And finally, if there was more than one set in a village cluster, descendents of different known (or presumed) ancestors, how were these different parallel sets interlocked into a single, multi-family system. These and other serious data gaps aside, the village cluster authority structure possessed, according to Collins, the following characteristics.

Generation leaders normally gave no orders but led younger members of their groups by persuasion. Their advice was routinely sought and their approval secured by these persons in important matters, especially those requiring the cooperation of others like holding a potlatch or constructing a dwelling.

When weighty issues arose, these leaders called together their kin group within the village cluster for discussion and, if a unanimous decision was attained, for joint action. When truly important questions developed, a rare occurrence as whether a hostile shaman should be killed or a retaliatory raid against the Thompson should be mounted, siblings and "cousins" living in other village clusters within traveling distance were summoned. These assembly sessions could, in fact, be attended by nonrelatives in the village cluster or even by such persons in other clusters. In such assemblies anyone, man or woman, was privileged to speak, though generally only those with practiced oratorial skills did so. Others made their views known by private conversations with those who were sure to speak. If necessary, interpreters were provided. Action was contingent upon a unanimous decision. (Collins 1974a:111-113)

Apart from the kin leadership structure, individuals attained positions of prestige and prominence by becoming experts in house building, fish weir construction, driving game over cliffs or into ravines, presiding at group ceremonies, curing illnesses, and leading raiding parties. Others followed their leadership because—and only because—they individually gained from this participation as in sharing in the weir catch, and considered themselves fortunate in having persons with these abilities in their village cluster. These leaders exercised their leadership qualities only in the areas of their particular competence; indeed, as in the case of shamanas and raid leaders, they were sometimes distrusted and even feared when out of their vocational province. (Collins 1974a:113)

At the other end of the prestige scale, sluggards benefitted from the work of others, but were sneered at, insulted, and publicly demeaned for their lack of industry and cooperation in group tasks. (Collins 1974a:113)

Life Cycle

Pregnancy and Childbirth

Families looked forward to many children, possibly partly because of the high mortality among them. Nevertheless, they attempted to space births about two years apart: more frequent births were considered harmful to both the mother and the new child. Barren women were pitied, and were believed to have somehow displeased a supernatural being. Evidently abortions were occasionally brought about, for women herbalists were said to be able to produce them. (Collins 1974a:215)

Women with illegitimate children married, but less advantageously than otherwise. Their children were tended as carefully as other children, but were disadvantaged as they grew up by lacking the social benefits and status of other children whose fathers had given substantial property to their wife's family on marriage, had had a large wedding potlatch, and could receive an "honored name." (Collins 1974a:215-216)

There was no general preference for children of one sex over the other. Where such existed in a particular case, an attempt was made to control the sex of a birth by placing sex-associated objects (e.g., a bow and arrow or basketry) under the sleeping platform. (Collins 1974a:216)

A pregnant woman observed certain restrictions, some magical and others credible from our point of view. Among the former were taboos against eating fresh salmon and the practice of undressing by removing clothing downward. The latter included watching her weight, walking a good bit, and remaining active. She was also expected to bathe twice daily in cold river or lake water. (Collins 1974a:216-217)

Birth was in the winter house or summer camp, apparently generally not in a specially constructed shelter. If no temporary partitions were erected in the dwelling to insure privacy during the delivery, children were sent to a nearby house. The woman was attended by a midwife, either her mother or another of her relatives who was often a specialist in aiding births. The father gathered large quantities of firewood to insure that she was kept warm. The birth was accomplished in an erect position over a mat, the woman holding onto a house post. In cases of prolonged or difficult births, a shaman with special guardian spirit power was summoned. (Collins 1974a:217)

The birth of twins was regarded as a disaster, a sign of supernatural disapproval. The mother was thought

to become "like a wild animal" and the father lost his guardian spirits. The twins were exposed to die, sometimes placed in trees near the house. The parents had to purify themselves by bathing twice each day and scrape their bodies with boughs. (Collins 1974a:217-218)

Postpartum practices were numerous. The infant was rubbed with grease by the midwife. The afterbirth was safely buried and the umbilical cord preserved, often secreted in a tree hollow. For a few days the infant was sometimes fed juice from salmon or cooked grouse. For about two weeks the mother rested and bathed in cold water, partly to aid in healing her birth injuries and partly to remove possible supernatural dangers to her husband and children. The husband swam morning and night for the next six months. (Collins 1974a:218)

The infant was kept in a board cradle—less frequently a basketry cradle—for two years, with cedar bark padding between it and the board. Its legs and arms were fastened to the board to keep them straight; its head was protected by a cloth or mat thrown over a half hoop attached to the top of the board; its forehead—perhaps only in the case of upper-class children—was gradually flattened as a mark of social status and a feature of beauty by a padded board, buckskin strip, or bag of sand pressing against it. It was diapered with soft, shredded cedar bark and wrapped in mink skins, soft fur inside, before being fastened on the board. The cradle was suspended by two straps from a tree branch when the mother worked outside. In the house it was hung from a bough brought inside and inserted in the ground upright and swung back and forth with a cord to rock the infant. In traveling, the board was carried on the mother's back, suspended from a forehead tumpline. (Collins 1974a:218-219)

Babies were nursed at their own demand. The mother increased her milk supply by squatting, wrapped in a skin or mat, over hot rocks upon which water had been poured to steam her breasts. Infants were removed from the board for cleansing twice daily and as it grew older allowed to be free of it when awake for increasingly long periods. When they began to toddle, the board was abandoned, but the child retained great affection for it, sometimes wanting to be tied to it when sleepy and dragging it around with him when awake. (Collins 1974a:219-220)

Naming

Naming ceremonies could be held in infancy, the time depending "on the type of name and the wealth and social ambitions of the parents." Children without special names were called by nicknames, many alluding to physical appearances. "In daily speech, people most commonly referred to each other and addressed each other by kinship terms." (Collins 1974a:220)

Special names were of two types, guardian spirit names and honored names. Both were respected, the former relating to the religious life and the latter to the social class and rank system. A parent sometimes gave the name of one of his guardian spirits to his child in the hope that the spirit would protect the child; this was a highly secret name never used in daily speech. As an adult, a person might even take as his name the name of one of his own guardian spirits. These names were not sex-specific. In Collins' view, this spirit-based naming system was related to that found in the Plateau. (Collins 1974a:220, 222)

The "honored name" was an upper class cognomen of very high prestige customarily given by a grandparent to a child or even an adult after consultation with the kin of his generation and the parents. If it was his own name rather than that of a deceased relative, he changed his name since it had become the property of its new owner. The particular name chosen in such cases reflected the person's similarities in "personality, talents, and intelligence" to the ancestor whose name he inherited. A potlatch for this purpose or a special smaller ceremony in a potlatch given for some other purpose was held to announce and validate the naming. This was a "happy, gay affair." Honored names, most untranslatable, were either male or female names unlike those relating to the guardian spirits. This naming system was, Collins reports, related to coastal culture. (Collins 1974a:220-222)

Childhood

Until four or five years of age, children were usually treated with relative leniency, especially by grandparents, and fed when hungry. They were toilet-trained once they could walk. Within an extended family in a single dwelling one woman, especially fond of small children, often took care of all the family's nonnursing offspring to free their mothers for other tasks. However, children were frequently taken by their mothers when they went out to pick berries or dig roots. (Collins 1974a:222)

From the age of four or five years to puberty children followed a different regimen, relatively strict in some ways. Each morning they were awakened by an adult "trainer," whipped four times as they lay on their mats, and sent to the river or lake to bathe before they could warm themselves before the fire. This was required even when on the upper reaches of the Skagit River in the mountains where there was considerable snow and ice in winter. To avoid their children's hostility, parents preferred to have a "trainer" perform this unpleasant task for

them. This practice had its associations with the guardian spirit world but was also one aspect of the procedure for developing physical hardiness. (Collins 1974a:222-223)

Both boys and girls were encouraged to fast, again partly because this was thought to attract a guardian spirit and partly because it trained boys to be active (e.g., in hunting) later in life even when food was scarce and girls to be careful of food so a surplus could be accumulated to make her family after marriage wealthy. (Collins 1974a:223)

Children from about four years on were trained to acquire guardian spirits, as noted below. At night they were told the myths and traditions of the tribe. (Collins 1974a:212-213, 223, 224)

When approximately eight years of age children began to receive regular formal advice concerning how to treat old people and other appropriate adult behavior from parents and other older kinsmen. Girls spent their time with their younger siblings and their female family elders. A girl "took care of younger brothers or sisters, dug roots, carried water, and learned to do household tasks." Boys were trained by their fathers and older male relations, the father's brothers more often than the mother's because of the tendency toward patrilocal residence. As soon as they could understand, they were taken fishing: taught how "to handle a canoe, [to] make nets, fishhooks, and lines; and [to] do all the other tasks necessary to the varied fishing operations. Both boys and girls were taught to respect fish, especially salmon, not to make fun of them or wantonly to destroy them when they were running." (Collins 1974a:224)

When five or six, a boy was given a small bow and arrows and his first small kill was made the occasion for rejoicing and much public praise. When it was dangerous or otherwise inappropriate to accompany fathers away from the village, small boys stayed home with the women, older people, and girls, often playing in gangs sometimes to the point of being mischievous and even destructive. Small girls enjoyed playing together with imitation houses, house furnishings, and people. (Collins 1974a:224-225)

Puberty

Puberty marked a great change in a girl's life. During her ritual she lived for six weeks alone in a special, small, well-built house constructed exclusively for her use. She observed many regulations, supervised by her mother or some other older female relative. She was considered dangerous, especially during the first five days of her menses and then again after the next four days had passed—her "dark days." During these "dark" periods only her mother was supposed to see her: she wore a hood over her face and had her face painted red. During the other days of her seclusion—her "light days"—she was visited by her female relatives on both her mother's and father's side of the family, who made a point of giving her behavioral advice and sometimes presents. (Collins 1974a:225-226)

Once daily the girl was brought food by her mother. Both in the morning and in the evening she was led by her mother to water where she dived four times and bathed, rubbing her arms and legs with a long willow wand so she would have a long life. Back in her special house, she had her hair combed by her mother, since she was forbidden to comb it herself. Nor was she allowed to scratch her head except with a scratching stick. She expectorated only in baskets that she had made, containers that were thrown away. And she was given tasks like making basketry. All these duties and prohibitions were designed to insure that in this condition she could not harm herself and anyone else and that in later adult days she would lead a safe, long, and productive life. (Collins 1974a:226-227)

At the end of this period of seclusion, the girl returned home, though she had to go back to her special house during her next three menses to fast and bathe. This sequence of periods of isolation behind her, she was given a dinner by her family and was regarded as eligible for marriage, although this was normally delayed for some years. During this interval she learned under her mother's tutelage to cook and perform the other tasks of the Upper Skagit woman. She was kept under the watchful eyes of her mother and other female relatives; she no longer, for example, went out on spirit quests. She was not, however, secluded in a compartment within the house as was the practice among coastal groups to the north. (Collins 1974a:227-228)

Boys underwent no puberty ceremonial. Their guardian spirit searches intensified and they took over a greater share of the adult work of males. (Collins 1974a:228)

Some irresponsible behavior was anticipated of adolescent boys and girls, which explains in part why a newly married couple remained under the authority of their parents until they had their first child. (Collins 1974a:228-229)

Marriage

Most men and all women married in the normal course of events. Marriage between persons of any "blood" relationship was prohibited and punished: i.e., in Upper Skagit terms between people out to and including three degrees of consanguinity. This regulation, as well as the economic and social advantages of developing cooperative kinship links with persons of different village clusters, was responsible for what amounted to a

village outmarriage pattern. On the other hand, intermarriage into villages in which relatives already lived was considered most desirable, for the in-marrying woman—it was generally the wife who left home on marriage—thus had kinsmen to guide and take her part. It was to guarantee the presence of a close relative, affinal in this instance, that the best marriage arrangement was thought to involve a woman's union with the brother of her brother's wife: i.e., a brother-sister exchange arrangement. Parents also preferred to have children marry into not too distant villages so that they could see them at least yearly, and into villages with cultural patterns, including foods, similar to their own. (Collins 1974a:97-99, 106)

The Upper Skagit maintained marriage links with the Nooksack as well as with other nearby coastal groups of no direct relevance to this study. Given the considerations outlined in the preceding paragraph, it is understandable why fewer marriage unions took place with Plateau people than with coastal folk. When, however, Plateau marriages occurred, the man was apparently normally from the east, though Collins fails to make this point. According to her, however, the Plateau man ordinarily moved to Upper Skagit country rather than the wife crossing the Cascades. (Collins 1974a:98)

First marriages of the more structured and honored variety were arranged by older relatives, the wishes of the young person being rarely considered. The father played the formal role or, if he was dead, an older brother or an uncle. It was especially important for the partner to be of the same class or higher if possible, wealthy, diligent, strong, and healthy owing to the rigors of travel and the food quest, intelligent, and of good nature. Relative ages were a minor consideration.

Prior to the marriage no courtship occurred. In fact, the couple might never have seen one another. Most marriages involved persons who had been previously married, in part the consequence of great pressures on a woman to marry a deceased sister's widowed husband and on a man to do the same with a deceased brother's wife. The rationale for these "sororate" and "levirate" marriages was that they guaranteed that children would have stepparents that were related to them and who consequently might be expected to treat them better than might otherwise be the case.

The marriage discussions could be quite relaxed or could have their formal elements, sometimes pursued only in a ceremonial fashion after the marriage had already been agreed upon. As an example of a formal pattern, a boy brought firewood bark to the girl's house on four occasions, to have it thrown out by her father the first three times. If he allowed it to remain inside on the fourth occasion, the boy's suit was accepted. Or the young man brought property to the entrance of the girl's dwelling, but was barred access by her father until he had returned one or more times with additional gifts. In any event to legalize the union, a payment was made to the bride's father or another of her male relatives, the first of a long series of property exchanges. (Collins 1974a:229-230)

A wedding ceremony was usually held: sometimes a small wedding dinner, sometimes a ceremony made part of a potlatch scheduled for some other purpose, and rarely a full-fledged potlatch with an expensive feast. "These events were financed by the families of both the bride and the groom," but were celebrated at the bride's home to which the groom's group came in canoes. On this occasion the couple received lectures on the responsibilities of marriage and all enjoyed the good and abundant food. Marriages were legalized by gifts of property by the husband and his relatives to the bride's family. The value of the marriage gifts influenced the social position of the children. (Collins 1974a:104, 230)

Marriages that were not arranged, at least not formally, occasionally occurred. Marriage dances attended by young unmarried men and women with their relations were held: in these a man sang and danced around a room and as he passed the girl he favored put a feather in her hair. Leaving it in place on the fifth occasion indicated that she had accepted his marriage offer. Collins (1974a:102) believes that this dance custom, which was poorly integrated into Upper Skagit marriage patterns, "may have been an introduction during the . . . [1880s] from the Plateau." Also as a very rare occurrence a woman wishing to marry an already married man went with some female relatives to the man's village and fought with his wife. If she was victorious, the man "was expected to marry the victor" (Collins 1974a:102-103). Such forthright action was considered, however, most unfeminine, for women were supposed to be courteous and gentle. Whether following such marriage arrangements a formal wedding of any kind took place is not stated. (Collins 1974a:99-103, 229)

Post-marriage residence was the choice of the husband, but was generally virilocal: i.e., with his family. This meant that usually the wife had to adjust to a new life with new companions, who in general might be expected to favor her husband. However, because of the prevailing pattern of marriage exchange, she could normally anticipate finding some "blood" kin in her new community. Furthermore, she could properly expect to make frequent and sometimes long visits back to her own family. Until the birth of their first child—or until they had given up hope of offspring—the couple were under the authority of the parents with whom they were residing. (Collins 1974a:230-231)

At the end of the first year, if all went well, the couple, with their first-born and some of the husband's relatives, visited the wife's parents and received gifts equivalent to the earlier bride price with interest. This visit was an altogether happy occasion. Still people continued through life to feel most comfortable with and to have the greatest attachment to their own "blood" kinsmen and to the degree possible continued to carry on many activities with them.

Most marriages were monogamous. Multiple wives, however, were permitted. Where the man was a great hunter or entered such unions to care as stepfather for a deceased brother's children or to provide his own children with a closely related stepmother, as in the sororate, more than one wife was regarded as especially honorable. Cases of as many as ten simultaneous wives, where husbands were upper class and wealthy, were remembered by Collins' informants. (Collins 1974a:103-104)

Divorce was rare in traditional times, partly because people wished to avoid leaving children with a stepparent, partly because no one wanted to return property acquired during the marriage, and partly in the case of the wife because she was afraid to travel alone back to the village of her family. It was certainly easier for a man to leave his wife than the reverse. "Acceptable grounds for divorce were barrenness of the wife, physical cruelty, or adultery." (Collins 1974a:104-106)

Neither male nor female transvestites were known among the Upper Skagit. (Collins 1974a:106)

The middle years of adult life were vigorous and productive and ideally brought respect and social status. It was the time of the guardian spirit return and of giving potlatches, if a family was fortunate in accumulating with the aid of relatives the necessary food and wealth. (Collins 1974a:231)

Old Age and Death

By their own choice the elderly—even the blind and otherwise physically handicapped—continued to work up to their physical abilities. If, however, they were ill or feeble, they were carefully tended.

As death approached, a person's guardian spirits left. His soul also departed, came to a river or lake, and was welcomed by the ghosts already there. In a rotten log the ghosts paddled across and ferried the newly arrived soul to their village in the land of the dead, which was like the living world except not as pleasant. The ghosts of all former relatives lived in the same dwelling, as their kinsmen did on the Skagit. They spoke a language—understood in real life only by shamans—in which the sounds of words were reversed. They strongly resisted all efforts by earthly shamans to recover a newly-arrived soul-ghost. (Collins 1974a:232)

Bereaved husbands and wives cut their hair to their shoulders and hid the clippings to prevent others from exercising hostile "contagious magic" with the cuttings. To make it difficult for the newly generated ghost to touch a living relative and so capture his soul and bring about his death, a surviving spouse, child, or parent usually left the house for a time. The closer the relative and the stronger the affection for the dead person, the longer the period away from home. The dwelling was rarely burned following the death of one of its occupants. The rapid distribution of the property of the dead person among the relatives, for which return gifts were later made to replenish the family's necessities, reduced the attraction of the ghost to living close relatives. (Collins 1974a:232-233)

The body was kept for four days, burial being on the fifth day. Men or women were paid to sit with the corpse at night through the period. A man with special "power" qualifications was hired to supervise the burial. He dressed the body and bound it tightly in cedarbark mats. (Collins 1974a:77, 233)

Several methods were followed in disposing of the corpse: it was buried in a shallow grave, the least prestigious method; it was placed on a plank or in a canoe (or canoe half) and tied in and to the branches of a tree; or it was put in a small wooden house constructed on stilts, the least common method. The most expensive and prestigious burial was in the canoe—or half a canoe or even two canoes, one upside down on the other—since these objects were very valuable. Some of the person's most valued objects were placed with the body. (Collins 1974a:233-234)

The man in charge, with his helpers, carried the body to the graveyard. Occasionally he removed it from the dwelling through an opening created temporarily in the side by the removal of a plank. All the guests followed the body to the burial locality, many of the women wailing. After the interment, all retired to the house for a feast and perhaps a potlatch. (Collins 1974a:233-235)

After the death of a spouse, the survivor was expected to fast and to bathe and scrape his body with boughs to remove all lingering contamination from the death. About ten years following a death, the person was honored with a potlatch if the family finances could support the ceremony, and the bones, cleaned and rebundled, were reburied, placed in a tree, or buried in a box in the house floor. Actually bones "of a number of dead persons were usually reburied on the same occasion." (Collins 1974a:235)

Religion

Guardian Spirits and Spirit Power

In traditional times the spirit world "permeated nearly all other aspects . . . [of Upper Skagit culture] and was . . . the central theme of their lives" (Collins 1974a:144). This world manifested itself above all in the guardian spirits and their relations with living people. These spirits were so numerous and so varied in their characteristics, powers, method of acquiring a human "owner," and so on that the description that follows can only

suggest their general features, present a few examples of specific spirits, and intimate the complexities of this supernatural world and its significance to the people.

Guardian spirits were of two basic types: those that bestowed on persons lay powers, such as those for fishing, hunting, woodworking, fighting, or acquiring wealth; and those that gave shamanistic powers useful for curing or killing by supernatural means. They were acquired as explained below. Individual spirits of the lay class became personal helpers of virtually every man and woman; those of the shamanistic variety appeared only to the few who were to develop shamanistic knowledge and skills and who, it may be observed, possessed lay spirits as well. (Collins 1974a:144-145)

Much of the year the lay spirits lived in their spirit world, with the exception of the warrior spirits and a few others that were believed to travel most of the year. After the persons with whom they had developed their personal relationships (their "owners") reached adulthood, they came to them from time to time during the year when they needed their supernatural assistance. A person needed only to speak the spirit's name to summon it, a fact that explains in part why people were very reticent to speak of their spirits in casual conversation. Each winter the spirits also came to their "owners," who, at some considerable expense, sometimes sponsored a "dance" for them. Shamanistic spirits, on the other hand, remained close to their shaman, one reason why people feared these persons, available on short notice to be called to aid in curing. (Collins 1974a:145)

The nature of the spirits is summarized well by Collins (1974a:146):

> Spirits were associated with many but not all animal species, the elements, and natural phenomena like lakes and strangely shaped boulders in the Skagit River. Some spirits had only human characteristics. (All spirits, those linked with animals included, had also a human or semihuman form which they could assume at will.) Certain spirits could be obtained either as lay or shamanistic spirits but not all spirits had this dual potential.

The spirits were very numerous. Those that gave both lay and shamanistic power were mostly those of mammals, though they included both the eagle and hummingbird as well as a spider variety found east of the Cascades, a point of particular interest to this study. Spirits that were exclusively shamanistic appear to have comprised no mammals but a number of birds and likewise minnows, a lizard, and a snake. Other spirits were associated with trees (e.g., the cedar), with meterological phenomena (e.g., rain, rainbow, thunder), with topographic features (e.g., Mt. Baker), and with the winds of the four directions; whether these were lay or shamanistic supernaturals or both is not reported by Collins. Spirits with human or semihuman form were all physically peculiar or deformed, or dwelled in unlikely or impossible places (as underwater), or possessed unusual supernatural skills like the ability to cure smallpox. In the spirit domain there were even beings that granted the ability to prophesy, eat to excess, lead singing, pound sticks in rhythm, and make berries and roots grow. The spirits were, in short, essentially numberless in terms of both their identity and the specific powers they endowed.

Each spirit category (e.g., blackbear or eagle) had its unique native name and each individual spirit in that category had its particular name that was revealed only to the one person with whom it developed the protector relationship. (Collins 1974a:146-147, 150)

These guardian spirit beliefs led to a very special attitude toward animals in general. The Upper Skagit "saw animals as humanlike in their motivations and desires. They believed that man had to show respect toward them." Since many animals were associated with guardian spirits, the appearance of an animal, especially under somewhat unusual circumstances, caused people to wonder whether its associated supernatural was attempting to communicate to them. Children were taught not to kill animals or insects that might be related to the spirit helpers of their relatives and that, therefore, might later become their own tutelaries. Nevertheless, people were permitted to kill food animals—like bears—even if they "owned" the guardian spirits of these animals. (Collins 1974a:213-214)

Lay Spirits

Among the many lay spirits were the wolf, blackbear, and grizzly, all three of which granted hunting power. It was believed that bears could become human and that people with bear spirit helpers could change into bears. A special ceremony was held for the first bear killed in the spring. The raccoon and wildcat helped their "owners" in various ways. Hummingbird was an important curing spirit. Among the several wealth spirits were one which, in human form, "lived [in a house] at the bottom of a deep place with swirling water in the Skagit River," a two-faced woman, one who dwelled in a house beneath the waves in salt water, and a little bent-over man spirit who assisted men in hunting and fishing and women in making basketry and other crafts and so both sexes in accumulating wealth. (Collins 1974a:147-153)

A particular female spirit, with long head and body hair, protected the dwelling, insisted on a neat house, guarded the family when traveling, and made people lucky in catching salmon. A giant spirit which lived in

swamps and wore moss on its head walked through the forest knocking over trees, making trees appear to burn, and creating a great noise as it moved. A spirit associated with Mt. Baker caused berries to grow on the slopes of that mountain. The cloud spirit, like the rain spirit itself, made driving rain. Several different spirits were associated with prophecy. There were spirits, too, that animated "guiding objects": vine maple boughs; flat, square cedar boards with four holes, painted white and red; objects made of mountain goat wool mixed with cedar bark and twisted into an "e" shaped loop; painted cedar ducks with handles on each side; and still other objects. The duck power was obtained by diving to the bottom of Big Lake in the lower Skagit Valley. A person with these spirits could make these objects come to life and compel people holding them to move at their will. The cedar boards, for example, gave power to fish successfully and led persons holding them to hidden objects and people who were lost. The ducks, in turn, provided their "owners" with the power to bring ducks down out of the air where they could be killed and also protected dwellings. Lay spirits likewise protected the people residing in houses and, coming in human guise, gave curing instructions. In use, the "guiding objects" were grasped by two men. While the owner sang, the object was motivated by the spirit, which pulled the men about. (Collins 1949:293 fn. 6, 1974a:153-156; Smith in Collins 1949:339-341)

A skeleton-like spirit, although of the lay variety, was atypical in giving one who possessed its power the ability to cure illness; but it likewise caused sickness by entering another person and brought about his death unless removed shamanistically. Two spirits who spent the entire year "flying around the world" were acquired by being close to a person who already had them. One was distinguished by being human in form, wearing an elaborate costume with eagle feathers, and granting war prowess. A person who fell sick with this spirit ran wildly off into the woods, heedless of possible injury, and had to be captured, restrained, and kept from biting pieces of flesh from onlookers while he sang the spirit song and danced to satisfy the spirit and return to normal. (Collins 1974a:160-167)

A few Upper Skagit possessed dog spirits that caused them, when they first acquired them, to be "killed" by others who already had these spirits and who comprised a kind of secret society. Taken to the woods for five days by society members, they were brought "back to life" and then returned to the village. There, prevented from biting spectators by being held back with cedar bark ropes, they passed through a ceremony that included devouring a dog and were returned to a normal human state. Since the Upper Skagit lacked this society, persons who secured this spirit were compelled to undergo this initiation in one of the nearby tribes who had the society. (Collins 1974a:166-168)

The Upper Skagit had and used no masks, nor did they have curing or true secret societies. (Collins 1974a:169)

Shamanistic Spirits

One of the most highly regarded shamanistic spirits was the two-headed snake, associated with the rainbow and thunder. Others were the lizard, which aided in hastening infant deliveries and on the evil side could be used to kill; an owl-like spirit that helped in recovering lost souls from the land of the dead; the loon spirit that had power to cure any illness; and the spirits of the whale and spider, both of which assisted shamans in curing. (Collins 1974a:169-171)

Criteria of Spirit Ownership

The "ownership" of one or more guardian spirits was attested to, in the Upper Skagit view, by success in life: specifically wealth, fighting prowess, physical health, and general well-being. Accordingly, no one feared a poor man for supernatural reasons, for his poverty was proof enough of his lack of power to harm through supernatural helpers. (Collins 1974a:172-175)

The possession of guardian spirit power was sometimes demonstrated publicly in a contest context. A man challenged others with the same spirit as his who were present at the time to best him by performing more spectacular feats of supernatural power. The loser was deeply embarrassed and might even die by having his guardian spirit purloined by the victor. (Collins 1974a:174-175)

Acquisition of Guardian Spirits

It appears that virtually every Upper Skagit man and woman, possibly in fact every one, secured at least one guardian spirit at some point in life. These essential helpers could be acquired at any age. From about four years of age to puberty, boys and girls—both needed supernatural power equally badly—were sent out in search of them but occasionally might even obtain one around the house. Later in life, too, they could be secured if one wished. It was critical especially for a child first to become clean and pure through a period of fasting and bathing in isolation. In general, the longer one fasted and bathed, the more powerful the spirit that one secured. Children were told what spirit to seek (e.g., a hunting, fighting, gambling, or curing spirit) and for some spirits was given an object associated with the spirit to take along on the quest: e.g., a bow and arrow for a

hunting or fighting spirit. Fearing to go out alone especially at night, children were forced to go on the search, through sometimes prepared for the experience by being sent alone on errands to other houses at night. To be certain that they had gone on their search where told to go, children were sometimes given an object to leave at the quest site; a parent checked the locality the following day. They were sent, for example, to a lake where they dreamed of a spirit house under the water, woke and descended into the lake, became unconscious and met the spirit, and woke dry on the shore with a spirit-given song clearly in mind. Breaking one's fast while on a quest (even eating berries) was most serious, resulting in an early death. Few adults, however, sweat-bathed before setting out on a quest, a practice common among Plateau tribes. (Collins 1974a:171, 172, 175-180)

If an animal, the spirit invariably appeared to a person as a human and in this form gave him his specific powers, sometimes even a choice between lay and shamanistic power. It apprised him of how to use the power, taught him his spirit song and dance, and instructed him concerning the clothing he must wear and the fasting he must observe during his winter initiation dance. This information conveyed, the spirit turned around and changed into its animal guise as it disappeared. (Collins 1974a:180)

If a child, on returning home from a quest, avoided his parents and went to sleep at once, his parents knew that he had acquired a spirit and the following morning sent him to bathe and fed him a little food. From that time on until, as an adult, the spirit returned to him, the child was supposed to forget his experience. Some winter years later he fell ill and his sickness was diagnosed as the consequence of his spirit coming back to him. Still, soon after his spirit experience, he was expected to show its effects by exhibiting special aptitudes of some sort. (Collins 1974a:179)

In general, a person acquired spirits that had belonged to an ancestor, either on the father's or on the mother's side. Because spirits were so numerous and everyone, or nearly all people, had them, those available from the ancestral group were considerable in number. When a person was about to die, his spirits left him—sometimes dramatically as with thunder and lightning in the case of a thunder spirit—and remained in the vicinity, each attempting to become a supernatural helper of the dying person's siblings, children, or even more distant relatives. If these spirits failed to develop this relationship, they returned "to wherever they came from." Later in theory they became the powers of unrelated people. A person could also send one of his spirits to protect a descendant in difficulty; whether he himself lost it in the process is unclear. Guardian supernaturals could also be stolen by shamans and hidden in the mountains, causing illness in the person losing it and even his death. (Collins 1974a:180-183)

The Shaman

The shaman was a specialist in diagnosing and curing (as well as causing) illnesses with the aid of his supernatural powers and in conducting shamanistic ceremonies. The amount of time that he devoted to this practice was dictated by his reputation and the size of his clientele. It was a rewarding specialty since he received payment both for the diagnosis and, if he attempted a cure, for it as well. When not engaged in "shamanizing," he hunted, fished, and performed daily secular chores like any other Upper Skagit. (Collins 1974a:190)

A person became known as a shaman only when he (or she) began to practice publicly, often only after reaching middle age and after having some quiet successes within his immediate family. Success in attending ill persons was considered to demonstrate the "ownership" of the necessary supernatural power and the guardian spirits from which this power was derived. Among the Upper Skagit there was no shamans' society to certify his skills. Though several shamans might work together on a difficult case, there were no bonds among them otherwise; generally, in fact, they were suspicious and hostile toward one another, an attitude to which explicit expression was given, for instance, in their serious public power contests. (Collins 1974a:190-191)

A shaman tended to have many and especially powerful supernatural helpers. Most of these were lay spirits, but one or more had to be shamanistic in nature, since it was from them that he obtained his power over illnesses. Shamanistic spirits were secured by fasting in the forest in the usual way. They were even thought to be easier to acquire than lay ones, since as ancestral tutelaries they were more insistent on being taken over by descendants. They were, however, more dangerous and hence more feared than the lay variety. (Collins 1974a:191)

Persons who were to become shamans were considered to be somewhat different at any early age owing to their apparent interest in and ability to gain supernatural power. Moreover, they and their relatives sought to promote these differences. They also possessed certain behavioral quirks: e.g., they were quick to take affront and slow to forget, traits that, retained into adult life, led to taking supernatural revenge. When their spirit returned to them later in life, they did not fall ill as persons with lay spirits did but simply began to cure. They held a winter dance, however, which, I take it, served to call general attention to the fact that they were beginning to practice. Shamans could summon their spirits at any time during the year, unlikemost lay spirits which returned only during the winter season. (Collins 1974a:190-194)

The same shamanistic spirits could be used—indeed, sometimes insisted on being used—to kill as well as

to cure. A shaman harmed another person either by sending one of his own lay or shamanistic spirits into that person or by taking away one of the latter's own spirits. The former could be accomplished by certain supernaturally threatening gestures in the presence of the person. He could even send his spirit to enter a victim a long distance away. When the person became ill, he assumed some of the idiosyncratic behavioral patterns of the hostile shaman—like a peculiar cough—which aided a curing shaman in identifying the person responsible. (Collins 1974a:194-196)

Alternatively, a shaman could harm a person by taking his spirit and hiding it in the mountains, burying it, or throwing it into a river. He might even accomplish his purpose by merely looking intently into the other's eyes; this was one of the reasons why children were taught to fear and avoid strangers. Sometimes the curing shaman could see the lost spirit but, owing to his lesser powers, found it impossible to recover it. (Collins 1974a:196)

The typical curing ritual is of some interest. Shamans who were "blood" relatives of sick persons were preferred, since there was always the possibility that a non-relative would have a lesser interest in the patient's welfare and in fact, if he were a local person, might even have caused the illness for the sake of the fee. An alternative to the summoning of a kinsman was to call a shaman from a distant village, but this was costly. Shamans were even known to sing a single curing song and then demand a fee (e.g., a deer skin) before singing a second one. They actually received a fee, though a smaller one—even if the person died. (Collins 1974a:196-197)

Illness caused by an intrusive spirit was cured by the shaman's sucking the foreign spirit out of the ill person, generally without leaving a mark, and plunging it into water in a cedar-root basket beside him. There his spirit and the intrusive one sometimes fought one another until drops of blood appeared in the liquid. Finally, the enemy spirit, in the form of a worm or insect, was retrieved from the water by the shaman. When the sickness appeared to be the result of spirit capture, the shaman dispatched his own spirit to hunt the missing power down, capture it, and bring it back. (Collins 1974:197-198, 208-209)

When a harmful, intrusive spirit was removed from an ill person and captured, it could be disposed of in several different ways. It could be returned to the offending shaman, the usual procedure unless he had sent this same spirit to perform its odious task as many as three times previously. In cases of repeated offenses, it could be sent to the mountains, buried, or placed in a river to prevent its return to its shaman owner, causing him to become sick or suffer some physical disability (e.g., deafness or blindness) unless he possessed other powerful spirits as well. But if an evil shaman who had caused endless trouble proved too powerful to be injured by supernatural means in punishment for his string of excesses, his neighbors, banding together as a last resort, ambushed and killed him. Because the provocation for this deed was widely recognized, no interfamily feud resulted but the act generated ill-will that persisted for generations. (Collins 1974a:198-199)

Shamans likewise cured two types of illnesses not caused by supernatural means under the control of hostile persons: (a) those brought about by an animal, a particular white worm, or a tiny red insect that entered the body and fed on it; and (b) those resulting from the loss of the soul, as distinct from the guardian spirit. (Collins 1974a:199-200)

It is of considerable interest that the dramatic shamanistic curing ceremony involving the use of "power boards" that was so characteristic of the tribes just south of the Upper Skagit—the Snohomish, Skykomish, and Snoqualmie among others—was not part of the Upper Skagit curing complex. These boards were fashioned of planks carved with a vaguely anthropomorphic or bird-resemblant "head-like" top and were sharpened at the lower end for insertion into the ground. The flat surfaces were painted with simple geometric and semirealistic animal designs. Boards were always used in pairs. These and the accompanying elaborate rituals were considered essential elements in recovering the soul of an ill person among the groups immediately south of the Upper Skagit. (Smith 1941:205, 1946:310-311; Wingert 1949b:78-80)

Shamans as Ritual Leaders

An entirely positive function of the shaman was to act as the ritual leader of the community. One example: as a part of his central role in curing a person when his guardian spirit first returned to him, the shaman helped him sing his spirit song, saw that he obeyed his tutelary's food and other behavioral restrictions, and protected him from the possible dangers of supernatural harm by hostile guests at the ceremony. His various ritual services were so highly regarded by his community that he received from it great prestige and authority. A shaman was especially well thought-of by his own relatives, who customarily expressed their approval by regarding him "with great respect and affection." (Collins 1974a:205)

Winter Spirit Dance

As already mentioned, a spirit first returned to a person when he had become an adult. Typically the "owner" fell ill and his sickness was determined by a shaman to be the consequence of his spirit's return and

desire for acknowledgement in the form of a winter dance and property distribution. If he were not to die, the ill man was obliged to sponsor such a ceremonial. An announcement of the coming event was sent to relatives in other villages; other persons with the same spirit were aware without this information of the spirit's return. These kinsmen were expected to gather all the food and gifts they could spare and hasten to the village of the ill person, lest he die before the rite could be performed. Arriving at the "power" structure, they danced into it single file, placing their food and property in the center so all could see how much they brought. A master of ceremonies, a well-respected relative hired for the occasion, announced the arrival of each group. The ill person lay in one corner. The shaman who had diagnosed his illness was likewise present. Then a "singer," guessing the probable identity of the initiate's spirit from his earlier behavior and particular accomplishments, tried various spirit songs. When he hit upon the correct one, the ill person rose and, supported by two kinsmen, danced four circuits of the house. The entire assembled group then sang his song, accompanied by a skillful drummer who had to get the rhythm precisely correct. Spirit singing could not be carried out properly by the individual: it required the help of others to be satisfactory to the supernatural. During this ceremonial period, the initiate was compelled to observe the restrictions given him at the time of his spirit experience or of its return lest the spirit leave him: e.g., fasting, drinking no water, singing the proper song and dancing the appropriate steps, dancing a specific number of days, wearing certain paraphernalia like deer-hoof rattles and red facial paint. When he tired, another person took his place, singing his song until the initiate himself was rested. At the close of his singing period, others with the same spirit power were permitted to sing their guardian spirit songs, though few except kinsmen of the initiate availed themselves of this opportunity out of fear that their spirits might be stolen. (Collins 1974a:172-175, 183-186, 288)

Also part of the ceremony were spectacular demonstrations of supernatural power, feasts of abundant food, and formal addresses beginning with an expression of gratitude to all relatives for attending. Distributions of the property gathered followed, kinsmen being especially favored, though in early days the Upper Skagit had little to give away: perhaps a mat, a basket, a part of a blanket, or raw materials (e.g., basketry fibers or wool). Return gifts were made at some future time, but this property exchange was not a principal element in this winter guardian spirit dance as it certainly was in the potlatch. (Collins 1974a:187)

Guardian spirits were supposed by the Upper Skagit to bring success, including wealth. Substantial property was necessary to give the winter ceremonial validity: to demonstrate that the ritual sponsor actually possessed the guardian helpers he claimed and to permit the ceremony to be accepted as a proper response to the spirits' demands. When a man who acquired a spirit was too impoverished to subsidize this ceremonial with his relatives' aid and died as a consequence of this failure to reply to the spirit's requirements, the Upper Skagit system was faced with a contradiction that appears never to have been resolved. (Collins 1974a:188)

The Soul

The soul was considered to be an entirely different entity from the guardian spirit. It was "a nonmaterial, life-giving essence" possessed by each person. It was generally invisible, though it could be seen by persons who had been given this power by a guardian spirit. When out of the body, it was thought to be identical to the body in form but smaller. It might leave a person in a dream, returning before he woke. On a trip, the soul might precede a person to his destination without harm to the person. It could also be taken from a person with untoward consequences unless it was soon recovered. (Collins 1974a:200)

Soul loss was at least sometimes diagnosed on the basis of the actions of the person. At times the soul of a person was taken by a ghost of someone who had died, if the living person mourned the death too deeply. For ghosts tended to remain in the vicinity of relatives in the hope of recruiting companions on their journey to the hereafter. In this after-land life was quite like that on earth but somewhat less pleasant. A new arrival was visited by the deceased kin of people still alive to inquire about the well-being of their relatives. In addition, living people were thought to visit the land of the dead several times for brief stays before their final death. (Collins 1974a:200-201, 204-205, 207)

Shamans who specialized in recovering souls were believed to go to the land of the dead to bring the soul back. As they made the "journey," they described their progress in detail to spectators at the ceremony: their search in the land of the ghosts for the soul, frequently hidden by the ghosts to prevent its recovery, their fight with the ghosts for the soul if such occurred, and their return journey with the missing soul. With his soul restored by the shaman, the ill person recovered. It was possible for shamans in the ghost country also to steal the souls of persons dead for some time and to bring them back to enable them to be reincarnated as reborn infants. (Collins 1974a:201-204, 221)

Souls could also be stolen by supernatural beings associated with unusual natural phenomena along much of the Skagit River. For example, near Rockport stood a large cedar tree with long hanging moss. If a person walked near the tree, it took his soul, threw it across the river to another tree that hurled it back, each time with the sound of thunder. And so it went back and forth, causing the person's death unless retrieved in time by a

shaman. "Near the junction of the Suiattle with the Sauk lived a dangerous supernatural being . . . who is described as an 'animal.' People who encountered this being in the woods might die." (Collins 1974a:214)

Religious Sanctions

Upper Skagit religion had its price in time, property, and anxiety as well as its benefits in explaining the unknown and unknowable in life, in bringing the ill back to health, in tying the group of relatives together for their general benefit, and in supporting through the guardian spirit system the right of people to be different. How was this complex religious system maintained? Largely through fear of spirit retaliation through illness and death as a consequence of failure to conform to the beliefs and practices of the system. And illness—the prelude in the Upper Skagit mind to death—was a source of substantial difficulties to one's family. Other kinsmen had to assume his or her normal duties that were essential to the functioning of the family: the subsistence quest and the manufacture of the objects required by the ceremonial life. Others had to contribute to the costs of the curing ceremony. And the entire family might well lose social status through the family's inability to do its part in subsidizing large family and public functions. (Collins 1974a:206)

On the other hand the positive rewards of proper and full participation in the supernatural system were also considerable. It kept alive and flourishing the beliefs and practices regarding the guardian spirit world, the supernaturals that gave people their individual powers that resulted in success in the practical and religious world, in good health and a long life, in children, and in wealth, high status, and respect. (Collins 1974a:207)

Magic

Magic among the Upper Skagit belonged to a different realm from the guardian spirit world of religion. It involved no supernatural tutelaries but rather charms for success in love and hunting, for improving the appetite, for curing sickness, and for preventing fatigue. These charms worked with a certainty if one knew the correct actions to follow and formulae to utter. When one wanted what could be gained by magic, one hired a man or woman who possessed the necessary knowledge to work the necessary spell. (Collins 1974a:207-208)

Malevolent magic occurred also but was of even less importance than good, sanctioned magic. While aware of the practice of making a small image of a person and damaging it to produce the same injury in the person represented, the Upper Skagit claim that they themselves never practiced this custom.

Both men and women, though few shamans, were the owners of magical lore. But in comparison with the guardian spirit system, magic was relatively unimportant. (Collins 1974a:208)

Diversions

Concerning the traditional diversions of the Upper Skagit—art in the narrow sense, dance, and music as well as games and smoking—virtually no data appear to exist.

Art

Prehistoric stone carvings, anthropomorphic in form and some as much as 2 or 3 feet high, have been found along the upper reaches of the Skagit River (Smith 1950b:27). In light of this fact it is curious that no mention of these Skagit figures seems to be made by Wingert (1949b) in his detailed study of native Northwest Coast sculpture.

In ethnographic times coiled baskets were ornamented with designs worked upon the basket surface by the imbrication process: popular patterns were frogs, butterflies, salmon back-fins, fish gills, fish nets, and a small fly. Upper Skagit women took great pride in their coiled baskets. Presumably the ornamentation of skin clothing and facial painting provided opportunities for simple esthetic expression, but the ethnographic literature is largely silent on the subject. Dwelling posts, which were sacred, and at times the house front around the entrance were carved and painted with the guardian spirit designs of the house owner. The external, self-standing totem poles of the coast were unknown. (Collins 1974a:63-64, 68-69)

Music

At least as late as the 1940s when Herzog (1949:93-109) reviewed what was then known of the music of the Salishan groups of coastal Washington and British Columbia and the interior of that province, the musical traditions of the Skagit were still very poorly described. Nevertheless, enough was understood of the principal musical characteristics of this large group of tribes to suggest that those of the Skagit could hardly have been significantly divergent. With this premise accepted, Skagit music must have been very like that of the Chilliwack in sharing both the general North American Indian characteristics and the particular traits of Salishan music and

in being performed with the same inventory of musical instruments. These data are summarized in the Chilliwack chapter that follows.

Mythology and Folklore

As Hess (in Hilbert 1985:xviii-xxiii) has written in a fine summary of the characteristics of the old myths from which the following is borrowed and synthesized, the Lushootseed-speaking Salishan tribes of Puget Sound (including the Skagit and others south to the Puyallup and Nisqually) separated their tales into two categories: "myth-age tales" and "history." "Personal accounts" of the news and individual experiences constituted a third, non-traditional genre. The myths, in turn, may be divided loosely into two varieties, a distinction apparently not made by the Indians themselves: (a) rather light, humorous myths, which, while "reflecting the foibles of human nature," taught proper behavior by detailing the unfortunate consequences of tabu-breaking; and (b) longer myths that "examine[d] the world order and deal[t] with points of tension within the social fabric [and in which their] . . . major characters were heroes who acted wisely rather than impetuously or foolishly as in the lighter stories."

Myths deal with the early time when all beings shared the traits of animals and people and possessed supernatural power and human emotions. They had, however, many of the physical and behavioral characteristics that animals possess today. As Hess illustrates:

> These characters, each with human and animal traits, provide[d] the reconteur with great flexibility . . . to draw upon on one or the other of these attributes as plot, imagination, and sense of humor require[d]. . . . [T]he sisters Boil and Hammer [in their myth] . . . looked and acted just like people, except they ate only berries. At the same time, however, they were like a real boil and a real stone maul. Therefore, Boil burst when a fir needle fell on her head and Hammer drowned when she fell into the river because, after all, she was stone.

With the aid of their supernatural power, they were able to perform superhuman and superanimal feats. During this primitive time-period there were several worlds—e.g., a sky world and one of the Salmon People—more or less similar to each other and with travel possible between them.

Particularly prominent in the Lushootseed myths were three unprincipled, impulsive tricksters: Mink (a rake), Raven (a glutton), and Coyote, borrowed in tales from the nearby Plateau east of the Cascades. Their episodes are immoral, dishonest, farfetched, and humorous. While tricking others, they themselves were often tricked. They were also capable, however, of performing occasional heroic deeds, like procuring daylight.

These myths are of special ethnographic interest in that they reflect facets of traditional culture. For example, their beings are organized into rather loose high and low classes with slaves at the bottom. High class beings are wealthy in goods, natural resources, and rights to songs, dances, and ceremonies, possess strong supernatural powers, and are influential in their villages. Low class people, in addition to lacking the above, are often uncouth. Movement between the two classes is possible by gaining or losing wealth and developing competence and exhibiting correct behavior, and by acquiring guardian spirits. Sibling rivalry is prominent, with the youngest of the series invariably getting the upper hand.

It is, of course, impossible to reflect in these traditions as written the teller's informative but non-lexical expressions, emotions, rhythmic and pitch variations, vocal mannerisms, and so on, as well as the fragments of song often incorporated into the tales.

As time passed, a transformer of great supernatural power walked through the Lushootseed world, changing as he went these mythic beings into humans, animals, and plants and the landscape into its modern form.

So much for the generalized picture of the mythology of this group of linguistically and culturally closely related people, which included the Lower and Upper Skagit. Fortunately, we have from Collins (1974a:211-212) a parallel generalized description for old Skagit mythology alone. It is of interest to compare her data with the preceding geographically much wider summary of Hess. In some ways it conforms well; in other ways it differs somewhat. But the Collins material is important in its own right, for it offers a fair amount of new information.

According to Collins, the past was divided by the Upper Skagit into two periods. The first was a remote, mythical time when animals were much larger, had the ability to speak, and behaved like humans. Then the world was different from now: there were no death and no mountains and the rivers followed different courses from the present. This old world was transformed into the one of today by several mythological figures, including Raven and Mink (coastal myth personages) and Coyote, who, as the Upper Skagit stated, came to them from the Plateau. (Collins 1974a:211-212)

But their most important culture hero was an entity in human form that was associated with the sun. He "was entirely a benevolent being, noble and upright," not a trickster. A fine supernatural, he reduced the "animals" of the mythological period to their present size and their present wholly animal, generally non-threat-

ening status, altered the world's topography to its current configuration, and taught humans arts and crafts. But he also occasionally changed people into striking stone formations still to be seen today. Such was the odd-shaped stone, once a woman, near Portage on the Skagit River. Addressed as "grandmother" by the Upper Skagit, she was believed to supervise the fishing on the Skagit above the mouth of Cascade River. People from villages upriver from Marblemount asked her respectfully for fish when they went for them and thanked her for her favors as they passed her. (Collins 1974a:211-212)

Raven, Mink, and Coyote were all mythological trickster transformers, supernaturals in the form of these animals but as large as humans, capable of speech, living in houses, and to a certain extent behaving like humans. "They were greedy, mischievous, and lacked the nobility and disinterestedness" of the highminded transformer described in the preceding paragraph. Of the three, the Raven was the most important, a being who never hurt anyone though he was responsible for death owing to a bit of short-sightedness. (Collins 1974a:212)

Myths were told in evenings for the children, who were expected to sit just so and be attentive. To increase interest and give the tale a vitality of its own, a good raconteur changed his voice for different characters and added details of his own choosing. (Collins 1974a:212-213)

Folklore, in contrast to myths, told of events that happened after the world became as it is today, including happenings to ancestors of living people. All were localized either on the Skagit River or its tributaries or in the country of neighboring tribes. Many dealt with encounters of people with guardian spirits and many possessed a moral content, exemplifying the importance of caring for the aged, the handicapped, and stepchildren, of observing the levirate and sororate, and so on. (Collins 1974a:213)

Several collections of myths and legends in whole or in part from the Skagit have been published. These include (a) Hilbert's *Haboo* (1985) with 17 tales told by Upper Skagit, 10 by part-Skagit, and two by Sauk-Suiattle reconteurs; (b) Haeberlin's (1924) "Mythology of Puget Sound" with 13 Skagit myths; Langen's (1984) "Four Upper Skagit Versions of 'Starchild'"; and Elmendorf's (1961a) "Skykomish and Other Coast Salish Tales" with one myth reciting an occurrence at the Skagit River mouth.

Cognitive Culture

Conception of the World

The world was believed to be an "immense round island . . . in an ocean" surrounded by a high wall. Behind this barrier was the pitch-black world of the guardian spirits, when they were not with humans, and of the Salmon People. Annually these salmon folk passed through an opening in this wall in their canoes and once beyond this obstacle tumbled from their canoes to become salmon and ascend the rivers of the Indian world to spawn. The sky, some believed, was a roof above which the stars lived as people. "The sun, the moon, certain individual stars, and constellations of stars were regarded as associated with supernatural beings." (Collins 1974a:209-210)

Calendrical Concepts

Traditional Upper Skagit months were lunar months. At least some had names that were meaningful in terms of the procession of the animal behavior through the year. Thus the third moon was the "moon when the frogs come out and begin to sing" and the eighth was the "month when the spring salmon . . . [i.e., chinook] spawn." (Collins 1974a:210)

Secular Medicine

The Upper Skagit possessed an extensive knowledge of curative herbs and other substances, a third means for curing ailments quite apart from both the guardian spirit and the magical systems. Most herbalists were women. If shamans administered plant medicines, this was entirely distinct from and secondary to their guardian spirit powers.

With herbs or bark steeped in water, sore eyes, headaches, constipation, and urine retention were treated. Broken limbs were set in splints. Ill persons were encouraged to remain in bed as little as possible. Contagion, though explained in guardian spirit terms, was understood and prevented by isolating in the forest the person affected. (Collins 1974a:209)

Use of North Cascades National Park and Ross Lake National Recreation Area

Such fragmentary data as have been located in the ethnographic literature are assembled—and extended by a certain amount of reasonable speculation—into four sections: the subsistence use of the Park Complex, its

use as sites for villages and task camps, its use in travel routes, and such other secondary uses as may be identified. Source citations are omitted in this section where the data can be found in the preceding topical discussion.

The Upper Skagit were described by Eells in the late 1800s as a group that "roamed in the Cascades mountains." Subsequent ethnographic information confirms this statement. The tribe claimed as a part of their traditional country the mountainous middle or upper Skagit Valley and nearby high country north to the international boundary, territory wholly within the Park borders. This northern line is, however, obviously unrealistic from a geoecological perspective, an artifact of today's political world. Evidently Upper Skagit parties at times went a bit farther north up the valley and its side mountains, far enough to encounter hunting parties from the Tait tribe, whose particular homeland was on the Fraser River between the Agassiz bend and the mouth of the Fraser River canyon. Realistically, this northward roaming could hardly have been a frequent occurrence, for the Upper Skagit, if Collins is correct, laid no claim to this north-of-the-present border country and, moreover, would surely have made use first of the natural resources of the Skagit Valley and high lands closer to their winter villages. In addition, the Lower Thompson regularly hunted south of today's Canadian line within the Skagit drainage, sometimes as far downriver as the Beaver Creek region and, in fact, considered this area to be their proper hunting and gathering territory. Coming from the west, the Chilliwack, in their turn, entered the Skagit River country within the confines of the present Park. Plainly we have in the Ross Lake region an area claimed and routinely utilized as food-source territory by the Upper Skagit and Lower Thompson and at least used to some extent by the Chilliwack and perhaps even by the Tait, though not claimed by these last two groups. Encounters in the area between Upper Skagit and Lower Thompson often, possibly even generally, generated moments of tension, with hostilities the consequence. Contacts between Upper Skagit and Chilliwack were sometimes inimical. Those between the Upper Skagit and Tait were, however, generally friendly, perhaps because they must have occurred in the northernmost periphery of the Upper Skagit tribal range and because they were, it may be conjectured, relatively rare events.

Consistent with these data, Upper Skagit culture, while having its coastal-resemblant traits, likewise possessed others that were clear adaptations to an inland, mountain environment. These adaptations included, for example, an extensive use of large and small game, of roots, and of berries as food, the wearing of moccasins and other skin clothing when the weather was cold in the mountains, and the possession of gear to assist in cross-country travel—snowshoes in winter and, in protohistoric or at least early postcontact times, a few horses for open season use. It is cultural baggage of these sorts, about which we, unfortunately, know so little, that so sharply points toward a broad utilization of the mountains and high forests and their animal and other resources throughout the year, and that, accordingly, indicates a consistent and thorough exploitation of that part of the Park area to which the tribe laid claim. Indeed, there would have been no reason for the Upper Skagit to have claimed territory which they failed to make use of in some measure: no neighboring groups would have considered legitimate any such empty claims.

Further, the fact that a significant part of the Upper Skagit winter population cannot be accounted for in the known summer villages and camps along the upper Skagit River seems best explained by the presumption that during the warmer months a considerable portion of this missing population was off in the mountains—many within the Park region—pursing their subsistence activities in small task groups. On the other hand, as noted below, there are a few fragments of ethnographic information that suggest some reluctance on the part of Upper Skagit folk to spend more time than necessary in the high country, in particular the stated dislike of the women to dig roots in the mountains.

Subsistence Use

The region of the Park and Recreation Area in and above the Skagit River gorge between Newhalem and Ross Lake was utilized by the Upper Skagit primarily as a subsistence source area. Among the nearby tribes these Skagit people, in fact, held a reputation as hunting specialists. Parties journeyed into the Ross Lake region throughout the warmer seasons in search of game, like deer and elk, that could be found to some extent also at lower, downriver elevations, but more particularly of those animals that either spent these months typically in the higher country or were limited by their habitat preferences to these loftier elevations. In this latter category, according to the ethnographic data, were the grizzly bear and especially the mountain goat that furnished robes and wool. This white wool was woven into cloaks and blankets that were something of a specialty of the Upper Skagit and comprised an important item of trade.

It is obvious that the ethnographic sources provide an incomplete catalog of those animals native to the higher mountain terrain of the Park Complex that were taken by the Upper Skagit for food or their other products (like peltries). A more exhaustive list of indigenous fauna can be compiled from the zoological distribution maps of Dalquest (1948), a task simplified by the fact that the entire Park lies within the Cascade Mountains Mammalian Area. Animal use information culled from ethnographic accounts of other tribes in the vicinity of the Upper Skagit territory reveals that these forms, in some cases in different taxonomic varieties, were hunted,

trapped, or killed as chance provided by one or more of these groups. Hence it may be presumed that they were likewise secured to some degree by the Upper Skagit within the Park boundaries. The roster includes, in addition to the grizzlies and mountain goat, the Canadian lynx, fisher, red fox, and western marten whose range did not extend much if at all beyond the western border of the Park. Found widely in the high country of the North Cascades Complex and also westward outside the Park were beaver, black bear, bobcat, cougar, coyote, deer, elk, ermine, marmot, mountain beaver, pika, raccoon, snowshoe hare, timber wolf, and weasel.

Anadromous fish certainly occurred up the Skagit River within the Park as far as Newhalem (presumably as far as the gorge) and were taken by the Upper Skagit in this sector. Whether they ascended the river through the gorge and into the Ross Lake region I do not yet know. In any event, fishing within the lake sector seems to have been a rather incidental pursuit.

While the men were engaged in their hunting tasks in the mountains, women were occupied in processing the meat and other game products. To some degree they were also root gathering, berrying, and collecting and preparing for later consumption other plant substances according to the season. For some unexplained reason, as previously noted, Upper Skagit women rather disliked root digging in the high meadows. Perhaps the soil tended to be conspicuously more rocky than on the flood plains farther down the Skagit and on the lower Sauk and Suiattle. Possibly the task of transporting the processed roots back to the winter village was too laborious, for the tribe traveled overland to a considerable extent as well as by canoe along the stream courses. It may be that women were uneasy in the elevated country out of fear of resident supernaturals. And in the Park region the possibility of meeting hostile Lower Thompson hunters and gatherers was always present. Whatever the explanation, they preferred to avoid securing their root supply in the high country.

Berries were extensively utilized as food by the Upper Skagit. When not preparing meat, women in the mountains devoted considerable attention to berry collecting and processing. Some of these berries, like the mountain blueberry, were typically high country fruit, while others were gathered, in their season, in both lower and higher elevations. But how many berry varieties were harvested within the Park borders and how great were the quantities of each kind are not reported.

Off in the northwesternmost corner of the Park, in the upper Baker River sector, the Upper Skagit of that stream country must likewise have spent at least some of their open season time in similar hunting, fishing, and collecting activities high up on the mountain slopes.

Related to this subsistence exploitation pattern of the mid-year months was a shift from the large, concentrated riverine winter and salmon-fishing villages to dispersed gathering camps with their temporary mat, lean-to shelters. During the summer hunting, root-digging, and berrying periods, the Upper Skagit of the permanent villages scattered to the various grounds to secure their food resources. In the process task groups were formed from members of various winter communities and these groups, while they existed, were as firm as the membership of the winter settlements. Thus the social units that prevailed in the Park region were not come-and-go, loose coalescences but closely-knit groups, though precisely how these links were expressed if not overtly formalized is not made clear. Nor are we informed of how the membership in a small summer grouping was determined. Owing to the importance of kinship bonds in Upper Skagit social life, it seems probable that each was largely a cluster of families, from various winter villages, that were related closely or distantly through kinship. Such an arrangement would have the advantage of bringing together for a time kin units that saw far less of one another during the remainder of the year than the families resident in a winter settlement and so of reaffirming the common relationship links of the larger kin network.

Village/Camp Use

Three traditional winter villages of the Upper Skagit are known to have been located within the confines of the Park Complex. All three were on the Skagit River: a large winter dwelling at Newhalem, a small winter house of three families east of Thornton Creek, and a large winter dwelling "at Portage, west of Damnation Creek," all within a stream stretch of some 5 miles. Without question, the residents of these communities must have been among the tribal members who made the greatest use of the resources of the Park. Other winter villages as well as summer settlements began immediately below the point where the Park boundary today crosses the Skagit River. Surely the people of these slightly more downstream settlements must also have visited the Park on their subsistence and other resource forays, though possibly to a somewhat lesser extent than the occupants of the three villages of the uppermost village cluster.

While there were, at least in ethnographic memory, no established settlements, winter or summer, inside the Park Complex above the Newhalem community, task-oriented camps must have been occupied for brief periods while the neighboring meadows, streams, and mountains were scoured for their resources. Unfortunately none of these camps can be located from the extremely meager ethnographic data, the principal interests of which are focused on the main salmon river areas of the tribe to the west and southwest.

Special note must again be taken of the northwestern corner of the Park where an Upper Skagit village was located on Baker River within a very few miles of the Park boundary. From this community hunting and foraging

parties must have regularly gone year-round into the upper Baker River country and the mountain flanks bordering the valley, and hence well inside the Park limits.

Trail Use

Only four old Indian trail routes into or through the Park and Ross Lake Recreation Area can be defined with some confidence. One led up the Skagit Valley to enter the Park Complex above Marblemount, to follow the river northward through the Ross Lake sector, and to leave the Area at the present Canadian border. This was the water and land route by which the Upper Skagit moved into the Park country to pursue their resource quest activities, whether largely by canoe or on foot the data do not reveal. It was likewise the route followed by the Upper Thompson in journeying southward from their Fraser Canyon village centers to attend to their food and other needs in the high mountain terrain of the Park. Unless they kept canoes at or near the point where, having come overland, they reached the upper Skagit River (as the Upper Skagit folk did at the head of Lake Chelan), they must have used a land trail down the river, but whether on the east or west side of the stream or both in unknown.

One or more trails led into the Park from the upper Chilliwack River region. Parties of the Chilliwack tribe are reported to have been encountered by the Upper Skagit in the Park river country, the area considered by the latter to be their tribal domain. The most obvious route, it would appear, would have been via Little Beaver Creek.

A trail to the east broke away from the Skagit River at the lower end of the present Ross Lake, ascended Ruby Creek and Granite Creek, and continued eastward over Rainy Pass into the upper Methow Valley. It soon left the Park region, actually about 4.5 miles above Ross Lake. Another trail moved up the Cascade River, proceeded along its North Fork, and came into the Park about 1 mile upstream from the mouth of the Fork. Still within the Park limits, it threaded the mountains through Cascade Pass and descended the Stehekin River to Lake Chelan. While other paths also passed eastward over the Cascades from traditional Upper Skagit territory, these apparently all crossed the mountain crests somewhat south of the Park perimeters.

A considerable amount of trail travel must have taken place, even in old, prehorse times, by small parties of Upper Skagit and Plateau Indians, moving east and west, with trading, visiting, and other objectives in mind. Apparently the Rainy Pass route mentioned above was not the east-west trail most followed; evidently it was a path that led through one of the more southern mountain breaks. According to the Upper Skagit, cross-Cascades movement was particularly undertaken in deep winter on snowshoes. The reason, though not reported by the ethnographer, seems rather plain: while the weather was obviously less hospitable and subsistence game on the trail was less plentiful, the trails were more easily traveled when deep snow covered the rough path—the rocks, snags, windfalls, low and tangled bushes, and the like. Temporary traveling camps were positioned, of course, along all of these trails, but their locations are not defined to my knowledge in the scanty ethnographic and ethnohistorical records.

Other Uses

It is axiomatic that Indian groups living in high altitude areas or journeying to them with task-specific objectives made as extensive use of the natural resources of these regions as possible within the needs defined by their culture, their knowledge of the terrain and its products, and the time they had available. These uses included not only those that the group considered primary, like, for the Upper Skagit, the hunting of mountain goats or the collecting of high altitude berries. They embraced as well the obtaining of other materials of secondary use, often widely varied in their nature, of limited availability, and desired only in small amounts.

Non-local travelers hastening along the mountain trails toward some particular locality with a few specific, sharply focused objectives in mind were obviously less well acquainted with the resources in the neighborhood of their routes—particularly resources of a secondary character—and, in general, surely had less time to exploit those they were aware of than were travelers and especially task parties of the group that "owned" the country. This is to say that the Upper Skagit must have been notably more familiar with the Park/Lake region and its resources than were Chelan, Methow, or Wenatchi journeying parties from the Plateau and than were coastal groups near the Upper Skagit when they traveled eastward over the mountainous watershed to the Plateau.

But what were the nonfood resources of the small streams and mountain slopes of the Upper Skagit River drainage that were secured by the Upper Skagit task-oriented groups? We know of mountain goat horn needed for fishing points, the hides of game killed for food, and mountain goat wool for weaving into cloaks and blankets, removed from skins brought back to camp, all materials that were excellent trade and potlatch items. But what more? Lithic supplies for the making of tools and other artifacts? Plants used technologically—as in fashioning nets and basketry—or as medicines and other curatives? Colored earths from which important paints could be made? Were there localities—high lakes, craggy mountains, peculiarly formed rocks, or strangely

shaped trees—where especially powerful guardian spirits might be obtained? And so on almost without end. Unfortunately, the ethnographic data to demonstrate such Park and Recreation Area utilization by the Upper Skagit are simply not in the literature.

II

CHILLIWACK

Data Base

The ethnographic and ethnohistorical data relating specifically to the Chilliwack are very limited. Accordingly the data compiled in this chapter are of two kinds. They include such ethnographic and ethnohistorical materials on the Chilliwack as are available and, to supplement these, data on the linguistically and culturally related tribes of the Upper Stalo cluster (see Figure 2-1).

The ethnographic information relating to the Chilliwack is drawn principally from Wilson Duff (1952) who in 1949 and 1950 gathered a small amount of traditional life-pattern data from Chilliwack informants. Some additional Chilliwack information comes from Franz Boas (1894) who carried out a brief period of field research among the neighboring Chehalis in 1890, from Charles Hill-Tout (1903, 1978a) who worked with Upper Stalo groups, including the Chilliwack, in the 1890s and early 1900s; and from Marian Smith (1941, 1946, 1947, 1950a, 1950b, 1952, 1955, 1956) who in the 1930s and 1940s studied the Chilliwack and nearby Upper Stalo tribes. Nevertheless, our knowledge of the aboriginal and early postcontact life style of the Chilliwack is singularly meager.

Because the Upper Stalo tribal cluster as a whole is considered by Duff to have possessed a fundamentally similar life mode, whatever the variations in detail, it appears legitimate to generalize with caution to the Chilliwack, where information concerning this group is lacking or seemingly faulty, from other Upper Stalo groups. Here of particular value are Duff's (1952) much more comprehensive and detailed field-derived materials on the native lifeways of the Tait in particular, the uprivermost of the Upper Stalo tribes. Limited information to check and complement Duff's data are provided by Boas' (1894) Chehalis study.

The ethnohistorical data are taken primarily from Charles Wilson (1866, 1970) who, as a member of the British Boundary Commission, lived for some months in 1859 in the Chilliwack country and nearby. Specific data on the Chilliwack and on the natural history of their area—including their river, Chilliwack Lake, and Cultus Lake—are included in Wilson's field records. These data represent, so far as I am aware, the earliest documentation relating to the tribe. Information relating to several Upper Stalo villages—but to none of the Chilliwack—is reported in the journal of Simon Fraser (1889, 1960), who with his exploring party paddled down the Fraser River and then back up in the summer of 1808. Additional bits of Upper Stalo cultural data are also drawn from several minor sources as indicated in the pages that follow.

As revealed at various points in this chapter, this procedure of placing the Chilliwack data, however limited, in the larger Upper Stalo cultural context yields one special reward: it provides strong, though palpably incomplete, evidence that the Chilliwack were in some ways an atypical Upper Stalo people. In part, these divergent lifeways were plainly the consequence of the group's unique, pre- and early postcontact, side-valley geographical location. In part, they may have been a residue of a pre-White history that differed importantly from that of their Upper Stalo neighbors.

Introduction

In this section are briefly discussed the early postcontact history of the Chilliwack, the terms used in the past to designate the tribe, the territory it claimed and over which its members roamed in the pursuit of their life plan, its linguistic and cultural affiliations, the meager demographic data available for the group, and the physical characteristics of the people as these are known.

Early Chilliwack History

The Fraser Valley in the neighborhood of the Chilliwack homeland was first explored by Simon Fraser's party in late May and early June, 1808. It is reasonable to assume that early White and métis fur trappers and traders followed Fraser in the main valley and probably moved up the Chilliwack River in their search for pelts.

Data to support this assumption, however, have yet to be located. In 1827 Fort Langley was established by the Hudson's Bay Company on the south bank of the Fraser about halfway between the Chilliwack River and the mouth of the Fraser to serve as the trading center for the area. In 1828 George Simpson of the Company ran the Fraser River from the Thompson River mouth to the sea, only to discover that this was too dangerous a route for the fur trade. Regrettably his detailed account of this journey remains unpublished. December of this same year found a party from the fort ascending the Fraser and entering "the Chul-Whoo-Yook [Chilliwack]," but, after about 10 miles on the stream, having to turn back because of the strong current. It reported seeing cached canoes but no natives. (Duff 1952:44, 1964:54, 56; Fraser 1889, 1960; Phillips 1961 2:441; Rich 1967:275; Wilson 1970:36 fn. 18)

Although at least the more downriver Upper Stalo already "knew the sign of the cross and a few simple hymns," the first organized missionary activity in the region was undertaken in the early 1840s by Roman Catholic priests using Fort Langley as their base (Duff 1964:89-90; Lempfrit 1985:35). The extent to which members of the Chilliwack tribe were contacted is uncertain. In May, 1846, a Fort Langley group went up the Fraser to the Chilliwack to establish a salmon fishery on its banks, a fact that argues for the importance of the Chilliwack as a salmon stream. (Nelson 1927:17; Duff 1964:89-90; Lempfrit 1985:35)

Fort Yale was established in 1848 by the Hudson's Bay Company and a few months later Fort Hope. Their *presence in Upper Stalo country initiated extensive contact between the native groups of this area and Whites*, a contact in which the Chilliwack must have participated to some degree. (Smith 1955:104)

The summer of 1858 saw a rush of gold prospectors and miners ascending the Fraser to the newly discovered fields on the riverbanks and bars between Forts Hope and Yale and even into the region above the canyon. Attracted by the lure of gold, many Indians turned to hunting the metal and, neglecting to store fish and roots, starved during the following winter. By mid-winter the gold fever had largely subsided owing to the intense cold and the lack of supplies. While the Chilliwack and their territory were evidently not directly involved in these activities, they could hardly have wholly escaped their effects. (Mayne 1862:50, 55-56, 66; Smith 1955:104)

In 1858-1859 the British Boundary Commission surveyed the international border in the Chilliwack territory and its vicinity. Its various supply and surveying parties that camped through the period in the Chilliwack region and constantly criss-crossed it during these years employed local Indians in various humble capacities, surely Chilliwack among them. (Wilson 1866, 1970) These very close contacts must have influenced the native life style, in some cases on a permanent basis, but the records are silent on these points.

Owing to time constraints, no effort has been made to review historical material after 1860 for whatever ethnographic scraps it may contain bearing on traditional Chilliwack life patterns.

Ethnonymy

To the degree that the Chilliwack have been distinguished in the ethnographic and historic literature from the other Halkomelem (Cowichan) tribes, they have, with one single exception so far as I am aware, been referred to as the Chilliwack or some obvious variant thereof. The only alternative designation is that recorded by Wilson in his phrase "the 'Chilukweyuk,' or 'Squahalitch' . . ., on the Chilukweyuk River." (Boas 1894:460; Hill-Tout 1903:355; Hodge 1912 1:268; Mayne 1862:295; Smith 1950a:340; Wilson 1866:278)

Tribal Territory

To understand the Chilliwack data as well as references to Sumas Lake, Chilliwack River, and Vedder River in the material that follows, a few geographic facts, drawn from Duff (1952) and other sources, must be comprehended.

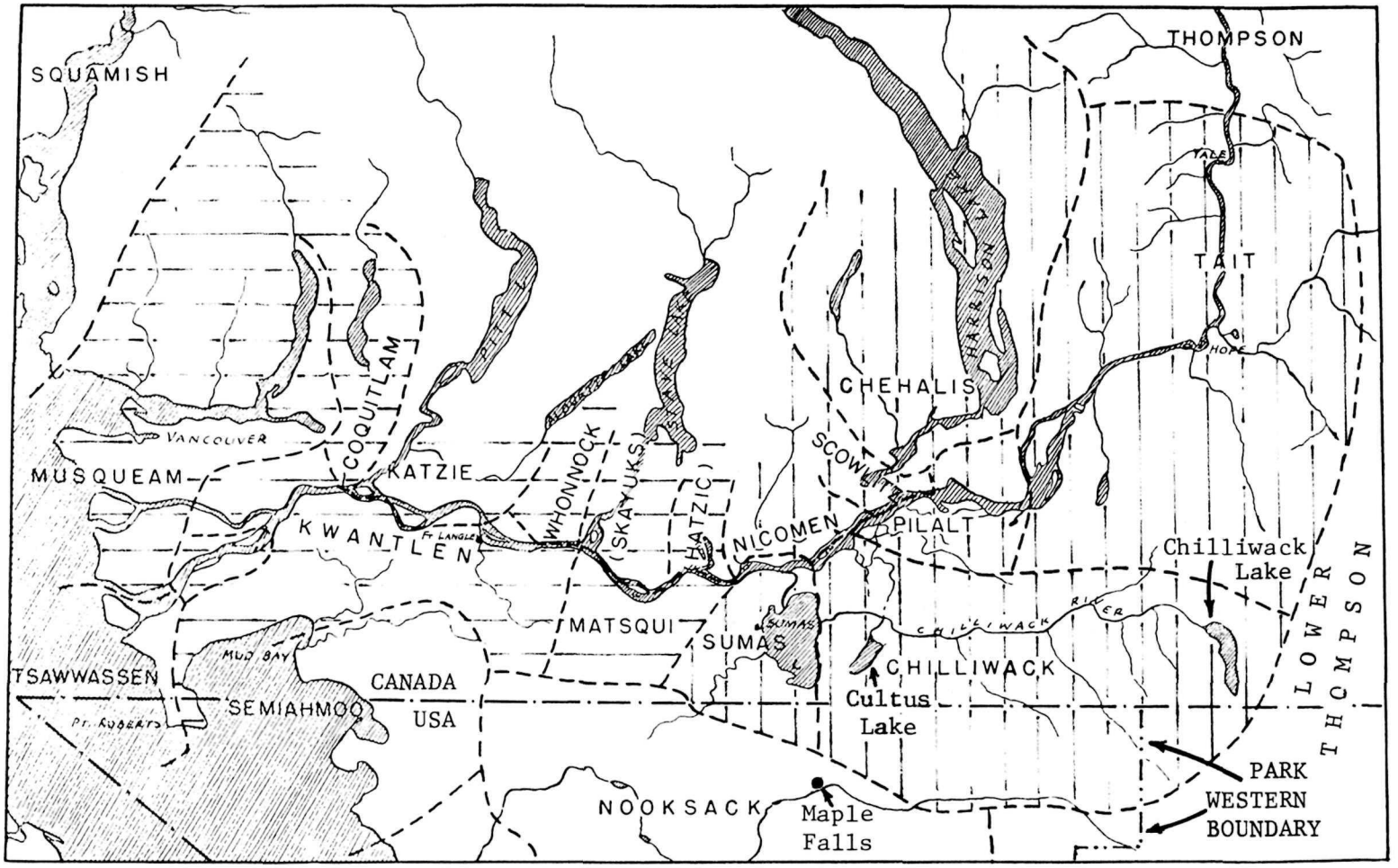
(a) In late precontact and perhaps very early historic times, the Chilliwack River, exiting from its canyon, flowed westward into Sumas Lake and thence northward to the Fraser River. A low bog lay between the Chilliwack and the Fraser, though it gradually grew firmer as time passed. (Duff 1952:43; Fraser 1960:101-103)

(b) Sometime before 1830, the Chilliwack altered its lower course and, having emerged from the canyon mouth near Vedder Crossing, turned sharply to the north. Meandering across the low plain, it reached the Fraser just west of the present city of Chilliwack. The water from Sumas Lake found its way to the Fraser by its own small stream. (Duff 1952:14, 44)

(c) In the late 1880s a downriver log jam caused the Chilliwack River to flow westward again from the Chilliwack canyon mouth, breaking through to Vedder Creek. Now called Vedder River from this point, it ran to Sumas Lake and once more north to the Fraser. (Duff 1952:44; DEMR *Hope* quadrangle 1970)

(d) In the 1920s Sumas Lake was intentionally drained. The lower Chilliwack, still termed Vedder River, was directed through the new Vedder Canal to the lower Sumas River and the Fraser. (Duff 1952:44)

These data reveal how essential it is to note the time period in question when the ethnographic and especially historical data refer to the lower Chilliwack River and to the people and villages along it.



Key: Upper Stalo tribelets: |||| Lower Stalo tribelets ===

Figure 2-1. Traditional territory of Chilliwack and neighboring groups as defined by Duff (1952: map 1, modified). Chilliwack River course is shown approximately as in pre-1830 and late 1800 periods. I differentiate between the Stalo group and nearby non-Stalo tribes; also between Upper and Lower Stalo as somewhat fuzzily distinguished by Duff. I label Chilliwack and Cultus Lakes, locate Maple Falls, identify area east of Chilliwack Lake as traditional (Lower) Thompson country, and designate approximate western limit of North Cascades National Park to indicate extent of Chilliwack occupation.

The borders of the traditional Chilliwack home country were defined in the Indians' mind with considerable precision, reflecting a relatively highly developed concept of territorial ownership not present among all Upper Stalo tribes. According to Duff (1952:21):

> The [Chilliwack] tribe held a small stretch of the south side of the Fraser between the mouth of the Chilliwack River and *lέxəwe*, a village half-way between Chilliwack and Sumas Mountains. From here the boundary ran due south, skirting the east side of Sumas Lake, to Maple Falls on the Nooksack, thence east along the north fork of the Nooksack and across the mountains to Chilliwack Lake. From the lake it ran west again to encompass the valley of the Chilliwack and that part of the Fraser Valley south of a line joining Elk Creek falls with the mouth of the Chilliwack River. (Figure 2-1).

These boundaries are, in most respects, as close to the facts as we are likely to get. When they are drawn slightly differently by other ethnographers, this is largely because, without special interest in them, they plot them more loosely. Still Duff's data call for several comments.

- The westward course of the Chilliwack River from the mouth of the Sweltzer River, which drains Cultus Lake, to Sumas Lake and then northward plots the late precontact and perhaps early historic situation. But the western Chilliwack boundary along the east side of Sumas Lake can only be that of the 1830s or later. Only then, after the bog filled in and Fort Langley provided protection from downriver raiders, did the Chilliwack leave their old homeland in the canyon above Vedder Crossing and settle out on the Fraser plain and make important subsistence use of its resources. Only then did they extend their border to Sumas Lake. (Boas 1894:455-456; Duff 1952:43)
- In precontact and possibly early historic times Cultus Lake, its source streams, and its outlet river were the territory of the Cultus Lake people, not the Chilliwack. (Duff 1952:38; Hill-Tout 1903:267-268; Smith 1950a:340-341)
- Duff's plotting of the southwestern Chilliwack border fails to carry the line "due south" from Sumas Lake to Maple Falls as the description above defines that boundary.

Most important for the present study is the fact that Duff's southeastern tribal line places the northwestern-most corner of the North Cascades Park squarely within old Chilliwack territory.

Linguistic and Cultural Affiliation

To comprehend their cultural position in relation to their tribal neighbors and the ways in which they were similar to and different from them in their life patterns, the Chilliwack must be viewed in the context of the larger lower Fraser region. In this segment of the Pacific Northwest linguistic and cultural relationships were intimately intertwined. It is convenient, therefore, to discuss the two together.

Careful linguistic reconstruction indicates that some time in the distant past the language family now known as Salishan developed in a riverine, forested valley environment west of the Cascades, perhaps even in the lower Fraser country itself or not far away. About 3,000 years ago it spread up the Fraser Valley and over the Cascades into the Plateau. This movement, in time, split the family into its two major units, a Coastal and an Interior division. The Coastal group (and, of course, Interior likewise) carried forward the normal process of language change through time when speakers are isolated to some extent by distance or other contact barriers. It continued to divide, ultimately to produce in the Strait of Georgia area of southeastern Vancouver Island, the nearby Fraser Valley, and the islands in-between, the language now customarily termed Halkomelem, though Cowichan, Nanaimo-group, and still other designations have been used for this unit.

As time passed, Halkomelem spread up the Fraser River to the mouth of Fraser Canyon, gradually separating into a number of mutually intelligible dialects that in the late prehistoric and postcontact period clustered into three dialect groups: Nanaimo and Cowichan, both on the southeastern corner of Vancouver Island, and Stalo in the lower Fraser Valley from Yale downstream to the river delta and a small area about the Fraser mouth (Figure 2-2). Chilliwack is one of the several Stalo tribes, all possessing a common language and cultural base but not a political unity. (Boas 1894:454; Duff 1952:11-12; Dyen 1962:156; Elmendorf and Suttles 1960:1; Fraser 1960:99; Hill-Tout 1903:355, 369; Mayne 1862:242, 295, 296; Smith 1950a:332-335, 338, 339; Suttles 1957:168; Suttles and Elmendorf 1963:48-49; Swadesh 1950:163, 164, 166-167, 1952:247; Teit 1900:168; Thompson 1979:693)

These Fraser River tribes—the Stalo—formed a single dialect chain, each population entity differing somewhat in speech—apparently also to some degree in culture—from its neighbors above and below in the river valley, with those at the upstream and downriver ends of the chain being notably different. In spite of this linguistic and cultural chain structure, one sharper than normal break occurred in this Stalo sequence. This break was across the Fraser Valley either just below the Chilliwack and Sumas or possibly a bit farther

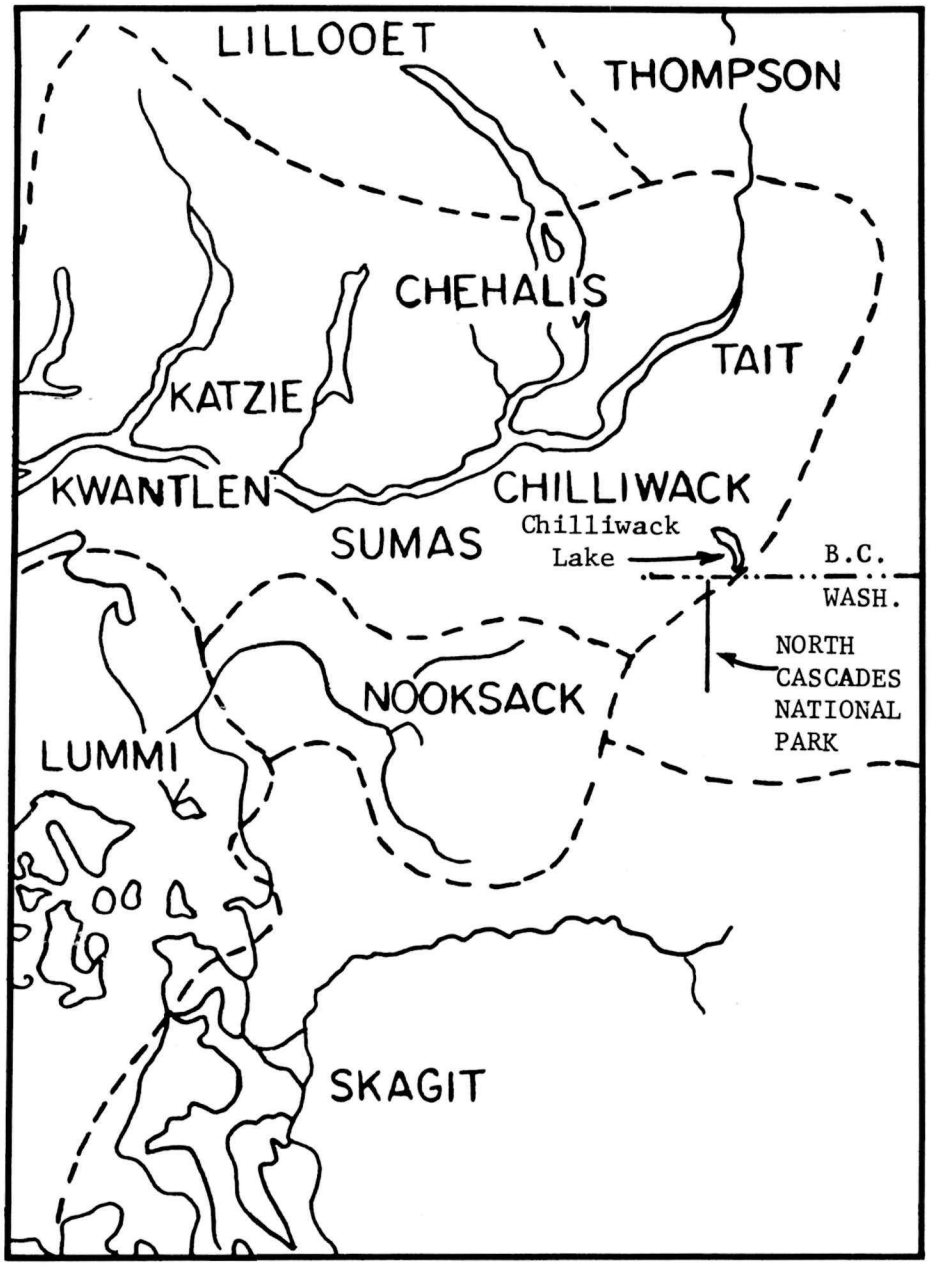


Figure 2-2. Principal mainland Halkomelem dialect communities and neighboring non-Halkomelem Salishan languages (Elmendorf and Suttles 1960:2, slightly modified). Shown are Halkomelem boundaries with Skagit and (Lower) Thompson, tribes also considered in this report. Boundaries are approximate. Chilliwack Lake, the British Columbia-Washington boundary, and northwestern border of North Cascades National Park have been added.

downriver. The six small tribes above this line are termed by Duff the "Upper Stalo"—as opposed to the "Lower Stalo" below—a useful designation that will be followed in this present study. (Duff 1952:11-12, 19-23; Elmendorf and Suttles 1960:1-3, 17)

Among the various Coastal Salishan languages known at the time of first White contact, which were most closely related to Halkomelem? Although there have been slightly differing formulations by linguists in the past, the kinship seems to be particularly close with Squamish, Nooksack, and Straits Salish (Lkungen, Lkungeneng), this last group including Lummi, Songish, Samish, Klallam, and other coastal and island dialects south of the Fraser delta and on the southeastern point of Vancouver Island. (Dyen 1962:159, 160; Elmendorf and Suttles 1960:3; Swadesh 1950:163, 1952:232)

In linguistic terms, the Chilliwack are especially intriguing as a Stalo tribe. There is some evidence that as recently as the late 1700s the group (and perhaps also the Cultus Lake people) may have spoken a different dialect, even a different language than that of more recent years. Perhaps it was most akin to Nooksack of the upper Nooksack Valley, though here the evidence is not fully convincing. Such a kinship, however, would not be out of the question since the Nooksack territory was contiguous to that of the Chilliwack on the southwest (Figures 2-1, 2-2), the groups evidently saw a good deal of each other, and both were upriver peoples sharing rather similar wooded valley econiches. It has already been noted that, although unintelligible to Stalo, Nooksack was among those Coastal Salishan languages most closely related to Halkomelem. (Boas 1894:455; Duff 1952:11, 12, 39, 43; Hill-Tout 1903:355, 357, 1978b:135; Smith 1950a:334-335, 341; Suttles 1957:167; Swadesh 1950:159, 160, 1952:233 fn. 3)

Demography

The size of the Chilliwack population in late protohistoric times is unknown, although, as Hill-Tout (1903:355) remarks, they appear never to have been "a populous tribe."

In 1839, in a Stalo-wide census by Hudson's Bay traders at Fort Langley, the "Chilsonook" were counted at 151 persons. About 1860 the Chilliwack population was estimated by Wilson (1866:278) at 200. While characterizing the 1839 Fort Langley head-count for the various Fraser River tribelets as in general "quite remarkable in its accuracy and detail," Duff (1952:28) believes its Chilliwack figure to be too low, "especially since the 1879 census sets the Chilliwack population at 296." Duff may here be correct, for, because of the early steady depopulation, the 1839 census should have shown a larger person count than the 200 figure of about 1860. On the other hand, as Duff (1952:28, 129-130) likewise remarks, probably some of the apparent increase reported in 1879 is the consequence of "the inclusion of some Pilalt," the tribelet immediately upriver from the Chilliwack.

Before the 1830s and especially prior to 1780, the Chilliwack numbers must have been appreciably greater, for a terrible smallpox scourge ravaged the region about 1800, killing, according to Jenness (n.d., MS), "about three-quarters of the Indians." Still other epidemics surely also reached the Chilliwack, and Fraser River Indians more generally, prior to the 1839 headcount, including the 1782 smallpox epidemic and the "fever" epidemic of 1830. (Duff 1952:28, 41)

One of the old Chilliwack villages carried in its native designation a reference to the severity of an epidemic that devastated it: it was translated by Hill-Tout's (1903:356) informant as "melting away" and by Duff's (1952:38) as "to dissolve." Contagious illnesses were, however, not the sole cause of major population reductions: another village was known as "wiped out by a slide" (Duff 1952:39).

Inasmuch as this chapter is concerned with the Chilliwack and their lifeways only in the protohistoric and early historic periods, the details of the continued decrease in the tribal population from 1839 to about 1915 and then the rapid increase in their numbers and the causes thereof fall outside its interest focus.

Physical Attributes

The earliest descriptions of the physical characteristics of the Upper Stalo are those of Simon Fraser (1960:100, 101), who included them in his journal of his travels down the Fraser in late June, 1808. He encountered his first Indians with a coastal cultural orientation—several settlements of Tait—in the Yale sector of the river. "Both sexes," he notes, "are stoutly made, and some of the men are handsome," although he could not "say so much for the women." On reaching the Tait village near Hope, he adds further details: "The Indians in this quarter are fairer than those in the interior. Their heads and faces are extremely flat; their skin and hair of a reddish cast—but this cast, I suppose, is owing to the ingredients with which they besmear their bodies."

A half-century later Charles Wilson, a member of the British Boundary Commission survey group, provides additional details. According to Wilson, who was in close field contact with the Halkomelem for many months in the 1858-1859 period, these tribes resembled "each other greatly in appearance and habits, such differences as exist[ed] being principally due to locality and the means by which they obtain their living, . . ." The Chilliwack, however, were a "noticeable" exception because they hunted "a great deal on foot, and, from constant exercise, . . . [were] much more robust in appearance, and more manly and open-hearted in manner, than their brethren

of Vancouver Island." Inasmuch as specific Chilliwack data are lacking and their basic physical traits are unlikely to have varied much from those of their Fraser River neighbors and since careful descriptive information of this kind for this early time level is uncommon, the following general Halkomelem data are worthy of notice.

> The stature of the Cowitchans [Halkomelem] is diminutive, ranging from 5 ft. to 5 ft. 6 in., and occasionally to 5 ft. 7 in., or 5 ft. 8 in. amongst the more inland tribes; the women are from 5 in. to 6 in. shorter. The hair is either black or very dark brown, coarse, straight, and allowed to grow to its full length, either falling in one large mass over the neck and shoulders, or plaited and done up in tresses round the head. The faces of both sexes are generally broad, the forehead low, the eyes black, bright, and piercing, though generally small, and set in the head obliquely like the Tartar or Chinese, the nose broad and thick with large nostrils, the cheek-bones high and prominent, the mouth large and wide, with thick lips, especially the under one, and the teeth large and of a pearly white when young, but soon discolored and worn down by the hard service they have to go through, masticating the tough dry salmon, which constitutes their principal food; . . . most of the old women met with had their teeth worn down to a level with the gum. (Wilson 1866:278-279)

Unlike the canoe people of Vancouver Island with their broad shoulders and good chests but small, crooked, weak legs, the consequence of spending the greater part of their lives squatting in a canoe, the Chilliwack had "straight well formed legs, the result of their more active life, and excursions into the mountains in search of bear and mountain goat." Usually all facial and body hair is removed by both sexes, though men occasionally encourage a small chin tuft. The skin color is dark olive, deepened to dark brown on the face through exposure. People age very rapidly, especially women. As they grow older, they are "much troubled with rheumatism and pulmonary complaints." In 1862 smallpox began its ravages and venereal disease had recently "increased to a fearful extent." (Wilson 1866:279)

Intentional flattening of the forehead extended up the Fraser only as far as Fort Langley in Wilson's day. Indeed, he saw no evidence of the practice even among the older people above the fort area. (Wilson 1966:278)

So much for the unusually rich and detailed ethnohistorical data, presenting, of course, primarily nontechnical observational information. What have anthropologists to say about the physical characteristics of the Middle Fraser people?

Near the close of the last century Boas (1892, 1895) recognized and documented a unique physical type in the Harrison Lake area on the basis of 15 measurements supplemented by a number of phenotypic observations. The type was characterized by a very short stature, a very round head, a flat nose with a low bridge, and a face that was very short vertically and in relation to its height very wide, all in comparison with other Indian types in the Northwest and even in North America in general.

Also recognized by Boas was a lower Fraser River type distinct from but closely related to the Harrison Lake type. This was slightly taller and rather less extreme in those other measurements involved in the several Harrison Lake biotraits mentioned above. Inasmuch as these middle Fraser data demonstrated a gradual change in type along the river, Boas (1895:549) concluded that these tribes "must have occupied these regions for very long times, and that the population has been very stable." (Codere 1949:176-181)

Subsistence

The Upper Stalo surely exploited fully their fish, game, and edible plant resources. Beyond the fact that fish—notably anadromous types—were exceedingly important, little is to be found in the ethnographic literature, however, to suggest the relative importance of these three principal food sources and how these proportions differed among the various tribal groups. As noted below, people who had no or few fishing locations within their own territory along the Fraser were accustomed to join relatives in other groups at their more favorable fishing sites.

From a few scattered notes it is clear that the old Chilliwack, in their aboriginal canyon and mountain country back from the Fraser Valley, had access to salmonids, perhaps in considerable numbers, in the Chilliwack River. We are not informed as to the degree to which they joined other Upper Stalo peoples farther upriver at their extremely rich salmon fisheries on the main Fraser. One surmises, however, that there could not have been much of this, for the tribe seems to have been a surprisingly isolated group in their back country. Consequently, it appears safe to conclude that the Chilliwack depended somewhat less on fish—at least anadromous types—and rather more on game than did other Upper Stalo groups.

The use of plant foods—especially roots and berries—is hardly mentioned in the published Upper Stalo ethnographic studies. Probably in comparison with nearby non-Halkomelem groups with limited salmonid supplies, their exploitation of these vegetable products was more restricted, if for no other reason than because

the seasonal occurrence of salmonids and of roots and berries in large part coincided, and principal attention was paid to fishing rather than to plant collecting.

Though no dietary data exist, to my knowledge, concerning the variety, amounts, and nutritional characteristics of the typical Chilliwack food intake, Rivera (1949:19-36) provides generalized information for the Northwest Coast peoples. In considerable measure this must likewise apply to the traditional Chilliwack, with sea products largely deleted and the inclusion of more game and inland vegetable foods. Chilliwack mainstays were certainly fish (probably especially salmon even for this lateral-stream group), meat, root crops, bulbs, tubers, and berries, all eaten both seasonally and prepared for storage. By preference, both dried and fresh foods and both flesh and plant foods were eaten year-round.

Under normal conditions, Rivera reports for the entire coastal area but surely no less for the Chilliwack specifically, proteins were abundant in the foods consumed. The situation in regard to fats is less clear, but the availability of both fish (particularly salmon) and game fat presumably furnished dietarily adequate amounts: at least on the coast fat fish were preferred for roasting and the drippings were saved for consumption. Since among the Chilliwack salmon were not far from the sea, they doubtless arrived in good condition, not fatless and beaten as at the headwaters of very long salmon rivers like the Columbia (Smith 1984:136-140). As an upriver tribe in their back valley with its river prairies and nearby hillsides, wild roots, bulbs, and tubers were clearly available to the Chilliwack to add the essential carbohydrate component to their diet. Sugar was largely provided by fresh and dried berries and other fruits.

In the domain of vitamins far less was known to Rivera. Further the situation is complicated by the critical importance of understanding not only their availability in traditional Chilliwack fresh-eaten foods but, far more importantly, their availability in foods that were processed in various ways before being eaten. Vitamin C, however, is known to have been secured in fresh fruit and vegetables (especially green sprouts) and in the blood of freshly killed fish and animals, many of even these plant foods obtainable throughout much of the year. Salmon was a good source of both vitamin A and vitamin D.

Even less was known in her day, Rivera observes, about dietary minerals. Those that are soluble were, of course, ordinarily leached out of boiled foods with the containing water, yet they were not lost as food, for the coastal groups—again plainly including the Chilliwack—customarily used this liquid in stews and soups. Dried serviceberries, which seem to have been available to the Chilliwack to some degree though they grew more prolifically in the interior of the Province (Turner 1978:180-182), contained unusually high amounts of iron and copper and were likewise high in manganese, all necessary for human health.

In short, to the degree that the native Chilliwack diet is understood, it appears to have been more than adequate in its quantities and its nutritional properties.

Fishing

Concerning fishing and its importance Duff's summary paragraph cannot be improved upon:

> To the Stalo, with their great wealth of fish resources, fishing was the most important economic activity. In the main [Fraser] river or its tributaries they caught the five species of salmon, as well as sturgeon, eulachons, trout, and other river-fish. They used many methods and devices—dip-nets, bag-nets, harpoons, weirs, traps, hooks. Although fresh fish was procurable the year around, they dried or smoked large amounts during late summer for winter use. (Duff 1952:62)

All Upper Stalo men were fishermen. The more proficient became in a sense specialists. (Duff 1952:72)

Salmon

The five salmon species of the Upper Stalo country were:

- *Oncorhynchus tshawytscha:* chinook, king, or spring salmon.
- *O. nerka:* sockeye salmon, silver trout, silvers.
- *O. gorbuscha:* pink or humpback salmon.
- *O. keta:* chum or dog salmon.
- *O. kisutch:* coho (cohoe) salmon. (Duff 1952:62; Wydoski and Whitney 1979:54-64)

Not surprisingly, all five were recognized by the Chilliwack as different fish and were referred to by different terms, as distinct, too, from steelhead and trout (Hill-Tout 1903:389).

Unfortunately, I know of no ethnographic data or recent natural history information reporting how many of these five salmon species ascended the Chilliwack River and, if they entered the stream, how far upriver they

swam. That some salmon, at least of the chinook variety, entered and made their way up the Chilliwack, however, is indicated by several fragments of evidence.

- A Pilalt myth, recorded by Hill-Tout (1903:402), that purports to explain how salmon were first brought to the
- Fraser River tribelets (see later mythology section), concludes with this relevant statement: "From this time onwards the salmon have visited annually the streams mentioned; . . . [In some streams, however, they are not good fish; in others, they die in great numbers.] In the Chilliwack, on the contrary, they are good and fine, and are easily dried and cured."
- As noted below, the only salmon run specifically mentioned ethnographically for the Chilliwack River in a non-mythic context is a chinook run of mid-summer (Duff 1952:62). Hill-Tout (1903:390), however, states that "autumn . . . was marked among the Tcil'Qē'uk [Chilliwack] by the departure of the salmon." It seems probable that Hill-Tout speaks here of salmon in the Chilliwack and not the Fraser, on which the Chilliwack maintained no salmon fishing camps in pre-White days. If so, the salmon remained in the stream for a longer period than Duff's data imply.
- In late 1846, a salmon fishery was established on the banks of the Chilliwack River by a party from Fort Langley, sent upriver specifically for this purpose (Nelson 1927:17). Unhappily we do not know the location of this site nor the success of the venture, but presumably the traders must have seen good evidence in the stream of salmon in numbers.
- In Charles Wilson's journal of 1859 occur three entries that attest to salmon of some variety or varieties in the Chilliwack at least up as far as Chilliwack Lake. On June 16 of that year, when encamped at "Chilukweyuk Prairie" close to the Chilliwack River a short distance below the Chilliwack Canyon, he reports being told by Indians of salmon abounding in Chilliwack Lake. In the same sentence he adds that "a reconnoitring party sent forward give glowing accounts of the fishing" in the lake, salmon being presumably alluded to. (Wilson 1970:49)

  On July 27, 1859, traveling along the Chilliwack River from his Fraser prairie headquarters to Chilliwack Lake, he camped that night close to an Indian group (surely Chilliwack), just upstream from the Chilliwack Canyon mouth. These people, who were fishing nearby, gave him "a splendid salmon" after he had talked and smoked with them for a time. (Wilson 1970:63)

  Finally, Wilson (1970:73) appears to be commenting on the Chilliwack River and its side streams—note that he uses the phrase "the river" in the singular—when he composed his diary entry on October 9, 1859: "One curious thing at this season of the year is the quantity of dead salmon on the banks of the river; in some of the smaller streams the quantities are so numerous that it produces a most intolerable smell & renders the water anything but pleasant for drinking purposes." When he wrote this note, he had been encamped on the lower Chilliwack River, below the canyon, for almost a full month, ample time for him to observe the phenomenon.

From the above data it must be concluded that salmon occurred at least as far up the Chilliwack Valley as the head of Chilliwack Lake. If they managed to make their way to this point, they may well have climbed the upper Chilliwack River into the North Cascades Park complex, the northern boundary of which is no more than a mile or two above the lake. But for this I have as yet no proof.

In Upper Stalo territory generally, salmon were easily taken in prodigious numbers at favorable locations along the Fraser and its tributaries and were easily dried for later provisions. These fish and the landform and climatic conditions of the country, working hand in hand, provided the people with "a storehouse of food unexcelled by that of any other Indian tribe." (Duff 1952:62)

Our earliest historical records—the 1808 journal of Simon Fraser—confirm Duff's assessment of the importance of salmon to the Upper Stalo. At least in late June of that year, the salmon fisheries in their territory were evidently more productive than those farther down the Fraser. Fraser's party of exploration received salmon—generally "in plenty"—from them, beginning with the first Upper Stalo people encountered. (Fraser 1960:98-101)

Of the five species, the chinook and sockeye were economically by far the most important to the Upper Stalo. To aid in comprehending what these enormous salmon resources meant to these tribes, a few details concerning the five types seem worthwhile:

- The chinook variety was the finest of the five species to the Tait tribe and the variety for which the first salmon ceremony was celebrated. According to Duff (1952:62) and his informants, soon after the ice broke in the Fraser, small, fat chinook began to ascend the river. In July a small run, too fat to keep well, passed up the Chilliwack River. The main runs in the Fraser appeared after mid-July, when the high water had subsided. During August and early September they passed upriver in large quantities; these were large chinook, lean and easy to dry. By the middle of September the Fraser run declined, although even larger fish then commenced to run up some of the tributaries.

In terms of the special interests of this study, the Chilliwack statement is particularly noteworthy. Whether the mentioned July run was the sole one up the Chilliwack during the salmon season is not made clear.

- Sockeye salmon began their upriver run in mid-June, reached their peak in August, and fell off by the close of September. Very fat early in the season, they became leaner until late August, when they were in perfect condition for drying. Less favored as food than chinooks, most were used for oil. (Duff 1952:62)
- Pink salmon appeared in late August and spawned for about a month. Large runs occurred only every second year. (Duff 1952:62)
- Chum arrived in mid-September and remained into December. (Duff 1952:52)
- Coho salmon "spawned in the small streams during late fall and winter." (Duff 1952:62)

Salmon were taken by the Upper Stalo with dip, gill, and bag nets, were harpooned, and were caught in weirs. How many of these techniques were in use among the Chilliwack we are not told.

Chinook and sockeye were dip-netted by thousands of Upper Stalo Indians from family-owned rocky banks or platforms over the water. The device consisted of an Indian hemp net attached to a vine maple hoop with a long cedar or fir handle. It was either moved slowly back and forth in an eddy or moved up and down in the water. Gill nets with wooden floats and stone bottom-weights were used from canoes. Bag nets were stretched between two poles held vertically from canoes. (Duff 1952:62-63, 69; Fraser 1960:101, 114)

Upper Stalo harpoons, of medium dimensions, were made with a fir or cedar shaft, a serviceberry or spiraea foreshaft, and a one- or three-piece toggle-type head. The head was of bone, charred wood, flat slate ground into shape, or elk antler hardened by heating and oiling. The retrieving line was of Indian hemp. Fraser seems to refer to just such a device when in a Tait village in 1808. Chinook were harpooned in early spring in the Fraser; cohos in the tributaries. In winter bottom-lying salmon were taken with these devices from canoes by firelight. (Duff 1952:60-61, 67; Fraser 1960:101)

Weirs, some with traps and some without, were widely used by the Upper Stalo in taking salmon. The fisherman speared the fish by thrusting straight downward with a three-pronged leister or by slipping over their head a noose hanging from a pole. The Chilliwack caught most of their salmon with brush weirs, supported by a row of pole tripods set across their stream: according to an old myth, the method of construction and use of this device was taught the tribal ancestors by Wren. After the 1830s and the movement of the Chilliwack from their traditional canyon home out onto the Fraser plain, salmon weirs were placed in the various meandering mouths of the Chilliwack River. (Duff 1952:37, 38, 67; Hill-Tout 1903:367)

Salmon intended for storage were cut up for drying by Upper Stalo women, using in the old days a ground-slate knife. The head was removed and the fish allowed to bleed thoroughly. Then the fish was cut down each side of the backbone to the interior cavity, leaving the flanks and belly in one piece and the backbone and other bones attached to the tail. After being scored, the two sections were hung over a pole to dry. The summer weather in Upper Stalo country provided ideal conditions for drying fish: it was warm and dry and the breeze blew upriver constantly. The large chinooks caught late in the season when the drying weather was less dependable were cut thinner to promote proper preservation. (Duff 1952:62, 63, 64 Plate II, 66-67)

Among the Upper Stalo not all salmon were dried. From mid-July to mid-August when three kinds of egg-laying flies plagued the area, it was best to smoke fish. In the fall many fish were smoked by preference. The process was carried out over alderwood fires in the smoke house. Among the Chilliwack fish were sometimes cured by being smoked at intervals instead of continuously. This imparted to them a peculiar salty taste. (Duff 1952:66-67; Hill-Tout 1903:396)

Salmon heads were split, cleaned, and dried on a rack for later use in soups. Chinook roe was hung in similar fashion to dry, later to be soaked or boiled for eating. Or it was placed over the winter "in a deep hole about 4 feet in diameter lined with several inches of maple-leaves," perforated to allow the oil to drain through. Then the roe was covered with more maple leaves and finally with earth. Cheese-like in its consistency when removed, it was eaten raw, boiled into soup, or applied to sores as a poultice. (Duff 1952:66)

Once dried, the fish were placed in an elevated storehouse where they could be protected from moisture and rodents for winter consumption. If completely dry, they were stored in boxes; otherwise they were hung up to dry further. (Duff 1952:67)

Chinooks were the only salmon that were dried. Sockeyes were caught for their oil, used "for everything, like we use lard." To extract the oil the entire fish was placed in a wooden trough or stone bowl in the sun and the oil was separated out as it seeped to the bottom as the fish decomposed. Clear, light red, and viscous even in cold weather, the oil was stored in bladders(?) of deer, bear, or mountain goats. Twice on their 1808 downriver journey of exploration of the Fraser River, Fraser and his party were served oil in "plenty" as a part of meals received at Upper Stalo settlements. (Duff 1952:66; Fraser 1960:101)

Sturgeon

White sturgeon, said to have weighed up to 1,800 pounds, were caught by the Upper Stalo year-round in the Fraser and its larger sloughs and tributaries. In winter they were harpooned in the deepest part of the river.

In mid-summer, when spawning in shallower water, they were taken with bag nets, harpooned, and caught with hook and line. In the outlet of Sumas Lake they were even taken in a very large weir. Fraser's exploring party was welcomed in late June, 1808, with a sturgeon meal in a village near Hope. (Duff 1952:67-68; Fraser 1960:101)

When conducting field research among the Chehalis (Figure 2-1) in the 1890s, Boas (1894:460) was informed that the Chilliwack caught no sturgeon. Other data gathered for this present study clearly contradict this statement: e.g., the Chilliwack were said to have eaten a particular moth during the sturgeon season to bring them good fishing fortune (Wilson 1866:285).

The large sturgeon harpoon was a complicated device. It consisted of two long, symmetrical foreshafts, their points about one foot apart and their other ends brought together in socket form to receive the end of the shaft, sometimes as much as 60 feet long. Each foreshaft was armed with a three-piece point, a central ground-slate blade flanked with two barbed side pieces of antler or mountain goat horn. Each was tied to its foreshaft with a cord, and the foreshafts, in turn, to the handle. The device was thrust into the bottom-swimming fish by a man in the stern of a canoe, as the craft drifted with the current. Struck, the sturgeon was played with a long line, tied to the harpoon handle and kept coiled in the canoe. (Duff 1952:60, 67, 68; Wilson 1866:284-285)

In shallow water sturgeon were captured in bag nets dragged behind two canoes. The net was either attached to two poles or, fitted with cedar floats and stone weights, was pulled with two main ropes, one attached to each upper net corner. Fraser, in July of 1808, observed just such a net in use when passing through Tait country. Bag nets of some variety were employed by the Chilliwack in sturgeon fishing. (Duff 1952:68-69, 115)

To a lesser extent sturgeon were also taken by the Upper Stalo with hook and line. Fishing in this manner was carried out throughout the summer, most successfully at night, when the line was tied to a long pole buoy anchored to a heavy rock. In a Chilliwack historical narrative, angling for this fish is mentioned as a central element in the story. (Duff 1952:69, 115; Wilson 1866:284)

The sturgeon weir erected by the Sumas people at the outlet of Sumas Lake appears to have been an unusual, if not unique, fishing contrivance among the Upper Stalo. A 200-foot fence of some sort was held in place against a series of two-pole supports pushed into the shallow clay stream-bottom. Horizontal poles ran across the stream, resting on the apexes of these crossed pole pairs. When a fish was observed in the clear water resting against the weir, it was noosed and harpooned from these horizontal, connecting poles. (Duff 1952:68, 69, 70)

Sturgeon flesh was usually cut into slabs and, held open with sticks, smoked in a smokehouse. The head and tail were cooked and eaten fresh. From along the backbone valuable glue was obtained. (Duff 1952:70)

Trout

Trout—steelhead, char, cutthroat, and smaller trout—were taken by the Upper Stalo by the same methods as used for larger fish. They were caught at night by torchlight with salmon harpoons or in Fraser tributaries—including the Chilliwack—with smaller harpoons, single or triple pronged. Fine-meshed bag nets, attached to two poles, were often employed from drifting canoes, a method known to have been used by the Chilliwack. Weirs with a variety of trap designs were constructed along small streams. The Chilliwack are reported to have had one with two long conical traps, one facing upstream and the other down. Trout were also taken with small hooks fashioned of thorns or of bone and wood. (Duff 1952:69-70)

Trout were usually eaten fresh. An Upper Stalo fisherman with a good catch kept "only what he needed and gave the rest away." (Duff 1952:70)

Other Fish

In May the eulachon ascended the Fraser as far as the Chilliwack River to spawn. They were scooped in huge numbers into canoes with dip nets. The Chilliwack, as well as upriver people who thronged down to meet these fish, participated in this simple and highly productive fishing. These fish, strung on sticks, were hung from racks under a bough roof to smoke over an alder fire. Eulachon oil was not extracted by the Upper Stalo as it was on the coast. (Duff 1952:70-71)

Suckers, graylings, and other fresh-water fish were caught by the same techniques as served to take larger fish. Fresh-water mussels from lakes in Upper Stalo country were eaten to some degree. (Duff 1952:70, 71)

Hunting

Very little information concerning Upper Stalo hunting is provided by Duff and virtually none, more's the pity, specific to the Chilliwack. This is particularly a shame, for Duff (1952:71) reports: "The fauna of the Stalo area was abundant and varied, and though not as important as fishing, hunting was a well-developed and

important economic activity." It might be suspected that this was especially the case for the Chilliwack while they resided along the Chilliwack River above Vedder Crossing with no claim to a Fraser bank sector.

Used for food were the following mammals and birds, according to one of Duff's Tait informants: black bear, the favorite meat; mountain goat, rated second as meat; deer, much used but considered a dry meat; elk and grizzly bear, used less because difficult to secure; groundhog and beaver, popular meats; raccoon, wildcat, squirrel, and marten, sometimes eaten; ducks, geese, grouse, and eagles, much sought after; fish cranes, robins, bluejays, and crows, sometimes eaten. (Duff 1952:71)

Not regarded as proper food were dogs, wolves, coyotes, cougars, seals, weasels, mink, rats, and mice; likewise loons, owls, and woodpeckers. (Duff 1952:71)

As noted above, very little information on animals utilized as food by the Chilliwack is available, but such a list could hardly differ much, if at all, from the preceding Upper Stalo catalog, which is itself obviously incomplete. For what it may be worth, the animals casually mentioned in 1859 by Wilson, of the British Boundary Commission, as having been seen in the Chilliwack country include black bear (numerous and widely occurring), beaver, deer (numerous on the Chilliwack Prairie), marmot (numerous in Chilliwack Lake and Cultus Lake areas), marten (abound in Chilliwack Lake country), and rabbits (many in Cultus Lake sector). A flat stretch beside the Chilliwack River between Sleese and Tamihi Creeks, formerly the river bed, was termed "Grizzly Flat" by Wilson and his Commission parties. Cougar tracks were seen by Wilson in the December snow in the mountains, but whether these animals were avoided as food—as, it is said, among the Upper Stalo in general—is not known. (Wilson 1970:49, 50, 60, 65, 66, 67, 68-69, 79)

All Upper Stalo men were expected to become capable hunters. Some, however, became specialists, spending a good part of their time in pursuing game and leading "the fall expeditions to the mountains after goats." Typically they received their "greater knowledge of animal habits and hunting methods" from their fathers and were likely to transmit this information to their sons. A successful hunter might possess guardian spirits for hunting, but this was not essential for hunting prowess. (Duff 1952:72)

Because, as the following facts demonstrate, the Chilliwack and their mountain territory were clearly deeply involved in hunting pursuits, Duff's all to brief summary of Upper Stalo hunting patterns deserves quotation rather than the usual reworking and compression.

> Most of the hunting was done in the fall, when the animals were fat. During the summer months, little hunting was done. The fact that the animals were thin, the abundance of fish, and . . . [perhaps] a restriction on hunting animals which were bearing their young, kept hunting to a minimum. After salmon-drying season was over, the hunters led expeditions into the mountains to hunt mountain-goats. There were apparently no sharply delinated hunting territories, but the hunters knew of mountains where there were many animals, some as far away as Chilliwack Lake or beyond. If they met hunting-parties of other tribes, there was no conflict (though . . . [one Tait informant] thought the Thompsons and Skagits fought when they met). These expeditions sometimes lasted several weeks. The party would set up hunting camps, and the hunters would operate out of these. Other men, women, and older children stayed in camp to cut up and dry the meat, gather firewood, etc. The meat was cut into slabs about an inch thick and smoked on a rack 4 or 5 feet high. The dry meat was quite light; one man could pack the meat of two or three goats. When enough had been obtained, the party started for home. The meat was tied up in packs, which were large envelopes of deer-hide carried by means of tump-lines over the forehead. (Duff 1952:72-73)

The Upper Stalo killed game "with bows and arrows, thrusting-spears and clubs, and caught them in pitfalls, deadfalls, snares, and nets," and used trained dogs in their hunts (Duff 1952:71).

Traps of four different types, each with its distinctive native name, are listed by Hill-Tout (1903:399) as Chilliwack devices for taking animals: (a) "fall" traps, which I take to mean deadfalls; (b) pit traps, always constructed with a V-shaped bottom to pin the legs of the animal together and prevent it from leaping out; (c) "noose" traps, which I gather were stationary set snares; and (d) spring traps "made by bending a sapling."

Deer were taken in numbers by the Upper Stalo. In the valleys they were chased by dogs into the river where hunters awaited them in canoes. In the mountains they were pursued by dogs, while the men attempted to get close enough for a bow and arrow shot. Deer were caught in pitfalls in game trails. A hole five feet deep was dug and fitted with two crutched sticks or several sharpened stakes, each long enough to hold the trapped animal off the ground. The hole was covered with cross-sticks, cedar-bark, and earth, which gave way under the animal's weight. (Duff 1952:71)

According to Simon Fraser (1960:98), the Tait captured deer and other large animals in nets. One net of this tribe that he examined in June, 1808, was "made of thread of the size of cod lines, the meshes were 16 inches wide, and the net 8 fathoms long." Presumably other Upper Stalo tribelets, including the Chilliwack, took game with the same or similar nets, but the evidence for this is lacking.

Black bears were driven by dogs until they tired and either turned to fight or climbed trees. They were then killed with bows and arrows or with spears. Bears were likewise taken in pitfalls of the type described for deer, and in deadfalls. Hibernating bears, too sleepy in their dens to be dangerous, were speared. (Duff 1952:71)

The Chilliwack River and Lake country was evidently excellent black bear country. During June and August of 1859 when camping in the area, Wilson (1970:50, 66, 67, 68-69) reports several bear sightings. On August 26 he notes: "bears are thick around us . . . ; one or two have been killed by the men whilst on their way from one place to the other & the bear's meat . . . is not at all bad." Pitfalls were sometimes used by the Chilliwack to take these animals (Wilson 1866:282).

Grizzly bears, against which dogs possessed little merit, were taken by hunters. How this was normally accomplished is not described by Duff. But he reports as an Upper Stalo practice the very special, daring bone-in-mouth method recorded from informants in neighboring Plateau groups. A bone, about 1.5 inches in diameter and 8 to 10 inches long, was sharpened at one end, fashioned with a fork at the other, and provided with a leather band around the middle as a grip. When the bear, approached by the hunter, reared to fight with his paws and claws, the hunter, staying just out of reach, danced from side to side until the frustrated and angered bear advanced to attack with his mouth open. Then the hunter thrust the bone, point up, into the animal's mouth. Closing strongly on the bone, the bear drove the point through the roof of his mouth and the two prongs into the soft under surface of his jaw. As the animal fought the painful bone, the hunter speared it in the neck. (Duff 1952:72)

Mountain goats, hunted without the aid of dogs, were stalked with bow and arrow. In another method two hunters approached a group of goats from opposite sides. While one waited, pressing himself against the steep mountain side, along the animals' trail, the other alarmed the goats. When they retreated past the first man, he pushed them over the side with a stick. (Duff 1952:71-72)

That the Chilliwack were among the Upper Stalo tribes which hunted wild goats in postcontact days is indicated by a historical note from Duff's (1952:115) Chilliwack informant. He knew an old man who "had a hunter's magical formula written down in a memorandum book. One day the old man was hunting mountain-goats without success. He took out the book, read the . . . [incantation] and found six goats around the next rock." Doubtless the only post-White element in this simple narrative is the use of the written spell instead of one carried in the hunter's memory—and presumably the use of firearms.

Small fur-bearing animals were caught in deadfalls by the Upper Stalo (Duff 1952:71). On one occasion in the Cultus Lake country of the Chilliwack, an Indian—not necessarily a Chilliwack, however—accompanying a British Boundary Commission field party killed a rabbit with a stone (Wilson 1970:60).

Ducks and geese, when migrating south in November, were netted by the Upper Stalo from canoes at night. The net was stretched flat on a square frame of four poles. One man was in the canoe bow; the other in the stern. Between the two a pitch fire was kindled on boards across the gunwales. While the canoes drifted downriver, one man held the net, threw it over the birds that were attracted by the light, pulled them in, and wrung their necks. Low-flying ducks were also brought down by loud shouts, a contention also made by several Gulf of Georgia tribes. (Duff 1952:67, 72)

Birds were also shot with arrows, blunt-headed ones for small birds. Hummingbirds, used in ornamenting hats and other articles, "were caught alive with special arrows, the ends of which were shredded so that they brushed out in flight." Birds were also snared. (Duff 1952:72)

The preparation, by the Upper Stalo, of meat for immediate consumption and for storage is not described in the ethnographic sources. However, we have two information fragments applying explicitly to the Chilliwack:

- Marrow was extracted from animal bones and eaten. When the Chilliwack saw their first Western candles, they mistook them for sticks of marrow and attempted to eat them. (Hill-Tout 1903:391)
- When birds were roasted by the Chilliwack immediately after being killed, they were considered to have had a salty flavor (Hill-Tout 1903:396).

Plant Collecting

Information regarding the plant foods collected and eaten by the Upper Stalo is fragmentary and none of what little exists is related specifically to the Chilliwack.

Roots

The following root plants are reported to have been used as food.

- Bracken fern. The most important local root. The long rhizomes were dug by women with hardwood digging sticks, cooked, and stored. (Duff 1952:73)
- "Wild potato." Found locally in patches on low foothills and mountain slopes. A composite bulb like onion or garlic with a 2 foot stalk and a blue flower "something like a tiger lily." (Duff 1952:73)

- "Wild potato." Not found in Upper Stalo territory; imported from the Lower Stalo. Boiled or roasted in hot ashes before eating. Duff (1952:73) believes this to be the true camas.
- "Wild onion." A bulb that grew close to the river; eaten raw. (Duff 1952:73)

Three dried roots, surely used for food but not remarked upon by Duff's informants, were collected in 1913 in Tait country: *Lilium columbianum, Balsamorhiza* sp., and *Lomatium* sp. (Duff 1952:73)

Omitted in Duff's brief root roster is the common arrowhead (*Sagittaria latifolia* = Chinook jargon *wapato* [Suttles 1951:277]). The Fort Langley Journal of October 5, 1828, observes that this root was then being collected by many Indians in Lower Stalo country, and that, dug under water in pools and marshes, these roots were held "in great estimation as an article of food" (Duff 1952:73). It is not clear whether they were also available in the upriver country of the Upper Stalo.

One very early historical reference to undoubted Upper Stalo use of roots is worth noting. When, in late June of 1808, Simon Fraser and his party traveled down the Fraser River, they were provided meals which included roots of some variety at two Tait villages (Fraser 1960:101). In the first case the meal consisted of salmon, oil, raspberries, and roots; in the second, of sturgeon, oil, and roots.

Women and their children, at least sometimes without men, went in groups to the root grounds to collect these foods. On occasion, they remained overnight. One of Duff's (1952:119) aged Tait informants recalled one time long ago when six women and their offspring left their village at the present site of Agassiz, camped at the foot of a mountain to dig roots, and were visited just at dark by a *sέsχač* (sasquatch) which came into the firelight of their camp and attacked them.

Southern Vancouver Island and Puget Sound tribes and groups immediately inland from the Sound tended certain native roots to some degree and even replanted them: e.g., camas seeds, Indian or wild carrots, and tiger lily stems (Collins 1974a:55; Smith 1950a:336-337; Stern 1934:42-43; Suttles 1951:282, 1957:163-164, 164 fn. 23). Suttles believes that this primitive method of encouraging wild root growth was widespread in the area. But I have seen nothing to suggest that the practice extended north into the Fraser drainage. If it had, one might suppose that the Chilliwack, with their unusual back-country subsistence focus for a Fraser River people, would surely have been one of the groups most likely to have followed the pattern. In any event, it is in my mind an open question as to whether wild root tending was an aboriginal practice or a very early post-White borrowing, transferred quickly to local roots.

Berries and Other Fruit

Most berries preserved for winter consumption were gathered in late summer by parties of women and a few men who went into the mountains for a few days. The most important mountain berries to the Upper Stalo were four huckleberry (*Vaccinium* sp.) varieties: sweet blue huckleberries, found only at higher elevations; gray huckleberries, that grew on low bushes at higher elevations; blue huckleberries, similar to the sweet blue kind but less sweet and found on lower slopes; and red huckleberries, which grew on lower slopes. Generally dried immediately after being picked, they were piled an inch or two thick on a cedar-bark mat spread on a wooden rack about 4 feet above the ground. They dried in two or three days. Sometimes berry patches "were burned to improve their future yield." (Duff 1952:73)

A red, bitter berry that "looks like wild-rose-hips" and grows only at the upper elevations was mixed half and half with sweet blue huckleberries and the two mashed together. (Duff 1952:73)

The following berries were collected during the summer and either eaten fresh or dried for winter eating:

- Salmonberries. Eaten fresh.
- Thimbleberries. Eaten fresh.
- Wild trailing blackberries. Dried by being spread on mats in the sun.
- Blackcaps. Dried like the blackberries.
- Salal berries. Dried like the blackberries.
- June berries. Placed in a backet or small woden bowl and crushed with a small stone hammer. Spread to dry on maple leaves in the sun or covered with more leaves and hot ashes. Stored in the form of flat cakes.
- Elderberries. Crushed, dried, and stored as June berries were treated.
- Oregon grape berries. Eaten fresh, "either right off the bush or smashed to a pulp and mixed with water."
- Wild crab apples were common and were gathered and eaten fresh when ripe in late fall (Duff 1952:73-74).

I have uncovered only a single reference to Upper Stalo use of berries as food in the very early historical records. On his early summer journey of exploration of the Fraser River in 1808, Fraser (1960:101) and his party received raspberries from the people of a village near Hope, in Tait tribal territory, as a part of the meal served them.

For the Chilliwack specifically we have little berry information. But Charles Wilson of the British Boundary Commission mentions incidentally several berries which grew abundantly in some localities within the bound-

aries of traditional Chilliwack territory where he spent several summer and fall months in 1859. These, which were greatly to his taste, included:

- Black currants. When ascending the Chilliwack River on July 29, Wilson (1970:64) was shown by his Chilliwack guide "a first rate fruit garden"—wild, of course—in the open valley upstream from Sleese Creek. Here were black currants "in profusion." On August 28 in a protected basin close by several glaciers in the high mountains along Sleese Creek near the international boundary, Wilson (1970:70) found these same black currants "in great profusion."
- Raspberries. Raspberries in abundance grew with the black currants in the berry patch visited by Wilson on July 29 (see above); indeed, "one species of raspberry, a large yellow one, was unequalled in flavour even by the best in the garden at home." Likewise near the Upper Sleese glaciers Wilson discovered raspberries in great numbers on August 28 (see above).
- Strawberries. On June 16 the prairie below the Chilliwack Canyon was "covered with . . . strawberries," providing Wilson on the 19th with "a feast" as he walked over the area. High up the Sleese, strawberries were growing "in great profusion" on August 28 (see "black currants" above). (Wilson 1970:49, 51, 70)
- A "beautiful red berry which grew abundantly on a shrub" was also enjoyed by Wilson (1970:64), who found them in the "berry patch" beside the Chilliwack River on July 29 (see "black currants" above).

It cannot be doubted that all of these fruit were eaten by the Chilliwack.

A number of berries scarce or unknown in Upper Stalo territory were secured through trade. The following belong in this category:

- Serviceberries (Saskatoon berries). Scarce in Upper Salo country. Obtained dried from the Thompson Indians. In general used as a sweetener and as such added to soups. (Duff 1952:74)
- Soopolallie berries (buffalo berries, foamberries). Obtained from the Thompson tribe. Beaten up to a foam for eating, with serviceberries added to sweeten the product. (Duff 1952:74; Clark 1976:324; Turner 1978:138)
- Cranberries. Grew near the Fraser River mouth. Obtained in late fall on visits or by trade. (Duff 1952:74, 76)

Minor Plant Foods

Green shoots were collected by the Upper Stalo and eaten raw in the spring. Among these foods were the shoots of salmonberries and of thimbleberries and round cow-parsnip stalks. (Duff 1952:74)

Of nuts, only hazelnuts were gathered. They were obtained in mid-September, put away to ripen, and later eaten uncooked (Duff 1952:74).

"Beard moss" (i.e., black tree lichen, *Alectoria fremontii*, I am sure) was secured "hanging from certain trees high up in the mountains." It was "boiled black" and dried as cakes, the so-called "moss bread." (Duff 1952:74; Turner 1978:35)

Meal Patterns and Preparation

Certain details of the preparation of fish and meat have already been presented. The following data are supplementary to those facts.

The Upper Stalo prepared food for consumption in three ways: by stone-boiling, roasting, and steam--roasting in earth ovens. Boiling was done in a basket or wooden trough. Roasting involved pinching the meat or fish in the split end of a fir stick and thrusting the pointed end into the ground near an open fire. The flesh was held open with twigs. Birds were kept turning to roast evenly all around. Details of the earth oven and of what foods were prepared in it are not reported. (Duff 1952:74)

Soups, made of fish, meat, roots, and berries, were a common Upper Stalo food. Certain conventions regarding the preparation and consumption of soups were observed: e.g., meat and fish were never mixed; the young were not allowed soup, because too much fluid made them become heavy. (Duff 1952:74)

The Chilliwack obtained a brownish salt from Cheam Peak and used it sparingly (Duff 1952:74). This peak is on the western end of Cheam Ridge, east and north of the mouth of Sleese Creek, and was just outside the Chilliwack boundary as plotted by Duff (Figure 2-1).

We have no information concerning the foods served in the typical Upper Stalo (much less Chilliwack) meal by time of day, season, condition of the food supply, and social status. This is, however, a matter of considerable importance, for this information represents part of the data base necessary for assessing the nutritional intake of the group under traditional subsistence conditions and the degree to which the minimum daily dietary requirements in proteins, fats, carbohydrates, vitamins, and minerals were met in the normal meal pattern.

Such data as are available for the Upper Stalo in general and the Chilliwack in particular on their methods of preparing foods for storage and subsequent consumption are discussed above. Here we are concerned

with the preparation of foods for immediate eating and the serving of these as meals. Unfortunately, there are very few data.

Among the Upper Stalo food was ordinarily cooked, when boiled, in box-like baskets or wooden troughs, these latter sometimes more than 4 feet long and 10 inches deep. The water was heated with hot stones carried with "two pieces of wood with flattened, shovel-shaped ends." While salmon, at any rate those to be eaten in the annual first salmon ceremony, were sometimes boiled in a basket, they were on occasion boiled in a large stone bowl or a hole in a rock, the water heated as usual by hot stones, or they were roasted over an open fire. (Duff 1952:58, 120)

Partially confirmatory evidence for the cooking of salmon comes from the early historical records. When exploring the lower Fraser River in late June, 1808, Simon Fraser and his party were served fresh salmon on several occasions as they passed through Upper Stalo country. The fish were either roasted or boiled with heated stones in wooden vessels (Fraser 1960:98, 99, 115; see also 101, 114). It is frequently reported that fish were cooked surprisingly quickly by this stone boiling method. Fraser (1960:115), however, makes a point that must be taken into consideration in estimating total meal preparation time. When, on his return journey upstream, he stopped at a Tait village in the Yale area, the villagers "spread mats for us, and put stones in the fire to heat in order to prepare us a meal. But this operation required more time than our situation would permit us to spare, and we took our leave."

No data are known to me describing Upper Stalo—or, more specifically, Chilliwack—methods by which game, roots, and berries were prepared for immediate eating, except as seemingly implied by Duff's very general boiling statement above.

Upper Stalo dishes were dugout vessels smaller than the boiling troughs and were made in various shapes. The Simon Fraser data agree at the general level: when, on June 28, 1808, he and his party reached the uppermost Upper Stalo village, they received from the villagers "plenty of Salmon served in wooden dishes." Upper Stalo spoons, with as much as a ten-inch bowl, were generally fashioned of a curved vine maple branch; their handles were sometimes carved by way of ornamentation. Mountain goat horn spoons were not in use. (Duff 1952:58, 59; Fraser 1960:98)

While apparently the same or essentially identical in material and form to those of the other Upper Stalo tribelets, some Chilliwack utensils were uniquely large examples of their types. According to Hill-Tout (1903:360-361, 394, 397), all persons of a single community ate their meals together. Consequently, the food for all villagers and for all meals was prepared and served together. The cooking and eating objects specifically mentioned for the Chilliwack are as follows: enormous "cedar troughs, 10 or more feet long and 2 or 3 feet wide"; wooden and basketry "kettles"; wooden bowls; big (i.e., ordinary) and small wooden platters; large maple dishes; wooden dippers or spoons; and horn ladles or spoons, known by a different native term from the preceding.

Food Ceremonalism

Although the data are scanty and to some degree contradictory, the result, in part, of the early adoption of certain Christian beliefs and practices, it appears that among the Upper Stalo the "first fruits" rituals were practiced for the first berries of the season, the first roots gathered, and the first salmon caught. (Duff 1952:98, 119, 120-121; Hill-Tout 1903:358)

The first fish, in some groups chinook and in others (including the Chilliwack) the sockeye, was harpooned by a single fisherman, wrapped in brush, taken to the big house where all persons had assembled, and boiled in a basket, boiled in a large stone bowl or hole in a rock, or roasted over an open fire according to the tribal custom. The fish—in recent decades the deity or maker of the world—was thanked by the chief, the fisherman who had taken the first fish, or the oldest man. The cooked salmon was divided among all present, each receiving a very small piece. Depending on the group, the bones were either returned to the water immediately or, wrapped in cedar bark, hidden for several years in the dwelling. The Chilliwack roasted their first sockeye over an open fire, as did the Lower Stalo. (Duff 1952:102, 119, 120)

Technology

In this rather general section are collected data relating to objects and processes that either fail to fit naturally into other sections, as fishing implements do, or importantly involve two or more cultural complexes, as do the bow and arrow that were employed both in hunting and in warfare. The data are obviously far from comprehensive: many items of material culture and their attendant fabricating techniques and uses are not described or even marginally alluded to in the published literature.

Fire was kindled with a drill of vine maple or crabapple and a hearth of dry cottonwood root. The sparks were caught in dry moss. To start a fire quickly, glowing coals were transported in large clam shells. Torches were commonly made of fir pitch; sometimes sockeye heads were burned for this purpose. (Duff 1952:61)

Artifacts of Fibers, Hide, Wood, Stone, and Antler/Horn

The basketry of the Upper Stalo and their neighbors was highly distinctive for its water-tight coiled variety and for its imbricated designs that sometimes covered and strengthened the entire basket. Coiling is a basketry construction technique in which a long element is coiled spirally from bottom to rim to build up the basket wall, being constantly sewed as the coiling proceeds to that part of the element that lies immediately below. Imbrication is a method by which an ornamenting element is applied horizontally to the exterior surface of the basket as the coil is carried around and is doubled over and pinched in place by the coil sewing element (see Figure 2-3). (Smith in Smith and Leadbeater 1949:112, 125)

Upper Stalo baskets were woven by this process, the circling elements being either round coils of cedar-root splints or flat coils of cedar slats. Water-tight baskets were invariably made with the round coils; those for which this property was not essential were often woven of the flat elements. Chilliwack baskets were in all cases manufactured of split roots of young cedar trees. (Duff 1952:57-58; Hill-Tout 1903:360; Smith and Leadbeater 1949:124)

Owing to the structural requirements of the weaving process, the ornamentation of the entire basket through design and color repetition had to be visualized and planned by the weaver before beginning the basket construction. Traditional design elements among the Upper Stalo were generally geometric, nonrepresentational, and non-symbolic. By imbrication, white, red, and black patterns were produced. A marked preference was shown for a continuous design structure: the figures on all basket surfaces were skillfully related by their arrangement and/or color properties whether the basket was round or cornered like a four-sided box. Individual designs were named, but were not owned as elsewhere in the coastal area. (Duff 1952:57; Smith 1949:115, 116; Smith and Leadbeater 1949:121-122, 124, 131, 132)

"Baskets among the Upper Stalo were of many types and had many uses." Large storage containers, usually of the round coil variety, held clothes and other valuables. Burden baskets, all water-tight, were made in many sizes. Round-mouth baskets served as work containers for weavers and others. (Duff 1952:57)

Woven mats, doubtless of different plant materials and fashioned by different weaving techniques, were used by the Upper Stalo in various ways, but the ethnographic data are very scanty. It is of interest that Fraser (1960:98, 115), when exploring the lower Fraser River in late June and early July of 1808, found mats being spread for his party on the floor—presumably to sit upon—when being given meals at Upper Stalo villages. The Chilliwack are specifically reported to have used mats for beds and for floor and seat coverings, the two forms being designated by different terms (Hill-Tout 1903:395).

Yarn was made by the Chilliwack from mountain goat wool and was woven into blankets (Hill-Tout 1903:400).

Nets of many types were used by the Upper Stalo—dip and bag affairs in fishing, others in entangling ducks and snaring deer, and many other varieties (Duff 1952:58). Specific data for the Chilliwack are lacking, but there is no obvious reason for assuming that nets were of significantly lesser importance to them than to other Upper Stalo tribelets. Nor is there any evidence for believing that any of the net varieties mentioned above were not Chilliwack artifacts, though whether the dip and bag fishing nets were as important to them in early years, when they were back in their canyon, as among the Fraser River groups may be questioned.

Most nets were woven of Indian hemp fiber, generally secured in trade from the Thompson either coiled in its raw state or as finished twine, since little hemp was to be found in Stalo territory. The inner bark was twisted between hand and thigh into strands which, generally in pairs, were then twisted together to create a twine varying in thickness from thread to pencil-diameter. Netting shuttles, usually of maple and about 1 inch wide and 8 inches long, and rectangular maple mesh-measures with a center hole for the hand were used in the netting process. (Duff 1952:58)

"Rope was used to tie up drying-racks, tie on house planks, as anchor-lines, and for other uses." The best was fabricated of Indian hemp. However, long, green hazel sprouts and cedar withes were likewise fashioned into rope. In this process the bark was removed; the sprouts or withes were twisted and worked until soft and pliable; then three of these elements were laid side by side, the ends tied, and the three strands twisted together into a rope. (Duff 1952:58)

The ethnographic documentation contributes little to our knowledge of traditional Upper Stalo artifacts of hide. On the other hand, Simon Fraser (1960:99), descending the Fraser River in the early summer of 1808, entered into his journal a very perceptive observation regarding the use of hides by the Upper Stalo folk. Coming into their country and stopping overnight at the Tait village in the Yale neighborhood, he noticed that the people had "scarcely any leather, so that large animals must be scarce." Fraser was almost surely correct in sensing a reduced utilization of hides in comparison to what he had just seen in Lower Thompson territory. And he may even be right in assuming that the Tait, in their environment, had a more limited access to large game than the Thompson on the Plateau upriver. On the other hand, these Tait folk, with their uncommon wealth in salmon and a distinctly lower Fraser River focus, may simply have been less hunting-oriented and so may have taken less advantage of such animals as were within their reach. In short, Fraser was moving in the from-

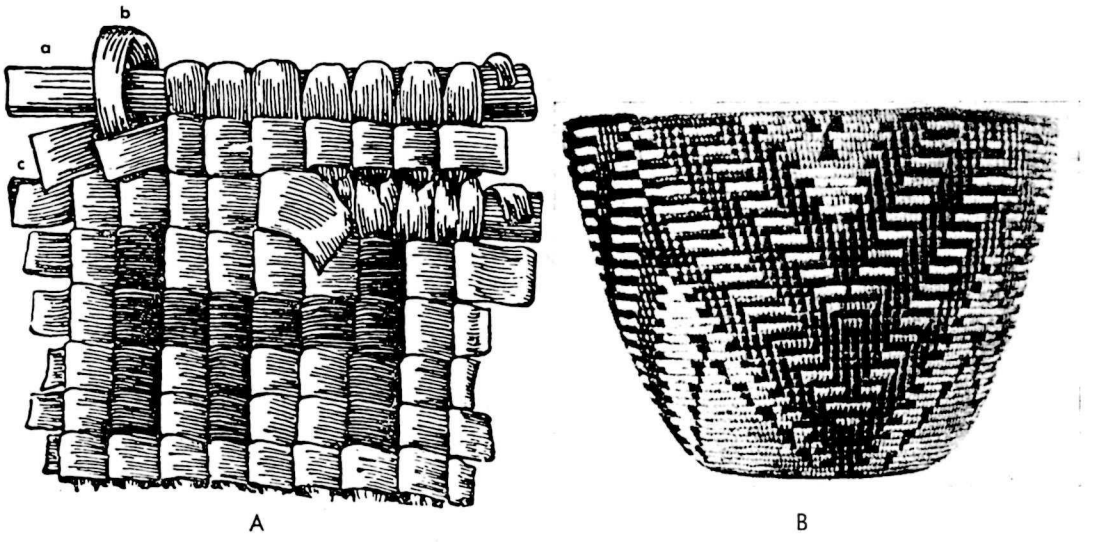


Figure 2-3. Technique of ornamenting the coiled basket by imbrication. A. Method, showing warp (a), sewing element (b), and imbricating element (c). B. Appearance of completed basket. Design pattern is visible only on exterior surface. (After Underhill 1945:104)

Spuzzum-to-Yale sector from a hunting, hide-using Plateau culture to a predominantly fishing, fiber-using one with strong links to the coastal peoples.

Among the Upper Stalo many items of material culture were fabricated of wood. The plank dwellings, mortuary structures, and canoes were among the larger items. In addition, a large number of smaller objects—cooking and eating utensils, bows and arrows and other weapons, fishing gear including harpoons, combs, and so on—were made of wood. Ethnographic descriptions of these objects—save for the weapons, for which see below—may be found in the various contexts of their primary uses. Whether wooden boxes of general coastal style were made by the Upper Stalo is uncertain. (Duff 1952:59)

Woodworking adzes were used by the Upper Stalo in carrying out all fine work on canoes, paddles, house planks, etc. The handles were of wood, shaped like a "D" with a center hole for the hand, and were often carved to represent bird or animal figures. The blade was presumably of stone. (Duff 1952:61)

The ethnographic data are silent on the general skill-level of the Upper Stalo worker in wood. There is, however, in Simon Fraser's (1960:99) journal one brief observation recorded on June 28, 1808, when his party reached their first Upper Stalo village on their journey down the Fraser River. He writes: ". . . from their workmanship in wood they must be possessed of good tools at least for that purpose," although he saw "few or no christian goods among them."

In earlier times Upper Stalo baskets were also fashioned of birch bark. The seams were pitched and sewn with cedar-root splints and the rim strengthened with a cedar-root hoop sewn in place. (Duff 1952:57)

Stone bowls, carved in animal and human figures, are found archaeologically in the Upper Stalo region. Poison was said by Duff's informant to have been mixed in them and pigment to have been ground and mixed with fish oil. But no interpretation of the carved figures was attempted. Large stone bowls were sometimes used in ethnographic times to cook salmon, at least for the annual first salmon ceremony. (Duff 1952:61, 120)

Shells, evidently largely if not wholly traded in from the coast, were used by Upper Stalo in Fraser's time. When on June 28, 1808, Fraser arrived at their village in the vicinity of Yale, he noted "ornaments . . . of . . . shells of different kinds, [and] shell beads." In this same camp posts of a newly erected mortuary structure were covered with shining shells. (Fraser 1960:99-100)

Upper Stalo artifacts of horn or antler included harpoon and spear points and wood-working wedges. Fraser (1960:99, 100, 101) saw among the Tait "horn Powmagans" (clubs), "horn bracelets," and "spears [apparently harpoons] . . . of horn" with long wooden handles. Quite obviously, horn/antler was a useful material where integral strength, weight, and sharp points were at a premium.

Weapons

Bows among the Upper Stalo were of yew or vine maple, constricted in the center for the hand-hold and with recurved tips. A fairly large bow is said to have measured 4.5 feet in length and 2 inches in width. Some

were strengthened with a layer of sinew from a deer's back: the sinew was dried, trimmed, affixed with sturgeon glue to the convex side of the bow, and sometimes covered with bullsnake skin. Bows were often decorated, as with painted animal figures. They were strung with a two-strand Indian hemp string. (Duff 1952:59)

Arrow shafts were of serviceberry wood, either a small round sprout or, for hunting, a larger, tougher stem split into quarters and rounded. Most were pointed by merely charring and sharpening the end. Some hunting arrows, however, were fixed with ground slate or possibly bone points. War arrows may have been tipped with "flint" points, fashioned by placing the blank on edge in a groove in a piece of wood and flaking it bilaterally by indirect percussion with a nephrite "pencil" and hammer. War points were said to have been "poisoned" by being dipped in human brain. Arrows were feathered with two whole mallard or woodpecker tail feathers, bound in place with deer sinew. They were "laid on tangentially opposite each other," quill end toward the arrow butt. Occasionally they were "given a half-twist to impart a rotary motion . . . in flight." (Duff 1952:59)

Quivers were made of beaver skin, sewn into a bag with an awl and with sinew or Indian hemp thread. They were carried over the shoulder with a woven Indian hemp tumpline, sometimes ornamented with wefts of colored mountain goat wool. (Duff 1952:60)

Twice while descending the Fraser River in June, 1808, through the Upper Stalo territory, Fraser (1960:99) records seeing bows and arrows in the settlements visited. Those at the first village he came to, still within the lowest reaches of the canyon above Yale, were "very neat." And in another camp a short distance downriver bows and arrows were observed among the village weaponry.

In shooting, the bow was held horizontally by the Upper Stalo, wrist up, whenever possible, with the arrow feathers up and down so as to pass between the index and second finger of the bow hand. It was drawn with the right hand by grasping the arrow butt between the thumb and the second joint of the index finger. (Duff 1952:60)

Slings, used in Upper Stalo warfare, "consisted of an elongated diamond-shaped piece of skin with a smaller hole of similar shape cut in the centre to hold the stone." Indian hemp cords were tied to the two ends through small holes. The end of one cord had a loop for the forefinger; the other, a knot which was grasped by the fingers and suddenly released at the appropriate moment as the weapon was swung around the head. The projectile was a round stone, sometimes as much as 4 inches in diameter. (Duff 1952:60)

Hunters were accustomed to carry a strong pole, 6 or 8 feet long and 2 inches in diameter, "to assist them in negotiating difficult terrain." This was quickly converted to a spear for defence by slipping over one end a stone point, mounted on a socket, that hunters also carried. Thrusting spears, with long points of elk antler or mountain goat horn or with long, bilaterally barbed bone points, may have been used for bear. (Duff 1952:60) In his short list of the "arms" seen at a village in the Yale sector, Fraser (1960:99) mentions their spears.

Standard war weapons, clubs were mostly of wood, sometimes of stone. Wooden clubs were fashioned much like sturgeon clubs or like baseball bats, up to 5 feet long, often with points carved all over the enlarged end. Stone clubs, generally about 2 feet in length, had broad, flat blades, sometimes with one sharpened edge, and a long, round handle, perforated for a carrying thong, that was grasped by both hands. Clubs were given a special ceremonial importance, for they "were brought out only at 'big times,' and their histories were told." (Duff 1952:60)

Horn (antler?) clubs were evidently likewise in use among the Upper Stalo. During his journey of exploration, Fraser twice mentions horn or antler clubs. At the village in the Yale vicinity, he observed "clubs, or horn Powmagans," and on July 4, when heading back upriver but not quite yet within Upper Stalo country, he describes the leader of a pursuing party as "brandishing his horn club." (Fraser 1960:99, 109)

Clothing and Ornamentation

Not much is reported in the ethnographic literature concerning the traditional clothing of the Upper Stalo and nothing, so far as I have discovered, specifically relating to that of the Chilliwack.

Dress was fashioned both of woven cedar bark—as was widely the case among the coast—and sewn of tanned buckskin—as common among northern and eastern Plateau tribes. Short aprons, presumably woven, were the garment of everyday wear for both sexes. Less commonly worn were skirts and capes of woven cedar bark, robes of groundhog, rabbit, or bear skins sewed together; and blankets woven of mountain goat wool or woolly dog hair. Robes were exclusively clothing, while blankets answered the dual purpose of clothing and bedding. Robes of strips of skin woven together appear to have been unknown to the Upper Stalo. (Duff 1952:53, 57)

In June, 1808, Simon Fraser (1960:99, 101) noted among the Upper Stalo "rugs made from the wool of . . . wild goat, and from Dog's hair, which . . . [were] equally as good as those found in Canada. We observed that the dogs were laterly shorn." In a village later seen, apparently below Hope, these dog's hair "rugs" had "stripes of different colours crossing at right angles resembling at a distance Highland plaid."

In fashioning the blankets, mountain goat pelts were soaked until the wool was loose and could be pulled off. The hair of dogs was either cut or plucked in the spring. These materials—wool or hair—were spun on large spindles, the dog hair apparently not being mixed with feathers or fireweed cotton as among certain non-Stalo

peoples. From this coarse yarn the blankets—worn as clothing, used as bed covers, or distributed at potlatches—were woven on a loom. (Duff 1952:53, 57)

A considerable amount of buckskin clothing was also worn, according to the ethnographic data but not to Fraser, at least by the uppermost Upper Stalo. This included breechclouts, shirts and dresses, leggings, and moccasins. Moccasins were seldom used, however, except by hunters and invariably when traveling on snowshoes. Buckskin mittens protected the hands of hunters in cold weather. (Duff 1952:53, 57)

Deerskin among the Upper Stalo was prepared by being soaked in water for several days and then, draped over a log, by being scraped to remove the hair with a drawknife-like tool having a center blade of bone, stone, or wood. Stripped of its hair, the skin, laced tightly on a square wooden frame, was pounded with a wooden club to stretch it, rubbed with deer brains, and, still on the frame, smoked over an alder fire. (Duff 1952:53)

The headgear and personal ornaments of the Upper Stalo seem not to be described in the ethnographic literature. In late June, 1808, Fraser (1960:99-100), however, made the following brief journal entries relating to the people of the camp in the Yale area. "Their hats, which are made of wattap [split roots], have broad rims and diminish gradually to the top. Some [persons] make use of cedar bark, painted in various colours, resembling ribbands which they fix around their heads." And concerning their adornment: "Their ornaments are . . . shells of different kinds, shell beads, brass made into pipes hanging from the neck, or across the shoulders, bracelets of large brass wire, and some bracelets of horn."

At least in Fraser's day, facial and body painting was practiced among the Upper Stalo, evidently by entire groups at the same time.

- After having come down the Fraser to a point below Hope and having visited by this time a number of Upper Stalo villages, Fraser (1960:101) comments upon the physical characteristics of the "Indians in this quarter . . . [in comparison with] those in the interior." Included is the statement that "their skin and hair . . . [have] a reddish cast—but this cast, I suppose, is owing to the ingredients with which they besmear their bodies."
- Later Fraser (1960:103) arrived at a large village where the "Indians . . . appeared at first view to be fair, but afterwards we discovered that they made use of white paint to alter their appearance." If my positioning of this village is correct, this village may have been a Sumas or Nicoman settlement. It is apparent that even nearby communities did not necessarily paint with the same colors.

The function of this body coloring is not explained. It is possible that the colors were in some measure symbolic, that the two sets of villagers actually painted with the same color for the same reason, and that the color difference is explicable in terms of different circumstances.

The Settlement

Here is reported such information as is available on the Upper Stalo settlement in general and the Chilliwack in particular: on dwelling types and ancillary structures, on specific village and camp locations, and on the spatial arrangements of structures within the settlement perimeters.

Structures

These consisted of dwellings and shelters of three types; of drying racks, smokehouses, and storage shelters; and of the sweat lodge, puberty hut, and grave structure.

Semisubterranean Dwelling

The Chilliwack, like the Stalo tribelets up the Fraser and the groups in the neighboring Plateau, made use of the pit house as a winter dwelling, either occasionally (Hill-Tout 1903:360) or as their ordinary cold weather residence (Duff 1952:46). According to Duff, dwellings of this type seem to have been but seldom constructed downriver from the Chilliwack: they were, in fact, something of a luxury, the usual winter shelter being the plank house. Among these lower Fraser people, they were said to have been occupied only by wealthy families in some groups and, among the Sumas, by families desiring to get away from mosquitoes. This latter rationale for their use, it seems to me, cannot be discounted out of hand, for Wilson (1970:49) of the British Boundary Commission remarks on June 16, 1859, while at Chilukweyuk Prairie: ". . . the mosquitoes are something fearful, but . . . their regular season comes on next month & the month after when the water falls, when they are so bad that even the Indians clear out." The extent to which these insects later harassed his field parties, men and horses, and the Indians nearby is almost unbelievable. If semisubterranean dwellings were favored by the Sumas as a means of evading these tormentors, these dwellings must have been warm season shelters as well as—not likely instead of—winter structures, a point of considerable interest.

There are, however, other possible explanations for the upriver occurrence of the pit house and the lower Fraser distribution of the plank dwelling. The former may correlate with relatively heavy snowfall and the latter with lighter snow precipitation. Or with higher, firmer ground in the first instance, and in the second with lower ground where moisture would have tended to seep into the structure. This latter explanation seems eminently reasonable, yet two Chilliwack villages of the post-1830 period were located out on the Fraser plain, one at the Chilliwack River mouth and the other about halfway between its union with the Fraser and Vedder Crossing. In both of these population centers Duff, in 1949-1950, discovered depressions which he interpreted as semisubterranean dwelling locations. (Duff 1952:17, 37-38, 43, 46) Possibly by the 1830s the earlier bogier surface of this area had become firmer to the point where in some spots pit structures were feasible.

In their traditional upriver, canyon homeland, the Chilliwack made extensive use of these semisubterranean houses. Fortunately we have rather good descriptions of the construction details of these dwellings. The pit was circular, up to 30 and perhaps even 40 feet in diameter. The peak entrance was 10 to 20 feet above the floor, a considerably greater height than among other Upper Stalo tribes. There were no posts out in the floor area to support the roof: the roof was borne by four main posts set vertically against the pit wall. Their tops, notched to receive the principal rafters, reached upward to just below ground level. The upper ends of these rafters were lashed to a square hatchway, one rafter secured at each corner. From supplementary posts other lesser rafters ran from the ground to the hatchway. The roof was pyramidal and only 4 to 4.5 feet above ground level. The center entrance was reached from the floor by a notched pole ladder. In better houses, these posts and rafters were smoothed; the former were carved above the bed platform and the latter were often painted. Sleeping platforms, six feet wide, were built four feet above the floor and were screened at their sides by partitions. Each dwelling was a multifamily structure, although only one cooking fire, under the overhead entrance, was provided for all. (Duff 1952:43, 46, 47; Smith 1947:257, 264)

These Chilliwack semisubterranean structures—those of the Nooksack are reported to have been very like them—differed notably from those of the Upper Stalo groups upriver from the Chilliwack, from the Thompson structures reported by Teit (1900:192-195), and from the various types described by Ray (1939:132-137) for the tribal groups in the northern and central Plateau (Smith 1947:365-366).

Plank Dwellings

Traditionally, houses constructed of planks were occupied by the Chilliwack during the warm months, being abandoned in favor of the pit dwellings when winter arrived. There were three types of plank structures in use in the general Chilliwack sector of the Fraser Valley. Presumably all three were found among the Chilliwack themselves, but the ethnographic data are somewhat less precise on this point than one would like.

(a) A small, shed-roofed, detached house. If like the Tait structure as seems to have been the case, this dwelling measured on the order of 25 by 25 feet to perhaps 30 by 50 feet. It had its high wall in front and a door in the middle or corner. The walls were lined with plank beds. In the center of the dirt floor was located the single fire. (Duff 1952:46-47)

Apparently a very similar structure was observed by Fraser in late June, 1808. Very near the upper border of Upper Stalo country, he came to a settlement consisting of a single dwelling on one side of the river and "a considerable village" with similar houses on the other side. The one structure on his river bank was "an excellent house 46 by 23 feet, and constructed like American frame houses. The planks are 3 or 4 inches thick, each passing the adjoining one a couple of inches. The posts, which are very strong, and rudely carved, receive the beam across. The walls are 11 feet high, and covered with a slanting roof." (Fraser 1960:99)

(b) A large, shed-roofed dwelling. As Hill-Tout (1908:360) describes this structure, it had a single-slope roof, the front and higher side "rising to 25 or 30 feet." Commonly there were only two doors, one at each end. The interior was divided, by hanging mats or screens of grass or reeds, into sections for individual families, each about 50 feet square. Beds were "reed mats laid one upon the another, the head-rests or pillows being rolls of the same." Over these mats wealthier families spread dressed skins and blankets of mountain goat wool. The tribal head—as well as, it may be supposed, the leader of each village—invariably occupied the central section of the dwelling. His brothers were located next to him on either side, the oldest closest. Then came the lesser "chiefs and notables, and beyond these again the common folk." This arrangement of families provided the tribal and community leadership with maximum security from possible hostile raiders. In early years when the tribe was more populous and villages were larger, the houses were placed end-to-end "in an unbroken line for several hundred feet." In such cases, the structure housing the leadership and important people was positioned, again for defence, in the center of the row of dwellings. On festive occasions (e.g., during the winter dances), the internal divisions of the house were removed, thus opening the interior into one large space. (A slightly varying description of this dwelling is given by Duff [1952:46-49].)

That dwellings of this type were in use by the Chilliwack in the mid-1800s is made clear by Wilson

(1866:287) who saw them on the Chilliwack River in 1859. They were constructed "much more substantially" than the dwellings among the other lower Fraser peoples.

> [Their] uprights and ridges . . . [were] of solid timber, of great weight and size, roughly squared, and the sheeting of the ends and sides of thick planks of split cedar. With the slight means and rude implements possessed by the builders, the erection of one of these houses is a work of great labour and time. The houses vary greatly in size, some being as much as 60 or 70 feet long by 20 to 25 feet broad.

About 1860 only these Chilliwack dwellings and those at Fort Langley, among all the groups seen by Wilson, were ornamented in any manner. Those of the Chilliwack were adorned with "grotesque carvings, apparently representing tortoises, large snakes, and some animal of the crocodile type." (Wilson 1866:287-288)

(c) A large, gable-roofed structure, apparently used as a year- round dwelling. Perhaps this style was a "fairly recent development" among the Chilliwack "coincident with a growth in size and elaboration of ceremonial and social functions," including potlatches and winter dances. (Duff 1952:47-49)

Temporary Summer Shelter

Mat lodges must have been used as temporary summer shelters (Duff 1952:50), though there are no ethnographic data concerning them.

A special summer shelter of importance to the neighboring Sumas deserves mention, both because of its unusual location and construction and because the Chilliwack evidently did *not* make use of it, demonstrating the hazards of extrapolating ethnographic data from one lower Fraser River tribelet to the next. In his journal entry of July 18, 1859, Charles Wilson (1970:61) of the British Boundary Commission writes:

> Haig came down from Schweltya [Cultus Lake] & we went out to an Indian hut built in the middle of the lake upon piles. The old chief was very civil & after smoking no end of pipes of peace, we had a good sleep, though the place was not what one would have chosen for a night's lodging; there being some dozen men, women, children & dogs besides the remains of one of our dead horses & a lot of fish hung up to dry, a fire & ourselves all compressed into a place hardly large enough for half a dozen human beings, still there were very few mosquitoes which made amends for everything.

This lake was Sumas Lake, a remarkably shallow, lowland body of water even in summer flood time and one in the midst of horrible mosquito country. I take it that the "hut" was both a fishing locus and a refuge from the tormenting mosquitoes, which the local Indians wished to escape no less than the Whites (Wilson 1970:49).

That this dwelling was not the sole one on Sumas Lake is demonstrated by Wilson's (1970:62) observation of July 23, 1859: "Old Low (my servant) & myself had a delightful sail across the lake to [Sumas] Headquarters, in one of our boats, much to the astonishment of the Indians on the lake, between whose houses we passed with a slashing breeze."

It is informative to note that on July 23, the day after his pleasant sail, Wilson (1970:62) and his companions took to the lake: "Having had no sleep last night, we all rowed out into the middle of the lake where we were soon fast asleep & did not wake till near sun set."

Evidently lake dwellings on piles were not in use among the Chilliwack. Two reasons for this are immediately apparent. Both Chilliwack Lake and Cultus Lake, the only two lakes of consequence in traditional Chilliwack territory, were mountain bodies of water surrounded by steep mountains (Wilson 1970:58, 65) and so presumably generally deep and hardly the environment for pile structures out from the shore. Further Chilliwack Lake was free of mosquitoes and at Cultus Lake these tormenting insects were "not quite so bad as down on the low ground" (Wilson 1970:60, 61, 65).

Subsistence-Related Structures

Fish drying racks were erected by the Upper Stalo on the highest available rocky points to catch the breeze. They consisted of a pole frame, tied together with willow-withe or cedar-withe ropes, supporting a roof of cedar planks or layers of brush to keep both rain and direct sunlight off the fish. In the deep shade under this roof were suspended horizontally parallel poles over which the fish were hung. The drying process required no more than one week if the salmon flanks were made thin; about three weeks if they were thicker. (Duff 1952:65 Plate III, 66)

Storehouses for the dried salmon were essential for their preservation to and through the winter. These structures, 5 to 8 feet square, were constructed of split boards and either tied in the branches of a large tree, reached by a notched pole, or less commonly elevated on poles. In any event, they were well above ground to keep the fish from moisture and safe from rodents. Sometimes a family's salmon caches were at some considerable distance from its winter village. (Duff 1952:67, 89)

Salmon smokehouses were constructed of cedar planks and were tightly walled and roofed. The smoking was accomplished over fires of alderwood. (Duff 1952:50, 67)

Sweat Lodge

Chilliwack sweat houses, constructed near a stream, were of two types. The common one was dome-shaped and large enough for only a single person. A frame of long vine-maple saplings with both ends thrust into the ground was covered with fir or balsam boughs. The inside was sometimes lined with maple leaves wedged between the framing sticks. When moistened by the steam, these leaves stuck together, making "an air-tight wall." The floor was covered with fir or balsam branches, except for the small hole dug into it to hold the hot rocks. The doorway was closed with mats or boughs. The rocks were heated in a fire just outside and carried inside with two sticks with flattened shovel-shaped ends. (Duff 1952:50)

The second variety was more permanent and larger, intended for two or more persons. Their shape and framing structure are not reported in the ethnographic literature. However, they were provided with cedar-bark roofs and were sometimes covered with earth. (Duff 1952:50)

Sweating was the practice with both men and women, the latter as often as the former. It is said that the sweating period lasted about 15 or 20 minutes and was routinely followed by a plunge into the nearby stream. (Duff 1952:50)

Sweating was engaged in by adults both for ceremonial purification and, sometimes two or three times weekly, as a cure for minor ailments such as colds or body pains. Among the Upper Stalo in general, "in spring, feeling poorly after a long winter, nearly everybody sweat-bathed." (Duff 1952:60)

Puberty Hut

A small brush hut, very like the sweat lodge, was used by Upper Stalo girls—presumably including the Chilliwack—for four days during their first menses. It was located not far from the village and was close to a similar hut in which an older woman stayed during this four day period. (Duff 1952:50) The point is not made, but the implication is that this woman served as the pubescent girl's mentor.

As among nearby coastal peoples and unlike the Plateau groups of the region, Chilliwack women were not isolated during later menstrual periods. (Duff 1952:50)

Grave Structures

The Upper Stalo constructed family vaults or special boxes to receive the corpses of family members. The vaults were gable-roofed structures of poles or cedar planks, raised on posts about 4 feet above the ground. The grave boxes were fabricated of separate pieces of wood, not of a single long piece kerfed and bent as boxes were fashioned on the coast. (Duff 1952:49-50, 59, 94) On these receptacles were carved or painted representations of the guardian spirits of the members of the family that owned them (Hill-Tout 1903:363). Bodies were apparently individually wrapped in blankets. They were then placed within these wooden structures, in the cedar box of the person's family or laid in the section of the structure assigned to the family (Duff 1952:49-50)

In Upper Stalo country "roughly carved effigies," anthropomorphic and usually life-sized or larger, were sometimes erected near the burial box or house in honor of respected persons and were thought to be likenesses of the deceased (Duff 1952:49-50, 51). These sepulchers were in use among the Chilliwack, according to Hill-Tout (1903:363, 364-365). The large box which received the body of a person belonging to a family of the middle rank was ornamented on its exterior surface with painted or carved family crests, called "dream objects," depicting, for example, bears, mountain goats, and beaver. Boxes belonging to families of rank and wealth were placed in boat-like receptacles. Those of "meaner" families were nothing more than rough rectangular boxes. Human effigies, roughly carved in wood, were sometimes placed nearby.

To this point, only one early historic reference to grave structures among the Upper Stalo tribelets has been located. At the Tait village in the neighborhood of Yale, Fraser (1960:100) in late June of 1808 saw a new "tomb." It was "supported on carved posts about two feet from the ground. The sculpture . . . [was] rudely finished, and the posts . . . [were] covered all over with bright shells, which . . . [shone] like mercury."

Residential and Task Sites

Leaving Chilliwack Lake, the Chilliwack River flows swiftly westward through the Cascade Mountains to where Vedder Crossing now stands. From this point its short journey to the Fraser followed rather different courses through time. As already described (see Tribal Territory section), the river, according to tradition, at one time continued straight westward to Sumas Lake, a shallow body of water which, via Sumas River, drained northward into the Fraser. Then somewhat before 1830 it turned strongly northward at Vedder Crossing to wind, in changing channels from time to time, across the broad, marshy Fraser plain to the south bank of this major stream. In the late 1880s, leaving this line of flow, it broke through from the Crossing area to the upper end of Vedder Creek and flowed via this former creek course westward once more. After Sumas Lake was drained in the 1920s, the Chilliwack was carried by Vedder Canal to the lower Sumas River and the Fraser. (Duff 1952:14, 15, 43; Smith 1950a:339-341)

In early days—well before the 1830s—while the Chilliwack River was still moving across the low area to the Sumas River, the villages of the Chilliwack were located entirely along the steep-sided valley of the Chilliwack River between Chilliwack Lake and Vedder Crossing, not beside the river below the canyon mouth (Boas 1894:460; Duff 1952:43; Hill-Tout 1903:356; Smith 1950a:339-341). On the high rocky ridge at Vedder Crossing, the tribe maintained a tower of poles "with a platform on top, from which one could see westward down the river to Sumas Lake and give warning of approaching visitors or raiding-parties" (Duff 1952:43).

Why at this time were the Chilliwack without villages below the canyon along the Chilliwack River to Sumas Lake and from that lake north to the Fraser? Three possible reasons occur to me: (1) the tribe was still a notable upper river and mountain group, to whom open prairie living failed to appeal; (2) the area was still actively claimed and utilized by other tribes, the Cultus Lake-Sweltzer Creek people immediately below the Chilliwack Canyon mouth and the Sumas around their lake, its headwaters, and its river outlet down to the Fraser; and (3) the open country below the canyon was thought to be too exposed to occasional raids by Lower Fraser and coastal war parties.

And why were the Chilliwack with no villages in the low country between the lower Chilliwack River and the Fraser and on the Fraser bank defining the northern rim of this level expanse? Possible explanations (1) and (3) above apply to this region no less than to the Chilliwack River-side locations. In addition, this sector was typically one of bogs, marshes, and swamps (Duff 1952:43) and one in mid-summer bedeviled by incredible hordes of vicious mosquitoes.

Sometime prior to 1830 the Chilliwack River shifted its course to pass north from the present Vedder Crossing locality over the previously wet, spongy terrain, now filling in naturally to become a prairie. Only after this filling-in occurred, probably following the founding of Fort Langley in 1827, and, through the efforts of the Langlie traders, after the dangers of hostile raids by distant peoples had been significantly reduced, did the Chilliwack move their main villages downstream and closer to Vedder Crossing. Then, abandoning their canyon isolation as the bogs grew firmer and giant cedars grew in the area, they began more and more to establish villages out "along the lower reaches of the [Chilliwack] river, even venturing out on to the Fraser to fish. (Smith 1950a:339; Duff 1952:14, 16, 21, 43, 44) Smith (1947:266) places at "only three generations back" the first of these Chilliwack villages along the Chilliwack after it ran sharply northward from the canyon mouth across the former swamp and water areas.

Charles Wilson (1960:48ff) of the British Boundary Commission presents a vivid and unquestionably accurate picture of this lower Chilliwack River country as he saw it in the summer of 1859. In the interests of space, I omit my extended summary of this engaging and informative description. He speaks of the area's thick brush and tree belts, widespread mid-summer flooding, absolutely unendurable mosquitoes, snakes and sandflies, and roasting days and cold night air from the mountains. Also of its grass to the waist, flower cover, fine strawberries, and splendid views. Considering especially the general flooding and mosquito hordes, it is no wonder that the traditional Chilliwack had no summer settlements in this lowland Fraser plain.

It is less certain why in earlier years it was also avoided in siting winter villages. Perhaps it was too exposed to downriver raiders. Or it was too far from the mountains for the tribe to be comfortable. Or it was too distant from subsistence caches and sources, since the group had no Fraser River salmon fisheries. Or the water table was too high even in winter for the use of the favored semisubterranean dwellings. Or the open plain was more exposed to cutting winter winds and biting cold than the tribe's mountain-flanked canyon. Whatever the explanation, the Fraser River lowlands within the Chilliwack drainage region were evidently not favored as winter village locations when the river path ran westward to the Sumas country.

Of much greater interest to this present study is Wilson's journey up the Chilliwack River from the canyon mouth to Chilliwack Lake in this same 1859 mid-summer time period. The contrast between this country, the old Chilliwack homeland, and the lower Chilliwack swamps, floods, and clouds of savage mosquitoes is very striking.

On July 27, Wilson left the mouth of Chilliwack River on his first and only journey to Chilliwack Lake. His pertinent journal entries are worth quoting at some length.

7/27. Wilson writes:

> Got on horseback early in the morning . . . [to] be out of mosquitoes for some time whilst . . . on the [Chilliwack] lake. The greater portion of this day's journey was through low land, very thickly timbered, the soil to judge from magnificent Indian potato fields I passed through excellent; at last, after going over a very high hill, I descended to the valley below & found our first halting place by the side of the Chilukweyuk river, which here assumed the character of a mountain torrent & was glad to find the mosquitoes were not very numerous . . . . [I must mention] the kindness of an Indian chief & his family who were fishing near our halt. . . . [H]aving tied my horse went to have a chat with them; the old chief's wife took compassion on my wretched state [from mosquito bites] & having asked my permission, they brought out the paint bag & painted my face & hands with vermilion & certainly the relief was very great; you would have laughed to have seen me painted up like an Indian; after the operation a pipe was lighted & passed round the circle, everybody, women included taking 3 or 4 puffs. Then I took my leave, with a present of a splendid salmon & the chief's son, 'Charley', who is going to accompany me. . . . I am now leaving the mosquito country, . . . (Wilson 1970:62-63)

Where Wilson stopped for the night is not well described. It was probably just above the canyon mouth since he camped as soon as he had descended the high hill to the river side.

7/28. Wilson's journal reads in its relevant parts:

> [The journey on up the valley] was very hilly, nothing but up & down over the spurs of the mountains, at one time toiling up then crossing the bed of a mountain torrent or going down an almost precipitous descent by a zigzag trail. Our halt [of the evening] was close by the river in a beautiful spot; the squitoes growing gradually less. (Wilson 1970:63-64)

His camping place of this night is uncertain, though it must have been somewhere between Tamihi (Tamahi on some Canadian maps; Tomyhoi on USGS *Concrete* quadrangle 1955) Creek and Sleese (Silesia on USGS *Concrete* quadrangle 1955) Creek.

7/29. Leaving the train behind, Wilson pushed on to the lake, covering the mules' two-day trek in one day.

> After about 5 miles the road became very bad, steep hills covered with loose stones which were rolling down under the horse's feet & winding round the edge of a cliff with the foaming Chilukweyuk beneath; after this the valley opened out & I had a level ride for about 14 miles. In one place Charley . . . showed me some berries, so . . . I got off & found myself in the midst of . . . black currents & raspberries in profusion & a beautiful red berry which grew abundantly on a shrub; one species of raspberry, a large yellow one, was unequalled in flavour even by the best in the garden at home. We also passed through a large fire. Luckily there was no wind, or we should not have been able to pass, the smoke was very thick and stifling; the fire extended right across the valley & up the mountains. . . . Nothing could exceed the dismal aspect of the country for the six miles to the lake over which the fire had gone, . . . When I got to the lake . . . I crossed over . . . to Haig's camp in a boat constructed by our men, a distance of 5 miles, . . .

Here ends Wilson's narrative of his three-day journey to Chilliwack Lake.

This narrative is of some special interest because of its description of the valley topography, of the Indian—surely Chilliwack—salmon fishing camp and its occupants, and of the wild berry field, known to his Chilliwack guide. My detailed geographic analysis of this ride may be omitted from this report, but the Indian camp and related matters deserve comment.

It is notable that Wilson speaks of meeting Indians at only one location during his three-day ride: i.e., when he was already in the canyon but still close to its exit. Since he was uncommonly comfortable with Indians, it may be supposed that he would have remarked upon any further encounters with native groups, especially since he had a guide from the one camp he mentions. This apparent absence of summer camps is perplexing, since Wilson implies that salmon fishing was underway at the one camp he encountered. Perhaps the canyon population had by 1859 become gravely reduced by disease or by mass movement to the Fraser prairie, although this area was customarily abandoned in mid-summer owing to the mosquito infestation as Wilson (1970:49) indicates was the practice of those otherwise on the plain. Perhaps there were Chilliwack who were for most of the year canyon residents but were, in the central summer months, off in the mountains, carrying out their normal seasonal food search. Or possibly the Chilliwack were in 1859 largely employed by the British and American boundary parties—at least we are told that some were assisting the British surveyers (Wilson 1970:49, 51, 54, 63, 64, 77)—and so were pulled away in 1859 from their customary summer camps.

With this very incomplete sketch of the Chilliwack Valley between the canyon mouth and Chilliwack Lake, as seen by Wilson in the summer of 1859, before us, we may now turn to his observations regarding Chilliwack Lake. This lake was known to Wilson by reputation at least six weeks before he had an opportunity to view it himself. On June 16, 1859, less than two weeks after establishing a Commission depot at the Chilliwack River mouth, he entered the following observation in his journal, writing at his Chilliwack Prairie headquarters a short distance below the canyon narrows:

> The Chilukweyuk . . . rises in the far recesses of the Cascade mountains & by its valley we penetrate the mountain range later on in the season. The Indians give a wonderful account of a lake near the summit, where bears, marten, marmot & salmon abound; a reconnoitring party sent forward give glowing accounts of the fishing. (Wilson 1970:49)

Hearing that there were no mosquitoes at Chilliwack Lake, he closed his Chilliwack depot on July 16 and sent the nearly mutinous men of the camp to the lake (Wilson 1970:61). Partly to seek relief from these insects, he himself left the Fraser plain for the lake on July 27, as already noted, and was pleased to find them decreasing in numbers as he ascended the river valley (Wilson 1970:63, 64).

On reaching the lake on July 29, at the close of his ride up the canyon as précised above, Wilson recorded his impressions as follows:

> [Chilliwack] lake is very beautiful in the middle of the Cascade mountains between 3 or 4000 feet above the sea, lofty snowy peaks, glaciers close above our heads, the snow in some places within a few feet; the scenery is however small, the valleys being very contracted & the glaciers not of any very great extent. (Wilson 1970:65)

On July 31, he paddled a canoe over the lake to see more of it and wrote:

> Some of the peaks are I should say about 6000 feet above the sea. It was a lovely day, not a breath of wind, the only sounds which broke the silence being the whistle of a marmot or the rumbling of falling trees or snow in the mountains. (Wilson 1970:65)

His encounter with the lake on August 5 contrasted sharply with his earlier pleasant paddle. While crossing the lake with a companion:

> . . . one of the sudden mountain storms came on & caught me in the canoe; luckily it blew in the right direction, as nothing could be done but go right before it. I was steering and precious hard work it was; to let the canoe get broadside on in the least would have been an instantaneous upset & the water was so cold there would have been no chance of swimming; besides, we had to work away with the paddles to keep up with the wind or we should have been swamped by the water coming over the stern. The canoe literally flew through the water with the rain and spray flying past us. (Wilson 1970:66)

How sharply the mountains rise from the lake shores and how high they climb in a short horizontal distance—from a 2,000-foot lake surface level to as much as 7,300 feet in 2 miles to Macdonald Peak—is clearly shown on the DEMN *Skagit River* quadrangle (1975).

The Chilliwack River above the lake was not visited by Wilson. Its course was followed, however, for at least some distance by two of the Commission cutting and surveying parties (those of Roche and Haig) on their journeys to the Skagit Valley (Wilson 1970:65, 73). But Wilson includes in his journal no topographic or other data concerning this upper valley area based on reports from these field teams.

The early location of the Chilliwack focus in the narrow valley back from the Fraser is of special interest, since it seems not to have been true of any of the other Upper Stalo tribelets (cf. Duff 1952:30-45). It is particularly notable inasmuch as the Fraser was so important to Upper Stalo life in general. As Duff (1952:16) explains:

> The . . . [Fraser River in Stalo country] was their main source of food the year around. It was their highway, which invited travel in the two dominant directions of their lives, up-river and down-river, and which brought to their villages visitors, new ideas, sometimes raiding parties . . . . Up-river, the way was barred by the Fraser canyon, with its surging broken torrent which was almost impossible to negotiate by canoe. Below lived the salt-water Indians, some of whom were friendly and familiar, but some of whom were hostile.

Travel was predominantly by canoe.

This suggests that in this early period the Chilliwack were somewhat out of the mainstream of Fraser River and Upper Stalo life. If so, this would be consistent with the native view that their speech was then "somewhat different from that of the Fraser Valley Indians," perhaps more like Nooksack but, according to one informant, "not the same as Nooksack." While Chilliwack settlements were in these early times confined to the narrow valley of the Chilliwack above Vedder Crossing, their principal village was at the lower end of the river stretch, about 2 miles above the Crossing. (Duff 1952:43)

Twenty-two Chilliwack village sites are identified by Duff (1952:36 map 3, 37-39, 43-44) (Figure 2-4). Of this number, twelve were on the south bank of the Fraser, on sloughs connected with that river, or on a channel of the Chilliwack River below the canyon outlet. All of these were first occupied after about 1830 when the lower Chilliwack River changed its westerly course away from Sumas Lake and began to flow directly north from the canyon mouth. Because these twelve were postcontact settlements and were, of all Chilliwack villages, those most distant from the North Cascades region and so least relevant to this study, they are not considered further.

The remaining ten villages, situated in the narrow canyon above Vedder Crossing, were apparently either precontact or very early postcontact settlements. They lay on the direct Chilliwack River route from the Fraser River to the northwestern corner of the Park. Moreover, they were not distant from the Park boundary: the farthest (13) was about 33 miles along the Chilliwack River from its limits and the nearest (22) was only approximately 11 miles. For these reasons the available data on these ten villages, obtained by Duff (1952:36-39) from a knowledgeable, elderly informant, are summarized in Table 2-1. It is significant that all of these ten settlements except for 13, a late but still pre-1830 community, are confirmed by other ethnographers as noted below. In addition to these village-level population aggregates, a few dwellings, Duff (1952:39) indicates, were scattered from Centre Creek "up to Chilliwack Lake . . . and around the lake," an ethnographic fragment of particular relevance to this study.

Three earlier ethnographic sources furnish Chilliwack village information:

(1) *Boas* (1894:454) mentions only two villages, both above Vedder Crossing, equating with Duff's villages 14 and 16 (Table 2-1). He provides no locational, demographic, or other data beyond recording the name of the mythical founder of each.

(2) *Hill-Tout* (1903:356) lists 12 Chilliwack villages. Eight were still occupied in the 1890s, not one located by Hill-Tout. Of these, seven can be matched against Duff's village roster, and so on this evidence were sited out on the Fraser plain and were of post-1830 date. The eighth is *sūwā'lē*, village 14 in Duff's roster, which Hill-Tout describes as "the former headquarters of the tribe," and as having acquired its Chilliwack name, "melting away," in reference to the fact that the people here once died in great numbers. Evidently it was located on Sweltzer River immediately above the Chilliwack Canyon exit, for this is where Duff (1952:38) positions his village 14. Five of the twelve, *sūwā'lē* and four others, were old "settlements on the upper reaches of the Chilliwack River." These latter four are described as having been "contiguous to Sūwā'lē," but cannot be otherwise located from Hill-Tout's information, nor can they be matched with certainty with Duff's villages. Unless these prove somehow to be identical, under different native names, to old settlements in Duff's roster, they give us four additional villages on the Chilliwack River between the western canyon opening and the Chilliwack Lake area.

(3) *Marian Smith* (1950a:334 fn. 14, 339-341, 340 Figure 1) lists 14 Chilliwack villages, the general locations of which are shown on Figure 2-5. Of these 14, only a single settlement (1) was sited below Vedder Crossing, explicable, she observes, by the fact already noted that "the lower course of the Chilliwack River was once marsh" and by the circumstance that "the Chilliwack had no old villages along the Fraser." Because this community was a late one and outside the early Chilliwack Canyon homeland, it is without central interest in this study.

Villages 5-7 in Smith's "Chilliwack" settlement catalog are identified by her with the Cultus Lake group, settlement 7 having been their "home" village where "they had been . . . a long time." If they were in fact affiliated with the Cultus Lake people, they should not appear in her Chilliwack settlement list. Duff (1952:38), incidentally, includes village 5 in his roster as Chilliwack settlement 14, saying nothing about its inhabitants having been members of the tribe that occupied the Cultus Lake sector.

In contrast with village 1, Smith's settlements 2-13 were all on the Chilliwack River upstream from Vedder Crossing, though this is not clear from her distribution map (Figure 2-5) which is inaccurate in several respects. Villages 2-7 were regarded by the Chilliwack, Smith (1950a:240) states, as their old "head villages," with 2 and 3 the most important of the six. These six were "not more than a quarter of a mile apart." Evidently there was a tight community cluster just above the canyon mouth, for Hill-Tout speaks of a group of five villages in this same area and Duff's villages 13-16 (Table 2-1) were all in this same locality.

The data provided by Smith (1950a:340-341) regarding these 14 villages is compiled in Table 2-2.

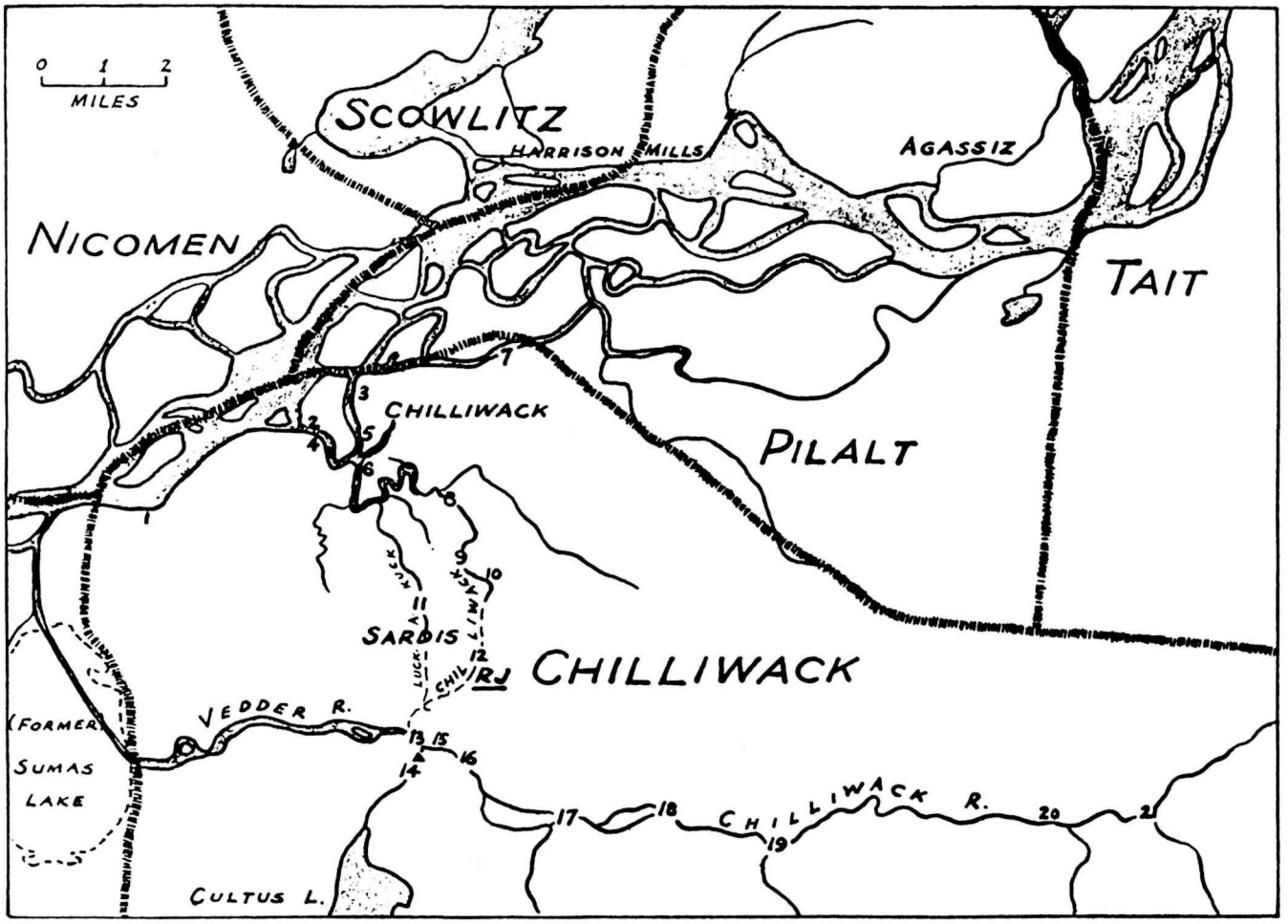


Figure 2-4. Territorial limits of Chilliwack near Fraser River and location of Chilliwack settlements (Duff 1952:36-39, 43-44, 36 map 3 slightly modified). Villages 1-12 were established after about 1830. Apparently villages 13-15 were early postcontact communities. Villages 16-21 (and 22 off map to right) were old Chilliwack settlements Dotted stream courses plot Chilliwack River channels to Fraser in 1830-1880 period, before river assumed its Vedder River path.

With these four field data records before us and with Hill-Tout, Smith, and Duff each listing one or more villages not found in either of the other two accounts, it is worthwhile to compile a master list of traditional Chilliwack settlements above the Vedder Crossing area (Table 2-3). An effort has been made, on the basis of the available information, to list these sites in an upriver order, divided into a Vedder Crossing cluster, a Sweltzer River group (originally occupied by Cultus Lake people but later taken over by the Chilliwack), and a Chilliwack River string from just above Vedder Crossing upstream to Chilliwack Lake. In addition, both Smith and Duff mention single dwellings or very small villages on the Chilliwack River close to Chilliwack Lake and around the shores of the lake.

Viewed from the perspective of this study, these data are of immediate interest in several ways. At least within the "tribal" memory of Chilliwack ethnographic informants, the Chilliwack population concentration was near or at the mouth of the river canyon. The degree to which the villages thinned out as the Chilliwack River was ascended is well demonstrated by the data plotted in Figures 2-4 and 2-5. And indicated also by the fact that only an occasional small settlement was located between Centre Creek and Chilliwack Lake, a distance of about 4 miles, and around the shores of the lake itself. This downriver concentration appears to have increased somewhat before 1830 as villages shifted their locus slightly closer to the canyon exit. Soon the population flowed out onto the alluvial plain along the various mouths of the Chilliwack River in its northward course. This movement must have drawn people from the canyon strip, particularly in view of the general tribal population decrease immediately prior to and during this time period.

One may wonder whether Chilliwack villages extended along the lower Chilliwack River "long ago" while, emerging from the canyon above the present Vedder Crossing, it flowed straight west to and into Sumas Lake

Table 2-1: Chilliwack Villages along the Chilliwack River at and above Vedder Crossing, according to Duff (1952:36-39, 43-44)

Village No.	Village Name	Location[a]	Other Ethnographic Village References[b]	Descriptive Data
13	*qaqa'ɬɛlәl*	On a flat just above Vedder Crossing		One of the early main villages. Its establishment from a location somewhat upriver initiated the move down the canyon and out onto the plains.
14	*cuwɛ'li*, "dissolve"	On Sweltzer Creek which flows from Cultus Lake to Chilliwack River just above the canyon mouth.	Boas 1; Hill-Tout 8; Smith 5.	Although Cultus Lake is of precontact date, it was said by Duff's Chilliwack informant not to have existed in "old times" (Duff 1952:43). The creek is obviously old and at this village site Duff observed 6 housepits in 1949-1950.
15	*θ'a'θ'әmals*	On a small flat a short distance above Vedder Crossing.	Smith 2.	Plank houses here; ground too rocky for pit dwellings.
16	*xe'lαs*, "slide"	On N. bank of river 1 or 2 miles above Crossing.	Boas 2; Smith 3.	Main headquarters of tribe long ago when Chilliwack River flowed to Sumas Lake (Duff 1952:43).
17	*layα'mθәn*, "water swirling out in gushers"	At mouth of Lihumitson [Liumchen] Creek.	Smith 8.	Large village and one of the main Chilliwack villages.
18	?	On small flat at mouth of Ryder Creek.	Smith 9.	
19	*t'ɛmiha'y*, "hermaphrodite"	At mouth of Tamihi Creek.	Smith 10.	
20	i'a'yθәl	A little above Anderson Flat, between Tamihi and Sleese Creeks.	Smith 11.	A good fishery.
21	*sәli'si*	At mouth of Sleese Creek	Smith 12.	On both sides of Chilliwack River.
22	?	Below Centre Creek.	Smith 13.	Wiped out by slide.

[a]For geographic plotting of village locations, see Figure 2-4.
[b]See paragraphs (2) *Hill-Tout* and (3) *Marian Smith*, page 85.

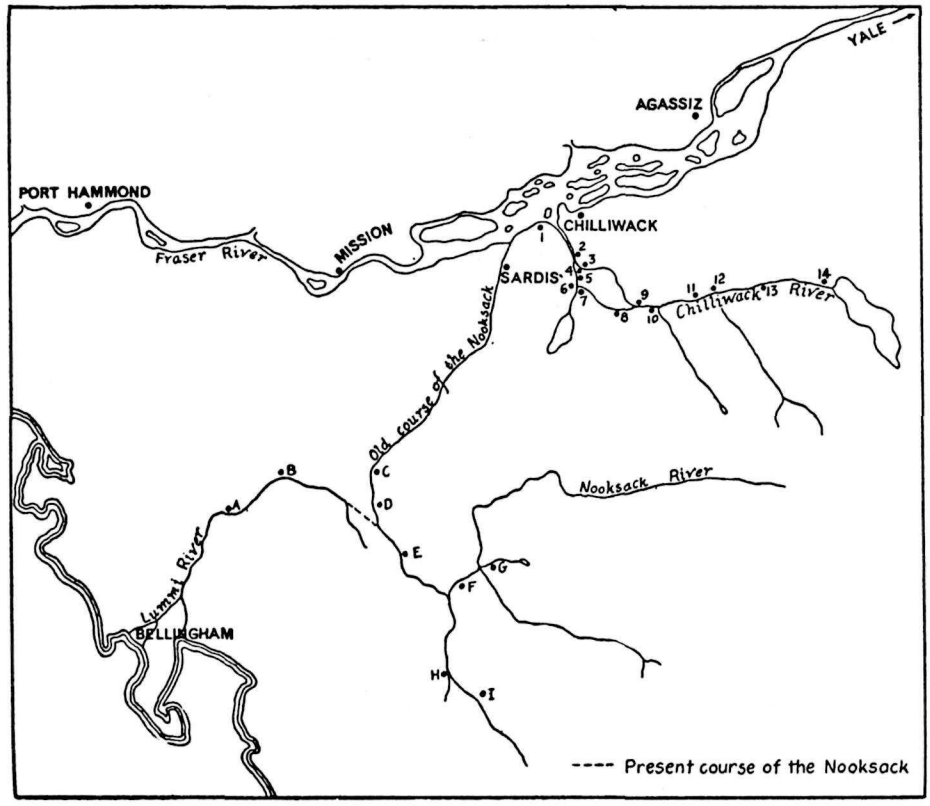


Figure 2-5 Location of 14 Chilliwack villages as plotted by Smith (1950a:339-341), based on her own field data. Nooksack villages on Nooksack River and lower end of "Old course of the Nooksack" are designated by letters. Villages F and G appear to fall within Chilliwack boundary as this is plotted by Duff (see Figure 2-1).

according to native informants. Apparently this was not the case, for Duff (1952:43) reports: "At that time the Chilliwack tribe lived in several villages along the steep valley of the river up as far as Chilliwack Lake" and had their main headquarters at *xe'lαs* (village 16, Table 2-1) in the lower canyon. Indeed, "another group of Indians lived at the present location of Cultus Lake . . . . These the Chilliwacks called *swi'ɬča,* and they spoke a language 'a little different' from Chilliwack" (Duff 1952:43). And, in fact, the village of *cuwɛ'li* (14, Table 2-1), located on Sweltzer Creek just upstream from its junction with Chilliwack River, was at this time largely, if not wholly, a *swi'ɬča* community (Duff 1952:43).

There is a strong implication that in protohistoric and early historic years the Chilliwack, owing to prevalent intertribal hostilities, were uncomfortable beyond the shelter of their canyon. Indeed, they maintained a high platform lookout against enemy raiders near their downrivermost village (Duff 1952:43). The area was also unsuitable for occupation because of its marshy surface and other particularly summer conditions to which reference has been made. Possibly, too, the district was held by the Cultus Lake people or the Sumas or, unlikely, some now forgotten tribelet.

Assuming that no Chilliwack settlements were located on this early, lower western river reach, it appears very probable that in the 1700s, prior to the appearance of the first known epidemics from Western sources, a substantially larger Chilliwack population inhabited the Chilliwack canyon above Vedder Crossing than in post-1830 years. Were these canyon villages larger or inhabited more consistently year after year? Were there additional settlements, especially in upriver sectors, perhaps around Chilliwack Lake, and even along the river above the lake? Evidently only archaeological investigation can answer these questions. But these are issues of major importance for an understanding of the traditional native utilization of the North Cascades Park area. For the upper, southern end of the present Chilliwack Lake is no more than 1 mile from the Park boundary.

It is of interest that extensive, periodic village splits and population movements to new localities were recalled for the protohistoric period by informants of the Tait group (Duff 1952:30-34, 44). Some involved single families, others parts of villages or even entire communities. Some were to nearby sites as roots, game, and firewood became scare. Others were of a more major nature as when groups attempted to reduce exposure to

Table 2-2: Old Chilliwack Villages and Old Cultus Settlements (starred) above Vedder Crossing according to the Field Data of Smith (1950a:340-341)

Village No.	Village Name	Location	Other Ethnographic Village References	Descriptive Data
2	*tsɔ́tsαmaus* (*t'átαmaus*)	Less than 0.5 mile above Vedder Crossing bridge where small creek entered Chilliwack from the north.	Duff 15.	Location of a famous dwelling called "watery eaves."
3	*xélαs*	Here a small creek reached Chilliwack from north. Nearby a rockslide and steep hill.	Boas 2; Duff 16.	
4	*siyéαq*^{u}	Just above Vedder Crossing		Name = "burnt over."
5	**s'wé'li*		Boas 1; Hill-Tout 8; Duff 14.	Village of Cultus Lake people.
6	* ?	At mouth of Soowahlie [Sweltzer] Creek, where a creek enters from the south.		Two dwellings of Cultus Lake people and another .25 mile up the small creek.
7	* ?	On a flat beside Soowahlie Creek near its mouth and a large rock ("those blow files").		Four or five large dwellings. Home village of Cultus Lake people.
8	*layúmsα*	Near Lihumitson [Liumchen] Creek.	Duff 17.	
9	*t'αpt'óp*	On a flat 1 mile above 8.	Duff 18.	A large settlement.
10	*t'αmmiáx'*	At mouth of Tomyhoi [Tamihi] Creek.	Duff 19.	Name = "deformed."
11	*iáiαθa*	On Chilliwack 6 miles above 10.	Duff 20.	River very deep at this place.
12	?	Opposite mouth of Sleese Creek.	Duff 21.	Quite a large settlement.
13	?	On a mountain side just above Sleese Creek, 9 or 10 miles below Chilliwack Lake.	Duff 22.	Two or three houses. Landslide once destroyed the houses, killing all but one family.
14	?	Several dwellings at head of Chilliwack River and on Chilliwack Lake.		Houses were "some distance from each other."

Table 2-3. Composite Roster of Chilliwack Villages at and above Vedder Crossing and of Early Cultus Lake Villages Compiled from Tables 2-1 and 2-2.

A. *Vedder Crossing Cluster*
   (a) Duff 13
   (b) Duff 15, Smith 2
   (c) Duff 16, Boas 2, Smith 3
   (d) Smith 4
   (e) Hill-Tout[a]
   (f) Hill-Tout[a]
   (g) Hill-Tout[a]
   (h) Hill-Tout[a]

B. *Sweltzer River Cluster*[b]
   (i) Duff 14, Boas 1, Hill-Tout 8, Smith 5
   (j) Smith 6
   (k) Smith 7

C. *Chilliwack River String* (from Cluster A to Chilliwack Lake)
   (l) Duff 17, Smith 8
   (m) Duff 18, Smith 9
   (n) Duff 19, Smith 10
   (o) Duff 20, Smith 11
   (p) Duff 21, Smith 12
   (q) Duff 22, Smith 13

[a]Perhaps a member of Sweltzer River Cluster.

[b]Evidently early Cultus Lake villages, later taken over by the Chilliwack.

raiders from other tribes, affecting as much as half the Tait tribelet and taking the people some distance to a new segment of the Tait territory. It may be that this internal mobility was made easier by the unusual absence among the Tait of any feeling of internal unity, such that their status as a single tribelet may be questioned. And it may have been encouraged by the Tait control of an important segment of the Fraser River and their possession of numerous excellent salmon fishing rapids, rocks, and ledges. Certain of these were naturally more productive than others and, moreover, it may be assumed that the productivity of individual sites varied somewhat with the season and year. The Chilliwack case is obviously different, at least in the sense that they evidently saw themselves as comprising an ethnic entity, were rather less exposed in their canyon home to extratribal raids, and were not the possessors of a rich and varied major river sector. But it is still plain from the above data that village relocation was by no means unfamiliar to the Chilliwack. This is not an insignificant point for an understanding of the utilization of the northwestern corner of the Park, particularly when coupled with the downriver population press mentioned above. These facts again raise the possibility that the small settlements along the upper Chilliwack River and around Chilliwack Lake to which Duff's informant alluded may have been larger villages at an earlier time as well as the possibility that other communities beyond those remembered by the informant may have existed both on the upper and middle Chilliwack.

Village and Camp Arrangement

There is virtually nothing in the ethnographic and ethnohistorical literature describing how the typical Upper Stalo village and task camp (by task, season, and geographical location) were physically organized: what types of structures comprised the unit and how these were positioned areally. The scraps that follow represent the total data known to me.

With reference to the Halkomelem tribes in general—not the smaller Upper Stalo group, much less the Chilliwack in particular—villages were composed of several substantial wooden houses or—up the Fraser River—of one or more semisubterranean dwellings. They were "always placed close to water, on some harbour or river, where the inmates . . . [had] only to walk a few yards to launch their canoes, which when not in use . . . [were] carefully drawn up on the bank, and covered with bushes to protect them from the rays of the sun. The outside of a village . . . [was] the very acme of filth, . . for all refuse . . . [was] thrown just outside the house, soon forming a large accumulation of shells, old mats, rags, and the putrid entrails of salmon." (Wilson 1866:287)

At Sumass, in Wilson's orthography, and various locations on the Fraser River, the village was "enclosed by a stout palisading of young firs, some fifteen feet high, fixed firmly into the ground," as protection against the ravages of northern coastal Indians (Wilson 1866:286).

The corpse boxes were usually but a short distance from the village (Wilson 1866:286).

The extent to which these data apply to the Chilliwack is uncertain. However, because their old settlements were exclusively on the Chilliwack River and Lake, it seems safe to assume that they beached their canoes near their villages. Further, because of their remote side canyon homeland, it is doubtful that their communities required palisade protection.

Domestic and Tamed Animals

For the Upper Stalo as a group, no clear and reliable ethnographic or ethnohistorical information relating to domestic animals or to wild forms kept in the village as tamed animals has yet been located. Duff (1952:71) reports only that the early dogs were not well or consistently described by his informants: they were like wolves, smaller than wolves, or in the case of bear dogs (very questionably it seems to me) like St. Bernards.

For individual tribelets within the Upper Stalo group, we have no more than the following two references, the second of special interest. Neither, however, describes the physical traits of the animals.

- On June 28, 1808, Fraser (1960:99), then at the uppermost village of the Tait on the Fraser River, observed that their dogs had recently been shorn to yield the hair that was woven into "rugs." The use of dog hair for this purpose was later noted by Fraser (1960:101) at another Tait camp between Hope and Seabird Island.
- The Chilliwack, Hill-Tout (1903:388) reports, bred a native species of dog for its hair, which was woven into blankets.

Travel and Transportation

The Upper Stalo made and used three or possibly four types of dugout canoes (Duff 1952:51-53; Smith 1955:101-102). The area of these tribes seems, in fact, to have been a center of skillful canoe fabrication and out-trade. In most cases it is not perfectly clear, unfortunately, whether the descriptions apply to the precontact or post-White situation or both.

The following are the canoe types reported by Duff and Smith:

- The "Nootka or Chinook type." This was a large canoe, as much as 40 or even 60 feet in length and a fathom wide, "with high projecting bow and vertical stern-post carved as separate pieces." A large cedar tree was felled with stone chisels and hammers and a slab split off the log.

> The log was turned over, and the ends were shaped with hammer, chisel and adze. Upturned again, it was hollowed by means of fire controlled by water, and the sides were adzed to the proper thickness, measured by a small stick through holes bored at intervals. It was then placed upright on two blocks, one under each end, for spreading. This was done by filling the canoe with water, putting in hot stones, then, when the wood softened, forcing many bent green saplings in crosswise, which, as they straightened, spread the sides of the canoe. The permanent cross-pieces were then sewn in place: a wide "captain's" seat at the stern and several smaller cross-pieces, one behind each paddler's seat. Bow and stern pieces were also sewn in place. The outside of the canoe was finished by smoking it with fir-pitch, which hardened the surface so that it would not crack in the sun. (Duff 1952:51)

This craft was used on the Fraser River itself up to the canyon above Yale and to make trips down to the salt water.

Because of the generally large size of these canoes, it may be reasonably doubted that the Chilliwack owned such large dugouts, at least until early in the nineteenth century. For until then the tribelet was generally restricted to the middle and upper Chilliwack River, holding no section of the Fraser River as their country.

- The most common and most typical canoe was an all-purpose craft which varied from about 15 to 30 feet in length and carried as many as 10 persons. Hollowed out of half a cedar log, it had a low, projecting bow with

> . . . a mouth-like notch carved at the front. The bow meets the water with a sharp vertical cut-water, above which it flares widely to give lift in rough water. Flatly rounded in cross-section for most of its length, the canoe tapers gently to a point at the stern. The bottom as it approaches the stern becomes V-shaped, almost keeled, and slopes gently up to the projecting stern. (Duff 1952:52)

In view of the characteristics of the water areas of the aboriginal and early postcontact Chilliwack country, it seems probable that craft of this widespread Upper Stalo variety were found also among the Chilliwack.

- A long, narrow, shallow "shovel-nosed" canoe was fashioned of a half cedar log.

> The bow and stern were the same—wide, flat, cut square across, and projecting far out over the water. The bottom was flat with no cut-water, or merely a suggestion of one. Often as much as 25 or 30 feet long, it was very low and narrow. Although ideal for gliding over the swift cross-currents of the Harrison, Chilliwack, and other tributaries, it was not constructed to take much wind or rough water, and its usefulness on the main river was limited. It was usually poled rather than paddled. (Duff 1952:52)

This shovel-nosed watercraft was able to turn quickly and was especially useful in rough water where it could "glide right across a cross current" (Smith 1955:102).

Here we have a canoe form that is definitely assigned to the Chilliwack (Duff 1952:52), one that must have met their limited water needs admirably.

- A fourth variety which may have been in use among the middle Fraser people appears to have been fitted with a vertical, heavy prow piece. The smallest held 12 men; a large one, 20 to 22 men. Three or four of these craft were said to have been available in each middle Fraser group to carry all the adult males in raids against coastal groups, when "travelling up-river to the Yale fishing grounds in summer," and in transporting people to "gatherings." (Smith 1955:102)

  Assuming that craft of this variety were actually in use on the middle Fraser, it would appear unlikely that it was a Chilliwack canoe in early days, given their wholly side-river homeland, their apparent atypical Upper Stalo culture, their evident isolation, and their self-contained riverine-mountain orientation.

A fifth water craft type, according to Smith (1955:102), on the middle Fraser was a bark canoe, used for lake travel and also on creeks where it could be back-carried from stream to stream. It was fashioned of cedar, spruce, or even fir bark, and was, according to one informant, about 8 feet long and "quite wide."

Bark canoes were not in use among the Chilliwack, Smith (1955:103) reports. This is difficult for me to understand, however, for bark must have been available and there surely must have been segments of the Chilliwack River during some seasons when these craft would have furnished convenient transportation. They might also have been used to advantage on Chilliwack Lake and later on Cultus Lake, after it became Chilliwack territory. Perhaps it might have seen service on the upper reaches of the Chilliwack River above the lake, if it was not everywhere altogether too swift and dangerous a mountain stream.

In view of the importance of Indian watercraft to the early White travelers in Upper Stalo country along the lower Fraser and the reported skill of the natives in manipulating cedar canoes in fast water and swift currents, it is surprising how little information regarding these craft as artifacts is to be found in the historical records.

- On his journey down the Fraser in June, 1808, and then back up in July, Simon Fraser (1960:98-102, 109-116) had ample opportunity to examine Upper Stalo canoes by the dozens, his party being dependent on negotiated or enforced loans of watercraft from the native groups they encountered. Unfortunately, however, he fails to describe their form and construction. He reports, in fact, only that at the village just below Yale, a Tait community, he "saw a number of new . . . [canoes], which seemed to have been hollowed with fire, and then polished" (Fraser 1960:99).
- Charles Wilson (1970) provides even less information. While serving with the British Boundary Commission in Upper Stalo territory in 1858-1859, he moved about by Indian canoe on many occasions. Not once, however, to my knowledge did he describe the Upper Stalo craft in artifactual terms.

Paddles were of maple with crutch or cross handles, those used by women being smaller than those favored by men. Steering paddles differed to some extent, but precisely how is not described. Poles, 10 to 15 feet long and of fir or occasionally cedar, were carried in all canoes for pushing the craft in shallow water. Bailers were of folded cedar bark with cross handles. (Duff 1952:53, Figure 1 a-c)

Coarsely woven, cedar bark mats and occasionally blankets were said to have been used as canoe sails by the Upper Stalo in precontact times (Duff 1952:53). Their pre-1800 occurrence among the Stalo may well be accurate, the sails having diffused up the Fraser from nearby coastal groups before the appearance of Whites in Upper Stalo country. But the ultimate source of the sail among the maritime native peoples appears to be still an open question: whether the idea derived from viewing early Euroamerican sailing vessels or long ago from seeing some wrecked ship from the Orient (Underhill 1945:91). How useful sails would have been as canoe adjuncts to the Chilliwack in their canyon country—as opposed to the tribelets along the open Fraser Valley—is unclear.

"Snowshoes were worn for land travel during the winter." The frame of vine maple was oval in shape with the front end turned up and with a webbing of deerskin strips. (Duff 1952:57)

Trails

Travel by the Upper Stalo was mainly by canoe with pole and paddle, except during the coldest months of the year when the river became covered with chunks of floating ice. Journeying up and down the valley through Upper and Lower Stalo country was easy via the river, the Stalo "highway" concerning which every turn, shallow, pool, snag, rapid, and beach were well known. (Duff 1952:16, 17-18)

Major land trails and water routes in the central segments of great river country—as opposed to small side trails—normally do not terminate within the area, but rather extend through it. So it was with the Upper Stalo Fraser River trails. This was no less true in prehistoric periods than in more recent ethnographic times. Thus an old, semirealistic art style with religious associations is believed to have originated in the classic Northwest Coast cultures and to have diffused, as one line of flow, up the Fraser, over to the Middle Columbia, and down that river to its lower reaches (Smith 1950b:26-27). Surely we are dealing here with a principal land-water route between the coast and the interior, with the Upper Stalo area as an important intermediate link.

But it is difficult to describe ethnographically such routes with their forkings this way and that. Consequently in the descriptions that follow the trails are treated as though they originated in Upper Stalo territory and fanned outward in various directions to the country of the tribal entities in the vicinity.

From just above Yale, the northeasternmost border of Upper Stalo territory and southern end of Lower Thompson country, upriver to Spuzzum the Fraser poured through a fearful canyon. Difficult and dangerous though this river reach was, it was sometimes possible to navigate it during low water seasons. Indeed, the Stalo occasionally took cedar canoes up this narrow canyon to Spuzzum for sale.

> These canoes . . . were larger than the Thompsons could make with the cedars they had available, and hence in great demand, as fairly large canoes were necessary in the rough waters of that region. (Duff 1952:16)

But "the usual method of travel to Thompson country was by foot, over steep and tortuous trails," with ingenious ladder constructions as travel aids. The difficulties of this route "were such as to keep cultural contacts with the Thompsons at a minimum." (Duff 1952:16)

To how great a degree the Chilliwack participated in these Fraser River trade and travel patterns is not reported. Assuming Duff's early Chilliwack River orientation for the tribelet as accurate, the group is unlikely to have been nearly as involved in the "old days" as were the other Upper Stalo peoples with their Fraser bank locations. On the other hand, the Chilliwack encountered Thompson parties—at least of the lower division of that group—in the mountains of the upper Chilliwack and perhaps of the upper Skagit.

Apparently no trails—at any rate, no horse trails of significance—led eastward from the Upper Stalo area *over the mountains* through Lower Thompson country to the Sinkaietk (=Southern Okanagan) or southern part of the Okanagan (=Northern Okanagan) territory. Though not without some ambiguity, McClellan (1855:197), a member of the Stevens' expedition, seems to be reporting as much when he records information received at Fort Okanagan at the Okanogan River mouth in late September, 1853:

> Mr. Lafleur [who had charge of the fort] informed me that there was no pass between Mt. Baker and the Hudson's Bay Company's trail from [Fort] Okinakane to [Fort] Langley. This our subsequent examination verified. The information received here confirmed me in my previous intention of examining the Methow river, for they told me there was a good foot trail leading up that valley and over to the sound.

Evidently, to rephrase McClellan's statements, the Hudson's Bay personnel were unaware of any *direct* cross-mountain route suitable for pack trains between the Mt. Baker area, southeast of Langley on the lower Fraser, and the lower Okanogan River. Such a path would have taken parties roughly eastward over the high mountains to intersect at some point either with the Similkaneen segment of the Company's Okanagan-Langley route or directly with the Okanogan River end of that route. This latter Similkameen-confluence to Okanagan-mouth stretch was also the southern terminus of the highly important north-south Old Okanagan Trail that linked Fort Okanagan and the company's establishment at Kamloops.

To view the matter from an Upper Stalo perspective, the customary route of Hudson's Bay travelers between the lower Fraser area and the Okanogan Valley plainly followed a series of low river valleys, crossing only one short, low watershed and avoiding altogether the mountains and their passes. Specifically, it was a roundabout path that ran from Langley up the Fraser, up the Coquihalla to its headwaters, overland to the Tulameen, down it and then the Similkameen, and finally down the Okanogan Valley to Fort Okanagan (Brown 1914:24, 29). This path was termed the "Fort Hope Trail" by Fort Okanagan and other Plateau traders (Brown 1914:29), since it reached the Fraser at Hope, where the Coquihalla empties into the Fraser, an area well within Upper Stalo territory.

Presumably it is to this circuitous trail that Brown (1914:12) alludes when writing in the following note of the Similkameen route:

> [The] Okanogans and their neighboring tribes used to frequently visit the coast in the vicinity of the mouth of the Fraser, going thence sometimes by the Methow route and sometimes by the Similkaneen route.

That this Similkameen trail was used by the Okanagan rather heavily in post-horse times is attested to by Teit's (1930b:250) ethnographic field information. On the other hand, this cross-country route from the Okanogan River to the Thompson River via the Similkameen and Nicola is dismissed as unimportant by Teit (1930b:250, 252) as a prehorse travel and trading route. His field data suggest that material items of Okanagan and more eastern and southern provenience appear to have reached the Lower Fraser tribes rather less by this trail than by way of Okanagan Lake to the Thompson River and Thompson tribe. (For further details see Lower Thompson chapter below.)

Perhaps it was this trail that may have been involved in prehistoric times in cultural trait and complex diffusion between the middle Fraser and middle Columbia. For example, in her discussion of the rock art of the Fraser drainage, Puget Sound, and The Dalles area of the Columbia River, Marian Smith speaks of two possible paths by which petroglyphic artistic styles might have spread southward from the Northwest Coast. One of these was down the coast to the Fraser mouth, up the Fraser to its upper drainage, and then over to and down the Columbia, this route carrying the dot-and-circle design. Of the two paths, Smith suspected this one via the Fraser and middle Columbia to be the older. (Smith 1946:309, 316, 320)

The trail between Fort Langley (and Fort Hope) and Fort Colvile followed this same Fraser, Coquihalla, Tulameen, Similkameen path to the Okanogan and then led eastward overland to Kettle Falls (Palmer in Brown 1914:29, 34-35).

The Methow line of travel commented upon by Brown would have brought Plateau Indians over the Cascades into the Skagit area and then to the Fraser Valley somewhere below Chilliwack country. For this reason it is discussed in the Skagit section of this report. It was this Methow trail that Alexander Ross (1956:37) attempted to follow in 1814, with Southern Okanagan guides, in his futile effort to journey from the lower Okanogan River over the Cascades to the salt water. It is not without relevance that this trail was so disused by 1814 and so poorly known to Ross' guides that its precise line of travel was lost about as soon as the party left the Methow River mouth.

Having said this much about the high-altitude Methow fur trader and Indian trail, it is of interest to note a possibly relevant ethnographic observation by Teit (1930b:250) presented from the Okanagan perspective: "In some places a few people [of the Okanagan group] occasionally made special trading trips across mountain ranges and through uninhabited country to distant neighbors. After horses had come into use these trips developed into important affairs, undertaken regularly by large parties." Whether the ranges alluded to were in part the high ones of the Cascades is not made clear and further, if so, whether these lofty trails led to the Upper Stalo country is in doubt. But as the trade data to follow make clear, Okanagan parties are known to have negotiated some trails to the lower Fraser.

Whether the Chilliwack on occasion made their way eastward to visit and trade with the Plateau Okanagan and Sinkaietk and perhaps with even more eastern groups like the Colville is unclear. If so, they may have gone via the roundabout Fraser-Coquihalla-Similkameen trail noted above. But since the tribe, exceptionally for an Upper Stalo people, traveled widely in their own high territory in exploiting their unique environment and special subsistence resources, Chilliwack parties may sometimes have made their way over the towering mountains to the upper Skagit River in Lower Thompson country and then through the passes to the Similkameen and ultimately to the Okanogan Valley. The Chilliwack, however, were traditionally on rather bad terms with the Lower Thompson, whose country bounded the Chilliwack homeland—and, in fact, all Upper Stalo country—on the east. This social circumstance may in itself have discouraged eastward travel both by the longer, less onorous Fort Hope Trail and by some more direct, mountain pass route.

Travel north to the Lillooet homeland was not difficult so far as the terrain was concerned, for Harrison River and Lake were easily navigable. In fact, a trail, the "Harrison-Lillooet" (=Cayoosh or Cayoush) trail first "discovered" by Anderson, a chief factor of the Hudson's Bay Company, led north from the Fraser up Harrison River, by Harrison Lake, up the Lillooet River to Lillooet Lake and then to Anderson Lake, across to Seton Lake and down to the Fraser River where the present community of Lillooet is sited. This trail was "cut" by Company men, but was still impassable to mule trains until 1859. Because of its circling route, it avoided the worst of the dangerous obstacles of the Fraser Canyon sector (Mayne 1862:43, 50, 56, 93, 129-138). I presume that this path followed a series of old Indian trails from the country of the Scowlitz and Chehalis, both Upper Stalo groups, north to the Lillooet and then east to the Shuswap. Nevertheless, because Upper Stalo relations with the Lillooet were generally hostile, at least in historic times, most Upper Stalo tribelets saw little of the Lillooet. (Duff 1952:16)

To travel southward the Upper Stalo moved on foot. Evidently this north-south contact was of some importance in recent traditional times. According to Smith (1950a:331), one or more trails led from the Fraser River via the Chilliwack River and then with several short portages down to the Nooksack country. Presumably this has reference to the early period when the Chilliwack River still flowed west to the vicinity of Sumas Lake and then north to the Fraser. If so, one route probably moved up the lowest segment of the Chilliwack, passed Sumas Lake, ascended upper Sumas River, and passed over to the Nooksack Valley. Or, of course, from Sumas Lake ascended Nooksack River during the period when, blocked from its customary westward channel, its outlet to the sea was via Sumas Lake and the Fraser (cf. Duff 1952:16). It was by this route that in "aboriginal times" grass used in fishnet weaving moved from the Thompson Indians to the Nooksack and sturgeon glue for sinew-backed bows was carried from the Fraser River to the Nooksack (Smith 1950a:332). Whether overland from the headwaters of the Sumas to the Nooksack Valley or via the diverted, north-flowing Nooksack River, the trail would have lain to the west of traditional Chilliwack territory. Hence the extent to which the Chilliwack made use of it is an open question. Still, in light of their relatively short distance from Sumas River and Lake and especially of their possible Nooksack-like speech and apparently rather aberrant Fraser River, Nooksack-like culture, it would be surprising if the tribe failed in early days to travel this route to the southwest to some extent.

With the establishment of Fort Langley and Fort Yale of the Hudson's Bay Company on the lower and middle Fraser respectively, this Chilliwack-Nooksack-Lummi route became very important as the shortest trail between Fort Yale and northern Puget Sound.

Concerning Chilliwack trails in particular we have very little information and this wholly, at present, from the journal of Charles Wilson, a member of the British Boundary Commission. In his record for 1859, he records several land journeys he and his colleagues made to various points in and through the area which is assigned ethnographically to the Chilliwack. But he states that most of the trails that he and his surveying field parties followed were their own paths, not old Indian trails (Wilson 1970:58). The remainder were surely traditional Chilliwack routes, such as that (probably those, one on each river bank) which led up the Chilliwack Valley from its lower end to Chilliwack Lake (Wilson 1970:49, 62-65), linking the various Chilliwack villages in early times and permitting access to resources below the canyon mouth and especially upstream into the Cascades high country. And such as, too, those up the small tributaries of the Chilliwack, like Tamihi Creek and Sleese Creek that brought resource-searching parties in traditional times into the mountains south of the Chilliwack. Unable in other instances to distinguish between surveying party routes and established Indian trails, I report here only one other "track," that which followed the upper Chilliwack River—above the lake—an unspecified distance and led ultimately to the Skagit country.

Regarding this route, Wilson writes on several occasions:

(a) On July 30, 1859: "One of Roche's men came in from the Skagit valley beyond the Cascades & told us that a fearful fire was raging there. He had great difficulty in passing it. (Wilson 1970:65)
(b) On August 2: "Haig left with a party of men for the Skagit valley" (Wilson 1970:65).
(c) On October 9: "I was getting rather anxious about Haig & was glad when I heard he had got down to the [Chilliwack] Lake; he only just got in in time & passed over nearly 2 feet of snow on the summit of the pass across the Cascades & to add to his other misfortunes, the provisions cached or hidden for him on the mountains has been plundered by bears or something or other, . . ." (Wilson 1970:73)

It is a pity that Wilson is not more explicit in regard to this route, but he was no geographer. It seems probable that Roche and Haig were not following the easiest trail to the Skagit Valley, but were cutting their way along the 49th parallel to the Skagit, it being their task to survey and mark this difficult line. In this case, they were obviously not following an old Indian path. The simplest Chilliwack to Skagit track south of Chilliwack Lake appears to have been that which moved up the Chilliwack River, by Bear and Indian Creeks, about 8.5 miles above the lake to the mouth of Brush Creek, ascended this stream to Whatcom Pass, and then followed Little Beaver Creek down to the Skagit River, now the west shore of Ross Lake. (Just such a trail is marked on the Green Trails, *Mt. Challenger* map.) From this point a ride of approximately 6.5 miles north up the Skagit Valley would have brought the surveying parties back to the border.

In relation to Chilliwack country trails in general, Wilson (1970:70) makes the interesting observation regarding forest fires and their influence on trail use, at least with mule trains and presumably likewise by humans alone:

> These fires are great drawbacks to us & sometimes stop up the trails for days. The dry moss catches from the least thing, a flash of lightning or a spark from a pipe may kindle a fire which will run for miles and miles; it is a grand & awful sight to see the power of the flames over the enormous trees. (Wilson 1970:70)

Trade

Trade—and, I conclude, travel—among the Upper Stalo had a distinct upriver-downriver orientation. Upstream, it was with the Thompson Indians. To them they took dried salmon, rush mats, and goat-wool blankets and in low water dugout canoes, these generally to their relatives and friends. In return the Upper Stalo acquired "soopalalie-oil," dried saskatoon-berries (i.e., serviceberries), and Indian hemp. (Duff 1952:95; Smith 1955:102, 103; Suttles 1957:169 fn. 39)

Reference to "soopalalie-oil" requires brief comment. Soopolallie (the more common current spelling of this Chinook jargon term) is the soapberry (*Shepherdia canadensis;* also called russet buffalo-berry and foamberry). Its orange-red, sour-bitter berries were widely eaten as a confection by the native groups in southern British Columbia. They were consumed either fresh or boiled, made into cakes, and dried for later use. Sometimes the juice obtained from them in the cooking process was collected and poured over the drying cakes. Fresh or dried, the berries, with the addition of cold water, were beaten to a froth, now often termed "Indian ice-cream." "Throughout . . . [British Columbia, dried] soapberries have been a major item of trade" among Indian peoples. (Turner 1978:138-141; see also Hitchcock and Cronquist 1981:302 and Clark 1976:324) I am not sure at this point what Duff means by the "oil" of the "soopalalie" and how it was used; but I suspect that it is a slightly confounded reference to these dried berries or their cakes and to their value as a luxury food.

To the downriver people near the Fraser River mouth the Upper Stalo took dried salmon in particular, for which they secured fish, "wild potatoes" (see "roots" section), dried and occasionally even fresh clams, and sometimes sealskins. Shells, too, evidently flowed up the Fraser River as trade items.

- In his journal of June 28, 1808, Simon Fraser (1960:99-100), when in the Tait village at Yale, observed ornaments of "shells of different kinds" and shell beads as well as shells in great numbers attached to the exterior of a newly erected mortuary structure. These shells and perhaps the shell ornaments already fabricated almost certainly had a coastal provenience.

Likewise indicative of coastal trade were items of Western origin noted by Fraser among the Upper Stalo.

- Fraser (1960:99) "saw few or no christian goods" among the people at the first village of the Stalo he encountered, this in the canyon. In the village in the Yale vicinity, however, he saw "brass" wire bracelets and "brass" pipes (Fraser 1960:100). If truly brass rather than copper, these objects or at least their materials were certainly non-Indian trade items probably from the coast. Still further downriver, at a village in what I take to have been the upper end of the Hope to Seabird Island reach, Fraser (1960:101) saw "a large copper kettle shaped like a jar, and a large English hatchet."

Duff implies that most of the trading was carried out as merely one component of the frequent visits made by the Upper Stalo to the tribes in these upriver and downriver directions. (Duff 1952:95)

Without probing the archaeological data in any depth since the present study is ethnographic in nature, it is still of historical interest that as early as 1907, Harlan Smith (1907:439) saw in the prehistoric artifacts of the lower and middle Fraser Valley evidences of early river-route trade. For example, ground stone and bone projectile points, ground-slate fish knives, bone harpoon points, beaver-teeth dice, and a carving style in bone occurred both on the coast and up the Fraser River. This fact, he held, attests to the proposition that interior Fraser people were influenced by nearby coastal tribes. Similarly, the inland presence of whale bone, dentalia, olivella shells, and shell pendants from the Pacific shores "proves the existence of intertribal trade" up the Fraser River (Smith 1907:439).

On the other hand, "it is probable," Smith (1907:439) writes, that:

> at an early time a migration took place from the interior to the coast and to Vancouver Island. This migration carried the art of stone chipping, the use of tubular pipes, and geometric decorative art, to the coast, and in later times the custom of depositing artifacts with the dead.

Whether right in migration as against culture flow through trade and other intertribal social links and whether correct in specific artifact details as known from later archaeological research, these data suggest the degree to which in early precontact times the Fraser River brought artifacts and cultural knowledge into the Upper Stalo area from both inland and the maritime shores.

Some trade items flowed to the Upper Stalo from Plateau tribes whose country lay east and southeast of the Thompson. Even in prehorse days some came from the Okanagan and via the Okanagan from sources both down the Columbia and from Salishan tribes off to the east. In early times they appear to have moved northward in group-to-group exchange and to have flowed predominantly from the lower Okanogan River area by Okanagan Lake and the trail to Kamloops on the Thompson River, a journey made mainly by canoe, and finally down the Thompson and Fraser. Later, following the introduction of the horse, the more direct overland trail up

the Similkameen, over to the Hope region of the Fraser, and down that river was the more commonly used. The use of this more direct route was also encouraged in early post-horse years by the disappearance as a tribal entity of the Athapascan Nicola, whose territory lay in the Nicola Valley and the upper Similkameen and who, traditionally hostile to the Okanagan, comprised a barrier to Okanagan trade movement west and northwest via these stream valleys. Larger parties became involved; trips were made more frequently; and more and heavier trade items were transported by the individual parties. (Teit 1930b:250-255)

Evidently in both the prehorse and posthorse periods many more Okanagan trading groups made the journey to the Fraser than Upper Stalo parties traveled to Okanagan country. Perhaps, in fact, the upriver Halkomelem never undertook this trip. Teit (1930b:254, 255) reports:

> In July and August, when the route was open, Similkameen and Okanagon sometimes crossed the Cascade Mountains and visited the people of Hope on Lower Fraser River. After horses became common this trade became important and was followed annually. . . . The Coast Indians never carried goods inland, as they did in Alaska and in the north, . . .

The Upper Stalo gave their Similkameen and Okanagan visitors packs of the best kinds of dried salmon, salmon oil, and dentalia and other shells. In return they secured Indian hemp-bark and twine, dried serviceberries, and dressed buckskin. In later years they even sold these interior trading parties salted salmon. (Teit 1930b:254)

According to Walters' (in Spier 1938:77) Southern Okanagan informants, "coast people" traded to their Southern Okanagan visitors for one buckskin enough dentalia or other sea shells to trim one dress. Before being exchanged, the shells were sorted by size and color to make each bundle uniform. All bead sizes, however, were of equal value. Whether these coast folk were Upper Stalo or groups at the western terminus of the Okanogan-Methow-Skagit trail is uncertain. Yet Teit's data above attesting to Upper Stalo involvement in bead bartering suggest the probable applicability of Walters' information to the inland Halkomelem, whatever her specific population reference.

Intertribal Relations

The prehistory of the Chilliwack and the Chilliwack area lies beyond the general scope of this report. But concerning the protohistoric period it is relevant to note that Hill-Tout (1903:406; 1904:311) viewed the Coquitlam near the Fraser mouth and the Chehalis of the Harrison Lake region as remnants of a former population (Duff 1952:12). Further, Hill-Tout (1903:355) believed that in the not too distant past the entire Fraser Valley below the Yale-Spuzzum sector was peopled by non-Halkomelem groups. For this view his argument runs thus: ". . . intercourse between the different tribes [in the lower Fraser country], as far as can be gathered from themselves, was never very free or extended, the nature of the country forbidding this." This argues for a relatively recent spread of the Halkomelem up into the Fraser area. For given their relative isolation from one another as a consequence of traveling difficulties, the speech of the individual groups from the Cowichan and Nanaimo on Vancouver Island to the Tait high up the Fraser River would have diverged to a point of mutual intelligibility, as was not the case, if they had been long residents in the region.

These reconstructive propositions require brief examination. Unquestionably group isolation contributes importantly to linguistic drift and divergence. But it is difficult to understand Hill-Tout's explanation of the group isolation to which he alludes in the simple environmental terms which he proposes. All of the relevant data of Duff, summarized at various points in his report, suggest that the Fraser River "highway" between the uppermost Halkomelem group (the Tait) and those tribelets at the river mouth was relatively easily navigated in canoes under most weather conditions.

If isolation there was among these Halkomelem groups, a substantially more telling argument, it seems to me, could be made for such as the result of intertribal conflict both among the Halkomelem peoples and between them and their neighbors in early times, a situation to which Duff's ethnographic data and the Fort Langley documents amply attest. Only after the establishment of the Fort in 1827 and after the traders and missionaries had had an opportunity to exert their influence were these traditional enmities relaxed.

Is there any explicit support for Hill-Tout's thesis of a fairly recent movement of Halkomelem-speaking groups up the Fraser Valley? Duff's (1952:12) field research a half-century later than Hill-Tout's revealed no migration memories among the Upper Stalo. Accordingly, Duff doubts any relatively recent population flow up the Fraser. But neither Hill-Tout nor Duff appear to consider the possibility of language diffusion unaccompanied by any significant population movement. Evidence exists for just such comparatively late speech shifts among groups immediately south of the Fraser River. Hence it seems that, modifying somewhat Hill-Tout's central proposition, the notion of a relatively recent spread of the Halkomelem language up the Fraser—not necessarily associated with an actual migration of people—is in fact a theoretical possibility, in spite of some intergroup enmity.

Of particular relevance in this context is Smith's (1950a:334) conclusion that ". . . a Halkomelem-speaking culture has recently displaced a Nooksack-speaking 'Middle Fraser' culture in the area around Chilliwack." Duff (1952:12) clearly interprets Smith's postulation as involving an actual population displacement, for he comments that his informants knew of no traditions of migrations or of earlier populations in the middle reaches of the Fraser. That Halkomelem speech has in fact spread in the general area is, however, indicated by the fact that the Nooksack have within relatively recent memory abandoned their own, unique Coast Salish language and adopted the Stalo dialect of Chilliwack (Elmendorf and Suttles 1960:1).

Any consideration of the cultural position of the Chilliwack vis-à-vis their neighbors must take note of Marian Smith's (1941, 1947:266; 1950a:335-338; 1950b; 1952:83-85, 89, 90; 1955; 1956) pre- and protohistoric reconstructions of an old "Foothill Cultural Province," a later "Middle Fraser Culture," and a short sequence of Bone and Stone Cultures, and more especially of her views of the Chilliwack in relation to these early postulated, areally-limited cultural configurations. These data are not easily presented in summary form because of certain real or apparent changes in her formulations through time, because of the largely speculative quality of her formulations, because of the fact that a detailed, coherent listing of the material and social traits that characterized these cultural subareas is rarely provided, and because of a certain lack of clarity in presentation. Yet not to mention briefly these postulations and the subsequent criticisms of them would be to neglect a significant chapter in the development of the anthropology of the Upper Stalo area and the Chilliwack position within it.

According to Smith (1941:198), the Coast Salish on the eastern side of Puget Sound considered the ethnic groups in their region as falling into three distinct divisions on the basis of location and overall lifeway pattern and distinguished these tribal groups by separate terms. These were (a) the "inland" groups that "ranged about the source waters of the rivers in the foothills of the Cascades"; (b) the "river" groups in villages "situated above the tides on the lower reaches of the large streams"; and (c) the "salt water" people of "the Sound and its various arms." The first of these categories included the peoples whose country lay in the upper reaches of the rivers between the Puyallup and Nooksack. Unfortunately, Smith fails to present lists of cultural traits distinctive of each of these three tribal categories. Still, if accurate, these observations indicate that these "inland" peoples and cultures west of the Cascade crest represent in some measure a separate string of tribes, the distinctiveness of which in the protohistoric period was recognized by the local Indians themselves. Surely the Chilliwack must be placed in this group, though Smith limits her review to tribes south of the international border.

Analyzing the ethnographic data, Smith (1941:203-206; see also 1940:31-32, 44-47; 1950a:336-337) herself proposed a somewhat different alignment of these tribes. She found them to be divisible into (a) an Inland Puget Sound group of tribes distinct from the coastal, (b) Northern Puget Sound, (c) Central Puget Sound, and (d) Puyallup-Nisqually groups. The Inland group, along the western foothills of the Cascades, consisted of the Skagit east of (b), of the Snoqualmie upriver from (c), and of the Muckleshoot upstream from (d). The Skagit shared cultural traits with the downriver Swinomish, as the other inland people did with the coastal groups with which they were paired. But the Skagit possessed as well important non-coastal traits in common with the other two members of its Inland group. A number of these latter cultural elements were environmentally related: clams, seals, and other salt water products provided a negligible component of their diet; hunting was almost as important as fishing; cross-country travel by land was important and, being more difficult than canoe movement among the coastal groups, contributed to the absence among them of the large social gatherings of potlatch proportions that occurred in the salt water tribes. Other common inland traits appear to have had no special or immediate ecological root: class distinctions were based on behavior rather than on inheritance; kin lines were socially insignificant in a formal sense; guardian spirit power dances were individualized, not systematized. At this early stage of Smith's thinking, the Chilliwack are not mentioned as a member of this "Inland" tribal string, but they undoubtedly belong with the group.

Relying largely on limited ethnographic data, bolstered by some linguistic and archaeological information, and interpreting these data from a time perspective, Smith (1950a:336; 1952:84) believed that the inland, upriver, or foothill culture was in place "by approximately 2,500 years ago." It extended from The Dalles northward on both forested faces of the Cascades and Coast Ranges to the upper Lillooet area and via the interior river systems to and including the Bella Coola of coastal British Columbia. This culture comprised the western periphery of the Plateau area from the Carrier of British Columbia to the Klamath of southern Oregon, as recognized by Ray (1939:145, 147), and the mountainous eastern fringe of the adjacent Coastal area. The only cultural items indicated by Smith in 1952 as particular to this Province are stone carvings in a special (undefined) style, a pacifistic orientation, and "the slight importance given to rank" (Smith 1952:84).

The ancestral Chilliwack—or more properly the population of the Chilliwack Valley at the time, an important point not noted by Smith—are considered to have been one of the component groups within this Province. Two conclusions appear to follow from the above interpretations of the data: (1) these old "Chilliwack" had their primary cultural affinities with groups to the north and south of them on both flanks of the Cascades, not with the coastal peoples as in more recent periods; and (2) the environmental similarities of the two sides of the mountains were then a more powerful cultural molding force than the high Cascade mountain masses were a barrier to group contact and cultural diffusion. These conclusions may have in them some element of truth.

Still, as Suttles (1957:169-170, 178), has pointed out, Smith's larger postulate of a Foothill Culture Province rests on very insecure ground. Most damaging to her proposition is the fact that she fails to provide the extended catalog of cultural traits and complexes required to establish it as a separate culture subarea.

Further, again as Suttles (1957:170) has observed, Smith's north-south line on the eastern face of the Cascades fails to conform to tribal lines as drawn by Ray (1939), whose westernmost longitudinal Plateau subarea Smith purports to embrace within her newly created Province. I suspect that she is intending to split these western Plateau tribal units into two segments, a Columbia River salmon component and a backcountry, more balanced hunting, gathering, and fishing for smaller fish component, only the latter being incorporated into her Province. This would parallel her separation of the west-of-the-Cascades groups into salt-water peoples and inland, riparian peoples, a division to which reference has been made above. The important difference between these eastern and western tribal clusters is that on the Coast these divisions were made by the Indians themselves, while this was not so on the eastern flank of the Cascades. In this latter region, individual tribes "owned" and made extensive subsistence use of both riverine and back-hill regions. If this division within individual Plateau tribes is her intent, it is a shame that she does not say as much.

The "Middle Fraser Culture" of Smith (1941:205-206; 1947:258; 1950a:336-339; 1950b:35; 1952:83, 95; 1956:272; see also Codere 1948), a later development in prehistoric times as one of several small, regional cultural types, may have evolved from the life patterns of the earlier Foothill Province. It was a unique cultural manifestation "peripheral" to and geographically intermediate between the cultural composites of the Gulf of Georgia on the west and the Upper Fraser on the east. The few cultural traits itemized by Smith at various times as especially associated with this cultural nexus include "elaborate attention to wild-root crops as a source of subsistence"; a divided riverine/salt water subsistence orientation, utilizing the marine territorial resources of other tribes; the manufacture and use of both flaked and ground-polished stone tools; the use of elaborate semisubterranean dwellings as well as plank structures; a certain uniqueness in mythology; speech of the Nooksack or closely related variety; and a special physical type. This cultural mode, "more complex than [the] surrounding and intruding cultures," survived in residue form into the late protohistoric lifeways of the Nooksack, Chilliwack, Fraser River groups from Mission upstream to Yale, and people of southern Harrison Lake (the Scowlitz and Chehalis [Figure 2-1]). In late prehistoric or protohistoric times, the more northern of these peoples came under the cultural and linguistic influence of the Halkomelem folk, with their coastal traits, who spread up the Fraser Valley to add a coastal veneer to the "Middle Fraser" substratum. Nooksack was the only "Middle Fraser" survivor into the full historic period; the Chilliwack retained this earlier life style "until the time of intensive European contact."

This posited Middle Fraser formulation requires some comment. As already noted, Smith (1950a:336-337) earlier described the Nooksack and Chilliwack as having had a strong inland, riverine orientation without a significant salt-water component. Whatever the Nooksack case, irrelevant to this present study, her own Chilliwack information and that of others strongly imply that in adding here to the Chilliwack life style an important salt-water resources use, she fails to distinguish between the traditional culture of pre-and protohistoric times and that in the postcontact period. Her documentation of Chilliwack travel to the sea with the Nooksack appears, in fact, to be limited to the post-midnineteenth century time level. The general ethnographic information summarized in this present Chilliwack chapter strongly suggests that journeys to the coast of any frequency as an aspect of the subsistence quest would have been out of Chilliwack character in pre-Fort Langley days (i.e., ante 1827), though it might have been a less dangerous trip with the Nooksack than straight down the Fraser to the Strait where hostilities were often possible. As in this instance, Smith is at many points unfortunately loose with her ethnographic time control. This frequently makes it difficult (sometimes impossible) to ascertain in her statements, reconstructions, and postulations whether she is describing the prehistoric life of a group, its ethnographic traditional, protohistoric and immediately postcontact culture, or some phase of its rapidly changing post-White lifeways.

In carefully reviewing Smith's Middle Fraser argument, Suttles (1957:162-164) agrees that the Nooksack were probably somewhat closer linguistically to the Stalo tribes on the Fraser than to the other groups in the vicinity. Following his lexicostatistical approach, Swadesh (1950:159 Table 1) found that Nooksack held in common a higher percentage of vocabulary items (out of his selected 165 items) with the Stalo dialects than with their other linguistic neighbors, the Halkomelem dialects of Vancouver Island being a near second. Suttles' (1957:163) own limited Nooksack linguistic findings show that Nooksack and Halkomelem were also "closer to each other" in their sound system than either was to other nearby dialects and languages. And he agrees: "It is probable that the strongest cultural ties, like the strongest linguistic ties, . . . [were] with the Chilliwack and other tribes on the Fraser." Still these Nooksack-Stalo linguistic and Nooksack-Stalo-Lillooet cultural similarities were not so great—and their differences from their neighbors not so great—as to warrant viewing them as comprising a unique Middle Fraser subareal complex.

It is not the task of this study to review such archaeological data and interpretations as contribute to an understanding of the early cultural development of the Fraser drainage. Accordingly, only brief and summary attention is given to three of Smith's somewhat tangled and highly speculative attempts to synthesize the

meager archaeological findings available in her day relating to the middle Fraser region—and to a largely unknown degree to the people of the Chilliwack Valley—and to the pre-White cultural interaction of the area with the Plateau and Northwest Coast.

In the late 1940s Smith (1950b) attempted to reconstruct four precontact cultural manifestations: an Early Bone Culture, a Late Bone Culture, an Eastern Stone Culture, and a Coastal Stone Culture. In the Fraser country from Yale "westward to the open sea," the Early Bone lifestyle seems to have either developed into or continued through some aspects of the Eastern Stone Culture. The movement south of the classic traits of Northwest Coast life began toward the close of the Late Bone period and continued into the protohistoric, following the coast southward and up the Fraser on east to introduce traits into the Eastern Stone Culture. The latter, turn about, spread from its place of origin down the Fraser to the coast. Smith concludes, with Kroeber, that "the lower Fraser drainage [was] a main, if not the main, early cultural focus of the Northwest Coast," and sees the Early Bone, with its equal adaptation to riverine and marine life, as the culture involved.

In the mid-1950s Smith (1956), again using the "meager and unsatisfactory" archaeological data supplemented by ethnographic information, reviewed the prehistory of the area in terms of both her Bone-Stone reconstructions and her hypothesized ancient Foothill Culture Province, the latter with "the western longitudinal subarea of the Plateau, Inland Puget Sound, and middle Fraser" as its nucleus. Among other efforts she constructs tentative culture-development sequences for the Columbia-Fraser region from an ancient, widespread, assumed North Pacific Rim substratum to the ethnographic cultures of this large area.

Her major attempt at archaeological reconstruction, however, involves a longer time span and considerably broader geographical area. To consider only those aspects germane to the particular interests of this report, Arctic influences, Smith (1956:286-287) contends, moved down the coast roughly 2,500 years ago and filtered up the Fraser into the Plateau without any large, sudden migrations. This early southward flow was not repeated until ethnographic times, when slate-grinding and the Halkomelem language diffused up the Fraser from the coast. Smith (1956:282-284, Charts II and III) sees her Interior or Foothill Culture as having contributed to both the later Puget Sound and Middle Columbia cultural developments. Through a merging of this Interior-Foothill life pattern and coastal traits, the Fraser Climax was born in the lower and middle Fraser areas.

This climax culture is equivalent to her Early Bone Culture, with an approximate 1,500-2,000 years ago date. The remarkable stone sculpture of the Fraser was clearly associated with this climax. This stone-carving complex, however, extended beyond the up-river sector of the lower and middle reaches of the Fraser River: it occurred also in the lower and middle sections of the Columbia River. While representing a single discontinuous trait distribution, the two Fraser and Columbia areas may have been connected by the wood sculptures of the Puget Sound regions. At any rate, they were trail-linked by a communication line from the Middle Fraser and Nooksack valleys via Snoqualmie and other nearby passes to the Yakima-Vantage region and hence to the Columbia downstream, all within the Foothill area.

Much of the trait assemblage of this rich early culture is thought to have been perpetuated in the Late Bone, Eastern Stone, and Coastal Stone cultural composites, the three covering the entire Columbia-Fraser region. The Middle Fraser culture is seen by Smith as a daughter culture of this Fraser Climax (Smith 1956:284, Chart III). During this later time span cultural traits flowed down the Fraser Valley from the interior to the coastal shores and local cultural variations developed. In its later Middle Fraser development the Fraser Climax, Smith contends, persisted into the historic period only among the Nooksack, although retained into very recent times by the Chilliwack.

All of this reconstruction is, of course, now dated by more recent and more technically proficient archaeological research, and so is largely of historical interest. But it illustrates the extent to which in this middle anthropological time level, between the very early work of Boas, Harlan Smith, and others and the more contemporary research of Borden and his successors, attention was paid to cultural movements up and down the Fraser through what has been in late times Upper Stalo territory and the possible contribution of the area's peoples over a very considerable time span to the cultural development of a much wider region.

So much for Marian Smith's various archaeological and ethnographic reconstructions, as best I can trace and comprehend them. One cannot but applaud these early efforts toward a synthesis of the limited data of her time and attempt to unravel her presentations since they frequently relate directly or indirectly to the Upper Stalo region and the Chilliwack. There are, however, substantial problems both in understanding and accepting her postulations: to me her papers exhibit a persistent lack of clarity and a bothersome failure to interrelate the different reconstructive formulations presented from year to year. There are other difficulties also, some having already been noted.

An intensive and extensive critique of her manipulation of the basic information, particularly the ethnographic, and of her time-tied cultural reconstructions has been undertaken by Suttles (1957). In this excellent point-by-point review, Suttles produces convincing evidence that Smith's data and formulations based on them lack credibility in many respects bearing on the Upper Stalo in general and Chilliwack in particular.

Her formulations demonstrate a fragmentary and often quite faulty and simplistic understanding of the relevant archaeological, linguistic, and ethnographic data available in her day and consequently a critical

misapprehension concerning their implications. She draws hasty conclusions regarding the diffusion of cultures and movements of tribes. In Suttles' carefully documented judgment, no convincing evidence of any sort exists for either the Foothill Culture Province along the Cascades flanks or the postulated later Middle Fraser Culture in the Mission to Yale sector of the river. The Province is nothing more than a typical case of culture overlap on the boundary of two long-recognized culture areas: the interior Plateau and the Northwest Coast, both in their Fraser River manifestations. The Middle Fraser Culture, in turn, rests on no persuasive data differentiating her proposed member groups culturally from their neighbors. Suttles' soundly based and well-argued weighing of Smith's data, point by point, and of her conclusions seems throughly reasonable. Hence the several papers of Smith in the 1940s and 1950s are of significance for what she attempts rather than for any lasting contribution to our comprehension of the linguistic and cultural history of the downriver segment of the Fraser Valley.

In principle, Marian Smith's Foothill concept has some appeal, even if her arguments for its existence as a culture area in itself or at least a major subarea are singularly poorly documented. A life mode with a special twist might conceivably have developed in prehistoric times as a regional response to the upriver, high altitude lake, lofty-rugged mountain, and heavy forest environment (especially on the west side) of the below tree-line Cascades. This would have been different in important ways from the strongly salmon-focused culture of the nearby Columbia and Fraser Valleys and from the maritime, littoral configuration of the Coast. In a way this would have paralleled, for example, the cultural similarity that Suttles (1957:173-174, 175) notes between the Bella Coola of British Columbia and the Puget Sound Salish, the consequence of adaptation to very similar geobioenvironments. This issue comes close to one central in this present North Cascades study: to how great an extent (if at all) were the traditional cultures of the Upper Skagit, Chilliwack, Lower Thompson, and Chelan—or at least one facet of them—similar owing to their exploitation of the Park resources, even though each tribe approached this ecological base from a somewhat different total-culture orientation?

We now move from the ethnoarchaeological reconstruction domain to the protohistoric and early postcontact ethnographic period. The Lower Stalo saw much of nearby coastal groups like the Cowichan, Nanaimo, Saanich, and Squamish who commonly entered their Fraser River territory in summer to fish for salmon. But even the upstream Upper Stalo frequently encountered downriver Stalo and nearby coastal parties when these folk passed in their canoes heading up to the very fast water above Yale, in uprivermost Stalo country, to fish and dry their catch for winter. There in the lower end of the Fraser Canyon was the finest salmon fishery on the river. (Duff 1972:11, 14, 17, 25)

Despite the above close downriver intertribal relationships of the Upper Stalo described by Duff, Simon Fraser's journal raises the possibility of a somewhat different situation in the early postcontact period. When Fraser (1960:100-103) and his party descended the Fraser River, they found it virtually impossible, once they reached the navigable stream below Yale, to persuade Indians, however friendly to them, to furnish canoe transportation beyond the very next village. Whether this reluctance rested on a fear of possible hostilities—such a fear of downriver people certainly existed once they entered Lower Stalo country (cf. Fraser 1960:104)—or had some other basis is unclear from Fraser's account. But the point is that these data could be taken to mean that the normal downriver range of intertribal relationships of any one Upper Stalo group was not great.

It must be assumed that the Chilliwack, in their canyon backcountry without fisheries of their own on the Fraser and apparently without customarily joining other Upper Stalo groups at their salmon fishing stations, could hardly have seen as much of the downriver people as their neighboring upper tribes.

While, according to Duff as noted above, relationships between Stalo groups were close, Stalo contacts with the Plateau tribes to their north and northeast—with the Lillooet in the Lillooet Valley and the Thompson of the Fraser country above Yale and of the Thompson River area—were significantly less frequent and less uniformly cordial. Duff (1952:11) summarizes the situation thus:

> Inland, the direct contacts of the Stalo were limited to trade and intermarriage with the Lower Lillooet and Lower Thompson. Warlike raids by the Lillooet and Thompson also occurred; sometimes even provoking the normally peaceful Stalo to undertake retaliatory raids. Difficulties of travel, however, prevented cultural contacts in this direction from being as important as those with the Coast . . . . As a result, a man from Yale commonly rubbed shoulders at the fishery with [Lower Stalo] men . . . but he seldom met his Thompson neighbours from a dozen miles up-river.

The uneasy Upper Stalo-Lower Thompson relationship pattern described above may well have generally prevailed, but on June 26, 1808, Simon Fraser (1960:97) found "some men of a neighbouring nation called achinrow" at a Lower Thompson village a few miles above Spuzzum, clearly within Lower Thompson country by Fraser's (1960:97) own journal testimony. These "achinrow" or "ackinroe" as the group's designation is more commonly spelled by Fraser were either the Tait individually or the Tait together with other (perhaps all) Upper Stalo tribelets. At least these particular Lower Thompson and Tait individuals were on a friendly basis when encountered by Fraser.

It would appear—as from Wilson's (1970) 1859 record—that the Chilliwack were friendly with the Halkomelem Sumas, who bordered them on their downriver flank. Chilliwack-Sumas links appear not to be addressed in the scanty ethnographic record.

If the data of Smith (1947:256-257) can be followed, the Chilliwack had an especially close and amicable relationship with the Nooksack whose aboriginal territory abutted theirs on the southwest (Figure 2-1). This relationship was maintained and cemented by frequent intermarriage and was encouraged by the apparent fact that the Chilliwack until about contact times spoke what is said to have been a Nooksack-resemblant language. As previously mentioned, at some earlier but not particularly distant time the Nooksack River evidently flowed northward to Sumas Lake just west of the Chilliwack country and then down to the Fraser River. This would have made comparatively easy the canoe journey to the Nooksack homeland. Even without this linking watercourse, the route from the Sumas over the hardly perceptible divide to the Nooksack Valley could not have offered difficult travel problems.

According to Smith (1950a:337), the Chilliwack traveled together with the Nooksack to sea-fish off Point Roberts, beyond the western limits of Nooksack country and "fully eighty miles" from the Chilliwack homeland (Figure 2-1). While Smith fails to report explicitly a beginning time-line for this practice, her documentary data plainly reveal it to be a postcontact pattern, indeed a post mid-nineteenth century one. This would be wholly in keeping with the ethnographic information which describes the traditional Chilliwack as basically a home-oriented, Chilliwack River and high country people.

Because of the generally uneasy relationship between the Upper Stalo and the Lillooet and because of the intervening Fraser River and the country of other Upper Stalo tribelets, the Chilliwack surely saw little of that group. But they are said to have encountered Thompson and Skagit Indians, with whom their relations were unfriendly at least at times. One of Duff's downriver Tait informants reported:

> . . . Ohamil [Tait] hunting-parties formerly went back into the mountains, several days' travel east of the river. Often they would meet Thompson or Skagit hunting-parties, but there was no conflict. He had heard of conflicts between these groups and the Chilliwacks, however. (Duff 1952:21)

I interpret this statement as signifying that Chilliwack hunters also worked back into the country some distance east of their village area below Chilliwack Lake, presumably into the upper reaches of the Chilliwack River and perhaps beyond. And there they came upon Thompson and Skagit hunting groups with which they sometimes contended.

I have yet to uncover ethnographic data indicating much unequivocally direct contact between the Upper Stalo and Plateau groups east of the Thompson. The Lower Fraser tribes as a group were known, however, to the Okanagan (Teit 1930b:202; Walters in Spier 1938:78), to the Sanpoil-Nespelem (Ray 1932:11), to the Columbia of the Columbia Basin (Teit 1928:93), and even to the distant Flathead of western Montana (Teit 1930a:300), and were named by each of these tribes. These data bespeak some measure of contact between the Upper Stalo and the more eastern and southern Plateau tribes, although the degree to which this relationship was direct or indirect is an open issue. It is worth passing note that all of the names are obvious variants of a single underlying form.

Whether such direct contact as may have existed at an early time was generated by Upper Stalo as the traveling groups, or by the Plateau peoples, or by both sides in some measure is not described in the ethnographic literature. In one specific instance, however, one that may have transpired in the early 1800s, the visiting party was a Similkameen (Northern Okanagan) man who journeyed to Tait country to trade (see Intertribal Marriage section below) (Teit 1930b:216).

In summary, the social links of the Chilliwack were primarily with their immediate Upper Stalo neighbors, to a lesser degree with the Lower Stalo tribelets and the inland non-Stalo tribes to the south and southwest, to a still lesser extent with the nearby maritime peoples down the Fraser and on the shores immediately to the south of the Fraser mouth, and least of all with the Plateau groups on the north and northeast. Given the distinct Plateau-like slant of a good many elements in Chilliwack culture, the tribe's minimal contact with Plateau peoples in the ethnographic past is, it seems to me, especially noteworthy.

Intertribal Marriage

Most marriages among the Upper Stalo were with persons outside their own community yet with those in nearby villages. However, people living near their own tribal boundary often found spouses in adjacent tribes. High status families, irrespective of their residence, frequently outmarried with persons from even quite distant tribes. The Tait, for example, remembered marriages with the Thompson of Spuzzum, Nooksack, and Skagit as well as with a number of salt-water groups. (Duff 1952:95-96)

Occasional Upper Stalo marriages evidently occurred with Plateau tribes more distant than the Thompson,

although how common this was in precontact days—if it took place at all—is unclear. One such instance was reported to Teit (1930b:216-217) in the early 1900s, that of a young Tait woman from Hope who married a Similkameen (i.e., Northern Okanagan) man, while he was on a trading journey to Hope. "The following year he took her back because she was unacquainted with the mode of life of his tribe and quite unable to adapt herself to it." When this event occurred is not stated, but Teit's context might be interpreted as placing it early in the 1800s. This is an interesting case from another perspective: it plainly documents the very substantial differences that existed between the life patterns of the middle Fraser people and their nearby Plateau neighbors.

So far as the Chilliwack specifically are concerned, we are told little, as far as I am aware, regarding intermarriage with other Stalo tribes. It has been contended, however, that the spread of the Halkomelem language into the Nooksack-like speaking Chilliwack group was the consequence of intermarriage with persons of nearby tribes with Halkomelem speech, the gradual growth of bilingual villages even into the early 1800s, and finally the near total loss of their earlier language (Smith 1950a:335).

The Chilliwack are known to have married members of the Nooksack tribe (Smith 1950a:331). Likewise they "sometimes intermarried with Thompson, although usually they would not move up to Thompson country" (Duff 1952:95). This antipathy toward relocating in Plateau country is of a piece with the case of the Tait-Similkameen union noted immediately above.

Warfare

Duff (1952:96) summarizes the Upper Stalo situation thus: "Basically a pacific people, the Upper Stalo fought little amongst themselves, but they were frequently attacked for slaves and loot by surrounding tribes, and sometimes were provoked to make revenge raids." The Tait regarded the Lower Lillooet as their enemies, for they were raided by them from time to time. They were "on fairly good terms" with the Lower Thompson, "except for some friction over fishing-stations on the river." In 1949-1950 the Chilliwack, however, clearly remembered one raid by Lower Thompson which resulted in the burning and looting of their large dwelling at a village on the Chilliwack River on the lowlands between Vedder Crossing and the Fraser River. (Duff 1952:96)

The really dreaded raiders, however, came from the Coast. These were the southernmost Kwakiutl who occasionally penetrated up the Fraser as far as the Tait (Duff 1952:96), even up to Yale where they terrorized the local residents (Smith 1950a:334, 1955:102). In the late 1820s the fur traders at Fort Langley complained of the frequent raids on the Stalo in their home area by "powerful tribes from Vancouver's Island," including the Halkomelem-speaking Cowichan. They were so serious that the local Indians were forced to devote all their attention and energies to the protection of their families, and even in this they were not wholly successful. (Duff 1952:96)

Maritime raiders likewise moved up the Chilliwack River to attack the Chilliwack. According to Duff's (1952:96) Chilliwack informant,

> they ascended the Chilliwack as far as Vedder Crossing, pulling their large double-ended canoes over the log-jams. On one occasion their canoes proved their undoing. Returning down the Chilliwack after a raid, they were forced out of their canoes at a sharp bend and attacked by Chilliwacks from the banks.

This is an instructive statement, for it suggests that the Chilliwack villages along the Chilliwack River in the narrow valley upstream from Vedder Crossing (i.e., all the really old-time communities) may have been comparatively safe from these coastal raiding parties. And that perhaps it was the protection by the Fort Langley traders as much as—or more than—a change in the course of the Chilliwack River to flow northward from Vedder Crossing directly to the Fraser River that encouraged the Chilliwack to expand out of their protohistoric canyon home and onto the plain to the Fraser south bank.

These damaging raids from salt-water country did not go entirely unresponded to, however. One famous Sumas warrior, accompanied by fighting men from all the upriver tribes, successfully carried out a reprisal raid against the Kwakiutl, breaking into a fortified house and killing all the men (Duff 1952:96). And the Chilliwack also, according to Hill-Tout (1903:358), occasionally mounted raids for slaves and plunder on settlements of other tribes down the Fraser. While their village and tribal leaders attempted to discourage such raids, they were unable to control "some restless, venturesome spirits, and these would from time to time persuade others less warlike than themselves to join them, by tempting them with visions and promises of the rich spoils they would secure and bring home." (Hill-Tout 1903:358)

Relations of the Upper Stalo with the more inland Salishan tribes were not entirely amicable. Fighting parties evidently reached over the Cascades at least to the lower Okanogan Valley, for Walters' (in Spier 1938:78) Sinkaietk (Southern Okanagan) informants reported:

> The Lower Fraser Salish . . . were bad raiders. They usually set fire to the camps attacked and ran. For this they were considered cowards, not brave enough to stay and fight. At the

beginning of the nineteenth century the Sinkaietk and Lower Fraser people became friends and traded.

To some degree, hostilities also occurred within the Upper Stalo peoples themselves. Chilliwack traditions report "quarrels and contests" with the Pilalt, their neighbors to the north just over the western end of the Skagit Range (DEMR, *Hope* quadrangle 1970). Generally these were generated by "one tribe overrunning the hunting-grounds of the other," the Chilliwack apparently having been mostly at fault since they often hunted in Pilalt territory. This is an interesting bit of information in Chilliwack subsistence terms, since it clearly attests to the special importance of game as a food resource among this group in traditional times.

Social Structure

Kinship Bonds

Kinship links were important to the Upper Stalo. Relatives were traced "in all directions for several generations": through both father and mother, brothers and sisters, sons and daughters and both lineally and collaterally. Children were taught who their relatives were, real known kin as opposed to fictive relations. They were told to respect them and to feel certain that they could count on them as friends. Owing to the high degree of intergroup contact that prevailed, any person was sure to have relatives in other tribelets. The Chilliwack were bonded to other Upper Stalo peoples by just such kin links: one Tait woman, for example, reported relatives through a grandfather among the Chilliwack, Sumas, Nooksack, and Skagit. (Duff 1952:76) Apart from the Chilliwack point, these data are of particular interest since they demonstrate that relationship ties, at least in the early historic period, were not limited to Fraser River groups but left that stream and, following the west flank of the Cascades, reached the Nooksack and Skagit basins and two tribes of special concern to this study.

One of the prevailing social patterns of the Upper Stalo was that of visiting relatives in other areas, "usually during the slack period in late fall." At times, for example, they journeyed downriver as far as the saltwater Musqueam above the Fraser River mouth and there picked cranberries with their relatives. "These visits sometimes lengthened into winter-long stays or even permanent changes of residence." (Duff 1952:76)

The Upper Stalo had within the tribe no socio-political units of the clan type, social descent and property-owing groups comprised of relatives, real and fictive, who were considered descendants of a single ancestor. (Duff 1952:76)

Kinship Structure

How kinsmen are recognized and classified in a society are fussy and often complicated matters. The details of the Stalo system are of little interest in a broad cultural survey of this present kind. Nevertheless, its general outlines seem worth noting. Kin terms were actually few in comparison to the situation in many other Indian groups. As in our Anglo-American system, no terminological distinction was made between paternal and maternal relatives, although the Salishan peoples east of the Cascades commonly distinguished father's and mother's uncles, aunts, and grandparents by different words. Similarly, also unlike the interior groups, "father's father" and a "man's son's child"—and like relationships—were not designated by a single reciprocal term, although such generation-reciprocal words were employed in terming more distant ascending and descending generations. For persons of grandparental and grandchild generations as well as of more distant generations, the sex of the person referred to, of the linking relative, and of the speaker were all irrelevant in the Stalo system: e.g., "grandfather" and "grandmother" were referred to by one word; "father's father" and "mother's father" by a single term; and "man's father" and "woman's father" by one word. But sex of the person referred to was expressed in differentiating "father" from "mother," yet not even in distinguishing siblings and cousins. The duty of identifying the kinsman's sex was allocated instead to the modifying article which had to be used with every noun. Differing from our system, too, the word for "parent's sibling" when the parent was alive differed from the term for that sibling when the linking parent was deceased, and separate words were used when addressing certain kin and when merely referring to them. (Cf. Duff 1952:75-76; Elmendorf 1961b; Suttles 1965)

Names and Naming

"Each [Upper Stalo] family line owned a stock of personal names," varying in importance and prestige. Most infants were given one of these names, from the block of either parent, as its first name within the first two years of life. It might be that of an earlier relative, a recently deceased kinsman, or even a living relative. In this last situation the living person was not required to give up the name in the process: indeed, an older kinsman

might elect to share his or her name with a child to which he or she took a particular fancy. Among the Chilliwack this name was announced at a potlatch or at least a special ceremony.

In later life a person "could be given other and more important [family] names," probably accompanied by a potlatch or similar ceremony though for this Duff had no informant confirmation. To avoid diminishing the importance and prestige of a name, its recipient was selected with great care by the older person then carrying the name or by family members in consultation. There was evidently a clear opinion that names should be passed down to descendants with personal characteristics and presumably abilities similar to those of the persons who had earlier borne the name. Usually this was a son, grandson, or nephew, who not only possessed the appropriate basic nature for holding the name but who had also been trained by the man himself in those particular qualifications that would enable him to assume the name and attendant rank without sullying it and diminishing its aura. Some people acquired several family names of esteem in this manner. Frequently the names were so old that their meanings were obscure, the people having "lost the high words in . . . [their] language." (Duff 1952:76-77, 82)

In the Chilliwack tribelet, the personal names of the dead could not be mentioned in the hearing of their survivors. They were not freely used, in fact, until they were given to certain family members in name feasts at some later time. (Hill-Tout 1903:366)

Property and Inheritance

Among the Upper Stalo, resource areas were typically not regarded as the exclusive property of the tribe or village, much less the individual. Thus sturgeon sloughs, berry patches, and hunting grounds were used freely by all nearby groups. "An apparent exception," Duff (1952:77) reports, "is the case of the Chilliwack, who were said to shoot intruders on their hunting-grounds." This seems at odds with Duff's (1952:72-73) statement noted above (see Hunting section) that if Upper Stalo "met hunting parties of other tribes, there was no conflict." Yet it would not be an unreasonable exception to the general Upper Stalo free-use pattern. For as we have noted, the Chilliwack could not have had in early traditional times Fraser River fisheries. Moreover, they seem to have spoken a tongue that set them apart from the Fraser River Halkomelem-speaking groups, which may possibly have had the effect of restricting the welcome at the salmon fishing rocks of the Tait below Fraser Canyon which was extended other Halkomelem tribes. Whatever may have been the cause, it appears probable that the Chilliwack were significantly more a mountain hunting people and less a salmon fishing tribelet than was the case for the Upper Stalo groups along the Fraser, who, Duff reports, exercised no real control over their hunting grounds.

Where an appearance of ownership existed, it "grew out of customary use rather than claims of exclusive right. . . . Large weirs like the sturgeon weir across Sumas River were built and owned by the community, but outsiders were also allowed free use." As an exception to this pattern were the salmon dip-netting stations that were family-owned, most on the Fraser in the upper end of Tait country. In general, dip-netting sites were owned by families belonging to the village closeby. The family head was considered the titular owner, but all "his descendants could claim the right to use it" and only a very mean-spirited man would prevent anyone, relative or not, from reasonable use of his station. In any event, at least in recent times, "practically everybody who wanted to fish could claim the right through kinship to use at least one station." (Duff (1952:77)

In general, the "owner" and his sons and younger brothers used the fishery together. As a group they built, rebuilt, and repaired the drying rack that went with the station, each having a number of rack poles from which to hang his fish to dry. The dip-net, however, was usually made and owned by the fishery "owner," but was left on the river bank for all to use. Because there was ordinarily room for only one man to fish at a time, the men took turns, the wife to each cutting up and hanging to dry the fish that he caught. So plentiful were salmon in early days that a man could take in one hour all the fish his wife could process in a day. If the "owner" were too old or otherwise enfeebled to fish himself, others shared their dried salmon with him. (Duff 1952:77-78)

Dwellings "were built and occupied by the members of extended families." As with the dip-net fisheries, the title to the house rested nominally with the family head, who could not dispose of it outside the family group. (Duff 1952:78)

A man's canoes, weapons, implements, and the like were his own to dispose of as he chose. Dying, he could give or will anything to anyone, as to a son who had been caring for him. When he died, the property was disposed of in various ways. That which had been willed was taken as the deceased had wished. A few favorite belongings were first burned in a "burning feast" four days after the funeral. The remainder could be taken by anyone prior to the second, ritual fire, with the first choice going to the person who had conducted the funeral ceremony and the relatives who had helped most with the rites. Then others could take what they desired. The remainder was destroyed in this final burning. (Duff 1952:78)

The Upper Stalo had very little inheritable non-material property: no special privileges, social positions or offices, or guardian spirits or guardian spirit songs. The two exceptions were the sxwaixwe mask and important personal names. The use of the mask, costume, and ritual "were obtained from either parent and passed on to

all children (exactly like the right to use a fishing-station)." Apparently myths, even the origin myth associated with the mask, were not inherited, at least in the sense that they could be narrated only by certain persons. (Duff 1972:78)

The important names, already mentioned in the naming section of this study, were family property, but the person who was using the name "usually had the right to choose his successor." If this was not done, all the relatives were involved in the choice. While all younger siblings, children, grandchildren, nephews and nieces, and so on were possible successors, both primogeniture and a sterling character that would not "spoil" the name were important criteria in the decision. In general and under these constraints, a name went to a young person as close as possible to the direct line of descent. (Duff 1952:78)

In addition to the masks and associated elements and to the valuable family names, spells and certain other supernatural powers could be passed on. Yet these differed from the masks and names to the degree that "instruction and training were more important than heredity, which merely suggested the most logical recipients." (Duff 1952:78-79)

Regarding property and attitudes toward it on the part of the Chilliwack specifically, only two ethnographic observations have been identified. One, already reported, is the group's concern about their hunting territory and their efforts to protect it against interlopers. The other is a note by Hill-Tout (1903:359) stating that the tribe "held their possessions more in common" than was the case among their neighbors. In support of this generalization, however, only a single illustration is provided, the village food sharing pattern (see Village section below).

Hospitality and the Potlatch

One of the notable cultural traits of the Upper Stalo was the generous hospitality extended to others. Simon Fraser was received graciously at every village with neat mats spread and plenty of salmon in wooden dishes. This kindness toward others—especially evident in the matter of food—was related to the general pattern of frequent intervillage visiting by well-liked, even remote kinsfolk and was made possible by the Upper Stalo abundance of food resources. (Duff 1952:89-90)

The potlatch that was so well and complexly developed among the coastal peoples was likewise an Upper Stalo practice though in a much diluted form. Duff (1952:87) writes:

> Every important social event . . . was signalized by a public ceremony. Bestowing an important name, building a new plank house, renewing a grave-house or the blankets holding the dead, a funeral—all required a public gathering where important persons could be "hired" to "do the work" and where the assembled people could witness the event.

The host and his family provided the guests' food, paid the officials and workers they hired, like the food preparers and servers, and accumulated the piles of goods for general distribution, largely to those to whom they were in debt for past favors. But occasionally at the close of the main potlatch, a scramble was arranged, in which the host threw out a stick representing a horse, canoe, or other valuable. (Duff 1952:87-89)

Only the richest families could finance such a complete potlatch at the time. Others, being forced to accept food loans and defer payments, announced at the ceremony when they would give a "paying off" potlatch. Sometimes such a deferred payment ceremony was held decades later, by which time the necessary property had been accumulated. It is apparent that "high-rank people gave the most numerous and impressive potlatches, and that they could not attain or hold a high status without doing so." (Duff 1952:88)

Potlatches were entirely social events in the sense that the possessed no religious component. Occasionally, however, competitive potlatches were held; in these one tribe or wealthy family tried to embarrass another by conducting a ceremony so expensive that the other group simply could not match it. If possible, they took place in the summer or fall when the weather was pleasant and firewood needs were less severe. Some, however, were held in winter, coupled with—but not part of—spirit dancing. And occasionally a family took advantage of a large dance gathering to announce a family status change—e.g., a new name for some member—and to distribute gifts. (Duff 1952:88-89)

A hypothetical "paying off" potlatch is described by Duff (1952:88-89) substantially as his Chilliwack informant presented the information. It fits the pattern outlined above but offers several illuminating details. Moreover, it deals explicitly with the Chilliwack and consequently deserves special notice in this study.

> [Paraphrased quote] The man who organized the ceremony was old and had incurred debts over the years not yet repaid: to speakers who had announced the family names of his children; to people who had bathed the bodies of family members and prepared them for burial; to those who contributed food, blankets, and so on for the funerals; to persons hired from time to time to change the blankets of the corpses or to make a new grave box; to those

who had helped in building a new dwelling; to people who had honored him with gifts of blankets or canoes or the like at their potlatches; to those who had at some time brought food gifts to long-past dinners he had given.

The ceremony is held in the largest house around—for a payment to the owner—and attended by old and young, not only those to be compensated for past kindnesses or services performed. It begins with the announcement of a new name for a grandson or granddaughter, with several chosen, prominent witnesses paid on the spot and the statement that the potlatch is being "given" by the young person, for whom persons had been hired to act as spokesmen during the ceremony. Then payments with interest are made for all the old man's still unsettled obligations in order of their occurrence. In each case a speaker announces the name of the person, the services performed, and the amount paid. The objects are given by the speaker to a runner who takes them to the person named, or, in the case of a rich potlatch recipient, to a prominent person or two appointed by the recipient to bring the payments to him in return for a small share of the property received. (Duff 1952:88)

Finally, from a large platform in the house, "the host or speaker throws things down so that anybody present can scramble for it." Very long blankets—sometimes 15 yards long—might be tossed into the crowd. Everyone who can seizes a piece; a man comes around with a knife and cuts off each person's section; the recipient takes his piece home, unravels it, and reweaves it. This event might be followed by a scramble from the river edge or from a canoe out in the stream, the people scrambling for the objects by swimming or from canoes. (Duff 1952:88-89)

A potlatch of this kind might last three or four days, the sponsors feeding the people twice daily from long platters sent to where the people were encamped. (Duff 1952:89)

Evidently a similar potlatch or part of one was witnessed by Wilson, a member of the British Boundary Commission, on October 23, 1859. He was encamped at the time on the lower Chilliwack River, either at the Commission's depot close to the river confluence with the Fraser or, less likely, at its sometime Chilliwack headquarters near the Chilliwack River not far below its canyon mouth. He writes:

> We had a grand festival amongst the Indians, several tribes coming to a feast here. These festivals are annual; held at different places & the chiefs give away presents; he who can give the most being considered the greatest. Some gave away between 3 & 400 blankets besides guns & other things, absolutely reducing themselves to poverty; the chiefs were seated on high scaffolds & threw blankets to the crowd beneath who were armed with long poles on which they tried to catch the blankets & then a regular scramble ensued, some of the blankets were quite torn to pieces by the scramblers. It was a very exciting scene. . . . (Wilson 1970:74)

Apparently for all the rather special environmental and cultural aspects that seem to have set the Chilliwack apart from the rest of the Upper Stalo, the Chilliwack participated in the potlatch ceremony with full vigor. It might be supposed that, without direct access to their own Fraser River salmon fisheries in the old days, they would have been a "poor," rustic people. But these narrative data seem to suggest that this was not necessarily the case. Could their immediate access to the special resources of their upriver mountainous homeland and their apparent extensive exploitation of the resources of the area have provided them with raw and prepared or fashioned materials in wide demand among the neighboring, more river oriented peoples?

Socioterritorial Units

Three levels of socio-political units existed, according to Duff (1952:84), among the Upper Stalo: the extended family, village, and "tribe." Nothing is said about the nuclear family as a functional unit and component of the extended family.

Extended Family

The Upper Stalo extended family was both a kinship entity and a local social unit. Comprised of "a nucleus of males—a man, his brothers, their sons, grandsons, etc.—with their wives, children, and other dependants," it was the largest—evidently Duff would say "only"—functioning kin group, though kinship bonds stretched far beyond the extended family and were important links in various practical ways. It was sometimes quite large in numbers, especially if it also included multiple wives and many children owing to high wife fecundity. And if the family head was of sufficiently high status to attract nephews, sons-in-law, and even more distant relatives. (Duff 1952:84)

Functionally, the extended family "was the most important and closely knit economic and social unit. It was the largest unit which was strictly exogamous. In it the children grew up, receiving their education from the grandparents." (Duff 1952:85)

The extended family was likewise the smallest *local* unit. Each Upper Stalo village had as its core one or more extended families. (Duff 1952:84)

Village

Winter villages—as opposed to camps occupied in most cases during the rest of the year—consisted of one or more extended families. They were local units and, when comprised of only a single extended family, were kinship units as well. Even where made up of several extended families, they tended to be a loose kin entity, for the constituent families were typically related in some manner. (Duff 1952:84-85)

In pre-White times, few Upper Stalo villages could have had populations of more than 50 persons. In the Chilliwack case fewer than 300 persons "claimed more than twenty village-sites, and even though they probably occupied only a few sites at a time, the average village size must have been very small." The Upper Stalo tribelets spent much of the year away from their winter villages, often at fishing camps "which must have been much larger than the winter villages." (Duff 1952:85) Presumably in the earlier, protohistoric period before the introduction of Western diseases, the population was greater, but whether the individual winter villages were larger on the average, or more villages were occupied at any one time, or—more likely—both situations prevailed, I do not know.

Among the Upper Stalo tribes, according to Hill-Tout (1903:359), the Chilliwack village was unique in its food sharing pattern: residents ate together as a single family. One "person" (i.e., evidently one family) was appointed each day by the "chief" to provide meals for all villagers, thus, among other ends, caring for the sick and aged. But in the food distribution distinctions were made according to social rank. Food-stores were always separated into three kinds and "packed away separately on the house shelves over the beds." The choicest portions, placed at the back of the stores where they were best protected from injury, dust, and smoke, were given the village head (and presumably his family). The second best food, stored in the middle, was for the family of the house owner, their friends, and others of their social rank. Inferior food, placed in the very front, was served to common folk. Since in the Chilliwack view this last group was at this low social level because they were lazy and poor providers, they received what they deserved and were not encouraged to continue their thriftless ways by sharing in the better foods of their more industrious and foresighted covillagers.

In speculating on the functioning of this singular sharing system, it is worth noting that the eight Chilliwack villages occupied in Hill-Tout's day were all very small, as, we have seen, Duff noted was generally characteristic of Upper Stalo villages in wholly traditional times. The population of the largest consisted of 12 adult males and the smallest of but one (Hill-Tout 1903:356). The average size of the eight was six males of adult status. While Hill-Tout's description of this community eating arrangement within the Chilliwack village might be questioned on the grounds of its highly unusual nature, it is conceivable that his account is essentially accurate, that the practice was made possible, even fostered, by the very small population of each settlement, by the kinship links that generally bound together the resident families, and by the absence among the Chilliwack of individual and family ownership of natural resources within the tribal limits.

The population of most Upper Stalo villages, Duff reports, was apparently quite fluid. Families moved individually from village to village, even into other tribes, permanently as well as for shorter periods, as when remaining with relatives for the winter. Villages as wholes sometimes shifted their location to then uninhabited places. As a consequence, nearly all favorable sites were occupied at one time or another. At times families and entire villages sought richer resources of food and firewood or simply a change of scene. Families also moved when interfamily friction occurred, or when for other reasons, they determined it advantageous to divide. However, a few villages at especially desirable locations were permanent in the sense that people had wintered in them year after year for as long as men could remember. (Duff 1952:85) None of these are mentioned by Duff for the Chilliwack.

On the other hand, according to Smith (1941:201), the individual family units of the typical Upper Stalo village were considerably less independently mobile through the year than among Puget Sound groups. They tended to remain together in their food quest.

> In . . . the ethnic groups . . . [of] the Fraser River, food gathering was confined to the territory of the group. Drying racks were built at temporary camping sites and no outside social contacts seem to have compared with those within the group itself. (Smith 1941:201)

That the village is the "group" Smith has in mind in the above quote seems plain from her description of the contrasting pattern among the Sound tribes. Among these peoples the local units (i.e., villages) erected their combination dwelling-smoke houses near important salmon fisheries, where they could remain year-round if their salmon supply allowed it. But when these local units

> dispersed, families went in opposite directions and at clamming grounds and berry and root fields often joined families from units which belonged to other extended villages. Socially, these people who met during the summer were as closely knit as were those of the contiguous winter quarters of the extended village. (Smith 1941:201)

Smith does not mention the Chilliwack specifically—or any other Fraser group by name—as following this generic Fraser River pattern. But given the cohesiveness of the Chilliwack village as revealed by their unusual commensality already remarked upon, a maintenance of the social integrity of the community through the entire subsistence cycle seems credible. Still, the Nooksack surprisingly, Smith (1941:202) reports from her own field findings, followed here the Puget Sound dispersal pattern. Accordingly, considering Smith's frequent emphasis on the cultural similarity of the Chilliwack and Nooksack, it is possible that the former likewise followed the Puget Sound pattern, though it would be out of character with such other social data as we possess.

Because Upper Stalo villages were small and all residents were generally related in some way, the villages were usually exogamous by necessity. But in the case of larger villages, it was possible for men to obtain wives from different family lines within the same village. (Duff 1972:85-87)

Unlike Lower Stalo villages and those of neighboring maritime tribes, the winter villages of the Upper Stalo lacked traditions of descent from mythical human or animal ancestors. (Boas [1894:454] differs on this point.) Accordingly, when families changes their village residence and entire villages as units shifted their locus, they possessed no powerful mythological unity with their earlier covillagers in the first instance and in both cases no mystical attachment to a time-distant ancestral locality. It may be supposed that the absence of such strong traditions contributed to the impermanence of the Upper Stalo winter village and its resident population, and to the meagerly developed concept of land ownership, essentially limited to extended family possession of fisheries. As already noted, "ownership of names and privileges rested in non-local kinship lines rather than in local 'kinship' units." (Duff 1952:85-86)

Tribe

In general, "the concept of a tribal unit [among the Upper Stalo] was neither clearly defined nor important in the native mind." Typically it was little more than a named social unit consisting of several winter villages or clusters of villages. These settlements were linked only loosely on the basis of close

> kinship among the male nucleus of population, common environment and economic activities, common history, awareness of common traditions, political unity based on a recognition of a main leader and tribal boundaries. . . . As social and political units, the tribes seldom, if ever, had important functions. (Duff 1952:84, 86-87)

Tribal membership appears to have played little role in the selection of marriage partners.

So reports Duff. And yet Boas (1894:454), writing on the basis of his brief period of field research among the Chehalis in 1890, states that each Halkomelem tribe was thought to be descended from a single "mythical ancestor." He provides a roster of fourteen "tribes," and of the ultimate ancestor of each. This suggest, at the cognitive level at least, something more than the loose and ill-defined social unit to which Duff alludes. According to the Chilliwack, its founding ancestor was T'ē'qulätca.

In a very few instances, these village groupings—tribes—were so small, possessed a cultural history so distinct, and occupied a geographical area so special and removed as to lead to a greater social and political unity and to a more functional entity. Such was the case, it appears, with the Chilliwack.

> The Chilliwack . . . are said to have recognized one main leader of the tribe and to have clearly defined and actively defended their tribal territories. The facts that the Chilliwack formerly lived in a fairly isolated cluster of villages and spoke a separate and distinct dialect have no doubt contributed to the formation of their concept of tribal unity. (Duff 1952:87)

The above circumstances of Chilliwack life—plus others like the tribe's occasional fights with raiding parties from lower Fraser groups and with intruding hunters from neighboring tribelets—may have led to a further cultural consequence: according to Hill-Tout (1903:359), the Chilliwack were "originally endogamous." By this he really means, I conjecture, that there was a strong tendency—perhaps even a formalized preference—for Chilliwack to marry within their tribe. Assuming this to have been informant-driven data and not merely a supposition based on an evolutionary model, current in his time, supporting an endogamous primacy, an early in-group marriage pattern would not be altogether surprising, given the geographical and cultural features mentioned above.

Later, Hill-Tout (1903:359) avers, "closer contact with the neighbouring tribes made a strict observance of

this rule impolitic, and led to the taking of wives from other communities." One might doubt that in this early period the mate-flow was as unidirectional as his statement implies: i.e., wholly into Chilliwack families. Indeed, it would be expected that more Chilliwack women married into other tribes and then remained outside with their husbands than women from other groups entered Chilliwack villages as wives of Chilliwack men. For it is difficult not to project at least an informal group-ranking ladder within the Upper Stalo region in which the Chilliwack, located off the main river with its limited salmonid resources and away from the river thoroughfare, occupied a relatively low status. Under such conditions the greater flow of women—and even occasionally of men—would have tended theoretically to have been out of the Chilliwack communities, there having been relatively little, on the average, to attract women and men from more central and richer tribelets into Chilliwack country on its small side-stream.

Social Rank

In Upper Stalo tribes, there were two ways of acquiring high social status: by birth and by achievement. High birth gave one a great advantage to attaining esteem but it failed to guarantee this. And a person of superior character and attainment could gain great respect on his own even though low-born. In short, "individuals and families differed in social rank because they differed in the degree to which they possessed the qualities which were admired and respected." (Duff 1952:80)

What personal traits were respected? They were wisdom and the age that brought wisdom; ability; industry and the wealth in the form of a large dwelling, many wives, large and frequent feasts, potlatches, spirit dances, and so on that came about through industry; generosity; humility; pacificm; and supernatural powers. Skill in persuading people to do right, in settling rows, and in hunting and fishing skillfully and in getting others to be industrious in these activities were all important in generating respect. It is obvious from these valued attributes that respect was not limited to the high-born, nor necessarily withheld from them. Similarly, that "individual effort and ability could overcome the disadvantage of low birth." And also that more than one person of high prestige could be found in a single village. (Duff 1952:80)

Nevertheless, to be born "into a high-ranking family constituted a tremendous advantage. It brought control of wealth, access to respected names, and the opportunity for training for a position of high respect." Children of such families were thought to inherit the superior qualities of their family and were taught the proper attitudes and responsibilities of their position. The members of such a family were "talked up to." (Duff 1952:80)

High ranking people were expected to act humbly and, in fact, customarily did so, claiming no special honors, moving down from places of honor at gatherings, avoiding boasting, and the like. Evidently, however, these self-depreciating behavioral patterns were in part the consequence of a fear of the envy of some hostile shaman of low birth. Nonetheless, everyone knew that high-ranking people possessed superior abilities and everyone knew who they were. Children, in fact, were "taught who were their social equals, who were their inferiors." Interestingly, people of high rank wore nose and ear pendants and some had their foreheads flattened. (Duff 1952:80) Plainly, high ranked persons could, in a way, afford to be humble, for their rank was made obvious to all by these distinctive cultural traits. Yet inherited privilege in the form of the sxwaixwe mask (see Dance section below) and the rights it granted figured prominently in Upper Stalo social functions (Smith 1941:202).

Families of high status "sought marriage partners in families of equal or higher rank, often at considerable distances." Such marriages were prestigious, possessed social and economic advantages, and involved the least danger of "spoiling" the family by producing offspring with undesirable social characteristics. (Duff 1952:81)

"To a certain extent, then, the Upper Stalo lived in a hereditary class society." But the situation was more complex than indicated above. For depending on differences in prestige level, high-class families in multi-family villages were loosely ranked in esteem at any given time and doubtless so also were families outside of the high-rank group. Beyond this, persons of esteem in different villages and even different tribes were ranked against one another in social, only incidentally political terms. (Duff 1952:81)

Though the high-rank/low rank distinction was based largely on heredity, this social rank system was not a closed system. A person of low class birth could rise to become a respected—i.e., high class—person by fulfilling the expectations and developing the superior personal qualities described above and so could establish a family of high prestige. In reverse, a high-class family could see itself "spoiled" by improper actions, wrong-headed attitudes, and injudicious marriages.

Perhaps viewing the Chilliwack class structure through conventional coastal eyes, Hill-Tout's (1903:357-359) characterization of the tribe's status levels seems on the surface overly rigid: "the people," he writes, "were divided into the usual threefold division of chiefs, notables, and base folk." (Evidently slaves [see next section] were seen by Hill-Tout as outside this class system.) To belong to the chiefly class a person had to be related to the village leader by consanguineal ties. The head of this class possessed a special personal name and title, the latter carrying the significance of wealth, in addition to his other names. The distinction between notables

and common people was less firm. Like the chiefly group, the nobles were likewise rich, but they were also necessarily ambitious and intelligent, traits necessary for maintaining their high status. Any free person could become a noble by acquiring and generously distributing property and so by being recognized by common consent as belonging to the class. Commoners were such because they were "lazy, thriftless, [and] unambitious," and consequently poor. Hence the noble and commoner groups were not castes, for upward and downward movement occurred between the two levels. All things considered, this class structure, as Hill-Tout describes it, is not altogether far from Duff's fuller and more behaviorally oriented Upper Stalo account.

Slavery

The Upper Stalo took and owned a few slaves, even though the practice ran counter to their essentially democratic patterns. Some were purchased. Others, if I read Duff correctly, were members of Coastal raiding parties who somehow had been left behind and been captured when their mates fled home. Some were taken by Upper Stalo warriors (a disliked group) on raids of their own. (Duff 1952:82-84)

In his journal entry of June 28, 1808, Fraser (1960:100) records an observation that might be taken as evidence for institutionalized slavery among the Upper Stalo. Witnessing a dance by villagers—surely of a Tait community—just below the foot of the Fraser Canyon and the long stretch of dangerous rapids, he writes, according to the Lamb version of his narrative: ". . . the women . . . seem to be slaves, for, in the course of their dances, I remarked that the men were pillaging them from one another." But then he adds: "Our Little Fellow [an Upper Thompson Indian accompanying the expedition (Fraser 1960:89)], on one of these occasions, was presented with another man's wife for a bed fellow." The two sentences together suggest that the "pillage" may have been only a form of socially patterned wife sharing or exchange, promoted by husbands in Fraser's eyes, and not evidence for the institution of slavery. For what it is worth, Masson, in editing Fraser's (1889:194) observations, has the explorer report: ". . . the women . . . seem to be *their husbands'* slaves, for, in the course of their dances, I remarked that the men were in the habit of pillaging them from one another [emphasis added]. Our Little Fellow was presented with another man's wife." This makes explicit what might be considered to be the implication of Lamb's version. It is possible, of course, that each woman involved in Fraser's observed arrangement was both a slave and a wife. At any rate, Fraser's account in the Lamb writing (almost surely following here the field journal more closely than Masson's statements), is very uncertain proof of slavery among the Tait in 1808, and, as edited by Masson, offers slavery no support whatever.

In general, slaves were not mistreated among the Upper Stalo, especially if good workers, although this depended on their owners. Indeed, the adoption of a slave girl as a family daughter was not unknown. Typically, however, "their hair was cut short, and they had to perform whatever menial tasks they were told to do. Worst of all was the social stigma attached to slavery, which [except under special circumstances] was passed on to the offspring." They were permitted to marry among themselves. Marriage between a free man and a slave woman was strongly discouraged, but when it occurred—against vigorous family opposition—the stigma could be "washed away" by a potlatch, the special circumstances alluded to above; the wife became free and the children were so on birth, both wife and offspring, in fact, assuming the rank of the husband. (Duff 1952:82-84)

Upper Stalo slaves were allowed to seek spirit power. When they died, they were usually given a proper funeral and were buried in the family grave-box or perhaps in a special box in the graveyard. As Duff observes, slavery, as among the Thompson Indians, was fundamentally "not congenial to the orientations of the [Upper Stalo] culture as a whole." (Duff 1952:82-84)

Coastal parties constantly entered Upper Stalo country on slave raids and sold their captives to other tribes. These raiding groups came even from the Lower Stalo tribelets, as well as from the Cowichan and non-Halkomelem-speaking maritime tribes. They came also from nearby northern Plateau peoples. (Duff 1952:83-84; Ray 1939:34)

According to Duff's informant, the Chilliwack neither kept nor took slaves from other peoples. Earlier contradictory evidence exists. Hill-Tout was informed that wealthy Chilliwack possessed several slaves of both sexes. Most were captives taken in warfare or by Chilliwack raiding parties who went out for them to distant settlements and, back home, sold them "to the more timid and less adventurous of the tribe." Slaves were not killed at the death of their masters, although they were sometimes sold to raise the property required for an appropriate mortuary feast. (Duff 1952:83, 84; Hill-Tout 1903:358-360, 366)

That the Chilliwack in fact held slaves is confirmed by the historical records. While, as a member of the British Boundary Commission, Wilson in 1858-1859 spent some time in the Chilliwack country, slavery was still an active institution. He reports: "A Chilukweyuk Indian, whose slave was employed for several months by the Commission, pocketed a large sum . . . [from this employment]; the money was of course paid to the slave, but his master was always near at hand on pay-day to look after the dollars." (Wilson 1866:290)

Duff's informant also reported that the Chilliwack, while not keeping slaves themselves, were raided for slaves by other groups. Here we have convincing historical data from the Fort Langley Journal. It reports that a slave-capturing expedition against the Chilliwack, by a force of about 70 Cowichan and Musqueam men,

occurred in October of 1827 and resulted in the capture of "several [Chilliwack] women and children as slaves. A few days later a Chilliwack man went down in a canoe loaded with goods to ransom back his wife." (Duff 1952:83, 84)

Secret Societies

Secret Societies, so characteristic of the British Columbia coast groups, were absent among the Upper Stalo (Smith 1941:202). Surely this was specifically the case among the Chilliwack, though I know of no ethnographic statement to this effect.

Life Cycle

Birth and Infancy

Large families were desired by the Upper Stalo. Nevertheless, an attempt was made to space children two or three years apart, lest the infants be sickly. A single copious drink of tea brewed of crab apple bark, drunk soon after the birth of a child, was thought to prevent another conception for the period. There appears to have been no sex preference in regard to children. (Duff 1952:90)

During the birth process only the midwife was allowed in the house; the husband left for a walk in the hills. The parturient woman drank an infusion of certain herbs and leaves prepared by the midwife. (Duff 1952:90)

Soon after the birth the newborn infant's "legs were bandaged 'to make them straight'; his 'nose was fixed to make it straight'; and his face was massaged." It was placed in a cradle, of birchbark in earlier times and more recently of basketwork woven by the coiling process, and bound in place. In the back of the cradle was a shredded cedar-bark mattress. With diapers of cedar bark often mixed with down, the baby, hands at its sides, was laced in position to its neck. A hollow elderberry tube, extending through a hole in the cradle, kept the cradle dry. When carried by the mother on her back with a carrying strap over her chest, the cradle was placed in a roughly horizontal position—not vertically as was the case farther up the Fraser River. If the mother was right-handed, the infant's head was put to her right side, so it could easily be swung around to nurse. (Duff 1952:57, 90)

The Upper Stalo baby was removed from its cradle only for its daily bath—in warm water for the first few days and then in cold—and sometimes to be nursed. "If the young mother had no milk at first, milkweed was heated with boiling water and applied to the breasts." (The association of the white, milky latex of this plant with the woman's urgent need is apparent, though not commented upon by Duff.) Nursing continued for a year, or even for two if no later child was on the way. When the baby grew to the point where it could crawl, it was removed from the cradle but returned to it to sleep or to travel. It really left it only when it could at last walk away from it. (Duff 1952:90)

Twins were apparently neither feared nor especially welcomed. But to keep the two babies from dying owing to the proximity of people, families had to move and live by themselves. Twins, however, were thought to be powerful in affecting the weather. (Duff 1952:91)

Intentional frontal flattening of the Upper Stalo infant's head was practiced, according to Duff (1952:90), with a padded wooden board, but less frequently than among the coastal tribes. Yet Duff also reports that a coastal man with such a deformed head who moved to Tait country was laughed at. And Wilson observes in 1858 and 1859 that the custom of frontal flattening was not practiced then among those groups that we define here as Upper Stalo. (Duff 1952:91) I conclude that, if Duff's generalization is correct, it must relate to early, perhaps even precontact times. "Ears were pierced at the age of 8 or 9, and a string was put through the perforations to keep them open. High-rank persons also had their noses pierced." (Duff 1952:91)

At the birth of a child, most Chilliwack parents attempted to secure the services of one or more members of the sqoi'aqī (see *Dance* section below) to perform their dance. This provided powerful supernatural protection for the infant and gave it social status, including the right later in life to be ranked among the tribal notables. The ceremony included a formal washing of the child by the sqoi'aqī, a birth-feast during which its ears were pierced, and the first application of the cranium deforming pads. The ear piercing was carried out not by the sqoi'aqī but always by skilled persons, paid for their services with blankets, who performed the operation with a pointed piece of pitch-pine. To prevent the hole from closing, the piece was left in the wound. (Hill-Tout 1903:366)

At the very few points where the above Chilliwack account intersects with Duff's Upper Stalo data, it coincides in a general way, except for the timing of the ear piercing action. It adds the new dimension of the sqoi'aqī role in the birth ritual pattern.

Youth and Puberty

Among the Upper Stalo the oldest male member of the local extended family, usually the paternal grandfather, was primarily responsible for advising, teaching, and disciplining a boy; the grandmother for a girl.

Young children may, in fact, have spent more time with grandparents than with parents, for they were left with them when the latter went hunting, berry-gathering, or visiting. (Duff 1952:91)

Every morning before dawn and again in the evening, a grandfather made his grandsons swim and dive in the river to ensure that they became "well-to-do" when they grew up. During the day he taught them fishing, hunting, and other skills, and how to behave, work, and become a good person. During long evenings, he instructed them in social matters until they dropped off to sleep: who their relatives were; how they should act, by relating stories with a moral content; whom they should not marry because of their connections with families known over a long past for their mean or bad behavior. He likewise trained them for shamanistic and other spirit power, sometimes with the assistance of an old shaman. (Duff 1952:91)

From time to time the grandfather, using spruce boughs, whipped the boys, all relatives together but one by one, in the center of the dwelling "to teach them fortitude and courage." The lads were expected to receive this whipping without flinching. Sometimes older women did the same to their granddaughters. (Duff 1952:91)

Puberty among the Upper Stalo was recognized as an especially critical time for children. When their voice changed, boys were made to be particularly active in order to develop a life-long pattern of industry and endurance: they were, for example, forced to run long distances. (Duff 1952:92)

The Chilliwack data of Hill-Tout (1903:366) are no fuller than the preceding notes of Duff for the Upper Stalo in general. We are told only that "youths on reaching manhood . . . went apart by themselves for a longer or shorter time, and fasted, and bathed and exercised their bodies till they had acquired their . . . [guardian spirits]."

For Upper Stalo girls at the time of their first menses, the observance was much more formal and patterned. Duff (1952:92) summarizes the typical ritual thus:

> At this time she was secluded in a hut of boughs for the duration of the [menstrual] period. She was constantly attended by her grandmother or any other old female relative. She ate sparingly, mostly of soup, and drank just sufficient water through a hollow straw or bird-bone tube. She took emetics and laxatives, took sweat-baths and then plunged into cold water. But most of all she had to learn to work, to be industrious, because if she didn't learn it now, she never would. Her grandmother made her practise weaving or basketry, "training the fingers."

Reaching puberty, a Chilliwack girl underwent four days of seclusion.

> For the first two days she must abstain from food of any kind; after this she might eat a little dried salmon, but no fresh meat or roots. After the fourth day the girl's face was painted, and she was permitted to walk abroad for a little distance in charge of some woman. On her return four . . . ["soothsayers"] would meet her and dance round her, each holding a salmon of different species in his hand. When this ceremony was over, she was taken to a lake and made to undergo a ceremonial washing and cleansing. She was never allowed to enter a stream frequented by salmon, or they would shun the stream thereafter. Throughout the four days of her seclusion she was kept busy in making yarn. . . . (Hill-Tout 1903:366)

At subsequent menstrual periods, an Upper Stalo woman was apparently not secluded but she was expected to observe certain activity restrictions: she "could not butcher salmon nor cut fresh meat"; she observed certain food tabus; she could not go into the woods lest, in her special condition, she be attacked by bears. (Duff 1952:92) Speaking of the Chilliwack alone, Hill-Tout (1903:366) reports that menstruating women were never permitted to eat hot or fresh foods.

Among the Lower Stalo, families of high rank celebrated a daughter's puberty with a potlatch with two masked dancers and the distribution of blankets and other property (Duff 1952:92). But I gather that these potlatches were not the custom with the Upper Stalo, for they are not mentioned by Duff (1952:87-89) in his discussion of the circumstances that gave rise to their potlatches.

Marriage

Among the Upper Stalo it was expected that eventually every person would marry. One or two bachelors were recalled by Duff's informants and were considered very odd. No unmarried women of marriageable age were remembered, though one female who wore men's clothing, was a good hunter, fisherman, and spirit dancer, and was married to a woman was recollected. (Duff 1952:79)

Monogamy was the rule, but polygyny was rather common among wealthy men who could afford several wives. An Upper Stalo instance of as many as 20 wives was remembered, most having been stolen by the man, a warrior and bully, from their husbands when they were visiting in the brawler's area. (I am not certain that these were all simultaneous wives.) A case of eight wives was recalled for the Tait. And an instance among the

Chilliwack of nine wives—perhaps, however, not simultaneous spouses—was recollected, some of these women, at least, being from neighboring tribes and the result of marriages made to establish fruitful intertribal links. (Duff 1952:79) Confirmatory data for the Chilliwack specifically comes from Hill-Tout (1903:359): "Polygamy [i.e., polygyny in contemporary terminology] was common among the Tcil'Qē'uk, a man having sometimes as many as ten wives. The number of a man's wives was ordered, as a rule, partly by his inclinations and partly by his ability to support them."

Occasionally a man who traveled a lot had wives in several places. (This arrangement is instructive since it demonstrates that the Upper Stalo must have had ways of providing a woman and her children with the services normally rendered by an in-resident husband. It must have been the woman's own extended family that somehow assumed these responsibilities.) (Duff 1952:79)

Polyandry appears to have been unknown among the Upper Stalo tribes (Duff 1952:79). The possibility of an early Chilliwack pattern of tribal endogamy—or at least a strong in-marriage tendency—has been discussed above.

"Girls married young, usually soon after their puberty observances." Boys were generally a few years older. Unmarried girls of high rank families were constantly chaperoned by a grandmother, mother, or other female relative. Girls of lower status families were not so rigidly monitored. (Duff 1952:92)

Marriage to first and second cousins was prohibited; otherwise there were no formal barriers of relationship. Yet in small villages—and even small tribelets—this proscription resulted in *de facto* village—and tribelet—exogamy. Neither the boy nor the girl had much say under normal conditions in marriage. The matter was determined by the family in conference, considering such matters as rank—high rank families required marriage with a spouse of equal rank—and the character and wealth of the other person and of his or her extended family. (Duff 1952:85, 87, 92)

At least three forms of marriage arrangements were current among the Upper Stalo.

(a) In wealthy families the union was formalized with gift exchanges and much ceremony. The boy's grandparents, parents, and other kin together with the village leader carried gifts to the girl's village for her family. The leader first explained the group's mission; then the grandparents and parents spoke in turn. The boy was expected to remain silent. The girl's grandfather and then her parents replied. If both parties agreed to the union, it was publicly announced to all the people. The girl's family gave some return presents, and the bride returned with the boy's party to their village. At a later time, generally during the late autumn slack period, the bride's family, the leader of her village, and most of her villagers made a return visit to the groom's village and distributed return gifts to the husband's people. (Duff 1952:81, 92-93)

From a Chilliwack informant Duff (1952:93) received a description of a typical marriage ceremony that varied in certain details from the above pattern. Inasmuch as Duff believes that the variations reported are recent innovations, they are not commented upon here.

(b) Ordinary villagers followed a different marriage form, as did orphans, other boys with no one to talk for them, and widowers. Usually in this case, the man had the girl's blessing. Early in the morning he went to the girl's dwelling and sat silently beside the doorway. Ignored by her family and tested during the day by being splashed "accidentally" with water being brought into the house, covered with dust and floor sweepings, or scraped by firewood being taken in, he bore this unwelcome reception all day. Finally he himself carried firewood inside, only to have it thrown back out. This same ritual took place for several days to test his fortitude, until, if he persisted and the girl's family agreed to the marriage, he was led inside by the father or grandfather, seated on a new mat, and given food. The girl joined him on the mat, witnessed by all in the dwelling. Then the people, joined by the boy's people, danced and had a grand time. (Duff 1952:93)

(c) In the case of low-class people with little pride, the boy crept inside the girl's house some night when her parents were away and spent the night. Thereupon the two were considered man and wife. (Duff 1952:93)

In addition to these three marriage patterns, the Chilliwack, though perhaps no other Upper Stalo people, held a marriage dance every few years in which young people could select their own mates. To the accompaniment of song, they formed pairs on the dance floor, witnessed by all present. The couples were then regarded as being married. (Duff 1952:93)

The newly married couple usually established their residence with the extended family of the groom—i.e., patrilocally. On the other hand, the actual situation might indicate the advantage of residing with the wife's people: her parents might have no sons,

> or might be of higher rank, or might need someone to care for them, or, as in the case of some Chilliwack women who married Thompson hunters, the woman might be reluctant to move far away from her home.

A married couple of commoner status sometimes moved around fairly frequently. "Among high-rank families, however, especially where a man had more than one wife, residence was more strictly patrilocal." (Duff 1952:79)

Marriages between high rank people were considered permanent, divorces theoretically not having been allowed. If a bride left her husband, her people returned her unless she was being mistreated. In the case of commoners, however, separation and divorce seems to have been quite frequent. If a commoner man could not get along with his wife, he simply took her home and left her there. In one actual instance, a man kept trying different women as wives, until the ninth one was found to be congenial. Most separations occurred early in the marriage, before the arrival of children, and to have been the consequence of incompatibility. (Duff 1952:79)

It is probable that virtually all men and women whose spouse had died remarried, unless already so old as to be cared for by their children. In theory, high rank people, however, were not supposed to remarry out of respect for the deceased partner, but apparently this proscription was not often honored. The length of the mourning period varied according to rank, age, and special circumstances. Widows tended to remarry after a somewhat longer period than widowers: "a widow was felt to be different, even dangerous, because she was spiritually more powerful, and it was considered dangerous to marry her too soon" (Duff 1952:79). Duff may have phrased this matter correctly, but I wonder if the delay was not the result of a greater fear of a jealous dead husband than of any spirit power of the woman herself. In any event, as Duff (1952:79) explains, practical considerations—such as the need for child care—came close to governing remarriage. It seems obvious that, among the Upper Stalo, the complementary division of labor by sex almost mandated remarriage sooner or later, even when the marriage was childless and in spite of one's membership in an extended family and the pattern of sharing within the family.

Remarriage often took the following form:

> [A] deceased woman's sister, knowing and feeling sorry for the bereaved husband and children, would often move in and take her sister's place. A man would similarly take over the care of a dead brother's family. In this way . . . the children kept the same grandparents . . . and their education went on without interruption. (Duff 1952:79-80)

Old Age

The elderly in Upper Stalo tribes were highly respected for their knowledge and wisdom. When they offered advice or criticized a person for his behavior, they were never answered back.

> At large gatherings, the old people made speeches, giving advice to the young. At feasts, old men were served first, and the old people were given the choicest parts of the fish or game: the fattest part of the fish near the head, and the hind quarters of meat. Old people lived with whichever son or daughter was convenient. (Duff 1952:93-94)

Old people were in great demand as story-tellers, taking "turns in the evenings telling folk-tales and stories about specific people, and pointing moral lessions." Some elderly men traveled around, staying in one house for one or several nights and then moving on. They slept during the day and, for their food and lodging, told stories at night—even all night. They related their war experiences if they had in the past been out on hostile expeditions and told tales of the transformer and other mythical personages. They talked until their auditors were all asleep, with no one left to respond from time to time with the listener's encouraging formula *i?ay*. (Duff 1952:94)

Death, Burial, and Mourning

Among the Upper Stalo the preparation of the corpse and the funeral ceremonies were supervised by a shaman. The body was washed and wrapped in blankets by friends. Sometimes, at the direction of the shaman, it was removed from the dwelling through a hole in the wall "so the ghost couldn't find his way back into the house." The body outside, the shaman swept the whole structure and the immediate family with cedar boughs "to keep the ghost away and make him forget" the near relatives he left behind, since it was not unknown for a ghost to take the soul of a loved one with him.

The body was carried to the family grave-box or grave house, usually by visitors who were not close kin and who were compensated for their services. Often people came from a great distance to attend the rites. The funeral was followed by a feast for all who attended, furnished by relatives and close friends. All who had a role in the funeral were paid, either at the time if the expense could be covered by the family or at a later potlatch. (Duff 1952:94, 117)

Among the Chilliwack, as soon as a person died, the body was carried outside by one or more "sooth-sayers," the theory being that the longer it remained within the dwelling, the more difficult it became to drive the hostile ghost away and rid the surviving relatives of its inimical influence. The corpse was washed by these functionaries and painted all over with red coloring, doubled up and bound in a mat or blanket, and finally carried

to the family's large mortuary box, if it was not yet midday. When a death occurred after noon, the body was laid off "by itself some little distance from the house till sunrise next morning." This was regarded as the most propitious time of day for a funeral, since by then all ghosts had departed to their own country. The corpse was placed in the box beside the remains of earlier family members, which were lying side by side within it. The construction details of these sepulchers have already been described. The edges or selvage of blankets and mats given to a deceased person—for, it was believed, the use of that person in his new, nonnatural state—were routinely torn off. This was done "to ensure the safety of the surviving relatives and break the power or influence of the . . . [ghost]." (Hill-Tout 1903:365)

When the body had been taken from the house, the "soothsayer" spread quantities of bullrush down all over the bed on which the deceased person had lain. He "set fire to it, and beat the bed and walls and surviving relatives with . . . [spruce branches] to drive away the sickness and ghost of the dead." All who had taken part in the death ceremonies were given "medicine" by the soothsayer "to protect them from the evil influence of the corpse." People were warned to avoid burial sites, especially after a recent death, lest they be harmed by the ghost of the dead person. (Hill-Tout 1903:364, 365)

In the mortuary rites of the Chilliwack there was, at a simple level, a Northwest Coast-like potlatch element:

> All but the relatives of the deceased were paid for their attendance and service by blankets. If the immediate relatives of the deceased were persons of wealth, a feast would be held on the return of the party from the burial-grounds. If they were poor, this would be held at a later date. It was customary among the . . . [Chilliwack] for friends of the mourning family to bring blankets and lay them on the dead body. When the mortuary feast was given, all those who had thus made presents were paid double of what they had given. (Hill-Tout 1903:365).

Among the Chilliwack, slaves were never killed at the death of their owners. Sometimes, however, as previously noted, they were sold to defray the expenses of the mortuary feast. (Hill-Tout 1903:366)

Four days later among the Upper Stalo groups a property-burning ceremony and feast were held. The disposal of the dead person's possessions was under the direction of one person, usually a shaman. Some objects that were most treasured by the deceased—his favorite clothing, gun, and other items he was thought to need—were first burned. From what remained his relatives and friends took what they wished and the rest were then destroyed by burning. (Duff 1952:94, 117)

The Chilliwack data describing the rituals occurring four days after the disposal of the corpse fail to mention this property-burning feature. In view of the paucity of information, this omission should not necessarily be interpreted as indicating its absence. According to Hill-Tout (1903:365), however, four days following the interment all who had participated in the ceremony bathed themselves and, with the exception of the husband or wife of the deceased, cut their side hair "as far back as, and on a level with, the ears" and beyond this point only the hair ends. These hair fragments were buried at "some spot where Nature was full of life." This locational vigor magically transferred to the persons, making them safe from the potential ill effects of their role in the burial procedure. (These hair fragments were never burned by Chilliwack as they were among the neighboring Pilalt, in the belief that burned objects lost their "spirit" component, causing their former owner to die.)

This four-day ritual among the Upper Stalo tribelets was followed "at daybreak or at dark, when souls and ghosts travel about," with a feast for the ghosts of the deceased, of his dead relatives, and of others. In a typical feast of this kind, dishes of food were set out for the dead person, for each of his parents, and so on for several past generations. Four portions of each food were placed on each plate. The official could "see" and name aloud each family ghost when it arrived to enjoy the meal and several stranger ghosts as well which chose to attend. He then burned two portions from each plate, one for the relative's ghost and one for a stranger ghost. When the ghosts had "eaten," the living guests ate the other two portions on each plate. (Duff 1952:94)

"Mortuary sacrifices," Hill-Tout (1903:365) reports, were called for "at certain times" by Chilliwack shamans, almost certainly referring to the same ceremony as Duff describes above although the details differ. "They were always conducted at sunrise." Everyone who had buried a relative or friend (surely "recently" is implied) assembled, bringing a quantity of choice food and other gifts. The shaman placed them on a circular platform erected to receive them. A short distance from this table, a large fire was kindled. In the intervening space, the shaman stood, while the bereaved formed a circle around the platform and fire. When all was ready, the shaman entered the ring, and taking portions of the offerings, threw them into the fire, presenting them to the spirits of the departed. Food and objects remaining after the offerings were completed were distributed among the people.

Commonly in Upper Stalo groups the blankets around the corpse were changed every few years. Each such event was marked with a potlatch. (Duff 1952:94-95)

While every effort was made by the Upper Stalo to return to his home the body of one who had died away, this sometimes proved impossible. In such instances, the body was buried in the ground, the bones being sometimes later exhumed and carried home. (Duff 1952:95)

Recently bereaved persons, male and female, in Upper Stalo groups observed certain restrictions on their behavior, some of brief duration and others much longer. At the funeral feast, they sat facing the corner of the dwelling as they ate. For about a year they were expected to eat with no other people and to eat no meat or fern roots. For a year also, they, together with immediate family members, wore buckskin bands tied around their wrists. They cut their hair to shoulder length and burned the trimmed ends to prevent hostile shamans from collecting and using the material for witchcraft. (Duff 1952:95)

Mourning among the Chilliwack and the ritual acts associated with this condition are briefly described by Hill-Tout (1903:365). After his wife's death, a man was expected to wash his entire body to prevent his next wife from dying shortly. In carrying out his ceremonial washings, he avoided bathing in a salmon stream, lest these sensitive fish shun the stream ever after. Following his bereavement, a man abstained

> from all foods for at least a day, and ate sparingly, with his face turned away from everyone else, for a further period of ten or twelve days. His food for the first four days was mainly 'medicine' made from herbs, &c. (Hill-Tout 1903:365)

A surviving wife was expected to observe similar behavioral restrictions. For example, she bound her wrists and ankles with wool bands. Other activities were tabued to both husbands and wives: e.g., they were not to utter the name of their deceased spouse while biting off and chewing pieces of fish, for otherwise they would soon die. Likewise, other tribal members observed certain proprieties in the company of persons who had lost close relatives. They, for example, never mentioned the names of the deceased in the latter's hearing. In effect, this tabu applied until, some time later, the avoided names were given to living family members at name feasts. (Hill-Tout 1903:365, 366)

Upper Stalo widows and widowers had a greater than normal chance of securing guardian spirit power and were thought to possess the power to kill plants by stepping over them. As mentioned above, immediate remarriage was thought to be dangerous to the new spouse. (Duff 1952:95)

Political Organization

Leadership

Among the Upper Stalo there were no chiefs, hereditary or otherwise, in the sense of a formally designated village leader, let along a leader of a larger geographic area and population cluster. No one who had the authority to direct others. Leadership was entirely informal, based on respect. Such leaders as existed did not—could not—order others, but were followed by other persons and families owing to the esteem in which they were held. Accordingly, leaders in most affairs were high-ranked persons as defined above. They were the heads of their own extended family groups, those who made the day-by-day decisions regarding the management of family matters. In villages of more than one extended family, the family head who stood above the others in esteem held the greatest sway over the village as a whole; he was the village leader by consensus. When he spoke, the others listened; when he suggested or exhorted, the others took action. While this was particularly true of his own extended family, the members of unrelated families in his community also heard him and responded because of his personal reputation for wisdom in leadership. In intervillage relations, too, he naturally assumed the leader's role.

Without village chiefs in the proper sense, succession was not an issue among the Upper Stalo. The respected men, however, generally selected their successors, the ones to whom they passed their family name. In most cases it was a son, grandson, or nephew. Since these persons, to qualify for the name honor, had to be upright, good, wise men, possessing as well all of the other qualifications for the name and high status, they also necessarily had the qualifications that more often than not led them to succeed their name predecessor as village leader, if the predecessor had been one. But this was not a foregone conclusion, for no leader owned his office and so none could, in the native mind, pass it on as he did his respected name and often enough his family responsibilities. (Duff 1952:82)

In addition to this informal social leadership within the village, "most [Upper Stalo] villages of any size had at least one fighting man who assumed leadership of village defence or of war-parties." Typically he was not a high prestige, upper rank person, for pacifism was one of the qualities that brought high standing in the community. The fighting was left to the few men, typically aggressive, hot-headed persons, who had been trained and had received supernatural powers for warfare. Though these men were not truly respected in the ranking sense, they were considered a necessary component of the village for its protection. Sometimes in serious intervillage squabbles, one such fighting man of one village and another from the contending community fought it out, with the decision determining the outcome of the hostilities. (Duff 1952:81-82)

The above leadership structure was that which prevailed among the Tait and presumably the Upper Stalo in general. Apparently the Chilliwack had "a slightly more formalized pattern of tribal leadership" (Duff 1952:82).

Because of our commanding interest in the Chilliwack among all of the Upper Stalo, I quote Duff's brief description:

> Each village had a head man, and the tribe had one main leader, . . . Everything that happened in the tribe had to be reported to the main leader. The main leader was expected to take command in wars, although there were other war leaders who could undertake raids. He was expected to be of good character and friendly with everybody. Succession was from father to son, provided that the son had the necessary personal attributes, which he nearly always had because of his training. If the leader had no sons, his position went to the best-qualified younger brother or nephew. (Duff 1952:82)

It is instructive to compare the preceding brief statement with the somewhat more expansive description of the Chilliwack leadership pattern as presented by Hill-Tout (1903:356-358) at the turn of the century. Each village, he observes, had its own leader, the head of the most important community serving also as the tribal leader. The former at least were still functioning in 1900, for he records a schedule of the then existing settlements with their individual heads. The tribal leadership—and surely therefore likewise the village "chieftainship"—"was practically hereditary," the office generally moving from father to son, occasionally to a brother or cousin. A man, however, could be "deposed" if considered to have failed in discharging his responsibilities. These consisted in overseeing the secular affairs and general welfare of the group as would a father: he was expected, for example, to appoint "times for salmon-fishing, root-gathering, and berry-picking," and to be generous and kind-hearted. They also included leading community prayers and religious observances. Selfishness and neglect of his duties were regarded as just cause for a leadership change. The decision was made by the elders and "nobles"—the principal men of the group—meeting to consider the matter and it was they who notified the head of the termination of his leadership duties. Such a decision was said to have been characteristically uncontested. Deposition, however, occurred very rarely, since leaders took their responsibilities seriously. In fact, Chilliwack tradition, according to Hill-Tout, recorded in his time only one such deposition event.

The other tribal leader, Hill-Tout states, was the "war chief." Rarely, if ever, did the secular leader "act in a military capacity"; typically he attempted to discourage men contemplating raiding forays from carrying their plans forward. Rather the fighting leader was generally selected from "among the fighting-men of the tribe of account of his superior prowess . . . in warfare." The "warriors" were men who were "fond of fighting." Others engaged in hostilities only on those rare occasions when their settlements were attacked. Faced with the urgent need for such defensive action, all men—and sometimes women—took to arms.

To the degree that these two Chilliwack descriptions, both informant-based but secured fifty years apart, intersect, they are reassuringly in substantial agreement. They differ really in only one respect: Duff states that the tribal leader expected to receive reports of significant events within the tribe and that he himself guided fighters in hostilities. Hill-Tout offers no information on the first point and expressly remarks that the tribal and war leaderships were assigned to different men. As he observes, Duff pictures a leadership arrangement that was rather more tightly structured than that presented by Hill-Tout and that placed broader responsibilities in the hands of one person. Hill-Tout's characterization, in contrast, positions the Chilliwack generally within the Upper Stalo mold as outlined by Duff. Whether in these differences one is correct and the other inaccurate or both are essentially right for different time periods is uncertain. If the latter, Hill-Tout's summary, based on field information antedating Duff's by a half-century, would presumably be the earlier. In this instance it would be interesting—but probably unproductive at this juncture—to speculate on the changes in the underlying social context that gave rise to these leadership shifts: the population movement from the dispersed villages in the Chilliwack Canyon to the more nucleated villages on the Fraser plain, increased contact with other Upper Stalo peoples (and with Whites), augmented salmon fishing at specific tribal sites as opposed to a more general use of the subsistence resources of their earlier valley country, a sharp reduction in intertribal hostilities making specialized "war" leadership largely redundant, and so on. But these data, however sketchy, suggest the possible insights that may be gained by comparing primary reports from different ethnographic sources, different time levels, and different neighboring groups, even though the information may be too fragmentary to permit extended interpretation. There is always the prospect that additional information, ethnographic and ethnohistorical, may sharpen our understanding in such situations where the questions are perceived.

Transgression and Punishment

Troublemakers were exiled, deserted, or even in extreme cases killed. Large groups could never avoid some interpersonal difficulties: "there were always one or two persons causing trouble, especially women." Sometimes two families with members who could not get along moved away to different locations: "that is how the people came to live in little bunches all over the place." Or everyone would move, leaving only the

troublemaker behind. When killing was considered the only, final recourse, as when a man continued to murder others for trivial reasons, the punishment was not uncommonly accomplished with the connivance and tacit permission of his relatives, who had themselves become outraged over his unconscionable conduct. (Duff 1952:89)

Religion and the Supernatural

The relationship between people and the supernatural world was essentially a very personal one. In aboriginal times there were no deities or spirits that were concerned, either hostilely or in a protective stance, with the welfare of groups—even of single extended families. Similarly, there were no clusters of persons that paid homage to any supernatural. The concept of a supreme deity reported for the Stalo is surely a borrowing from Western theology, one that was probably introduced in the first half of the nineteenth century. This was early enough to be partially integrated into the native culture before it felt the disintegrating influence of White contact and to convince contemporary Upper Stalo that it was an aboriginal concept. (Duff 1952:97-98, 119-120)

"The most immediate supernatural beings, the most rewarding sources of supernatural experiences and powers were the individual guardian spirits," sulia (Duff 1952:97). An understanding of the native guardian spirit world is the key to a comprehension of the traditional beliefs and religious practices of the Upper Stalo.

Guardian Spirits

No roster of individual guardian spirits among the Upper Stalo or even of guardian spirit classes is recorded by Duff. Nevertheless, from his informant narratives it is plain that they were often animals (e.g., deer, grizzly bear, wolf, mink) and at least sometimes birds (e.g., owl, loon, raven), fish (e.g., sucker), reptiles (e.g., double-headed snake), insects (e.g., moth, mosquito), other invertebrates (e.g., leech), and natural phenomena (e.g., thunder, fire) (Duff 1952:99-101, 103, 104, 106, 113). These data suggest that the number and range of these supernatural beings must have been quite large.

Speaking of the Chilliwack in particular, every Chilliwack, according to Hill-Tout (1903:361-362), had one or more guardian spirits. Presumably this was true of women as well as men, though this is not clearly stated. These "helpers" were required as protection against the supernatural powers, capricious and generally malevolent, with which the people endowed "every object and agency in their environment." Through a dream or vision, these guardian supernaturals could be derived, it appears, from any "bird, beast, fish, [inanimate] object, or element," or, rarely, even from parts of these beings and objects.

Among the Upper Stalo guardian spirits were acquired in two distinctly different ways.

(a) Through a long, rigorous quest and a dream or vision of a spirit which granted a specific power that could be used at any time. Among these tribes this was the unusual method of developing a supernatural relationship, not the common procedure as in the nearby Plateau. It was, in fact, limited to prospective shamans and in a few cases to hunters, warriors, gamblers, and the like. Important powers—like healing powers—were acquired in this manner, indeed power in practically every significant field: apparently the person experiencing the dream or vision might request a specific kind of power. Nevertheless, except for shamans and those to become the greatest warriors, very few people attempted to secure powers via this vision/dream route; the rigorous training was too much trouble, particularly since supernatural power was not necessary to become excellent hunters, fishermen, gamblers, and perhaps even warriors. Guardian spirits secured in this manner were thought to be "constant spirit partners," in the sense of being available to assist at any time during the year. (Duff 1952:97, 98, 100, 102-103, 109)

A Chilliwack tradition (Hill-Tout 1903:367-368) tells of the remarkable experiences of a Chilliwack man who went to Cultus Lake to secure his "spirit helper," an encounter with underwater "unnatural beings" which led to his becoming an important shaman. (See Myths section below for this tale.)

The physiographic features of the lake and its immediate surroundings that made it a natural arena for serious guardian spirit quests, especially for those that earned unusual and extraordinary spiritual results, are briefly described by Wilson (1970:57-58) in his journal entry of July 2, 1859. On that occasion he rode through the "forest and prairie" and then over the high ridge that separated his Chilliwack headquarters from the "Schweltya" (now Sweltzer) River and on to the northern end of the Cultus Lake. From there he crossed to the Boundary Commission base by boat. "The lake," he wrote, "is about 3 miles long, the mountains coming straight down, the water beautifully clear and intensely cold like all other mountain lakes; . . . We found Haig [the Commission man in charge in the area] encamped on the edge of the lake. . ." In his report of March 28, 1859, Colonel Hawkins (also of the Commission) explained that Haig's camp was "at the south end of Cultus Lake, owing to 'the rocky and precipitous character of the sides of the lake"' (Stanley in Wilson 1970:57 fn. 44), thus, reasonably, placing the base for surveying and marking the international line at the

closest lake point to the border and explaining why Wilson required a watercraft to reach the camp. This brief Hawkins' statement also confirms Wilson's description of the mountainous faces of the lake shore. But the essential point in this present context is that it is not surprising that guardian spirits of exceptional power were acquired among these surroundings.

(b) Through an encounter with a guardian spirit without any quest and receiving from the spirit only a specific dance and song to be performed at the winter spirit dances. No other powers were given in such unsought encounters. This was the usual method of securing a guardian spirit link: in fact, almost everyone received at least one spirit dance-song constellation during his lifetime. These winter dance spirits were considered to be present only in winter, and gave powers that were substantially weaker than those granted to persons who underwent the rigorous guardian spirit quest. (Duff 1952:97, 103-106, 109, 111)

The guardian spirits were thought to be the same in either case, merely granting different kinds of power depending on the circumstances of the person-spirit encounter. Under these conditions, it is not surprising that in the Upper Stalo view guardian spirits could not be inherited. (Duff 1952:97, 101, 109)

Shamanism

Upper Stalo shamans (*sxwəlɛ'm*)—as with a few warriors and others as exceptions—secured their special guardian spirit powers through a long, arduous quest. Although theoretically obtainable at any age, success was more probable on quests undertaken soon after the death of one's spouse. Still more promising were quests carried out during childhood, the time, apparently, when most shamans began their search for a dream or vision and the resulting supernatural powers. Children were carefully watched for an interest in this direction and for good character, and were encouraged to go out on quests if they appeared promising. Their training was supervised by a father or grandfather if either was a shaman or, if not, by an old shaman who was paid for his assistance. (Duff 1952:97, 98, 121)

Duff's (1952:98) description of a typical Upper Stalo quest is so succinct and comprehensive that it deserves to be quoted in full.

> At first the young boy would go out with the shaman, or with a brother or small group of aspirants. By the time he was about 12, however, he was expected to go out alone and train. He might go out on successive overnight vigils, returning home at dawn, or he might stay away from home several days at a time, going increasingly farther from home on each successive vigil. Coming to a lake, a stream, a waterfall, he would stay for several days, fasting the whole time. He would make himself thoroughly clean by chewing laxative bark and by tickling his throat with a stick to induce vomiting, by sweating in a sweat-house, by frequent bathing and swimming, and by rubbing his body with boughs. All night long he would sing and dance. He would sleep only when exhausted, and then try to dream of the power he wanted. When he did go home, he would observe strict continence, and would avoid everything that was impure.

Certain localities offered better chances of a successful quest than others. Lakes were particularly favored, especially those thought to be inhabited by strange, unnatural creatures (slalakums). One could request supernatural power from any such being he chanced to encounter. Some questers even climbed into grave-boxes to await a power experience. (Duff 1952:98-99)

Each quest was expected to be long and generally unsuccessful—even unsuccessful every time. It was customary, in fact, for the searcher to see nothing on his lonely trips until he was 25 or 30 years old, sometimes not before he was 40. If a boy should receive some power in his teens, he kept the fact secret, continuing to undertake periodic quests for more and different powers. In any event, he normally did not use his powers until about 30 years old. (Duff 1952:99)

Few girls, at least among the Tait tribelet, trained for shamanistic powers: according to Duff's informants, they could not because they were not allowed to be alone before marriage and after marriage were "unclean" and too busy (Duff 1952:99). This, however, seems to me to be no more than a partial explanation, for, unless the shamanistic quest was restricted to high-rank families, commoner girls, less carefully chaperoned, should have had opportunities for power searches and, one might think, an even higher motivation for obtaining power and the success that it brought. Among the Chilliwack and other Upper Stalo groups, Duff notes, "some negligent parents allowed girls out alone; perhaps they could train." In any event, it is certain that there were very few female shamans among even the Chilliwack. Duff hypothesizes that most women shamans probably acquired "their power in less usual ways; for example, a quest later in life, through illness, or by inheritance." (Duff 1952:99)

The culmination of the power quest was a true dream, a vision when wide awake, or a "supernatural experience of fixed form. The guardian spirit appeared in human guise, instructed the individual, then revealed

its true identity [by turning into its proper form as a bear, sucker, or whatever] and departed." (Duff 1952:99)

A shaman was able to secure additional power by meeting a slalakum, the unnatural but non-supernatural creature already mentioned. While encountering such a being caused serious illness in a lay person, a shaman could request power from it. If it consented, it assumed human form, talked to the shaman, and then reassumed its actual shape as it departed. (Duff 1952:99)

Occasionally shamanistic power was acquired in a strictly happenstance meeting with supernaturals in their visible guise: e.g., as an animal. Or by becoming very sick, the details of which are not described by Duff. Or when, badly hurt by a wounded grizzly, the bear appeared to him when unconscious and granted him power. Or when after a period of training, a boy received power (without its accompanying guardian spirit) from a shaman father who "blew" his power into him. (Duff 1952:100)

With the Upper Stalo guardian-spirit quest pattern described and Duff's few casual remarks relating to the Chilliwack before us, such specific Chilliwack data as Hill-Tout (1903:361) provides may be reviewed. To acquire his powers, a Chilliwack shaman, invariably a man,

> . . . usually underwent a long and secluded training in some lonely spot in the forest or on the margin of some lake. This training consisted in prolonged fasts, trances, body washing and exercises, accompanied by invocations of the Mysteries. His 'medicine,' or 'power,' it is believed, was bestowed upon him by his guiding spirit or spirits, who appear to him and instruct him in dreams and visions . . . .
>
> Not only the shamans, but every other [Chilliwack] Indian, had one or more guiding or protecting 'spirits.'

These fragmentary data suggest no appreciable difference from the general Upper Stalo quest pattern except at two points:

(a) Hill-Tout indicates that Chilliwack women never undertook the search for shamanistic power and so never became shamans. Duff's information relating specifically to the Chilliwack is in mild disagreement.
(b) Hill-Tout might be understood to suggest that persons not destined for a shaman's role secured their guardian powers in the same manner as did the shaman. Duff indicates that this was not the case.

Without additional pertinent data, it is impossible to judge between these two data sets regarding these two information matters.

Powers acquired by the Upper Stalo in the spirit quest were usually quite specific and related in some way to the characteristics of the guardian spirit in tangible form. Curing powers, for example, were not broadly such, but were narrowly limited in their scope: e.g., to the curing of illness by sucking, a skill awarded by sucker and leech.

During their training quests shamans also secured secondary sidepowers. To illustrate, the ability to see and converse with souls and ghosts, which made shamans the logical ones to supervise funeral ceremonies. Or the power to see what was transpiring in distant places and to foretell the future as the size of coming salmon runs or berry harvests. (Duff 1952:97, 100-101)

Shamans kept secret the identity of their guardian spirits and their supernatural powers until they began practicing. Then there was little point in attempting to protect these hitherto concealed facts, for people could easily guess them from the shaman's professional actions, as their method of curing. Shamans were felt to maintain some vague personal relationship with their guardian spirits, in some cases restricting their own behavior and in others providing them with a certain leverage over the actions of the spirit. Shamans appear to have been prohibited from—or at least cautious about—killing their spirit animal. And to some degree they were thought to be able to summon or persuade their guardian spirit to do their bidding: to get, for instance, a grizzly to attack a specific person or thunder to produce a thunder-storm to someone's disadvantage. (Duff 1952:101)

Guardian spirits were generally not represented in paintings or carvings, although Duff's informants recalled one case of such a carving on a house post and another in which ancient, small human figures carved of stone in the round were thought to contain some of a shaman's power. (Duff 1952:101)

Shamanistic contests in which their powers were set to fighting one another occurred but evidently infrequently. In Chilliwack country these sometimes took the form of friendly competitions between two shamans attempting the same task, as sucking a painted red spot through a tree trunk from one side to the other. (Duff 1952:101)

Status and Role of the Shaman

Owing to their special supernatural powers, Upper Stalo shamans typically became important and respected.

> Their abilities to cause and cure disease, to act an intermediaries between men and ghosts, to tell what was happening in distant places and what was to happen in the future, and to help out in wars brought them high respect as well as more tangible wealth. Most shamans were successful fisherman and hunters; most obtained several winter-dance spirit songs; and their general excellence in these fields was considered to be largely a result of their familiarity with spirit matters. Shamans were likely to be wealthy men, and wealth had implications of high status. (Duff 1952:101-102)

In addition to curing illnesses of supernatural generation, Chilliwack shamans conducted the mortuary rites. (Hill-Tout 1903:361)

There was, however, among the Upper Stalo, no class or grouping of shamans; rather they operated as individuals and saw themselves as such. They were, however, not the leaders in all religious ceremonies. Nor were they accorded any special consideration in their funerals, normally given a special burial, or particularly feared after death though they might be in life. (Duff 1952:102)

Illness and Curing

Among the Upper Stalo, illness associated with the supernatural domain came about in two quite different ways: by soul loss and by object intrusion. These ailments were cured—or at least attended to—by shamans. In addition, wounds and illnesses resulted from obvious natural causes. These health problems were addressed both by shamans and through home, lay remedies. (Duff 1952:97, 112-114)

Chilliwack shamans, Hill-Tout (1903:361) reports, were concerned only with inner, concealed ailments resulting from spells or "enchantment" generated by "maleficent and mysterious agencies." They were not treaters of wounds and similar natural bodily injuries. This latter information is in obvious conflict with the above general Upper Stalo data of Duff.

Shamans in the Upper Stalo tribes were paid for their services. "Good" shamans worked first and were paid when their efforts were completed whatever a person or family believed appropriate. However, some shamans—by implication less honorable and less well thought-of by the community—refused to expend their efforts and exert their skills until a satisfactory fee had been agreed upon. (Duff 1952:114)

The three forms of illness and their associated curing procedures may now be examined:

(a) *Illness through Soul Loss.* Among the Upper Stalo, a person's soul might abandon his body when he was visiting some strange, "bad," or unnatural locality and remain there. Or it might be "shocked out of him" by a sudden, frightening encounter with an unnatural being (slalakum), rendering him unconscious for some hours. Or it might be stolen by a shaman either to cause illness or to compel the person to do the shaman's bidding. In light of Elmendorf's (1952:110, fn. 15) finding that soul theft by the dead as an illness cause was present from the Northwest Coast (including the Gulf of Georgia tribes) south to Oregon and likewise in the Plateau (e.g., among the Thompson, Lillooet, and Shuswap), it is surprising that Duff's field research failed to pick this up as an additional soul "disease" cause among the Upper Stalo. In any event, to prevent death it had to be recovered by a shaman and restored to the person without much delay. (Duff 1952:97, 112)

In recapturing an errant soul, the shaman, summoned for the purpose, first informed the ill person of the circumstances of his soul loss. He then covered his head with a basket or cloth, and danced and sang his personal power song, accompanied by the spectators who drummed as well as sang his song with him. Through this song he called his curing spirit to him and presumably dispatched it after the missing soul though Duff omits this detail. According to Elmendorf's (1952:112) ethnographic data, the recovery was probably sometimes on the trail to the dead, which was the belief elsewhere in the southern Northwest Coast and in the northern Plateau, or in the land of the dead itself, which was the theory in Gulf of Georgia area, in part of Western Washington, and in the Plateau section of the Fraser River. In any case, to return to Duff's information, the shaman seized the returning soul between his palms and blew it back into the owner's head. Sometimes to complete the treatment, the restoration of the soul was followed by the administering of plant medicines by the family. (Duff 1952:101, 112-113)

Chilliwack shamans, Hill-Tout (1903:361) reports, had the power to recover a lost soul or spirit, which, leaving the body, caused "sickness and fainting, and, if not restored in time, death." Curing was achieved by the shaman going "apart by himself," crouching down, covering his head and shoulders with a mat, and going into a trance. During this trance his own soul was thought to leave his body and go in search of the patient's absent soul or spirit. In its essentials, these data closely parallel Duff's general information for the Upper Stalo group and clarify the point about the shaman dispatching his personal soul in the search concerning which Duff is silent.

(b) *Illness through Intrusion.* A person in an Upper Stalo tribelet could be made ill by a hostile shaman either for some reason of his own or for hire. By some method not described by Duff, he bestowed "power" to a bit of

stick, bird's beak, little bell, short thread, "or anything" and "shot" it into the person to be harmed. A cure was affected by another shaman—one, for example, who had obtained his power from a sucker fish—who removed the foreign object or objects. Typically, after bringing his power close to him by his song, he advised the patient of the cause of his ailment, sucked blood from him, and finally the illness-causing agent itself, all without breaking the skin, leaving a mark, or hurting the patient. Extracted, the object was cut up and burned to prevent it from flying back to the malignant shaman. (Duff 1952:97, 113)

Concerning ailments of this type among the Chilliwack, it is only reported that their shamans had the ability to drive "out a disease caused by a magic spell or by witchcraft." To effect this, they beat a stick or board, sang, and danced around the patient. (Hill-Tout 1903:361)

If the Upper Stalo recognized an intrusive unfriendly spirit as a possible sickness agent, as was the case among nearby groups both on the coast and in the Plateau, Duff's (1952:114) informants failed to mention this fact.

(c) *Illness of Natural or Uncertain Causation.* Wounds, even serious abdominal openings, were cured by some Upper Stalo shamans magically with the assistance of their guardian spirits. Other injuries—as a crushed chest with blood filling the cavity—and the accidental ingestion of harmful things, as sharp objects caught in the throat—were treated by shamans sucking the blood or foreign object out. Localized ailments of uncertain genesis were cured by shamans blowing their spirit power into the person, which drove the sickness away. (Duff 1952:113)

"Minor indispositions" were relieved in the Upper Stalo tribes not by shamans but by recourse to the native materia medica of herbs, bark, roots, and the like, concerning which some persons were especially knowledgeable. Colds and other minor infirmities were treated by sweating in the sweat lodge. "Bad blood" was caused to escape by shallow-stroke lancing with a flint blade set in a cleft-stick handle so it barely protruded. (Duff 1952:114)

It has been observed already that, according to Hill-Tout (1903:361), Chilliwack shamans were not involved, as were those of Upper Stalo groups in general, in treating these ailments of natural or indefinite causation. An historical instance of relieving a very bad case of mosquito bites in a nonshamanistic manner is reported by Charles Wilson, who, like other members of the British Boundary Commission, was terribly afflicted by these insects in late July of 1859. After weeks on the lower Chilliwack River and being all but terrorized by the mosquitoes day and night, he left for Chilliwack Lake in part to seek deliverance from them in this high mountain environment. On July 27, heading up to the lake, he encamped along the Chilliwack River just upstream from the canyon mouth, finding the mosquitoes already reduced in numbers. But his "mosquito bites had turned into boils & riding was excessively painful. I must . . . [mention] the kindness of an Indian chief & his family who were fishing near our halt. I . . . went to have a chat with them; the old chief's wife took compassion on my wretched state & having asked my permission, they brought out the paint bag & painted my face & hands with vermilion & certainly the relief was very great. . . ." (Wilson 1970:63)

Guardian Spirit Song and Dance

Spirit song and dance complexes could be obtained by anyone irrespective of sex, age, wealth, and status. Most old persons had them. Shamans, too, possessed these song-dance pairs as well as their personal curing songs, demonstrating that the two systems were separate and distinct. (Duff 1952:106)

The song and dance of supernatural origin could be secured in four different ways, none involving the onerous spirit quest.

(a) A song and dance pair was given a person in a unsolicited seizure during the winter dancing season, the pair having to be fully learned in a set of follow-up procedures. This was probably the most common method of acquiring a winter song and dance. Indeed, anyone wishing to secure a set could expect to obtain one in this way.

The spirit came to the person in a dream or, it was believed, actually entered him causing a seizure. It taught him a song and dance, which the person evidently performed in his dream or possessed state. This encounter was usually followed by a training or initiation "run" in the woods, accompanied by two persons of the same sex. During this "run" he received still another song or the complete version of that which he had heard during his dream or seizure. (Duff 1952:103-104)

This stereotypic Upper Stalo pattern apparently varied somewhat among the Chilliwack. To abbreviate Duff's detailed account received from a Chilliwack informant, it typically took the following form:

> [This is a paraphrased quote]—The person dreamed his first song and sang it in his sleep. Hearing him, others were aware of what was happening. During the following four days he received very little food and water, the water in a cup with holes in the bottom or in a vessel from which he was compelled to drink through a bird wing-bone "straw." From time to time

during these four days he sang his song in a choked and almost unintelligible manner; listening, other people attempted to learn it too.

On the fourth day he was dressed, painted red or black depending on his song, and tied in the middle of a long strap. With two men—or women if the person was a female—grasping the two ends of the strap, he was led into the forest on his "run" to receive the rest of his song or another different song. Guided by his two companions, to keep him from barging into trees, he moved at a run, then a walk and finally, nearing the tree, rock bluff, or stream where he was to receive his complete or new song, on weak and rubbery legs. Standing before the place, he at last sang his song, while his companions listened and learned it also.

Led back to his village, he visited each dwelling, still guided by his two "handlers," and received something from each house. He was then taken to the structure where—I take it—the winter dance was in progress. As he approached, the people started to drum. He entered backward, made four counter-clockwise turns around the room, still being held by the strap, and sat down. He was given a five-foot cane with four strings of deer hoofs and several goat wool strands tied near the top. (I assume from other evidence that his spirit was thought to enter this cane, which likewise served as a rattle.) He sang his new song, helped by those who "ran" with him and gradually by the entire audience. With cedar bark strips tied by his aides around his ankles, his legs just below his knees, and his waist and with a crown of this same material, he began to perform his dance. For eight days he had to eat alone, facing the wall. (Duff 1952:74, 103-104, 105)

Even persons not wanting this supernatural attention occasionally experienced it. Sometimes such people resisted it, at times successfully. Because it relates to the Chilliwack, a case of this kind, which happened to Duff's informant, seems worth noting.

> [This is a paraphrased quote]—One winter night a few days after the death of his sister's small son, he heard a scratching along the corner of his house. He looked out into the moonlight and saw a huge manlike creature standing in the snow about 10 yards away. It was a sɛ'sx̣ač (giant [Sasquatch]) covered with long bushy hair. He closed the door. When he did, he began to hear songs, but he fought them off.

The following night his brother felt his house shake. "The door opened and this creature came into the lighted kitchen. My brother had a fit in which a song came to him." Apparently he acquired a song and dance from this being which he later performed as though they had been guardian spirit derived.

Once a person has one song and dance pair, he might obtain others during later winter dancing seasons, even as many as two or three in one season. (Duff 1952:104-105)

(b) Spirit songs and dances were given persons by old dancers. Sometimes these were bestowed in generosity when a man, for some reason, failed to obtain supernatural power on his own. But generally, apparently, they were forced on a person against his will, sometimes via a seizure, as punishment for a slight, a mocking, or some other untoward action to which the old man took offense. Among the Chilliwack, at any rate, the affronted individual at times used his power rattle-stick as a club to force acceptance of the song. If the person so much as grunted or whimpered, he had lost, had acquired the song-dance complex against his will, and was compelled to commence the four-day training period. (Duff 1952:103, 105)

(c) A song and dance pair was acquired in a dream at any time of the year. In this dream one "saw" a person—actually a supernatural—singing and dancing and then, on leaving, turning into his nonspiritual shape: e.g., a moth in one case. In this way a person learned his guardian spirit song and dance and acquired the dream-being as his supernatural helper. (Duff 1952:103, 105)

(d) A song and dance complex was sometimes secured, at any season of the year, by a person walking alone in the forest. He heard a song coming from a tree or other natural object, learned it, and used it at the winter dance ceremony. It is unclear whether this spirit experience included a visual component. (Duff 1952:103, 105)

The Upper Stalo classified these encounters with the supernatural world into two categories that were evidently clear to them: into guardian spirit (sulia) experiences and into those that lacked this component. Sulia encounters included dreams or visions culminating a shaman's quest, song-dance dreams in which a spirit was viewed in human shape, performing a song and dance until the person learned them, and seizures during the winter dancing season in which a person received his song. While people attempted, at least theoretically, to keep concealed the identity of their spirit helpers from whom they had gained their songs and dances, this could not be done for long: the facts were too evident from the words of the songs and the miming actions in the dances. On the other hand, non-sulia experiences, in which guardian spirits were secured in only a very limited

sense, included those in which power was acquired from an unnatural being (slalakum) or a song and dance from an old dancer, a spirit song while out on a "run," or a song from a forest tree or other natural object. In these last two situations, supernaturals were plainly involved as the causitive agent. (Duff 1952:105-106)

Apparently, then, to be a sulia occasion, a spirit in the shape of a "human" had to appear to a person, perform a song and dance until learned by him, and finally change into an animal or some other non-human form as it departed. It had, in short, to be actually "seen." In the non-sulia experiences there appears to have been no visual encounter and no power secured other than the possession of the song and dance. (Duff 1952:103, 106)

Little is known concerning the details of these spirit songs and dances, for they were no longer part of the living Upper Stalo culture for some decades before Duff's time. They were said, however, to have been all different. Moreover, all songs, some of which had words however few and repetitive, were all owned. While the owner was alive, no one else could sing it, except when accompanying him. This exclusive right of performance was protected, at least on occasion, by hiring a shaman to make the offender pay by falling ill. The owner sang his song not only in a religious or ceremonial context—during the winter spirit dances—but often in summer just for pleasure. Songs could not be given to others nor inherited by others. After the owner's death, on the other hand, they became public property and could be sung by anyone for pleasure. (Duff 1952:106)

Winter Spirit Ceremony

The most important public religious ceremony of the Upper Stalo was the winter spirit ritual when people performed their individual guardian spirit song and dance. This season lasted about three months, beginning and closing earlier among the upstream Upper Stalo than farther down the river. During this season spirit dances occurred almost continually in one village or another. (Duff 1952:103, 107)

The dance costumes evidently were not particularly elaborate and varied somewhat among the several tribelets. In some, a mountain-goat wool blanket was worn and deer hoof rattles on ankles, knees, and wrists. Among the Chilliwack, dancers were not allowed to wear the hoof rattles, four on ankles and knees, until they had danced for four years, and, in fact, may not have used them at all until quite recently, when they may have been borrowed from the salt-water Cowichan. (Duff 1952:107)

Some dances were small gatherings of relatives and friends in a family's semisubterranean lodge—in an above-ground cedar lodge among groups below the Chilliwack—with those in attendance helping the man sing his song and drumming as he danced. The host supplied the food and sometimes even paid them for their attendance and assistance. Another man might invite the group to a ceremony in his dwelling the following night. And so on. (Duff 1952:107)

Larger meetings occurred in large cedar-plank longhouses, which were used as well for potlatches and summer dwellings. In this case, a man and his family hunted and fished for several months before hosting such a large dance, since he had to accumulate food, often with contributions from his friends. From nearby villages he invited as many people as his food resources would allow. In large gatherings people sat around the house, separated according to their village. "One person became possessed and danced at a time, but everybody helped by singing and drumming." Generally in performing they took their turn in order around the room; but occasionally a person became inspired out of seating sequence, being stimulated by a song resembling his own. It must be in this context that Duff (1952:107) reports that, when a power entered a person, he was forced to dance wherever he was at the time, under penalty of serious illness or, if the spirit was a strong one, even death. For Duff intimates that supernatural possession, followed by singing and dancing, was restricted to the winter dance season.

Often the dance host and others distributed presents in honor of some family member as a part of the winter dance. This, however, was not considered to be a potlatch inasmuch as, in general, no return gifts were expected. The closest approximation of a true potlatch occurred when on uncommon occasions valuables were given to a specific person with the understanding of a later return gift. On the other hand, a true potlatch was sometimes held—possibly only among Lower Stalo groups—in conjunction with—though not as a part of—a winter spirit dance. In these events food was prepared and served by hired people, not by the host and his family and friends. (Duff 1952:87-88, 97, 108)

Clairvoyants

The term "clairvoyant" seems a bit closer to the mark for the Upper Stalo se'uwa than Duff's term "fortune-teller," for it covers a broader range of their activities. Yet it is not perfect as the following ghost data reveal.

The *se'uwa* of the Upper Stalo—the Pilalt specifically—had supernatural powers, but these were inborn, not acquired through quests, training, or inheritance. They could see ghosts better than shamans, find drowned bodies and lost articles, see events taking place far off, and foresee future events and prophesy their occurrence. Most of these persons were women. They are specifically reported by Duff as having been present among the Chilliwack. (Duff 1952:97, 100, 114)

These Chilliwack "sorcerers" (*yeu'wa*, as Hill-Tout [1903:361, 364, 401] writes the term), both men and women, had a broad range of functions, as their counterparts had among the Pilalt. They were thought to have a "mystic language of their own." They were paid with gifts of blankets to injure an enemy. To achieve this objective, they washed their hands in water at sundown, repeating meanwhile the name of the person to be harmed. If the animosity were of moderate intensity, the victim fell into fits and had black spots appear on his body; if great, the person probably drowned or hanged himself. In an alternative procedure, "sorcerers" secured some bit of clothing or other belonging of the person to be damaged and uttered "mystic words over it." Again with blanket gifts, they were "commonly employed by the relatives of a deceased person" to persuade ghosts to leave and not trouble the survivors further.

> They were present at the ceremonial bathing of the relatives and friends of the deceased on the fourth day after burial, and when the mourners were bathing they would go through their ceremonies, such as washing their hands and blowing water from their mouths. They did this to drive the sickness of the deceased away from the village and to send the ghost of the dead to some unfriendly settlement to cause the death of their enemies there.

Among the Pilalt, these "sorcerers" were still actively functioning as late as 1900, though whether this was likewise true of the Chilliwack is not stated by Hill-Tout.

Controllers of Magical Formulae

Spells (*šiwi'l*) were memorized incantations or occasionally songs with words in a strange, unknown language which, if managed properly and repeated verbatim, could magically cause good or ill by their own power alone. Thus they belonged to the supernatural world, but spirits, whether favorably disposed or otherwise, were not involved in any manner. No training was required to receive these formulae, inasmuch as they were obtained through inheritance. Nevertheless, a certain amount of training and level of purity were thought necessary to use them.

There appear to have been considerable differences in their form and typical uses among the various Upper Stalo tribelets and perhaps among persons possessing them within a single group. For example, one person might have several different spells with different functions; or a single formula with minor variations for different uses; or one spell with two parts, a good and an evil.

Although all of Duff's narrative examples involved males as active users of these formulae, it is plain that women, at least sometimes, were likewise the owners and employers of their own magical incantations. (Duff 1952:97, 115, 116)

Spells could be used in innumerable ways. To illustrate with Duff's specific cases. They could:

- Make very large, fighting sturgeon give up their struggle.
- Make a specific little plant bring success to a fisherman when it was tied to his nets or even cure sickness.
- Bring success to a hunter, even kill animals outright. In one case an old Chilliwack man, hunting mountain goats without luck, spoke his spell and at once "found six goats around the next rock."
- Be used to affect humans both for good and for evil: to cure certain sicknesses or, on the other hand, to cause incurable illnesses, as for revenge or in war.
- Be emplyed, for a fee, to part married couples, to bring estranged husbands and wives together again, or to make a person irresistably attractive to another.
- Make a young man or a horse run swiftly in races. (Duff 1952:102, 115)

In many cases—possibly in all though Duff does not say so—the outward expression of a formula was accompanied by the necessary use of some object, as in certain of the above instances, and by some behavioral act, as in a four-time bathing in the young man racer instance. These points are made clear in a specific Chilliwack case in which an old Chilliwack man, bag-netting sturgeon from a canoe unsuccessfully in spite of his spell, changed his fortune by landing, bathing and massaging himself with conifer boughs, acts which were thought to purify him. (Duff 1952:115)

A spell was kept secret until its owner was about to die. Then he selected one child in the family who, he believed, could be trusted to use it for good and taught it carefully to him. The recipient employed it only after he became at least 30 years old. He found it gaining power as he grew older, even until very late in life—contrary to the experience of shamans with their power—and so his use of it in the service of others in increasing demand. (Duff 1952:115, 116)

Owing to their power to bring practical results in so many of life's domains, these formulae supplemented or were an alternative to seeking guardian spirit power among the Upper Stalo. Supernatural spirit power, which was atypical among the Upper Stalo peoples, was both more restrictive and in one form much more onerous to

secure among the Stalo than in other tribal groups of the general region. As Duff (1952:116) puts the matter: "A man who owned a *šiwi'l* which ensured good hunting had no need to train for a guardian spirit which would make him a good hunter. All he needed a spirit for was to give him a spirit song [for use in the winter ceremonial]."

Prophets

In Duff's view, prophets probably existed among the Upper Stalo in precontact times, "perhaps individuals with the ability to see and hear what was going on in distant places, to perform miracles and cure." If so, they possessed, it seems to me, at least some of the powers of the traditional clairvoyant and shaman. The fact that the Stalo had a native term for this group (*a'lia*) different from those for clairvoyant (*se'uwa*) and shaman (*sxwəlɛ'm*) suggests to me that, as Duff proposes, prophets were in fact part of the pre-White culture base and that they were in early days distinguished from clairvoyant and shaman. (Duff 1952:119, 121-122)

Among the Chilliwack, "soothsayers" (*o'līa*), to use Hill-Tout's (1903:361, 364) term, were invariably men. They treated wounds and similar visible injuries, these being of natural and comprehended causation rather than of supernatural genesis. More important were their functions of interpreting dreams and visions and of reading omens. They alone prepared the dead for burial and protected the living from the ghosts of the dead, which nightly haunted cemeteries and with which they alone could communicate. They likewise played a part "in the puberty and other social customs of the tribe."

These data are generally consistent with the preceding generalized Upper Stalo summary of Duff and detail additional functions, at least for the Chilliwack, not noted by Duff.

With the appearance of the first Christian influence, Upper Stalo prophets adopted some elements of the new religion, fusing them with certain features of the traditional religion, and became proselytisers of their new doctrines. Two such persons are recalled for the Upper Stalo, neither, however, Chilliwack. These had visions. In one case it was of persons representing God who instructed him in details of a new worship structure—kneeling, praying, making the sign of the cross, and so on—and informing him of the imminent arrival of domestic animals and religious figures dressed in black. (Duff 1952:98, 121-122) In Upper Stalo belief, these prophets and their visions occurred in precontact times. Duff, to the contrary, believes that the first of the two prophets recalled by the people experienced his vision about 1840. Certain it is that the Upper Stalo were rapidly converted to Christianity through contact with the Hudson's Bay personnel at Fort Langley and with Catholic missionaries who entered the area in 1841. (Duff 1952:121-122)

Souls and Ghosts

Every Upper Stalo person possessed a single soul. In sleep it might leave the body temporarily without ill effect, wandering around, "seeing other places and meeting other souls and ghosts of other people, resulting in dreams." But if it left the body when awake and failed to return (or, I presume, failed to come back before a dreaming person awoke), sickness resulted. Then, if not recovered through the offices of a shaman, who could "recognize and converse with the soul, catch it in his hands, and return it to the owner's body through the head," eventual death was the inevitable consequence. Leaving the body permanently at death, the soul became a ghost. The treatment of the ghost of a person immediately after his demise and in the mourning ceremonies that followed has already been described (see Death, Burial, and Mourning section). (Duff 1952:97, 112, 116, 117)

In Upper Stalo belief, according to Duff's informants, there was no land of the dead to which souls or ghosts went. For a time after death, the ghost traveled around by night and returned to the corpse at dawn. It was this nightime activity pattern that allowed those shamans and clairvoyants who had the power to see and converse with ghosts and to locate missing bodies of drowned or murdered people; sometimes they merely watched where the ghost went toward dawn. (Duff 1952:97, 112-113, 116-117)

On rare occasions laymen saw ghosts, especially those of dead troublemakers. Seeing them did the person no harm but actually touching them was thought to cause paralysis, at least in that part of the body which had made the contact. Ghosts could be driven away from a dwelling by lighting cedar boughs and brushing and slapping the walls with these. (Duff 1952:117)

Ghosts were also sometimes seen by Upper Stalo shamans in training, the sight rendering them unconscious for a time. Occasionally, however, they were able to shoot them with an arrow or strike them with a cane before losing their senses. In such cases they found, on awaking, a human bone—e.g., a shoulder blade or rib—lying where the ghost had been. (Duff 1952:117)

Concerning the spiritual entities associated with a living person, Hill-Tout (1903:364 fn. 2) was able to learn very little from the Chilliwack and what he heard was confusing, perhaps, as he himself observes, because the people themselves had no clear and uniform ideas about this matter. As he understood the situation, each individual was thought to have a spiritual being that was visible only to "soothsayers" (o'līa). This was fond of earth-life and, on the death of the person, continued to be attracted to the latter's former possessions—clothing,

utensils, etc.—which explained to Hill-Tout why these objects were placed with or about the corpse on burial. The person's spirit, on the other hand, was the concern of the shaman and, on death, went to the hereafter.

Unnatural Beings

"Up in the mountains, deep in the forests, and in certain bodies of water, lived all manner of strange unnatural creatures" (slalakum). While anything very unusual and unnatural that might be seen was referred to by this term, it was also employed to refer to a number of specific creatures with definite form and characteristics. "In former days the sight of one of these powerful supernatural creatures was apt to cause soul-loss sickness, unconsciousness, and an upset stomach." (Duff 1952:97, 117-118)

"Certain places, usually bodies of water, were known to be the homes of slalakums or to have . . . [generalized evil powers] of their own." In one lake, for example, strange men were seen paddling canoes only to disappear, "water-spouts and large waves were frequent, and sometimes the sound of beating hoofs was heard." Of the specific lakes mentioned by Duff, only Cultus Lake, immediately south of Vedder Crossing, and one other noted below were in or near the traditional Chilliwack territory. Because of their awesome properties, these localities were favorable places for shamans to train. (Duff 1952:99, 118)

The best known of these strange creatures in Upper Stalo country were the following, each with its own name, a generic term where more than a single being was known:

- The lake-dwelling, double-headed, snake-like creature. Because it describes just such a frightful being within the Chilliwack borders, the following Chilliwack account is particularly interesting in its detail:

> [A two-headed snake-like animal] comes to the surface of small lakes and shoots a head out each end. Its body is a black sphere about 4 feet in diameter. The heads are round, about 6 inches in diameter, with round ears and red circles on the top. The farther out it sticks its heads, the smaller the central body part gets. It makes a noise like a duck, but much louder. One was seen in *laɬi'c*, a little lake on Lihumitson [Liumchen] Creek (a tributary of the Chilliwack River). If you saw that animal in the water, you daren't turn around, because if you did you'd keep twisting until you were dead. (Duff 1952:97, 117-118)

- A cannibal woman, short and stout, who lived in a cave in Tait country. She gathered up children, pitched their eyes closed, carried them home in a big basket, and ate them. (Duff 1952:97, 117-118)
- An underwater bear that lived in a bay of the Fraser River in Tait territory. Seeing it caused sickness and even death. (Duff 1952:117-118)
- Huge serpents that lived near small lakes. (Duff 1952:117- 118)
- Hairy giants (*sɛ'sxač:* sasquatch),"men covered with dark fur, more than 8 feet tall, who leave footprints about 20 inches long." These awesome beings, usually sighted singly, are said to have been seen repeatedly in the early days, then not for a time, and finally began to be sighted once more about 1935. Typically, they were seen on moonlight nights, but were known to steal women as wives in broad daylight, as when, unprotected, they were out picking berries. What were reported as actual sighting experiences—even of women who, stolen, managed to escape at the price of being abnormal in some manner for some time afterward—were told to Duff by an informant, aged about 50 in 1949-1950, who had a friend whose grandmother experienced such a capture. If the person avoided falling unconscious—a frequent response—and fled, the creature followed, walking and yet keeping pace, for some distance. Usually in old times even seeing a *sɛ'sxač* resulted in an illness of some kind. Sometimes these being raided storehouses for the dried fish; at other times, when carrying women away from a village, they killed them. (Duff 1952:97, 117-119)

Creatures similar or even identical to the above slalakum are reported ethnographically to have been widely seen among other Northwest Coast tribes. (Duff 1952:117-119)

Diversions

Art

There are next to no ethnographic data relating to forms of graphic and plastic art among the Upper Stalo. Geometric designs, however, were woven onto the exterior surface of baskets by the uncommon technique of imbrication (see Technology section) (Duff 1952:57). And representations of a man's guardian spirit were painted or carved on the posts of his dwelling, on his family's corpse box, and on his personal belongings (Hill-Tout 1903:363).

Carved representations on mortuary structures were noted by Simon Fraser on his journey of exploration

down the Fraser in late June, 1808. He first saw them at the downrivermost village of the Lower Thompson, located at the mouth of Spuzzum Creek, and then saw them again at the Upper Stalo (i.e., Tait) camp in the vicinity of Yale. Because it helps to clarify his later brief Upper Stalo observation, Fraser's description of the Lower Thompson carvings is included here, though out of proper tribal context.

> [The Thompson] tombs [are] of a curious construction. . . . [They] are superior to any thing of the kind I ever saw among the savages. They are about fifteen feet long and of the form of a chest of drawers. Upon the boards and posts are carved beasts and birds, in a curious but rude manner, yet pretty well proportioned. These monuments must have cost the workmen much time and labour, as they were destitute of proper tools for the execution of such a performance. (Fraser 1960:97-98)

Concerning the carvings at the Upper Stalo camp of 150 persons, Fraser (1960:100) comments that the posts of a newly constructed "tomb" were carved with "rudely finished"—in Masson's (Fraser 1889:194) edition, "neatly finished"—sculptures. These were presumably more or less like those he had seen the previous day further upstream, but this is not made explicit. In this instance, however, the supporting "posts . . . [evidently including the sculptures were] covered all over with bright shells. . . ."

The Chilliwack also painted and carved "family crests" on the outside of their mortuary boxes, figures representing bears, mountain goats, beaver, and the like. Near these sepulchers human figures, roughly carved in wood, were sometimes placed. (Hill-Tout 1903:363, 364-365)

The customary representational painting style of the large grave figures and house posts of the upper (i.e., middle) Fraser area, according to Wingert (1949a:77, 86-89), extended downriver to the Gulf of Georgia. This style was executed in historical days in monochromatic red or black, though it may have been in some cases polychromatic in earlier times. It was related to the traditional painting in the Puget Sound sector rather than to the art of the coastal regions farther north (Wingert 1949a:77, 86-89). Wingert (1949a:89-91), in fact, sees the upper (middle) Fraser area as having exerted an important influence on the development of at least one art style of both the Gulf of Georgia region and the lower Columbia, in this latter case via the inland route down the Columbia.

In his survey of the wood carving art of the Salishan-speaking groups of the Fraser drainage and of the coastal strip from Vancouver Island and adjacent mainland south to the Columbia River, Wingert (1949a, 1949b) studied all of the ethnographic specimens from the region identifiable in museum and other collections. On the basis of this research he characterized these Salishan tribes as having developed a less complicated and diversified wood carving style than that of the coastal groups farther north in British Columbia and Alaska but one that differed significantly from the classic sculptural art of those people. It evolved from a fine Salishan tradition of woodwork in cedar, using shell, stone, and bone tools. (Wingert 1949b:1, 2, 4)

Among these Salishan groups, Wingert recognizes five "major art areas." One of these, that of interest in this present study, was the "Straits of Georgia area," comprised of the coastal area at the mouth of the Fraser and of the lower and middle Fraser Valley up to and including the Yale sector. The art of this region was, he holds, stylistically distinct from that of Western Washington, Puget Sound, Vancouver Island, and the Upper Fraser River, the other four of his carving art provinces. (Wingert 1949b:2, 63, 85-91)

An important art object—art at least from a Western cultural perspective—among the groups of the middle and lower Fraser was the sxwaixwe mask, the use of which was a hereditary right. As described by Wingert (1949a:87-88), they "were elaborately carved, with protruding eyes, pendant tongues, and surmounting bird or animal heads; and are profusely painted in red, black, white, and, sometimes, blue." According to Marian Smith's Chilliwack informant, masks were "painted with one's own paint" which "made the mask one's own" (in Wingert 1949b:15, fn. 39).

To his above description Wingert elsewhere adds more impressionistically:

> Largeness of scale and treatment dominates the handling of [the] parts [of these masks]; while the expression results from the organization of the separately carved elements into an active, dynamic design. All of these elements correspond to objects in nature, although the masks are not realistic. In general, the style is elaborate, emotional, dynamic. (Wingert 1949b:106-107)

The carved and painted designs expressed a personal encounter with a supernatural being, which conferred some measure of supernatural protection and the right to fashion and use the mask. Typically, they were, however, prestige, not religious, objects, worn on social occasions as at marriages, potlatches, and when receiving visitors. The extent to which these and other more special functions were served in their wearing is outlined more specifically in the section that follows.

The above brief descriptions by Wingert of lower and middle Fraser sculptural painting and mask carvings appear detailed and factual. But are they? The answer is to be found in his *American Indian Sculpture* (1949b)

volume. The problem relates directly to the tribal or areal affiliation of the corpus of sculptures he had at his disposal for study and from which he derived his generalizations and interareal conclusions. He remarks:

> The specimens of wood carvings collected from this [large] Salish [coastal] area [from Vancouver Island to the Columbia River mouth] provide more than adequate material for . . . [this] study. . . . For the present paper, all available examples were examined, and from them those specimens were selected for illustrations which would present all of the various types and styles of carving. (Wingert 1949b:4)

But he had, in fact, only seven carvings, all cedar, from his Straits of Georgia art area, and not a single example surely from tribes in the Fraser River stretch from just upstream from the Musqueam at the delta to the Lillooet above mid-Harrison Lake and the Thompson above Yale. Of these seven the only carving of "known" tribal provenience was a chief's coffin from the Musqueam in the Vancouver area. (Wingert 1949b:86-91, 135-136, Plates 29, 32, 33, 34, 36, 38)

From these data it is obvious that Wingert had no certain Upper Stalo specimens available for analysis. This being so, it seems pointless to summarize his descriptions of the seven carvings and the generalizations he derives from them, all of which he regards as typifying the sculpture of his Straits of Georgia—including the middle and lower Fraser—art area. Further, in his discussion of the three sxwaixwe masks he follows closely the very questionable "power" and "crest" concepts generated by Codere (1948), more of which immediately below. It appears, in short, that we know nothing about the Upper Stalo and more explicitly Chilliwack sculptural traditions beyond the meager ethnohistorical and ethnographic information already noted.

Associated with the sxwaixwe mask was a myth narrating its origin. Versions of this in its Middle Fraser form have been recorded by Hill-Tout (1903:403-404) before 1902 from an informant at Chilliwack Landing, by Marian Smith in 1938 from a man at Sardis in old Chilliwack territory, and by Codere in 1945 from a Tait woman. These three versions all tie the myth's origin to localities in the Yale to Hope sector—old Tait country. They appear to constitute a single localized myth, as Codere's careful element tabulation reveals. But she also contends that they display a unique, enriched, integrated merging of two quite different concepts: (a) the private guardian spirit "power" idea important in similar myths of the Puget Sound Salish and (b) the totemic inherited "crest" concept of the Kwakiutl involving interest in ancestors, in masks, dances, dance paraphernalia, house posts and dishes, names, and formal privileges, and also in publicly living up to the requirements of one's status and thus maintaining hereditary rights and privileges.

Codere's example of the Kwakiutl sxwaixwe myth, recorded by Boas, is certainly heavy in the "crest" motif while that of the Skagit, collected by Haeberlin, is clearly "power" focused. But her analysis of the three conflated middle Fraser versions of the origin of the mask in terms of these two conceptual elements is far from convincing (Codere 1948:Table II). As Suttles (1947:161-162) has argued, her assignment of individual mythic elements into these two conceptual categories frequently seems artificial, impressionistic, and arbitrary when viewed in a larger ethnographic context. In Suttle's opinion, which I share, there is little convincing evidence to document the unique integration that Codere propounds.

Reconstructing the prehistory of the sculptural styles of the Coast and Fraser Salishan groups through an analysis of their apparent relationships, Wingert (1949b:118-119) concludes that it is much more probable that "the center of point of origin of Salish sculptural art was . . . up the rivers with the coastal art developing later under inland influences." But "upriver" in this context Wingert means simply on the upper reaches of the short coastal rivers on the east side of Puget Sound. But there may have been, he observes, a second separate center of origin up the Fraser, an opinion of special interest to this North Cascades study. Wingert (1949b:118 fn. 12) was aware of the published Boasian and Kroeberian views as to early Salishan movements up and down the Fraser Valley: how much, if at all, he may have been influenced in his own judgments by these earlier discussions is uncertain. At any rate he summarizes the stylistic evidence that leads him to his inland center hypothesis: e.g., (a) "the relative isolation or remoteness of the up-river points from the strong northern influences apparently made it possible for . . . [these upstream peoples] to preserve more successfully the older character of their style"; (b) "the boldness and surety of their approach to problems of design and expression . . . [show] that they were working within an old tradition. . . ." These reconstructive arguments are not wholly persuasive, since, as Wingert seems to be aware, they may likewise be turned against an inland origin hypothesis. Whatever the conclusion regarding the sculptural font issue, "Salish sculpture," Wingert (1949b:122) contends, "represents an older southern tradition on the Northwest Coast which differs from the northern later and more richly elaborate style of wood carving." The correctness or otherwise of this proposition, like the validity of the other reconstructive conclusions based on the manipulation of his ethnographic style data, can only be settled, in my opinion, by archaeological research and to the degree that this research is fortunate in recovering the essential, perishable artifacts from the earlier cultural periods.

Others also have assumed, according to Suttles (1957:175-176), a relationship between the stone sculpture of the Fraser and Columbia Rivers, but convincing proof of this kinship remains to be demonstrated. In fact,

in his study of the precontact stone sculpture of the Pacific Northwest, Wingert (1952:22, 24) describes the "sculpture from the two areas . . . [as differing] strikingly in style." What similarities there are between the Fraser and Columbia lie in techniques and principally in pestle and mortar types. The differences occur in the frequency of other types of objects and in style.

A word now regarding prehistoric rock art, though being of a nonethnographic time level it falls properly beyond the scope of this North Cascades report. In 1946 Marian Smith published an article entitled "Petroglyph Complexes in the History of the Columbia-Fraser Region." Only one site was known to her from the "Middle Fraser" area, a rock figure on the western shore near the upper end of Harrison Lake. In the context of this Park study, this creates two serious problems. First, according to Teit (1900:166 map), this area was not in Halkomelem country at all but in Lower Lillooet territory, so the sculpture is of no direct Middle Fraser interest. Second, the artistic style of this single example is tacitly assumed to have been representative of the petroglyphs of the entire valley below Yale, an area from which none were known to Smith. Owing to these two facts, there seems to be little profit in discussing this Harrison Lake figure and the comparison Smith makes of its sylistic traits with those of Puget Sound and The Dalles.

Nothing seems to be known from ethnographic sources concerning stone sculpture, either in the round or as etchings, in the middle Fraser area. For this reason, and an exception to the exclusion of prehistoric data from this present study, I summarize here certain of the early archaeological findings in the region that possess what might be considered the characteristics of art objects. This is particularly important since frequent reference is seen in the literature to the stone art of the Fraser River region, with high praise for its "technical proficiency and . . . [its] strong, often astounding aesthetic qualities" (Wingert 1952:9).

Both hard and soft stone was used in creating the sculptures. The material was reduced to the desired shape by hammering and pecking, with a chisel-like tool in some cases to produce design details, and then sometimes by grinding with a coarse hard stone or with sand and water to yield a smooth final surface. There is some evidence for the painting of the completed form. The art of stone sculpture disappeared from the Fraser Valley during the prehistoric period, but the time and circumstances of its disappearance remain unknown. (Wingert 1952:10, 25)

Several types of sculptured objects fashioned of stone are of special note:

- A seated figure with a knot headdress of some sort, either grasping a bowl in its lap or with a bowl before it. The front of the bowl is sometimes carved into an animal face. According to Harlan Smith (1907:420) examples had been discovered in his time from the "Fraser River Delta probably as far east as Yale, or even Lytton," the latter location in traditional Upper Thompson country. Wingert (1952:22-23, 34) speaks specifically of two examples from the valley from Yale down to the mouth. Stylistically they are apparently very alike. One, of serpentine, is of indefinite provenience within the valley (Figure 2-6); the other of lava comes from Hope. Typically these sculptures vary in size from moderately large to small, "are precisely carved, compact in design, and very specific in definition of detail (Wingert 1952:22). The treatment of the hair, the curve of the eyes, and sometimes the mouth all "recall the characteristic Pacific coast art." (Smith 1907:420-422, Wingert 1952:22)
- Mortars and dishes carved in animal form. The example in Figure 2-7, found near Yale in old Tait territory, evidently represents a human with bent arms and legs. The sculptured dish (Figure 2-8), likewise discovered near Yale, is also in this style: clearly visible is the large head at one end with the forefeet, but the intent of the remainder of the carving is less obvious. Simpler carved bowls (Figure 2-9) were in use in the middle Fraser region: (a), of volcanic rock, is from the Chilliwack River; (b) also of volcanic rock, and (c), of steatite, are both from the vicinity of Yale. (Smith 1907:426-428)
- Bird representations of unknown use (figure 2-10). All those in this figure are from the neighborhood of Yale. Example (c) seems to be a recent carving and either imported from the Northwest Coast or fashioned in imitation of the coastal style. (Smith 1907:428-429)
- Human figures with small depressions on top to receive offerings, it is claimed. The example in Figure 2-11 is reported to have been "ploughed up on the Fraser Plains, near Sumas, Wash." (Smith 1907:430-431) This may be the large Chilliwack stone "statue" representing a human figure that Hill-Tout (1903:367) mentions as having been taken from the Chilliwack tribe to the Sumas group and thence south across the border. It may also be the large vertical, granitic stone carved as a human figure described by Wingert (1952:23, 34). Although he reports it to have been found "south of the Fraser River in the Puget Sound area," the catalog information accompanying the specimen places its location of discovery at Sumas, Washington. Inasmuch as this town is on the upper Sumas River which flows north—at one time through Sumas Lake—to the Fraser, the sculpture was evidently discovered in middle Fraser, Upper Stalo territory, not in the Puget Sound country. Moreover, if it is, in fact, Hill-Tout's specimen, it was a Chilliwack rather than a Sumas artifact, though the question as to whether it was a Chilliwack creation or an imported object would still remain open.
- Small steatite carvings that "may represent charms or amulets. In a very simplified style, full or half-length human figures are depicted. . . . The expression is animated and in some ribs are indicated by incised lines.

Figure 2-6. Serpentine human figure with bowl: height 4.75 inches, width 2.5 inches. Reported to have been found in "Lower Fraser Valley," i.e., somewhere below Yale. (Wingert 1952:22, 34, catalog no. 99, Figure 40)

Figure 2-7. Stone morter found near Yale (Smith 1907:426 Figure 189).

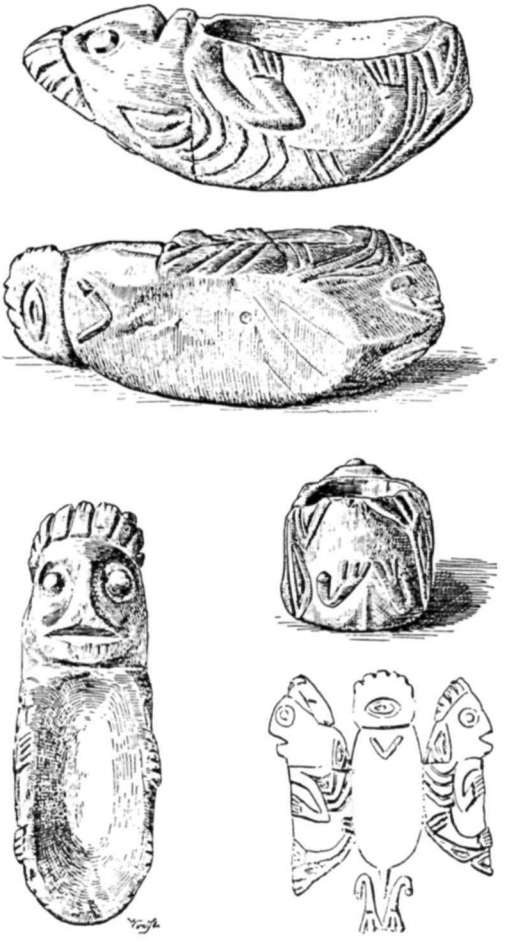


Figure 2-8. Stone dish discovered near Yale (Smith 1907:427, Figure 190).

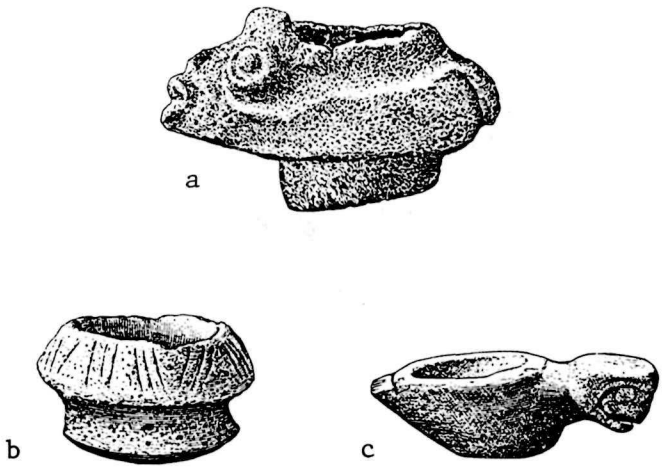


Figure 2-9. Stone carvings: (a) and (b) of volcanic rock; (c) of steatite. Object (a) from Chilliwack River; specimens (b) and (c) from near Yale (Smith 1907:428 Figure 191).

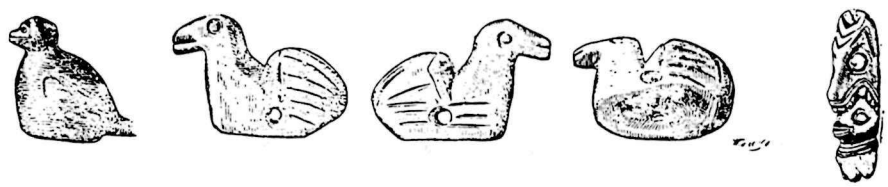


Figure 2-10. Stone sculptures from Yale vicinity (Smith 1907:429 Figure 193).

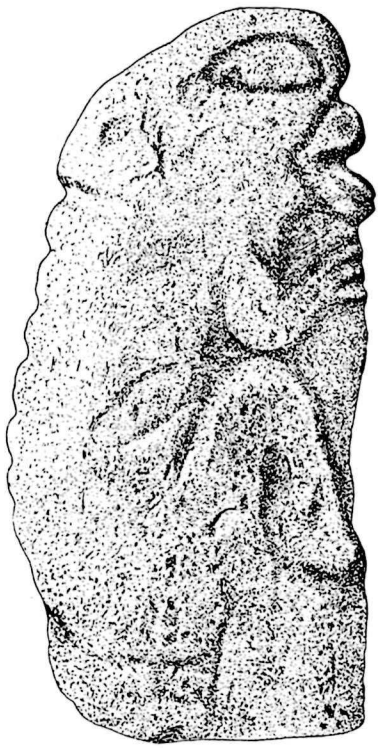


Figure 2-11. Stone sculpture with pit in top of head, reportedly found near Sumas, Washington (Smith 1907:430 Figure 195b).

> This may have been a unique up-river style." While it is not precisely clear what river segment Wingert intends by his "up-river" comment, the area evidently included the Upper Stalo country. For one example of this style is a seated figure, fashioned of steatite, that was discovered on the Fraser near Yale. (Wingert 1952:23, 34)

Various utilitarian objects—pestles, pounders, clubs, etc.—were also decorated by carving portions, like handles, into animal or human form (Wingert 1952:24).

Prehistoric objects in the Fraser Valley from the canyon downstream have been found with etched geometric ornamental patterns. These designs are more varied than are the etched designs on the North Pacific coast. (Smith 1907:352)

There were interesting similarities—in addition to technology—between the prehistoric Fraser River-Puget Sound stone art and that of the middle and especially lower Columbia Valley, as already noted. These include like eye-forms (concentric circles and concentric ovals with pointed outer corners), a triangular forehead with the point at the nasal bridge, a partly open mouth, and conspicuous ribs. Yet there were striking differences also. As a whole, the local and regional style variations appear less diversified and marked on the Fraser than on the Columbia. The Fraser art also seems "less imaginative in its handling of life forms and more rigidly bound by the dictates of a firm and widespread tradition." (Wingert 1952:11, 22, 24)

Dance

Little is to be found in the ethnographic literature concerning traditional Upper Stalo dances. It is known, however, that their religious dances were closely linked to the possession of personal guardian spirits and the powers derived from them (Smith 1941:202). The only hard information available relates to the fairly elaborate sxwaixwe mask dance discussed below.

Nor is there, it appears, much to be found in the early historical records regarding Upper Stalo dance forms and the occasions that called for dance performances. Simon Fraser, however, mentions dances that were held in three villages—all probably within Tait territory—to entertain his party when it was passing along the Fraser River in the summer of 1808. Specifically:

- When at a village in the Yale district, Fraser (1960:100) witnessed, evidently in the evening, certain dances concerning which we are told only that during them "the men . . . [pillaged the women] from one another."

- Farther downstream near Hope at another Upper Stalo camp, Fraser (1960:101) and his party were "amused . . . with dancing," on this occasion during an afternoon traveling break. None of the activities are described.
- On his upriver, return journey in early July, Fraser (1960:115-116) witnessed "a variety of songs, dances, &c. during the evening" when encamped at a village which was either at the very northern end of the Upper Stalo country or just within the southern limits of Lower Thompson territory.

The sxwaixwe mask dance, on the other hand, has attracted some considerable ethnographic interest. The mask itself has been described in the preceding section. Through an analysis of its forms and functions and the traditions relating to it among the Upper Stalo and various lower Fraser and coastal tribes, Duff concludes that the mask was a Tait creation, probably about 1780. Still, this could hardly have been without inspiration in some form and by some route from the highly ritualized and artistic coastal societies, for both the artistic conception of the mask and costume and the function of the dancers were foreign to Upper Stalo culture.

The characteristics of the mask were altered as it diffused down the Fraser from Tait country and then among the nearby maritime tribes, as were its meaning, its uses, and the traditions recounting its supposed origin. In its earliest form, it is believed to have been given a Tait man by underwater lake people, whom he visited when, driven from his village because of a foul disease he had contracted, he tumbled into the lake by accident. Fashioned of wood and brightly painted, it had a human-like face, save for protruding tongue and peg-like eyes, and surmounting eagle plumes. The wearer of the mask wore a swan-down costume with a mountain-goat cape and deer-hoof rattles. (Duff 1952:123-125)

The Chilliwack acquired the mask and accompanying dance from the Tait through intermarriage and proceeded to make copies of the mask. From the Chilliwack and nearby Sumas it is said to have spread downriver to the coast. Among the Chilliwack, the functions of the mask and associated dance were primarily social. It was used, however, at funerals when, to honor the dead person, sxwaixwe dancers were

> hired to dance around the coffin shaking their rattles and singing their song. Another was for a wedding; two sxwaixwes danced, then took part in the ceremony by joining the bride and groom's hands together. They were paid immediately. On the occasion of girl's puberty potlatch, one or more sxwaixwes might be employed to dance around with the girl "to show that she is . . . [of high status]." (Duff 1952:126)

These sxwaixwe likewise played an important role in the birth feast of the Chilliwack for those families who could secure their services (Hill-Tout 1903:366).

In other Upper Stalo tribelets, the masked figures took part in a social way "in the initiation ceremonies of a new spirit dancer. . . . [T]he person being honoured was dressed in a sxwaixwe costume and danced with other sxwaixwes." Involving these functionaries in a ceremony made it very expensive and conferred on the family no right to use the mask again. (Duff 1952:126)

Sxwaixwe dances among the Upper Stalo tribelets were normally held outdoors, though occasionally in a large house. They were accompanied by much ritual, which surely added to the expense. Unfortunately, little of this ritual has been described. However, we are told that the dancers dressed within a temporary enclosure of blankets.

> At a signal, the waiting drummers began to drum, and the dancers came out, backwards, after three incomplete attempts. When the dance was over, they returned to the enclosure after three unsuccessful attempts and entered, again backwards. While dancing, they made a high squeaking noise like the note caused by blowing on the edge of a stretched blade of grass. (Duff 1952:126)

The right to perform this masked dance was inherited by all Upper Stalo children of owner families. A woman rarely exercised this right herself, but either allowed her husband to use it or saved it for her sons. "Apparently no religious quest or initiation was required to become a sxwaixwe dancer." (Duff 1952:126)

It has been noted above that, according to both Hill-Tout and Duff, the Chilliwack possessed this sxwaixwe mask and dance. In confirming their presence among this tribe, the former (Hill-Tout 1903:358) understood that the sxwaixwe comprised a secret society. He learned, too, that the tribe possessed other "fraternities" that owned their own particular dances. But he was unable to secure any informant data concerning these esoteric social units and their activities and functions. Perhaps in the 50 years between his field experience and that of Duff, these groups and their rituals lost much of their religious associations and secrecy, allowing Duff to gather the data that came to him.

Apart from these groups with their dances and other rituals, the Chilliwack engaged in both religious and social dances (Hill-Tout 1903:358).

Music

The earliest effort by trained ethnomusiocologists to record and analyze Chilliwack music seems to have been that of Frances Densmore, who in 1926 recorded ten melodies (Herzog 1949:95). These few are obviously not a proper sample of the tribe's traditional musical repertory. With a no better—and generally a worse—collection from nearby middle Fraser groups, similarities and differences between the traditional styles of the Chilliwack and those of their neighbors remain uncertain (Herzog 1949:95, 106).

Nevertheless, the data are sufficient to allow Herzog (1949:95, 96), using published materials including his own, to see traditional Chilliwack music as having shared the general musical traditions of the Salishan tribes of British Columbia and coastal Washington. The music of these peoples possessed the following characteristics in common with much of North American Indian music:

- Instrumental music was rare. Percussion instruments, used exclusively for accompaniment, predominated.
- Singing without instrumental accompaniment was rare.
- Many song texts consisted wholly or partly of meaningless syllables, often repeated.
- The singing technique was characterized by strong vocal cord tension, "intermittently relaxed and tensed anew for almost every tone," resulting in sharp accents, voice pulsations, and strong glides. (Herzog 1949:96)

In addition, the music of the area possessed a number of features that varied from North American Indian music in general in being either notably more or less widespread. Among these the following are worth noting:

- The total range within the typical song was limited.
- The melodic movement was often level or undulating and less commonly balanced between rising and falling, rather than primarily descending as in North American Indian music in general.
- In melodies of wider range, broad jumps were fairly frequent.
- Pentatonic scales were less common and small, half-tone steps more frequent.
- A consistent dominating rhythmic measure and rhythms based on three were more frequent; those based on five and seven were moderately common.
- The relationship of the rhythmic accompaniment to the voice rhythms was at times intricate, not simply coordinated.
- The skin-covered drum, sometimes square rather than the usual round shape, was less important and rattles and beating on planks, striking sticks together, and the use of other rigid percussion instruments more common.
- Structurally, individual melodies were more loosely, less sharply organized, as into contrasting phrases and minimally varied repeated phrases: i.e., more internal variation was permitted.
- Incipient harmonic part-singing of the drone type apparently occurred, a rare feature in North American Indian music.
- Women appear to have been almost as active as musicians and composers as the men. (Herzog 1949:96-98, 105, 106)

The detailed analyses by Herzog (1949:98-103) of his small corpus of Chilliwack songs is too technical for me to fully comprehend and for summary here. Further these songs may be somewhat tainted: they may contain "heavy and recent borrowings from non-Salish groups," since "Chilliwack has been for years a center for the gathering of members of many tribes for hop picking" (Herzog 1949:101). Still, as already noted, Herzog considers the list of musical traits itemized above as properly descriptive of old Chilliwack music as a part of the general areal musical culture. From a broader perspective he concludes that the Salish songs of the Fraser and neighboring coastal areas as a whole, while representing "a somewhat specialized development of . . . [their] own," had a "good deal in common" with the music of the Northwest Coast (Herzog 1949:101-105, 106-109).

By ethnographers we are told next to nothing concerning Upper Stalo music and musical instruments. Rattles of two kinds were in use. One variety consisted of deer hoof devices attached by cords to a person's wrists, knees, and ankles or to a wand (Duff 1952:104, 105, 107, 124). The other was made of a bighorn-sheep horn, "split and shaped, with stones inside," attached to a stick (Duff 1952:105). Both types were used in dances involving the spirit world and in such a way as to suggest that the rattles themselves—or the wands with rattles attached in that instance—possessed some measure of spirit power. It would seem, therefore, these rattles were not, in our conventional Western sense, musical instruments and nothing more.

Drums are mentioned for the Upper Stalo as rhythm-producing instruments but are not described. Like the rattles, these were widely used in connection with spirit dances, curing rituals, and so on (Duff 1952:104, 105), but whether also on more secular occasions is not reported. The Chilliwack are said to have had both the board and stick drum and the tambourine-like skin drum. Hill-Tout (1903:392) offers no comment on the relative antiquity of these drum forms, but both may be presumed to have been part of Chilliwack precontact culture.

No other sound-generating devices that might qualify as musical artifacts—e.g., flutes—are referred to in the Upper Stalo ethnographic accounts. However, speaking of the Fraser River and nearby coastal Salish

people in general, Herzog (1949:105) mentions whistles that may have diffused to them from the more complex Northwest Coast cultures to the north.

Did the Upper Stalo themselves classify their songs into categories or types, marked perhaps by special names, and, if so, on what basis was this done? We have two sets of data that hint at partial answers to these interesting questions bearing on one very minor segment of what must have been a rich middle Fraser cognitive world.

The Salish songs described by Herzog (1949:101-103, 106) are divided into: (a) power songs associated with doctoring, curing, and guardian spirit beliefs; (b) dance songs of more than one type, some serving also as power songs; (c) bone gambling songs, some likewise possessing religious power associations; and (d) lyrical songs, particularly love songs of apparently late date. Presumably these categories reflect in some measure the native song classification structure. There is, however, no statement to this effect, and it seems possible that Herzog's categories merely reflect the social contexts in which songs were said to have been primarily performed. Because the Upper Stalo as a whole are represented in Herzog's study sample by only the few Chilliwack songs, one may question how accurately the above song categories reflect the musical conceptual framework of the other Upper Stalo tribes, assuming that they achieve this goal for the Chilliwack. The same may be said for the generalizations that follow. But for what they are worth, lacking more precise data:

- According to the premise that archaic styles "tend to be characterized by a restricted tonal range," Salish myth songs and "doctoring," curing, and guardian spirit melodies have best preserved their archaic character and simplicity, and bone-gambling and lyrical songs and to some extent dancing melodies less so.
- Considerable intertribal borrowing of gambling and dance songs occurred in the area.

The fragmentary ethnographic data come from Duff (1952:127-128). The Upper Stalo, he reports, had songs of various types, some spirit songs and a great variety for pleasure alone. Some of the latter were even composed on the spur of the moment to suit an occasion or a mood. Unfortunately, none are discussed at any length by Duff. But it is at least clear that the Stalo had their own system by which they classified their songs into types. For Duff speaks incidentally of:

> *šiwə'l:* spirit songs
>
> *sṯe'ləm:* ordinary songs sung for pleasure. Possibly within this class may be placed the:
>
> *sewe'lɑk:* lively songs accompanying dances.
>
> *ṯi·u:* slow songs. (Duff (1952:127)

How many other types of songs were recognized natively and the underlying conceptual basis for the distinctions made, save as suggested by the meager data above, have not, to my knowledge, been reported. Nor is it clear how this patently partial but fortunately native classification structure meshes with that presented by Herzog above. Perhaps Duff's spirit songs, ordinary songs, and lively songs equate with Herzog's power, lyrical, and dance songs respectively, but this is by no means certain.

Many of the non-spirit songs were love songs, composed and sung by both sexes, but others were nostalgic or even humorous. Duff provides a translation of one Tait song composed by a woman on "going back to her childhood home and seeing the path she had formerly walked along." This seems to be of particular interest because it expresses a deep emotion with which native Americans are rarely credited in the popular Western mind.

> "Oh my tracks are still there, where I used to walk, Oh my trail is still nice, I nearly cried when I saw my tracks." (Duff 1952:127-128)

Games

A number of athletic games—undoubtedly only a very partial list—are reported for the Upper Stalo. Shinny, played by males, involved carrying, throwing, and catching two small balls of wood, tied about 10 inches apart, with four-foot vine-maple sticks with a curve at the end. The field of play was a sand bar or cleared area with a goal at each end. The sides were always of the same number of players, who played until exhausted. (Duff 1952:127)

Other athletic contests included a reverse tug-of-war in which two teams of men pushed a long pole, not pulled a rope as with us. A hoop and dart game, played inside the winter house, consisted of throwing darts at a rolling hoop. Foot- and canoe-racing and wrestling, in which the opponents grasped each other's head and hair and attempted to throw the other, were also popular. (Duff 1952:127)

Gambling games were widely played, but little is known of most of them. However, it is said that the stick or bone game, in which one attempted to guess the hand that held the proper bone, was a favorite. Some gamblers sought the aid of their guardian spirit in guessing the correct hand; others watched the eyes of their

opponents, who often tried to avoid revealing facial signs while they held the bones by keeping their eyes down. Each tribe—sometimes even individual players—owned gambling songs with which, when they had the bones, they attempted to confuse their opponents. Another gambling game was played with beaver-tooth "dice." (Duff 1952:127)

Smoking

Elbow pipes, considered aboriginal by Duff's informants, were made from soapstone obtained in Tait country. Straight pipes, though found archaeologically in Upper Stalo territory, were unknown to the Tait and Chilliwack with whom Duff consulted. (Duff 1952:61)

There are two early historical references to Upper Stalo pipes and smoking that are worth passing note:

- In his daily record of his canoe and foot journey down the Fraser River to the coast in the early summer of 1808, Fraser (1960:100) states that at a camp in the Yale area—obviously a Tait community—the villagers had pipes fashioned of "brass" hanging from the neck or across the shoulders. He considered these a form of ornamentation, as doubtless they were, but these artifacts were surely put to more practical use on occasion.
- Smoking by Chilliwack (at least Indians of the fishing camp on the Chilliwack River just upstream from the canyon mouth) is reported in Wilson's (1970:63) journal of July 27, 1859: "after . . . [the Indians had alleviated his discomfort from his numerous mosquito bites] a pipe was lighted & passed round the circle, everybody, women included taking 3 or 4 puffs." Who furnished the pipe and tobacco remains unstated, but one may suspect that they were Wilson's, partly in return for the Indian aid in relieving his pain. Nor do we know that this mid-nineteenth century practice—by both sexes—is a perpetuation of precontact cultural behavior.

Cognitive Culture

Time and Distance Units

The Upper Stalo calendar was moon-based, each month bearing a descriptive name. Most of these month names appear to have been forgotten by the late 1940s. But the one reported—that for about March—translates into "glowing coal carried in ashes in a clam-shell." (Duff 1952:128) This month term seems unusual to me in that it has no obvious reference to the procession of natural, seasonal events or to cultural associations with them.

Each season was also named. Years were recorded by knots in a ball of string, one knot per year. In the Upper Stalo view, this was a traditional, pre-White method of keeping track of time. If so, it was early put to use in recording days so that each seventh day could be recognized for worship. (Duff 1952:128)

We know nothing about traditional measurement units among the Upper Stalo tribelets as a whole, and very little concerning them for the Chilliwack. Among the Chilliwack, the fathom and fractions of this measurement were recognized as standard lengths. One fathom was the span between the tips of the second fingers of the outstretched arms of the average man. Three-quarters of a fathom was the distance from the elbow of one arm bent over the chest to the tip of the second finger of the other arm outstretched. One-half a fathom was measured from one hand in the center of the chest to the second finger tip as above. (Hill-Tout 1903:360 fn. 1, 394)

Astronomy

How extensively among the Upper Stalo the stars were individually recognized by native terms and grouped into named star clusters similar to our constellations, we do not know. The Chilliwack, however, identified the Pleiades as one such grouping and designated it by a specific term. The Great Bear (Ursa Major) was called "elk": it was seen as always wandering around in the same circle, allowing people to determine the hour of the night by its position. (Hill-Tout 1903:396, 399)

Myths, Legends, and Tales

The Chilliwack, Hill-Tout (1903:369) wrote about 1900, "seem to possess but few folk-tales, or else they have forgotten them." From his several informants, he was able to collect only the very limited examples that follow. It is barely conceivable that, as he suggests, the people in his day, through strong missionary influence and general culture degradation, had lost memory of most of their mythology and traditions. Without question, however, they had had a rich body of folklore in early postcontact times, for they were surrounded by groups that are known to have had very extensive corpora of oral literature. It seems probable that for some reason Hill-Tout's informants were reluctant to relate to him such of their folklore as they recalled.

The Chilliwack mythical transformer and "wonder-monger" was called QEQä'ls. Concerning his activities Hill-Tout (1903:366-367) learned little. Apparently, however, he was invoked in prayer at times. Hill-Tout's informants recalled a large stone statue in human form, reportedly weighing more than a ton, that was believed to have been the work of QEQä'ls. One day, passing that way, he saw "a man and his wife, who in some way displeased him, and were in consequence transformed into stone statues." It was owned by a Chilliwack family, was taken to the nearby Sumas tribe by a Chilliwack woman when she married into that group, and was later sold and carried south of the international border.

Another tribal tradition concerning Qäls, the great transformer and principal deity, and his transforming activities is reported by Boas (1894:454, 463). That the Chilliwack believed in a mythical ancestor has already been mentioned (see Tribe above). This ancestor, like similar ancestors among other Halkomelem tribelets, is said to have met Qäls and to have been transformed. Some of these group ancestors were changed into plants and animals that abounded near the main tribal winter village, and others into rocks of remarkable shape or size that occurred not far from the village. The Chilliwack forefather experienced this same change, but his precise fate in terms of his new shape is not related by Boas.

The following tales relate to mythic times and mythic personalities.

(a) The ancestors of the Chilliwack long ago were taught to fashion salmon weirs by Wren (Hill-Tout 1903:367). (For details of the barrier construction, see earlier section on salmon weirs.)

(b) The Upper Stalo myth narrating the supposed underwater source of the sxwaixwe mask and dance (see Dance section above) appears among the Chilliwack in a somewhat different guise than in the Tait case already alluded to. In the Chilliwack version, recorded in considerable detail by Hill-Tout (1903:367-368), a youth on his vision quest visited Cultus Lake, at the bottom of which lived slalakum (see Unnatural Beings section above). He pierced a strong buckskin with many pointed bones, fastened it around him, and, holding a large stone, jumped into the lake. Sinking to the bottom, he landed on the roof of the slalakum dwelling. He found some of these people sick from his spitting into the lake and from the ashes of his fire dropping down on them. He cured them by wiping away these foreign substances. In return, he was given an object shaped like a long, stout icicle. Returning home, he found all the people taking sick at the sight of him. With his magical object he cured them and became a great shaman with special powers to cure people ill through contact with an "unnatural being." When a man from a neighboring tribe, hearing of the Chilliwack man's great power and the way in which he had received it, attempted to obtain the same power for himself at Cultus Lake, he rose to the surface only after a considerable time and as a skeleton, his flesh having been devoured by fish.

(c) Long ago the Chilliwack were suffering from a great famine. The men went down the Chilliwack River looking for salmon, fashioned a weir, and caught a few. Selfishly the men decided to keep the news from their wives and children back home. A boy bound some salmon roe to his leg with bark and fled, pretending to chase butterflies. Reaching home, he gave the news to his mother, who informed the other women. Greatly angered, the women beat their husbands' beds with pieces of bark. (Hill-Tout was unable to discover the magical import of this act.) Taking the blankets, paint containers, and painting-feathers of the men, they started out to find them. When they neared their husbands' camp, they beat the blankets with sticks and shouted to QEQä'ls to transform their men. The men heard them, saw their painting feathers floating in the air, and called the painter to paint them hurriedly. He painted them individually as different birds in color and then, in haste, the rest in black and white. When the women arrived, QEQä'ls, answering their prayer, turned all the men into birds. As birds, they assembled again on the Fraser River where they encountered Beaver, learned from him of the Salmon country, and were told by him that he would secure salmon for them so they could make peace with their wives.

At this point Hill-Tout (1903:369) discontinues his narrative, remarking that the remainder closely paralleled the myth of the Pilalt which he had recorded elsewhere. The following outlines the principal elements of this Pilalt myth:

> Long ago there were no salmon in the Fraser, only steelhead. To secure salmon, Beaver led an expedition of 'Bull-head' Fish, Woodpecker, and an unidentified bird. Arriving at the Salmon village, Beaver and Mouse crept toward the dwellings to steal the chief's baby. Beaver feigned death on the path, while Mouse gnawed holes in the Salmon canoes and weakened vital points in their paddles. At dawn, a Salmon woman, fetching water, saw Beaver and called all to view this strange animal. Steelhead recognized him as a sly being that he had earlier met up the Fraser. When they were about to cut Beaver open, Woodpecker and the other bird flew by and the Salmon abandoned Beaver to catch the birds, who feigned lameness. Beaver entered the chief's house and stole the baby, hanging from the swing-pole, and rushed to the river. The expedition paddled off. The Salmon pursued, but most broke their paddles and were

> slowed by their canoes filling with water. In canoes and with paddles missed by Mouse, a few gained on the fleeing party, which was, in ignorance, paddling with the edge of their paddles. Snail, on the bank watching the chase, shouted to them to flat-paddle. Now the expedition pulled away from the Salmon people, who, abandoning their sound canoes, swam upriver after the four. As the party passed, they threw soiled baby's underclothes into the Coquitlam River, making the salmon there henceforth bad and difficult to dry. At the Chilliwack River they threw in a clean garment, so there the salmon were good and fine, easily dried and cured. At the Harrison River, they dropped more the child's clothing: there, later, something killed the salmon, causing them to die in great numbers. At the lower side of the fish weir at Yale they threw the baby itself in the water, making it rage and boil. The expedition then separated and became supernatural "unnatural beings." (Hill-Tout 1903:401-403)

According to tribal tradition, the Chilliwack have always occupied their Chilliwack River country above the Fraser plains. Indeed, one of their legends recounts the original springing of the river from its Chilliwack Lake source, a marvellous event produced by a young man with guardian spirit power gained at the lake. With the assistance of his supernatural helper, he broke open the lake outlet, permitting the river for the first time to flood down the valley. (Hill-Tout 1903:356-357)

Miscellaneous Beliefs

Thunder was thought by the Upper Stalo to be caused by a bird, larger than an eagle, that lived on a little bare peak near Harrison Lake, and lightning by the bird opening its eyes. "The splinters of a tree which has been struck by lightning were dangerous and should not be touched." One of Duff's Tait informants reported that he has once burned some, and had discovered that "they gave off 'a different kind of heat' that caused little scratches on the skin to swell up and made him sick and feverish." (Duff 1952:128)

The Chilliwack conception of the afterlife was based on information concerning that supernatural world brought back by the spirits of individual shamans that had visited the region. As a consequence varying views of its character prevailed. (Hill-Tout 1903:361)

The sound of a crow's caw resembled the Chilliwack term for 'brother,' *skak*. It was believed that in crying *"skak, skak!"* the bird tried to claim its relationship with the people. (Hill-Tout 1903:388)

Use of the Park Complex

There is little in the published literature so far as I am aware explicitly demonstrating traditional Chilliwack visits to the northwest corner of the Park area and their use of the resources of the region. And yet circumstantial evidence of several forms testify to the fact that the area must have been extensively visited and utilized by the group in their subsistence quest and in other ways.

Subsistence Use

The region of the upper Chilliwack River above Chilliwack Lake and the nearby mountains lay within the traditional tribal boundaries of the Chilliwack, terrain wholly within the limits of the Park. That this high country was claimed by the Chilliwack testifies in itself to the fact that the natural resources of the region were utilized by the Chilliwack. For it is axiomatic that native peoples in the Pacific Northwest laid no claim to areas unused by them. Indeed, such a claim would be pointless, given the absence among them of any concept of land ownership for its own sake. Further, in the eyes of neighboring tribes, a group validated its claim to real estate only through extensive and continual use of its resources.

If it is concluded from these territorial-claim data that the Chilliwack must have used the upper Chilliwack drainage and its mountains within the Park borders, even though explicit descriptive support for this conclusion is lacking, are there circumstantial data to argue for this belief? In my opinion, there are. This is the information describing general Chilliwack use of mountainous country, some of which must certainly have taken place in high elevation areas within the Park. More than this, inasmuch as the natural route to the high country from the Chilliwack River villages below the lake lay up the stream first to the lake and then on up the river valley, it seems reasonable to assume that of all the high altitude areas within the Chilliwack boundaries, the mountainous surfaces inside the Park were probably particularly frequented and their resources exploited. Indeed, the uppermost of the Chilliwack small camps—perhaps villages—around Chilliwack Lake in early traditional times may have been no more than a mile or two outside the Park perimeter. Further, the fact that Chilliwack hunting parties met Thompson and Upper Skagit out on similar mountain ventures is of relevance here, for the areas of overlap between the country borders of these three groups fell in part within the Park limits.

Unlike virtually all other Upper Stalo tribes, the Chilliwack were not a Fraser River and Valley people. Within

their own territory they were restricted in pre-White days to the narrow, canyon-like valley of the Chilliwack River before it emerges onto the Fraser River plain. They had no great salmon fisheries comparable to those on the Fraser itself. Still salmon swam in the Chilliwack River, even many according to a bit of historical evidence, and upstream at least as far as Chilliwack Lake. One actual fishing locality within the old Chilliwack homeland—in the lower canyon area and plainly a salmon site—is reported in an 1859, casual remark of a member of the British Boundary Commission. It cannot yet be demonstrated that salmon ascended the Chilliwack River above the lake and into the Park region, but maps fail to suggest the presence of formidable falls or other barriers to spawning fish.

At any rate, the mountains and their forested slopes surely furnished a substantially larger part of the subsistence and other resources for the Chilliwack than for most (perhaps all) other Upper Stalo tribes. This is consistent with Marian Smith's definition of the prehistoric and protohistoric Chilliwack life pattern as a foothills one, rather than a strongly river-oriented pattern, a view with which, perhaps somewhat unwisely, Duff takes strong exception. The special importance to them of their mountainous terrain is also underscored by the fact that the Chilliwack, unlike other Upper Stalo peoples with their Fraser River orientation, possessed a relatively highly developed concept of territorial ownership and seemingly a sharper vision of territorial boundaries. To members of the Chilliwack tribe, however, the resource areas—hunting grounds, berry patches, and so on—were open to all.

High country use is likewise especially convincingly argued for by the fact that Chilliwack hunting parties, encountering Thompson or Upper Skagit hunters back in the mountains, sometimes fought them, which was generally not the case when other Upper Stalo met hunting groups from these two tribes. The Thompson must have been met, at least in part, in the Park area on the east where the Chilliwack-Thompson territorial claims were in contest; the Skagit were encountered on the southeast, again doubtless partly within the present Park boundaries. Finally, inasmuch as Chilliwack relations with the Nooksack, also an inland-oriented people, were close and friendly, and because Chilliwack territory extended to the Chilliwack River-Nooksack River watershed and even down into the Nooksack Valley at one point, the high terrain between the two drainage basins, the easternmost end of which stretched a short distance into the Park, must certainly have been frequented by Chilliwack parties. In summary, except for the Chilliwack Valley itself, the traditional country of the Chilliwack was mountainous and most of the central and largest segment of this high elevation area was inside the northwestern boundary of the Park.

We now turn to the Chilliwack use of mountainous land as described or implied in the ethnographic and early historical accounts, assuming that unless otherwise specifically localized, they apply to the Park region at least as much as to the tribal high altitude areas outside the Park limits. Furthermore, included in the following summary is general Upper Stalo information concerning the utilization of mountain land forms on the grounds that, as noted above, these areas were of particular importance to the Chilliwack and so, again unless special negative local conditions prevailed, the information most probably applies to the Chilliwack no less, at least, than to other Upper Stalo peoples.

No organized ethnographic consideration exists detailing the importance of hunting and the various methods of game pursuit employed by the Chilliwack, or even the Upper Stalo in general. But there are hints as to the extent to which animals were taken by these Upper peoples for various purposes. Given the lesser importance of salmon fishing among the Chilliwack and therefore surely the greater utilization of mountain country in their subsistence economy, data describing Upper Stalo hunting and use of animal products can be presumed to apply broadly to the Chilliwack. In the animal tally below, only the mountain goat is mentioned specifically for the Chilliwack; the remainder are described for the Upper Stalo tribes in general or for some tribelet other than the Chilliwack, but not in such a way as to exclude the Chilliwack from their use.

- *Black bear.* The favorite meat. Skin used for robes. Bladder(?) used for storing salmon oil.
- *Grizzly bear.* Little used as meat because difficult to obtain.
- *Mountain goat.* Rated second as meat. Horn used in making points of hunting spears and fish harpoons. Wool used in weaving blankets and in ornamenting quiver tumpline and magical spirit canes. Bladder(?) used in storing salmon oil.
- *Bighorn sheep.* Horn made into rattles with stones inside.
- *Deer.* Much used for meat but considered dry. Hide used for breechclouts, shirts and dresses, leggings, moccasins, mittens. Brains rubbed on skins in the tanning process. Sinew used for bow strings and in attaching feathers to arrows. Antler used in making large sturgeon and smaller harpoon points. Hoofs used in fashioning rattles. Bladder(?) used for storage of salmon oil. Hide used to wrap dried meat in packing it from mountain hunting camps back to the village.
- *Elk.* Meat eaten but not much used since difficult to secure. Antler used in fashioning points for hunting spears and both large sturgeon harpoon points and smaller harpoon points.
- *Raccoon.* Sometimes eaten.
- *Wildcat.* Sometimes eaten.

- *Beaver.* A popular meat. Skin used in making arrow quiver. Teeth used as dice.
- *Rabbit.* Skins used in making robes.
- *Groundhog.* A popular meat. Skin used in making robes.
- *Squirrel.* Sometimes eaten.
- *Martin.* Sometimes eaten.

Among the birds the following are mentioned as having been actively sought by the Upper Stalo and so, it may be supposed, also by the Chilliwack.

- *Ducks.* Considered good food. Tail feathers of mallards used in feathering arrows.
- *Geese.* Much sought as food.
- *Swans.* Skins, with feathers plucked to leave only down, used in making sxwaixwe costume. Balls of down used in ornamenting sxwaixwe mask.
- *Grouse.* Much sought as food.
- *Woodpecker.* Not eaten. Tail feathers used in fletching arrows.
- *Eagle.* Feathers attached to sturgeon harpoons to allow harpooner to feel stream bottom. Feathers used in ornamenting sxwaixwe mask.

The data presented in the subsistence section describing Upper Stalo hunting and hunting methods need not be repeated here. It is sufficient to underscore what must have been the special importance of hunting to the Chilliwack. With fishing sites on Chilliwack River limited in number and productivity, it seems necessary to assume that more Chilliwack men must have been active hunters and that these must have devoted more of their time through the year to hunting activities and to scouring the small lateral valleys and the many mountain slopes of their country for animals—and for eagles and grouse among the birds—for food and their other useful products. The only animals specifically mentioned ethnographically as having been pursued by Chilliwack hunters are the mountain goat, one reference relating to the efficacy of magical formulae in taking the animal and the other noted in the paragraph that follows.

Hunting was carried out particularly in the fall when the fishing season was over and the animals were fat. Mountain goats appear to have been especially sought by these autumn parties which went to "Chilliwack Lake or beyond": this is to say, specifically into the high sectors of the North Cascades Park, where particular mountains were known as fine goat areas. These parties of entire families sometimes extended to several weeks, the women and children and even some men remaining in the base camps to butcher and smoke-dry the meat on racks and to maintain the camps. A man could pack the dried meat of two or three goats from his hunting camp to his permanent village.

Deer were also hunted by the Upper Stalo in the mountains, pursued by hunters with their bows and arrows and sometimes with their trained dogs. Since both black bear and grizzlies were hunted, the former occasionally with dogs, surely some of these hunts were carried out in appropriate seasons in high altitude areas. Indeed, grizzlies were particular frequenters of the high country (Post in Spier 1928:11, 22). How many of the other hunting techniques—pitfalls, deadfalls, snares, and nets—were employed in the high country is not reported.

Of the very few food roots noted as having been obtained by the Upper Stalo, only the tiger lily, the balsamroot, and certain species of *Lomatium* grew in the higher elevations. The tiger lily (*Lilium columbianum*) was found upwards to subalpine elevations; balsamroot (*Balsamorhiza sagittata*) up the hillsides "to moderate elevations in the mountains"; and the *Lomatium* likewise up to moderate elevations in the mountains (Turner 1978:87, 102, 108, 116). Inasmuch as the Upper Stalo are said to have used these roots for food, it appears relatively safe to suppose that the Chilliwack were among the groups that dug them in their own high country.

In late summer, parties of Upper Stalo women—and so without doubt of Chilliwack women—accompanied by a few men, went to the mountains for a few days to gather berries and dry them on cedar bark mats spread on racks. Of huckleberries, the most important berries, two varieties grew at higher elevations and two on lower slopes. Sometimes patches of the higher altitude berries were burned to improve future yields. Another berry, red and bitter but so far botanically unidentified by me, also grew at upper elevations and was collected by these field parties. Of the other berries certified by Duff as Upper Stalo foods, only elderberries, it appears, were found in the mountains "to moderate elevations" (Turner 1978:132) and so may well have been collected by Chilliwack berrying parties within the Park borders. Black tree lichen, for boiling into "moss cakes," was also gathered from "certain trees high up in the mountains." Plants and plant parts—and doubtless other natural products and substances—were collected by the women on these journeys for technological uses (e.g., grass required in imbricating baskets [Teit 1930b:223]), to serve later medicinal needs, and for other purposes.

The Chilliwack secured a "brownish salt" from a peak that lay somewhat outside the Park perimeter. It is conceivable that other mountain sources of this food additive were available and exploited inside the Park boundary.

Village/Camp Use

Except perhaps for the Chilliwack River immediately above Chilliwack Lake—and hence just within the Park's northwesternmost boundary—the Chilliwack could have maintained few, if any, winter villages within the Park limits. The terrain and environmental conditions in general were simply too unfavorable. On the other hand, temporary open-season, small camps must have been scattered widely through the mountains and high valleys of the Park. These were occupied by parties for a day or sometimes up to several weeks while hunting, berrying, and perhaps gathering roots in the vicinity. On occasion other camps must have been in use while the Chilliwack collected, for instance, plant materials for technological use, mineral pigments, and stone for fabricating utensils and weapons. To illustrate, red paints were needed to color the sxwaixwe masks and to apply to persons on their ritual forest "run" in acquiring a guardian spirit song and dance; pieces of slate were required in fashioning harpoon points. The sources of these raw materials are not specified in the ethnographic literature, but surely the Chilliwack must have looked to the mountain slopes of the Park area for some of these important materials.

Trail Use

The mountains of the Park were evidently criss-crossed by trails, some leading to the food and materials resource areas and others followed by parties en route now and again to visit other tribes. Obviously, the Chilliwack made use of the former travel paths. How frequently they made their way along the intertribal routes is less certain. Such data as we possess uniformly point toward a somewhat greater isolation on the part of the Chilliwack than for the other Upper Stalo tribelets ranged along the Fraser River. So far as Chilliwack-Thompson relations were concerned, Chilliwack still living in 1949-1950 recalled when, apparently somewhat after 1837, one of their villages on the Fraser plain was looted and destroyed by a Lower Thompson party. Further, the Chilliwack, quite atypically for an Upper Stalo tribelet, even fought their Thompson and Upper Skagit neighbors when they believed that they were encroaching on their hunting grounds. But is is doubtful that they engaged in hostilities on every such meeting and it is stated, moreover, that Chilliwack intermarriage with Thompson was not unknown. In addition, the Upper Stalo tribes traded mountain-goat wool blankets to the Thompson. Though the Chilliwack are not specifically mentioned as partners in such exchanges, the importance of mountain hunting to the Chilliwack would have made them logically a natural source of these blankets for the Thompson.

Precisely where these trails ran into and through those Park higher elevations that fell within old Chilliwack country is, unfortunately, not described in ethnographic contexts. But wherever they led, there must have been overnight camps here and there along them in especially favorable locations.

Other Uses

Still another circumstance attracted Upper Stalo—and obviously Chilliwack among them—to the mountains: the guardian spirit vision quest pursued by aspiring shamans, some men hopeful of becoming warriors of special prowess, and even a few others. In these searches for supernatural power, youths as they grew older journeyed continually deeper into the mountains to isolated lakes (particularly those noted for their resident monsters), streams, and waterfalls, where a spirit vision or dream might be experienced. At such a place they might remain for several days, performing various ritual acts—including sweating in a sweat lodge—to encourage a spirit encounter.

Though we are not informed of localities in Chilliwack territory within the Park circumference where dangerous, unnatural creatures existed, it would be most surprising if there were thought to be none, for these strange beings were varied in their forms and believed to be widely dispersed through more remote sectors of Upper Stalo country. These included lake-dwelling snakes with two heads, cave dwelling cannibal women, underwater bears, and huge serpents that lived near small lakes. Only the fur-covered giants—the sasquatch—on rare occasions left their back-country homes to come face to face with people berry picking and even to approach human habitations. In light of the particular interests of this report, it is a shame that we know nothing concerning traditional Chilliwack convictions regarding such abnormal, terrifying creatures in the mountains of the Park.

III

LOWER THOMPSON

Data Base

The Thompson tribe was composed of two "divisions," of a Lower group and an Upper cluster of bands. In general, the Lower Thompson, as described below, were the people of the Fraser Canyon and of the forested hills and mountains that lay on either side of this awesome chasm and reached southward into the upper Skagit country within the boundaries of the North Cascades National Park. The Upper Thompson, in contrast, had their homeland in the open forest, sagebrush, hill, and mountain country of the Fraser and Thompson Rivers east of the Cascades.

Because of the particular concerns of this study, the focus of this chapter is on the Lower Thompson. Two bodies of data dealing with this group, the ethnographic and ethnohistorical, are merged in the following pages. Nevertheless, the information is not extensive. To fill important subject lacunae and add meaningful cultural details, this relatively meager data base is extended by the incorporation of a substantial corpus of ethnographic material relating to the Thompson tribe as a whole and to the Upper Division more particularly. The fundamental life modes of the two groups were certainly much the same. Still, there were some notable and surely many subtle differences, in part the consequence of the different ecological settings of the central home areas of the two divisions and in part owing to the greater exposure of the canyon people to coastal and lower Fraser influences and of the upper people to Plateau contacts. At least to the extent that both divisions made substantial use of the higher sections of their country in hunting, gathering, and even fishing, their cultural behavior must have been fundamentally identical. Fortunately, this is the segment of tribal life of special interest to this present study. To keep the data properly sorted out, however, the specific population entity described is identified where these facts are provided in the source. When no such data appear in the following pages, the information is to be understood as presumably generic Thompson in its relevance.

The ethnographic material on the Lower Thompson is drawn in part from James Teit's (1900) extended, first-hand report on the Thompson Indians. While bearing largely on the Upper Division, it presents some data, either expressly stated or implied, that pertain to both groups and other information described as relating exclusively to the Lower people. Teit, who was married to a Thompson woman and spoke the language fluently as well as neighboring related languages, was discovered by Franz Boas in 1894 and was given a certain amount of basic ethnographic training. With Boas' support he recorded in depth the traditional life of the Thompson Indians as he saw it, then in its final stages, and supplemented these observations by informant inquiry. His Upper Thompson manuscript was prepared in 1895; that on the Lower Thompson, in 1897. The two were merged by Franz Boas in Teit's 1900 publication. The data are especially rich in the material culture sections, though quite respectable in many other cultural domains. They show, of course, the subject gaps common in ethnographic studies of his time. They also possess less obvious flaws—and doubtless strengths—as a consequence of Boas' editorial attention: in some subject areas—e.g., art and mythology—it is not invariably easy to ascertain which of the two is speaking (see Maud 1982:63-77). Nevertheless, Teit's Thompson report ranks high among Plateau ethnographies. Additional ethnographic details are extracted from a number of Teit's (1898, 1928, 1930a, 1930b, 1930c) other studies and incorporated into the cultural account that follows. Owing to time pressures, the scraps of folkway data imbedded in his extensive mythic collections have not been extracted and introduced into this report.

To Teit's data for the Thompson as a whole, for the upriver bands in particular, and for the Lower Thompson where specifically indicated is added the ethnographic information secured by Verne Ray (1942) in the 1930s from a Lower Thompson informant then in his 60s. These data are unique in describing in their entirety the traditional culture of the Lower group, revealing, when compared with Teit's material, their lifeway differences from the cultural patterns of the Upper people (Ray 1942:103). As noted in more extended form in the following Chelan chapter, Ray's data were collected through a culture-element check-list in which traits were succinctly defined and then coded simply as present, absent, sometimes occurring, practiced by women only, etc. They are grouped into functional complexes—e.g., into a trait cluster dealing with deer hunting methods. Nevertheless, individual elements are not infrequently difficult to assemble into satisfying clear and

coherent wholes, and relationships between complexes are obscure. Further, the data were gathered from a single informant and some 40 years after Teit's material and so doubtless with some unknown amount of tribal culture-memory loss: accordingly, some of the apparent differences between Lower and Upper cultural practices are surely an artifact of imperfect and incomplete data. Finally, Ray's contact with the Lower Thompson was brief and therefore in a sense casual rather than personal and intensive over years as in Teit's case. On the other hand, Ray's information has all the marks of a first-rate professional ethnographer with a wide and detailed knowledge of Plateau cultures and was secured using careful, systematic field techniques. It represents, in fact, the only intensive ethnographic fieldwork to my understanding on the traditional culture of the Lower Thompson, the division that utilized the Park country, and is, therefore, especially valuable in the context of this present study.

In the 1890s Charles Hill-Tout undertook a field study of the Upper Thompson. Published in 1900, his report consists primarily of an ethnographic section, a few remarks on the archaeology of the Thompson homeland and on the physical characteristics and language of the tribe, and a comparatively long myth collection. Relevant incidental data in this report that concern the Lower Thompson are meshed into this present chapter, as is occasional Upper Thompson information of special interest, as where it fleshes out an otherwise inadequate Lower Division account. English-trained as a clergyman, Hill-Tout is at many points naive in his description and theoretical underpinning, as well as curiously wandering and irrelevant. Approaching the Thompson with a coastal Indian, British pastor, and firm Anglo-European mind-set, he speaks, for example, of a Thompson chief as the "lord paramount," of a Thompson nobility where, in fact, no inherited class distinctions existed, of the Thompson as having "many singular and superstitious customs and practices," and, on the other hand, of the group as a "finer . . . race than their congeners on the coast" (Hill-Tout 1900:501, 506, 513, 517). He alludes to, but happily does not discuss here, his uninformed theory of a South Pacific origin for the entire Salishan group (Hill-Tout 1900:517). Yet he had the good fortune of working with Chief Mischelle, a highly intelligent Upper Thompson Indian and evidently a fine informant. In recording his field data, Hill-Tout took minimal notes, later expanded them from memory, and still later checked his enlarged draft with his informant. In this process, he freely introduces an unmistakable Hill-Tout element, especially in his mythic sections where descriptive color is added to heighten the impact of the narrative and suggest the emotional content of the teller's performance. So far as these myths are concerned, though straying from the narrator's often greatly compressed version since the tale background was well understood by his listeners, this technique produces a richer and in a special, broad sense, a rather more faithful rendition of the myth in its native cultural context. Hill-Tout's information cannot compare with Teit's intimate, detailed, and well informed data of the same time period (cf. Maud 1982:29-38).

A few further notes on Thompson ethnography have been drawn from two narrowly focused studies by Teit (1930c) on Thompson tattooing and body painting, have been borrowed from a compendium of Plateau food plant data by Turner (1978), and have been culled from several other sources of lesser importance.

Because of time pressures, the ethnohistorical sources have not been properly surveyed for early data that would expand meaningfully the ethnographic picture of traditional Lower Thompson lifeways. So far as this Division is concerned, however, the most important historical archive has been thoroughly examined and its significant ethnographic remarks placed in their proper context in this present study. This document is the record of Simon Fraser, made when he and his party, exploring, descended and then returned up the Fraser River in the summer of 1808.

Some few fragments of additional ethnohistorical material have also found their way into the following account. These include in particular the observations of Sir George Simpson who passed down the Fraser Canyon by watercraft in 1828 and those of R. C. Mayne, a member of the British Boundary Commission, who ascended the Fraser gorge in 1858. Fraser's report of the terrifying hazards of the Fraser Canyon, confirmed 20 years later by the disbelieving Simpson, led the traders to seek and find alternative routes over the Cascades in this region. One such path proceeded up the Coquihalla and then overland either up to the Kamloops area on the Thompson River or over to the Tulameen and Similkameen and down to the Okanagan country. Another ran up Harrison Lake to Anderson and Seton Lakes and on to the Kamloops sector of the Fraser. Both by-passed the supremely dangerous canyon sector of the Fraser, the core portion of the Lower Thompson territory. It is not surprising, given the hostile environmental accounts of Fraser and later Simpson, that early visitors to the Lower Thompson canyon villages were few and that ethnohistorical documents for the pre-1850 period are largely lacking.

As noted by Mayne (1862:305ff), no Protestant missionary entered the upper Fraser and Thompson River country before 1857. The extent to which the Catholic priests administered to the Thompson in earlier years I do not know, but Mayne, quoting Hudson's Bay Company sources, reports for even the lower Fraser Valley that their efforts were ineffective in changing the Indian life in any material way. These remarks are confirmed by Teit (1930c:403) who notes that the White influence on the Thompson first became strong about 1858. It was, in fact, only the discovery of gold in the 1850s on the "bars" of the Fraser from Hope on upstream by Yale and through the canyon reach to the Lytton district that brought Whites in numbers into the deep gorge country and

the home area of the Lower Thompson. At any rate, I know of no published missionary records or Hudson's Bay reports that provide ethnohistorical data of significance relating to the Lower Division and its homeland during the first half of the 1800s.

Introduction

In this section are summarized (a) the various terms used for the Thompson tribe by other groups and for its Lower and Upper Divisions, (b) the traditional boundaries of the Lower Thompson, (c) the cultural and linguistic affiliations of the tribe, (d) the population data available for the early postcontact years, and (e) the physical characteristics of the tribal members.

Ethnonymy

The Thompson are referred to in the literature under several alternative names. Among these are the following, some of which occur in orthographic variants:

> Couteau or Knife Indians: used by early Hudson's Bay Company personnel (Teit 1900:167).
>
> Cê'qtamux: occasional Lillooet term (Teit 1900:167).
>
> Lükatimü'x: occasional Okanagan term (Teit 1900:167). Variant in Columbia Salish (Teit 1928:92).
>
> Nko'atamux: Shuswap term (Teit 1900:167). Variants in Southern Okanagan (Walters in Spier 1938:78), Sanpoil-Nespelem (Ray 1932:11), Columbia Salish (Teit 1928:92), Okanagan-Sanpoil- Lakes (Teit 1930b:202).
>
> Nicouta-much or Nicouta-meens: recorded by Mayne (1862:296) for the Thompson as a single group, whose territory extended from Spuzzum northward to that of the "At-naks or Shuswap-much" [Shuswap]. A variant—possibly only an orthographic variant—of the preceding term, but spelled so differently that it deserves mention.
>
> NLak·a'pamux: derived from the Thompson name for themselves (Teit 1900:167).
>
> SEmā'mila: used by neighboring Indians of Fraser delta (Teit 1900:167).
>
> Sa'lic: occasional Okanagan term (Teit 1900:167).

Numerous additional variants of some of the above, with citations to the generally old and obscure publications in which they appear, are listed by Hodge (1910:89). Swanton (1952:588-589) obviously merely reproduces Teit's data. The terms in the above inventory are spelled as they appear in one or more of the references cited; no attempt has been made to reduce the disparate phonetic systems to a common base.

As noted below, the Thompson had names designating their two divisions—the Upper and Lower groups—and among the Upper Thompson that distinguished their four major bands—the Lytton, Upper Fraser, Spences Bridge, and Nicola units to employ Teit's terms. The Lower Thompson, a comparatively small, compact, and culturally and linguistically essentially homogeneous group, had no band units paralleling those of the upper people. They had, however, names for each of their 19 villages as itemized by Teit, their residents commonly being referred to as "the people of X village." (Boas 1895:524; Teit 1900:169-171)

Tribal Territory

The Thompson were separated in their own view into two somewhat distinct population clusters, marked by significant cultural and minor dialectic differences: into Upper and Lower Divisions to use Teit's (1900:166, 168, 171) designations.

The Upper group—the Nku'kûmamux, "people above [Lytton]"—occupied a section of the Fraser River, the lower reaches of the Thompson River which flows into the Fraser, and the lower Nicola River, a small tributary of the Thompson (Figure 3-1). To some extent even in early traditional times they hunted for elk and deer and fished all over the middle Nicola drainage as well, making it their home for parts of the year, some wintering there, even though this was strictly country belonging to the Athapascan-speaking Nicola tribe. This Upper Thompson region east of the Cascades was rugged and hilly, but the mountain contours were rounded and their slopes gentle. The surface was intersected by many deep and narrow valleys. Somewhat farther east rolling hills or plateaus prevailed. Lower elevations were covered with sagebrush, greasewood, and other dry climate vegetation; the higher altitudes and mountain tops supported grass and scattered timber, principally

pine. Summers were hot; winters were generally short and only moderately cold with light snowfall. (Teit 1900:168, 175, 178, 1930b:213-214; cf. Mayne 1862:383)

The Lower Thompson—the Utā'mqtamux. "people below [Lytton]"—claimed the deep canyon and rushing river segment of the Fraser Valley where it sliced through the Coast Range south of the country of the Upper group, whence the designation "Canyon Indians" sometimes given them. In addition to the very important Fraser River itself, they used as their principal subsistence grounds the rugged country, with its towering mountains, narrow valleys, deep gorges, and thick timber, on both sides of the Fraser. To the southeast and south they also exploited the food and other resources of the regions of the Coquihalla River and the Upper Skagit. According to Teit's Thompson informants, they likewise hunted in and claimed the Chilliwack Lake and upper Chilliwack River area (Figure 3-1). This Lower Division also considered as theirs and ranged over in their hunting activities an area south of the international border, specifically the northern section of the North Cascades Park Complex and the high country on both sides of the present Ross Lake. (Concerning conflicting aboriginal claims to and subsistence use of these Chilliwack and Upper Skagit areas, see comments below.)

In physical and biological terms, the country of the Lower Thompson was very complex. It extended from the bottom of the Fraser Canyon, with an elevation of only a few hundred feet, upward to rugged mountain peaks with areas of permanent snow and an arctic-alpine environment well above tree-line. East and west it reached from some distance west of the Cascades crest up over the watershed and down their east-facing slopes to just within the comparatively low and dry ponderosa pine country of the upper Similkameen. In fact, six distinct biogeoclimatic zones (including the Ponderosa Pine-Bunchgrass Zone in the east) are found within its borders (see later section discussing the Lower Thompson utilization of their high country), with their widely varying altitudes, precipitation levels, seasonal patterns, native animal and plant assemblages, and other natural resources so essential to a hunting, fishing, gathering way of life. Fraser Canyon, the site of the tribe's splendid salmon fisheries and all winter villages, was a region of abundant rainfall, especially in the southwestern quarter, and of heavy timber, primarily fir and cedar. Game was rather scarce; the taking of salmon was all important. Winters were short and the snowfall was occasionally heavy. (Teit 1900:166, 168, 169)

As the Nicola tribe vanished as a distinct ethnic entity during the early and middle 1800s, the Upper Thompson took over the middle Nicola Valley sector, while the Lower Thompson reached eastward into the middle Tulameen River country (Figure 3-1). Gradually they extended their territory down the Similkameen Valley to a point between Hedley and Keremeos, where they met the Okanagan expanding westward up the Similkameen. At first they hunted over this eastern country—elk were especially abundant there—and then began to maintain winter villages in the area. (Teit 1900:166, 168, 169, 1930b:204, 213, 214, 218, 257; see also Swanton 1952:430)

Since the concern of this report is with the groups that made use of the Park region, close attention is given in the following paragraphs only to the traditional territorial boundaries of the Lower Thompson.

The boundaries of the aboriginal territory of the Thompson are not well described by Teit in his text. This is particularly true for the Lower Thompson and especially so for the small segment of their homeland that stretched into the mountainous terrain south of the Canadian line. We are told only that the hunting grounds of the Lower Thompson extended "southward to the head waters of Nooksack and Skagit Rivers" (Teit 1900:168). On the other hand Teit's (1900:166) tribal location map marks off the southern territorial limits of the Lower group with sufficient precision to allow them to be followed on contemporary maps.

According to this map (Figure 3-1), based it must be assumed on informant data but surely somewhat generalized, the home country of the Lower Division followed the Cascades crest from the present international line, describing an arc to the southwest around the headwaters of Lightning Creek. It crossed the upper Skagit River—today's Ross Lake—just above the mouth of Big Beaver Creek and headed westward over the mountains to the uppermost reaches of Baker River and Mount Shuksan. Thence it curved to the northwest to the Mount Baker region, crossed the North Fork of the Nooksack River in the Glacier area, and finally bent northeastward to arrive at the Canadian boundary southeast of Sumas Lake, now drained.

Evidently this region within the present State of Washington was regarded by the Lower Thompson as aboriginally theirs, for Teit (1900:175, see also 178) writes:

> So far as current tradition tells, the tribal boundaries have always been the same as they are at the present day . . . [i.e., in the 1890s, except for the Nicola and Similkameen River sectors taken over in the 1800s from the Nicola tribe].

Reference to the preceding Skagit and Chilliwack chapters will demonstrate that in the upper Skagit and upper Chilliwack country within the Park region, the ethnographic literature records conflicting territorial claims. The upper Skagit tribe considered theirs, according to Collins, the Skagit River to near its sources, though her informants conceded that the Thompson used the northern portion of this area in their food quest. Specifically, Collins (1974a:5) writes: "[On the north the Upper Skagit tribal country reached] the territory of the Thompson Indians who hunted along the Skagit headwaters in Canada. One northern headwater of the Skagit River comes near their territories."

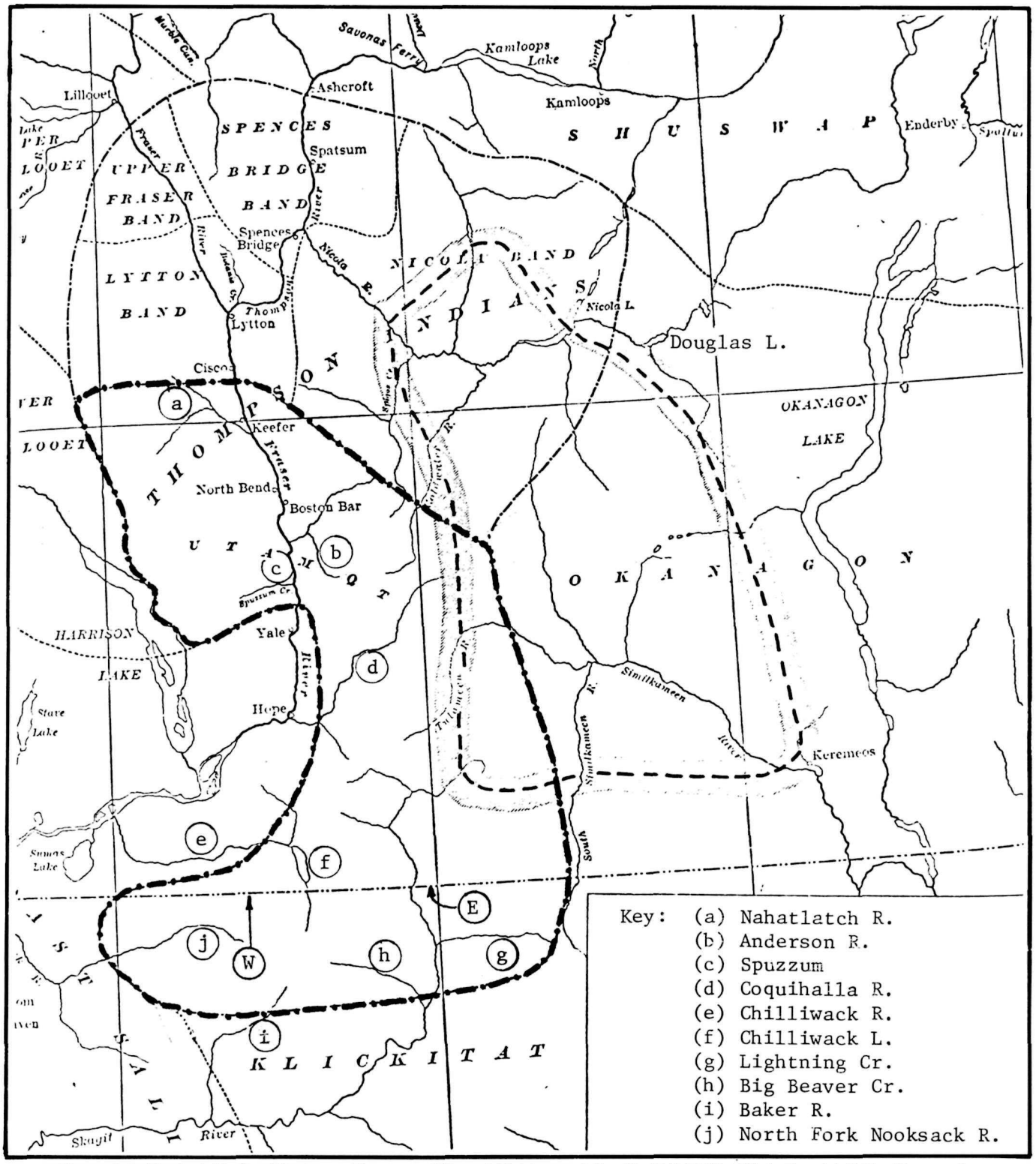


Figure 3-1. Territorial limits of the Lower Thompson (Utamqt) Division as defined by Teit (1900:166). Letters (a)-(j) identify a number of additional geographic features.

The Lower Thompson boundary is emphasized by a heavy dot-dash line. The approximate territorial limits of the Athapascan Nicola, which disappeared as an ethnic entity in early historic times, is strengthened by a heavy dash line.

Arrows have been added at the international border to mark the approximate eastern (E) and western (W) limits of the North Cascades National Park Complex.

Teit's "Klickitat" term for the group adjacent to the Thompson on the south was an early vernacular designation for some or all of the peoples on the eastern face of the Cascades from the Thompson south to the Dalles-Vancouver region. On this map it refers to the Upper Skagit.

The Chilliwack tribe, for its part, certainly had solid claim to Chilliwack Lake and to the Chilliwack River both feeding and emptying the lake. It may be seriously questioned whether in traditional times the Lower Thompson often—perhaps ever—ventured down into these lower elevations as Teit indicates.

One concludes that the Skagit region from some, presumably rather short, distance above the present international boundary downstream to the southern end of today's Ross Lake was a contested region, at least in the late protohistoric and traditional postcontact period. It was ranged over by Lower Thompson, Upper Skagit, and to some degree Chilliwack hunting and gathering parties. The northern valley and adjacent mountains were visited more by the Upper Thompson; the western mountains lying between the Skagit and Chilliwack Rivers and particularly their western flanks, primarily by the Chilliwack; and the more southern sector of this region in the lower Ross Lake area, mainly by the Upper Skagit.

Cultural and Linguistic Affiliation

It has been noted that according to Ray (1936:108; 1939:147) the Thompson were culturally northward and eastward looking, most resembling the Lillooet, Shuswap, and Northern Okanagan and thus being perceptibly *different in their lifeways from the nearby Southern Okanagan and other groups south of the international* boundary. Teit (1900:167) made essentially this same point much earlier in an even more refined but more impressionistic manner in observing that the Thompson were culturally most akin to the Shuswap to their northeast. Both, however, were speaking most particularly of the Upper Thompson. The Lower Division, in contrast, was in many respects culturally oriented toward the lower Fraser and nearby coastal tribes, a leaning attested to by much of the data in the ethnographic section that follows.

The speech of the Thompson comprised a distinct language, most closely related but still unintelligible to that of the Shuswap to the north and to that of the Lillooet to the west (Figure 3-1). These three languages of interior British Columbia made up the Northern Group within the Interior Salishan Division; the Southern Group included the four Salishan languages—Columbian, Okanagan, Kalispel, and Coeur d'Alene—east of the Cascades and south of the Canadian border. Thompson speech was substantially more distantly akin to the Salishan languages of the British Columbia, Washington, and Oregon coast. (Thompson 1979:692-695)

The speech of the Upper and Lower Thompson differed only at the dialect level: i.e., the two divisions were able to understand one another (Boas 1895:524; Teit 1900:171).

Demography

No serious approximations of the size of the aboriginal population of the Lower Thompson appear, so far as I am aware, in the ethnographic literature. An attempt in this direction for the Thompson tribe as a whole and a few general comments concerning postcontact population reductions are, however, worth introducing into the record.

About 1835 Hudson's Bay personnel undertook a census of various Indian groups of British Columbia. These published counts, as Duff (1964:38) observes, are in general "obviously and grossly inaccurate," and so fail to provide an acceptable starting point toward late protohistoric and early postcontact demographic approximations. Duff's own attempt to begin with the first accurate censuses of the 1880s and work backward, taking into consideration epidemics, wars, and so on, yields some figures, but he collapses all these for the Interior Salishan peoples into one group from which it is impossible to extract the Thompson as a specific component of the total. (Duff 1964:39)

Sometime around 1850 I gather, A. C. Anderson, a chief factor in the Hudson's Bay Company who had "travelled a great deal in . . . [the interior, Plateau] country," estimated the Thompson and Shuswap tribes together, groups "mustering annually on the Fraser," at 6,000 or 8,000 persons (Mayne 1862:43, 297). There is no way to divide this demographic lump figure between the two tribes, much less between the Upper and Lower Divisions of the Thompson. This may be one of the Company census figures to which Duff alludes, but, if so, whether it is one of the better or one of the more imperfect "counts" in Duff's judgment is uncertain. In any event it, like other similar lumping demographic estimates of the mid-1800s, furnishes no useful information regarding the Lower Thompson population size.

The only early population estimate for the Lower Thompson provided in the historical accounts of which I am aware is the rough approximation of Simpson (1947:34-38). In his brief account of his two-day water journey down the Fraser Canyon in mid-October of 1828, he writes that "the Natives . . . were exceedingly numerous" and that "the whole of this [canyon] population . . . [numbered] several thousand souls." Impressionistic though this figure is, it is still not without meaning, for Simpson had just come down the upper Fraser River to Alexandria, gone by horse from there across to Kamloops, and then descended the lower Thompson River through the Upper Thompson country. In the lower Thompson River area he had observed that the population "is numerous, forming themselves into Camps of 10 to 12 Families at the different [salmon] Rapids" and that

"the Natives . . . become more numerous as we descend" the Thompson to its mouth. His Lower Thompson demographic note, as reported above, was written against this background.

On the subject of population reduction among the Thompson in the 1800s through diseases of epidemic proportions a few fragments of ethnographic and ethnohistorical information have been uncovered.

In his 1908-1909 manuscript, Mooney (1928:2, 27) gives some attention to the population reductions among the native groups of interior British Columbia, but his data seem confusing. On the one hand, he reports that the inland tribes of the province suffered much less from the early epidemics than the coastal groups. On the other hand, he observes that the great 1781-1782 smallpox epidemic was very destructive throughout British Columbia and that the tribes of the region were "greatly reduced by repeated visitations of smallpox and other epidemics, of which the most destructive was the smallpox epidemic which swept the Fraser River country and northward along the coast in 1802" (Mooney 1928:27). He does not state that this 1802 scourge moved up the Fraser River as far as the Thompson, but he appears to imply as much. If this is his meaning, the interior Fraser groups must have been hit badly by these pestilences, though still conceivably not as severely as the coastal peoples. And further, if this is his meaning, then Teit's data holding that the real depopulation began in the 1850s (see later paragraph) requires modification. In any event, Mooney's (1928:29) estimate for the Thompson population (Upper and Lower Divisions together) in 1780 is 5,000 persons.

In light of Mooney's largely reconstructive data, a journal entry by Fraser (1960:94) is of more than casual interest. On the evening of June 24, 1808, he encamped in a Lower Thompson village within Fraser Canyon and observed that smallpox "was in the [Indian] camp, and several of the Natives were marked with it." This seems to clinch the proposition that smallpox climbed the Fraser River at least as far as the Lower Thompson by the early 1800s, for it is improbable that all of these "several" Indians would have been visitors from downriver, where the testimony is conclusive as to the earlier arrival of the disease. Negative evidence is always suspect but it is of moderate interest that Fraser makes no mention of the ailment in his contacts with Indian groups farther up the Fraser either when descending or later when ascending the river.

Teit's (1900:175) ethnographic information is in agreement concerning the frightful effects of disease on the Thompson people in the 1800s, but indicates that the initial appearance of epidemics differed notably between the Lower and Upper Divisions. Specifically, he writes that his native Thompson informants and Whites already long residents in the area in the 1890s both affirmed that the Thompson in the late 1800s were "greatly reduced in numbers." The existence in the 1890s of numerous ruins of underground dwellings is not in themselves acceptable evidence for depopulation: single families often constructed several such houses and, after the first smallpox epidemic, many survivors moved from small villages to larger communities and constricted new dwellings there. Nevertheless:

> The old people say [for the Upper Thompson] that forty or fifty years ago [i.e., 1850s], when travelling along Thompson River, the smoke of Indian camp-fires was always in view. This will be better understood when it is noted that the course of Thompson River is very tortuous, and that in many places one can see but a very short distance up or down the river. The old Indians compare the number of people formerly living in the vicinity of Lytton to "ants about an ant-hill." Although they cannot state the number of inhabitants forty years ago, there are still old men living who can give approximately the number of summer lodges or winter houses along Thompson River at that time, showing clearly the great decrease which has taken place. (Teit 1900:175)

With reference to the Lower Thompson specifically:

> In 1858 when white miners first arrived in the country, the Indian population between Spuzzum and Lytton was estimated at not less than two thousand, while at present it is probably not over seven hundred. If that be correct, and assuming that the number in the upper part of the tribe was in about the same proportion to those in the lower as now [c. 1897], the population of the entire tribe would have numbered [in the 1850s] at least five thousand. (Teit 1900:175)

This estimate should be seen in the context of the fact that, according to Teit (1900:175), about 1856 the tribe had been depopulated by a devastating famine that struck nearly the entire interior of British Columbia. Still, in Teit's judgment, the significant decrease in the Upper Thompson population occurred only after 1858 or 1859 when the Whites first arrived in numbers. Or, as Teit (1930b:212-213) explains the situation more precisely in a later publication: "It appears that the . . . Thompson escaped all the epidemics until 1857 and 1862."

The situation, again from Teit's evidence, was apparently rather different among the Lower Thompson. While smallpox was said by his informants to have struck the Upper Thompson only once in their memory, it reached the Lower Thompson three or four times, first near the beginning of the 1800s. This disease was the most important cause of their depopulation during the nineteenth century. The 1863 epidemic, for example,

must have carried off between one-third and one-fourth of the population, Teit's Lower Division informants asserted. Many people fled to the mountains for safety and dropped dead on the trail; others attempted to survive by retiring to their sweathouses, only to die within their walls. (Teit 1900:176) These data regarding the appearance of smallpox among the Lower Thompson very early in the nineteenth century, before it reached the Upper bands, is reassuringly consistent with Fraser's comments and the implications of his narrative for more upriver areas as noted above.

On its face, the extraordinary difference in the epidemic history of the Upper and Lower Thompson as reported by Teit seems improbable. White trade goods were observed by Fraser in 1808 among both the Upper and the Lower groups. Items of trade of coastal origin reached both Divisions through intermediary tribes. And the Upper and Lower villages were in constant contact, although the relationship was not as close as between many friendly neighboring tribes elsewhere owing to the difficulties of moving about within the Fraser Canyon. If the Lower Division smallpox situation is properly described—at least Fraser's data seem straightforward enough—it would be remarkable if the Upper people escaped the disease until the 1850s.

Physical Characteristics

In the early and middle 1890s Boas (1895:524-551) collected a series of anthropometric data among the Indian groups of the northern Pacific coastal area and the adjacent interior, including measurements on members of the two Thompson Divisions who appeared to have minimal White admixture. In his analysis of these Thompson data, the figures for the Lower Thompson were kept separate from those of the Upper bands. Averages were computed for the various physical features measured, sensibly regarded by Boas not as defining a "typical" person but merely as approximations useful in intergroup comparisons. As he observes, they turned out to be surprising for their geographical regularity: e.g., from the exceedingly short Harrison Lake people the stature increased tribe by tribe in all directions, irrespective of subsistence base and substantial variations in cultural configuration, suggesting a very stable population over a large region.

A detailed comparison of the Lower Thompson data with the comparable figures for other groups would be out of place in this report. But the measurements for this Division and their relationship with those for the Upper Thompson may be summarized. The average stature of the Lower males of Spuzzum village was 160.5 cm (63.2 in) and of those of the villages farther upstream was 161.0 cm (63.4 in). The stature figure for the Upper Thompson band on the Fraser and lower Thompson River in the Lytton region was 162.7 cm (64.1 in) and for the band still farther up the Thompson was 165.7 cm (65.2 in). The comparable stature averages for females in these four groups was somewhat lower in each instance as would be anticipated. (Boas 1895:524, 530, 531)

Similar average figures are recorded by Boas (1895:533-538) for both men and women for head length and breadth, facial height and breadth, and nasal height and breadth. "Indexes" are computed for head, face, and nose, revealing the proportion of the smaller measurement in each pair to the larger measurement. These are technical details which can be best summarized descriptively.

The Thompson—Lower and Upper Divisions together—proved to be generally intermediate in these measurements and indices between an Interior Salish—and Sahaptian—type (represented by the Flathead, Okanagan, and Shuswap over the interior of northwestern Montana, northern Idaho, interior Washington, and southern interior British Columbia) and the Harrison Lake type (to the west). From this fact, Boas (1895:544) saw the Thompson as essentially a mixture of these two types, the conventional way of interpreting anthropometric distributional data of this sort in Boas' time.

More descriptively, the Thompson were considerably darker in skin color than the Indians of the neighboring coast, their heads were narrower (though still broad), their faces were lower and narrower than among their neighbors, and their noses were broader. The most interesting point, however, to emerge from their field data is that the Upper and Lower Thompson were physically notably different from one another in spite of the similarity of much of their fundamental culture, their essential linguistic unity, and the view of the two divisions themselves that they comprised a single tribal entity. The Lower people resembled more the Harrison Lake type; the Upper folk looked more like the Shuswap and Okanagan. But even more intriguing from Boas anthropomorphic records is the fact that the Upper Thompson band of the lower Thompson Valley presented pecularities of their own, which may represent a retention of their archaic physical traits or "may be due to admixture of Tinneh blood" (Boas 1895:549). These "Tinneh" were the Athapascan groups, presumably in this instance the Nicola of the Nicola and Similkameen Valleys and perhaps to some extent the Chilcotin and Carrier to the north of the Lillooet and Shuswap.

While obviously not biological characteristics in the above sense, it is of some interest to note Teit's (1900:180-181) assessment of the "mental traits," as he terms them, of the Lower Thompson. In brief, at least in the 1890s the members of this group were "quieter and steadier than the people of the upper division, but at the same time they seem[ed] to be slower and less energetic. They . . . [were] better fishermen and more expert in handling canoes, while the Upper Thompson . . . [were] better horsemen."

The behavioral differences noted by Teit appear consistent with the different cultural bases of the two

divisions—largely fishing in the first instance, and hunting and more roving in the second—and with the kinds of personality emphasis that might be logically encouraged by these different lifeways.

Subsistence

The staples of the Lower Thompson were salmon—the principal food—with deer, roots, and berries as important but supplementary foods (cf. Simpson 1947:33, 38). According to Teit (1900:230), undoubtedly speaking primarily of the Upper Thompson, many people lived in the mountains much of the year, moving about seasonally from one deer-feeding, root, or berry ground to another. The men trapped and hunted while the women gathered and prepared the plant foods. Only when cold weather arrived did they return to their winter dwellings. This, however, was obviously not the pattern for many—possibly most—Lower Thompson families with their fine salmon fisheries in the Fraser canyon. Nevertheless, it would be most surprising if some of these families, either by preference or because they had no ready access to salmon sites, failed to follow this seasonal routine. And still others, though fishing during the principal runs, must have gone to the hills outside the canyon for game and vegetable foods at other times, as the lists of foods obtained by the group compiled in the paragraphs that follow demonstrate. It must have been just such parties of Lower Thompson that sought elk and deer in the Tulameen region and food resources down in the Skagit River country of the North Cascades Park.

In his journal of June, 1808, Simon Fraser makes a point of considerable comparative interest. As soon as he, on his voyage of exploration down the Fraser River, entered the country of the Lower Thompson (his "Nailgemugh") he observed that this group was "better supplied with the necessaries of life than any of those we have hitherto seen" (Fraser 1960:94), comparing them with the Lillooet and Upper Thompson people farther upstream. These "necessaries" surely including food, it is worth noting that at various villages within the canyon he and his party received edibles, generally "in abundance," to satisfy their subsistence needs. Mentioned specifically on one or more occasions are fresh salmon (boiled or roasted), dried fish, green and dried berries, wild onions, hazel nuts and other nuts of excellent quality (Fraser 1960:94, 97, 116, 117, 118).

Fishing

Salmon of five varieties were the principal food secured by the Lower Thompson. Trout and "fish of many [other] kinds" were taken especially in spring and autumn. Owing, however, to the special physical conditions of their canyon stretch of the Fraser, the Lower Thompson caught plenty of salmon even in years when the fish were comparatively scarce. Consequently, they cured only the finest fish: the chinook, from which much oil was obtained, was considered the best. (Teit 1900:230-231, 251)

Agreeing with Teit on the primary importance of chinook salmon and the lesser importance of trout among the Lower Thompson, Ray (1942:104) provides further data on the other varieties of fish to which Teit alludes. In addition to trout, of some significance in the diet were salmon trout, sturgeon, suckers, and eels. On the other hand, steelhead trout, though available, were unimportant, and dog salmon and whitefish were unknown in Lower Division country—at least within the canyon.

Women participated in all fishing activities, except the actual spearing process (Teit 1900:115).

Salmon and other large fish were taken with bag-nets (Figure 3-2). The Indian-hemp net was attached to small horn rings that slid along a fir or cedar hoop. This hoop was fixed to a long wooden handle. A string ran from the net to the fisherman's hand. When a fish entered the net, the man released the string and the weight of the fish closed the mouth of the net by sliding it along the wooden hoop. The fish, clubbed or with its neck broken, was placed in a pit previously made nearby by cleaning away the boulders to leave a sandy or gravel surface encircled by the stones. (Ray 1942:109; Teit 1900:249-250)

Long drag nets, with wooden floats and stone sinkers, were set in lakes and river pools overnight and hauled into canoes in the morning (Teit 1900:250). Presumably it is to these nets that Ray (1942:108-109) refers in reporting that Lower Thompson seines were netted of Indian hemp cordage to a length of as much as 60 feet. These were attached to end sticks, and were, as Teit states, sometimes provided with wooden floats and bottom weights and were emptied into canoes.

Salmon were caught in dip nets from platforms built out over the river where the fish, attempting to ascend the fast water, came close to the bank. Stakes were driven into the stream about 3 yards upstream from the platform, if the water was clear, to make it rough and foamy and so to conceal the net. The net was drawn downstream at intervals. This fishing method was especially suited to the Lower Thompson territory in the Fraser canyon, where the very rapid water compelled the fish to hug the banks, the water was typically muddy, many low rocks projected into the river making natural fine dip-net sites, and the fish, only recently from the sea, were superior. Because of the many rocks in their canyon from which to fish, the Lower Thompson fashioned these platforms less frequently than did the Upper Thompson. On the other hand, their bag-nets often had to have very long handles. (Hill-Tout 1900:509-510; Teit 1900:250-251)

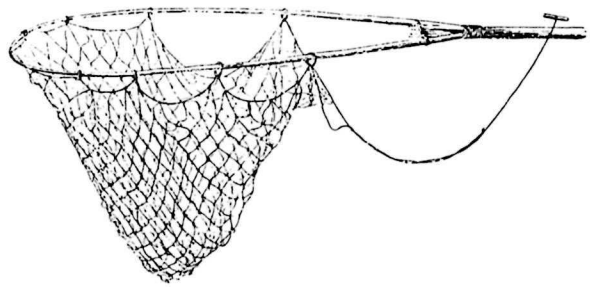


Figure 3-2. Thompson bag-net (Teit 1900:250 Figure 230).

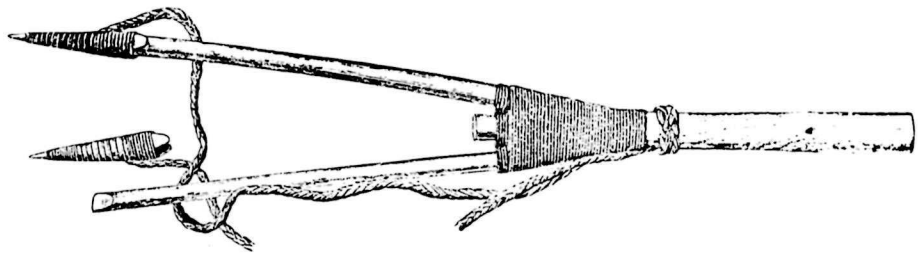


Figure 3-3. Thompson fish spear with detachable points (Teit 1900:251 Figure 231).

Figure 3-4. Thompson three-pronged fish spear (Teit 1900:252 Figure 232).

The dip nets of the above scoop type, Ray (1942:109-110) explains, were suspended from a circular hoop attached to an A-frame, single-pole handle. The nets themselves were united to the hoop with horn or occasionally maple slip-rings, thus constructed like the bag nets described by Teit in an earlier paragraph. They were used from platforms both for salmon and for smaller fish.

On June 25, 1808, Simon Fraser (1960:95), descending the Fraser River on his journey of exploration, saw a Lower Thompson man "on the opposite side [of the river] fishing Salmon with a dipping net." Details concerning its construction and use are not furnished.

Fish, when running, were also taken by the Thompson from the bank with a spear made with a two-pronged point, each bearing a detachable tip with a barb directed inward (Figure 3-3). Each tip was attached to the handle by a line so it could come loose from the handle when the fish was struck. A spear with a single barbed point, sometimes detachable, was also used particularly for large trout from rocks on the river bank or from canoes at night with the aid of torchlight. These canoes were operated by a four-man team, each man wearing eyeshades: one in the stern to keep the craft drifting broadside down the stream; one in the center holding the torch; and one on each side of the torchman to attend to the spearing. This method was seldom used by the Lower Thompson because of the muddy condition of the river in their country. (Hill-Tout 1900:510; Ray 1942:112-113; Teit 1900:251-252)

A three-pronged spear, with two nondetachable wooden side points each armed with inside mountain-goat horn barbs, was also a Lower Thompson fishing device though it was not of great importance (Figure 3-4). It was used both for salmon and for smaller fish, largely in night torch fishing from river banks, from canoes, and in winter out on the ice. (Ray 1942:113)

Fish were speared or taken with hook and line through holes in the ice, though not often by the Lower Thompson (Ray 1942:110; Teit 1900:252-253). Hook and line angling was also practiced to some extent in warmer seasons.

Small sturgeon were taken by the Lower Thompson in the Fraser River with hook and line, both from the banks and from canoes. The hook of bone, large and heavy, was attached to a wooden shank and it, in turn, to a heavy bark line as much as 100 yards long. A stone sinker was fastened to the line about five feet above the hook. Salmon tail was the usual bait. (Teit 1900:253)

Among the Lower Thompson, hook and line fishing was practiced by boys for trout in a few creeks and by men for trout in mountain lakes when camped nearby hunting and digging roots. Salmon trout were taken with stout hooks, also baited with salmon tails, and Indian hemp lines with a stone sinker tied a few feet above the hook. The line was coiled and thrown out into the stream as far as possible and then hauled in to attract the fish. (Teit 1900:253-254)

Ray (1942:110-112) also reports the Lower Thompson use of small hooks, fashioned of two pieces of bone with a wooden shank and a sinker, for small fish and eels. Double-pointed, bone gorgets were likewise used for these minor fish. Worms, ant larvae, grasshoppers, fish eggs, and even squirrel meat served as bait.

Weirs of stakes lashed together were built by the Thompson in shallow streams to catch salmon. These stopped the fish in large numbers, allowing them to be speared. Traps were fashioned like a stick box or were a woven willow basket in cylindrical shape. The Lower Thompson, Teit (1900:254) remarks, rarely made use of either weirs or traps; Ray (1942:104-108) goes further: according to his data this downstream group made no use whatever of weirs, traps, or fish dams of any kind. The slight difference in these two statements is suggestive. It is conceivable that Teit was aware of the occasional employment of these devices by subsistence task parties in the higher elevations out of the canyon, concerning which Ray's informant appears to have been largely silent. Through the 1800s the Lower Thompson became increasingly more sedentary, a life pattern shift substantially less true of the Upper Thompson (Teit 1930b:216). Inasmuch as Teit secured his ethnographic data in the 1890s while Ray gathered his in the 1930s, it is reasonable to assume that the latter's informant was less likely to remember those activities of his Division that occurred outside the Fraser Canyon boundary when the group as a whole were following a freer and more mobile life style.

Salmon, among the Thompson, were slit along the belly with a knife with a curved stone blade and short handle, and the entrails and blood were removed. The backbone was separated but left attached to the flesh. When the flesh had been deeply scored, the fish was stretched and kept open with thin cross-sticks. It was then hung over a long pole to dry, backbone on one side and flesh on the other. About a hundred fish could be suspended from a single pole. (Teit 1900:234)

The Lower Thompson salmon preparation technique was slightly different as described by Ray and Hill-Tout—or perhaps these differences were not group pattern distinctions but nothing more than variations at the level of individual women or villages, or in ways of handling fish at different seasons or under different weather conditions or according to the food to be prepared from the fish, or some other similar variable. At any rate, Ray (1942:135) reports that the Lower Thompson split the fish *dorsally*. Hill-Tout (1900:510) states that the women stood by to receive freshly taken salmon and at once killed them with a blow to the head, cut them open along the *belly* (as Teit reported above) with a knife of meat-chopper shape, wrenched off the head, *removed the backbone* (as Teit states was not the case), spread the two halves, and hung the fish to dry in an open, pole shed nearby on the river bank.

Once dry and hard, the salmon were removed from the drying pole, piled in heaps, and carried by the Lower Thompson for storage to the elevated wooden caches where they remained all winter. In the spring they were removed and placed in pit caches. The following spring they were taken out and aired, only perhaps to be returned to the caches for another year. In this way a reserve supply of salmon was kept for two or three years by most families for emergencies. Salmon heads were also dried and stored. Wrapped in dry grass or bark, salmon roe was buried until nearly rotten; roasted or boiled when later removed, the roe tasted rather like cheese. Salmon eggs were also dried by the Lower Thompson and buried in bark-lined pits. Salmon and large trout tails were roasted before a fire until crisp. (Ray 1942:135; Teit 1900:234-235, 236)

To make salmon oil, a number of fat salmon were placed in a pit, about 3 or 4 feet square and 2 feet deep, lined with stone slabs with cracks plastered with mud. Water was added and heated stones thrown in. Later the boiling mass was broken up and stirred with a stick. It was kept simmering until all the oil had been extracted. As the mixture cooled, the oil floated to the surface and was skimmed off and put in dried salmon-skin bags tied at each end. The boiled salmon flesh that remained was removed, squeezed, and put in baskets to be eaten at once or dried into cakes for later use. (Teit 1900:235)

The process of oil extraction is also described by Hill-Tout (1900:510-511), obviously from having witnessed the process. Although very similar in essentials to Teit's account, it differs in certain details and adds enough new information to warrant summary. Forty or fifty fish, he writes, were placed in a large trough hollowed out from a tree trunk with fire and adz. When rotten, the mass was covered with water; heated stones were put in; and the mixture was stirred to a hot pulp. The stones were removed and a small amount of cold water was added to cause the reddish oil to rise to the surface. This oil was skimmed off into birch-bark vessels with a spoon of wood or bighorn sheep horn. After standing overnight, the oil was reboiled and skimmed until quite clear. It was stored in bags made by peeling the skin from a whole salmon "as one draws off a tight-fitting glove," cleaning it with dry punk-wood, and rubbing it with deer or bighorn sheep suet. Turned right-side out again, the bags were filled with the oil and their mouths were fastened.

The salmon flesh remaining in the trough, to continue Hill-Tout's description, was kneeded into balls and sun-dried. Later it was squeezed, washed, rekneeded, and again dried. When quite dry and odorless, it was broken up and rubbed fine between the hands until like flour. Some of this flour was placed in the bottom of a birch-bark basket and on it was laid the skin sacks of oil. When the basket was filled with these bags, more salmon flour was spread over the top and down the sides, burying the bags. This food was stored for winter eating. (Hill-Tout 1900:511)

A kind of "butter" was also made as a great delicacy by boiling salmon oil with deer or, better, bighorn-sheep kidney suet, thoroughly mixing the substance, and allowing it to cool, when it assumed the consistency of butter. This "butter" was eaten with compressed cakes of serviceberries or other berries. (Hill-Tout 1900:511)

The Lower Thompson celebrated the appearance of the first few chinook salmon with a special ritual. It was led by the village chief; the ceremonial position of "salmon chief" so important in other tribes did not exist among these Fraser Canyon people. The fish were prepared by the women and were eaten by men, women, and children, which was generally not the case elsewhere. It was considered important for the future salmon run for all of the fish and fish soup to be consumed on this occasion. (Ray 1942:115-116)

A rather more extended description of the first salmon ceremony of the Upper Thompson is given by Hill-Tout (1900:504), though not without, it appears, some considerable overformalization of the social and political structure, at least as it existed in traditional and early postcontact times. To summarize his account: When the salmon began to run, the "divisional chiefs" were informed. Messengers were sent to neighboring villages, calling on all people to attend the first salmon rite on an appointed day. When the day arrived and the people had assembled, the "head chief," attended by "lesser ones and the elders," initiated the ceremony with a long prayer. On its conclusion, everyone in attendance was given a bit of salmon specially cooked for this rite. When these pieces had been eaten ceremonially, all were permitted to eat as much as they wished. Singing and dancing in a circle followed, with hands held extended palms upward as in supplication. This same dance was performed again at noon and at sunset. This account tells us a bit about the ceremony, but more importantly it illustrates the cautions to be exercised in the use of much of Hill-Tout's data relating to the less material aspects of traditional Thompson culture.

Shellfish were considerable inedible: they were in fact abhorred (Teit 1900:348).

There is considerable ethnographic interest at present in the extent to which native hunting-gathering groups took positive action to maintain and even increase the food and other essential resources of their natural environment. In this context it is notable that the Thompson in traditional days followed the practice of taking live trout from lakes and streams and transplanting them into lakes where there were none. Sometimes these fish propagated and became plentiful. (Teit 1900:348)

Hunting

The ethnographic data on hunting are rich and can only be summarized in this section.

Although the Lower Thompson had an abundance of fish, they "spent much time in hunting," considerably less, however, than the Upper Thompson. "They even hunted," Teit (1900:239) writes of high relevance to this present study, "on the mountains on the western slope of the Coast Range. Hunting-parties who visited the most southern part of their hunting-grounds were sometimes absent for seven months, returning only when the snow began to melt in the mountains." Apparently these southernmost grounds were those in the Skagit country north of the Canadian line and even south in the Ross Lake region, though Teit fails to locate them with this precision. They must, however, have fallen within the Lower Thompson tribal boundaries as these are demarcated on his territorial map (Figure 3-1). This is nicely confirmed by Teit's (1930b:257) subsequent data that the Lower Thompson hunted in the Cascades back of Hope and Chilliwack (i.e., in the Skagit country north of the Canadian border) where they met friendly Nicola hunting groups. And that they hunted and raided even "a long way [farther] south along the Cascades" (i.e., south of the international boundary in the Ross Lake Skagit region).

Skilled hunters among the Lower Thompson (no less than in the Upper Thompson bands) were esteemed. In fact, there were even men who specialized in hunting in spite of the great importance of salmon fishing to the group. (Ray 1942:123)

Before going out in search of game, a Lower Thompson hunter was expected to remain continent for a time. Sometimes he sweated in his sweat house, though this was not regarded as very important. Before actually leaving the village or camp, however, he customarily bathed in a somewhat ritual fashion. Apparently his wife was under no ritual behavioral restrictions. Nor were there prescriptions on how a deer was to be butchered, handled, cooked, eaten, and the bones disposed of, as was the case among many not distant tribes. In a group hunt, the meat was divided equally among the hunters. (Ray 1942:123, 127-129)

Deer, elk, bighorn sheep, beaver, porcupine, hare (rabbit), and squirrels were secured in abundance by the Thompson, according to Teit (1900:230), and to a lesser degree lynx and coyote. The principal game of the Lower Thompson was mountain goat, black bear, and marmot. This Lower group also ate rock-rabbit, which the Upper people did not regard as proper food. Ray's (1942:46) roster differs in several details. Deer, he writes, were the most important game of the downstream division; black and grizzly bear and mountain goat were also hunted; bighorn sheep were occasionally secured; elk were of minimal significance. The points of noncorrespondence between the Teit and Ray lists are of particular interest in terms of this present study. Teit's catalog appears to indicate a widespread and significant use of the mountain hunting grounds away from the Fraser Canyon fishing and winter villages. On the other hand, Ray's listing, except for the mountain goat, suggests a primary focus upon hunting in the Fraser Valley and immediately adjacent higher areas. One might sensibly conclude that in the period between Teit's research and the field efforts of Ray, memory of hunting in the tall mountains, including especially those in the upper Skagit sector, had evidently faded significantly.

A number of animals mentioned elsewhere in this study as having been taken by the Thompson generally for various secondary purposes—like clothing or ornamentation—are missing from the above two lists. Among these are the cougar, fox, wolf, wolverine, and ermine. Presumably these essentially unimportant animals were also secured at times by Lower Thompson hunters. At any rate, they were not truly "game" or subsistence animals, those with which the above catalogs are basically concerned.

Birds—particularly geese, ducks, and swans but also some land birds like grouse—were hunted for their flesh. Others were sought for their feathers. The tail feathers of the golden eagle were highly valued, used for decorating headgear, hair, and weapons; those of the chicken-hawk were considered second best as adornment materials. (Ray 1942:117, 120; Teit 1900:367)

Bows and arrows were the principal hunting weapons (Figure 3-5). Among the Lower Thompson bows, narrow and 3 feet or somewhat more in length, were fashioned of hemlock, yew, syringa, serviceberry, or dogwood. In cross-section they were flat on the inside and rounded on the face away from the hunter. Better ones had glued to the face a layer of deer sinew to strengthen and increase the resiliency of the weapon, the glue of salmon skin. The center hand-grip was narrowed and wrapped with bird-cherry bark. The ends were recurved, notched, and sinew-wrapped. The string was of deer back-sinew, sometimes placed along the center line of the bow and sometimes to one side, or, when sinew was unavailable, was of Indian hemp. The entire bow was at times covered with snakeskin. Some bows were not given the sinew backing: e.g., those used in light shooting of birds and small game. The inner face of bows was often incised with designs filled with red paint, or adorned with dyed porcupine quill work, or fitted with red-headed woodpecker scalps at their tips. (Ray 1942:148-149; Teit 1900:239-241)

Arrows, of serviceberry or hawthorn wood or rosewood, were soaked in warm water, straightened with the teeth or over the knee, and polished with scouring rush or a sandstone shaft smoother. They were fitted with hawk, grouse, and sometimes eagle feathers: two or three split feathers attached spirally with deer sinew and pitch or with two whole feathers laid on flat. The Lower Thompson found stone for their arrow points near the headwaters of the Skagit River. Many points in traditional times were reflaked from the large points of earlier and unknown origin which the Lower Thompson found "in great numbers in the valleys." Hunting arrow points, of stone, were leaf-shaped and were fitted to the shaft at right angles to the nock. For small game the end of the

arrow shaft was simply sharpened, and sometimes cut into barbs; some had detachable heads tied to the shaft with string. Bird arrows were blunt-headed. Arrows were often ornamented with simple painted patterns or branded with animal figures. War arrows bore barbed bone points that were detachable and "poisoned" with vegetable material or with rattlesnake venom. (Ray 1942:149-151; Teit 1900:241-243)

Quivers were of tanned deer skin, fringed and painted, or of "uncut hides" of coyote or wolverine, arranged so the tail hung down, or they were woven of sagebrush fibers. Some were fitted with small pouches to hold the fire drill and tinder. (Ray 1942:151-152; Teit 1900: 243-244)

Bows were ordinarily held horizontally in the shooting (Ray 1942:149; Teit 1900:241)

Every Thompson man had the right to hunt wherever he chose within the traditional tribal limits. There was no ownership of particular hunting grounds by band, villages, or families. As a practical matter, each band usually took its game in areas nearest its respective home villages, yet men frequently hunted, without being considered intruders, in sectors that were technically under the control of other villages or bands. (Teit 1900:293)

Most of our hunting information describes methods used in taking deer, the most important game among the Upper Division. Among the techniques employed were the following.

Deer were generally hunted with the bow and arrow, with dogs providing valuable assistance. When dogs were to be used, they were tied up for several days before the hunt, fed sparingly on good food, and sometimes even purged with medicines and sweat bathed. In one of the simplest procedures in which these animals were employed, the hunter left before daybreak—perhaps carrying a few serviceberries to eat if he later felt exhausted—with his dogs on halters. On seeing the tracks of some large buck, he freed his dogs to run the animals down and followed them as rapidly as possible. The dogs generally drove the deer to a stream, where, particularly in autumn, men in canoes were waiting to pursue the animal in the water and, with a stick with an end crook, to catch the antlers and force the head under the surface. When drowned, the deer was pulled ashore, skinned, and butchered. Often the dogs brought the deer to bay at a creek until the hunter arrived to dispatch it. (Hill-Tout 1900:508; Teit 1900:244-245)

During the rutting season and in winter after the deer had come down from the hills, the Upper Thompson—and one may suppose the Lower Thompson also—lay in wait for the animals at night at their regular swimming places. In summer both Upper and Lower Thompson hunters shot them by moonlight at their salt licks or drinking sites, the men having concealed themselves in shallow pits screened with bushes. (Ray 1942:117; Teit 1900:245)

To some degree—though to a lesser extent than among the Upper Thompson—the Lower Division took deer with a rough deer fence. At one time these fences were very numerous, even up in the mountains. Some were for summer use, but most were for taking the animals in the fall and early winter in little valleys or defiles between the mountains and where the deer gathered when descending the mountains to their winter grounds. These fences, seldom over 4 or 4.5 feet high, were constructed of poles, tree limbs, and the like placed close enough together to impede the animal's progress. They were sometimes more than a mile long. Every 100 yards or so, an obvious opening was left. In this was dug a shallow pit, over which sticks were placed to support a bark-string snare attached to a strong spring pole. On the ground nearby a log was laid so as to force the animals, in stepping over it, to place its foot in the noose. With its leg caught, the animal was jerked off the ground. This was a very successful hunting method, but curiously not much used by the Lower Thompson. (Hill-Tout 1900:508; Ray 1942:44; Teit 1900:246-247)

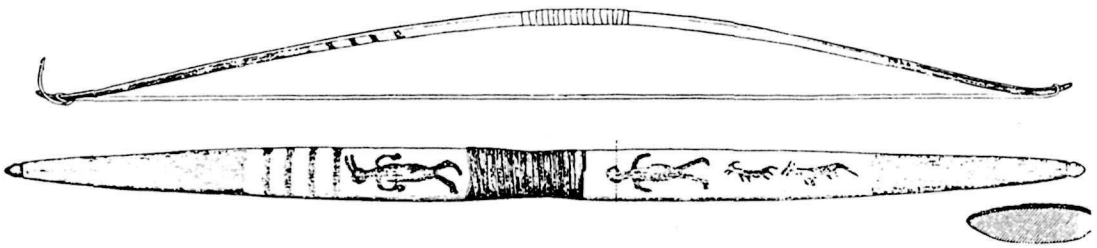
The Lower Thompson also set nooses on deer trails to catch the animal's head or antlers (Teit 1900:247).

Drives for deer were carried out by two or three men or even a much larger group. Walking a hundred or more yards from each other, they forced the animals ahead where they could be shot by concealed hunters. This method was especially successful in winter in gulches where the animals tended to yard. If the number of men was large, the hunt was directed by an especially experienced man who knew the ground well. If men were scarce, women and boys assisted in the drive task. Sometimes a large number of deer were killed. Generally the oldest hunter divided the game, each deer being cut into nine pieces. In a fat buck, the best part of the animal was considered to be "the fleshy and fatty part of the body between the skin and the bones." (Teit 1900:247-248) As Teit intimates, Ray (1942:117) reports that group drives were also organized to some degree in warm weather. These were under the direction of any good hunter (confirming Teit's statement), who assigned individual areas to the several men. The game was driven into water.

Deer were also caught in large mesh, Indian hemp nets, about 7 feet high and up to 200 yards long. These were set in the evening between clumps of bushes to form a corral open at one side on a deer trail. Generally some deer were found in the corral in the morning, unable to find their way out. (Teit 1900:248)

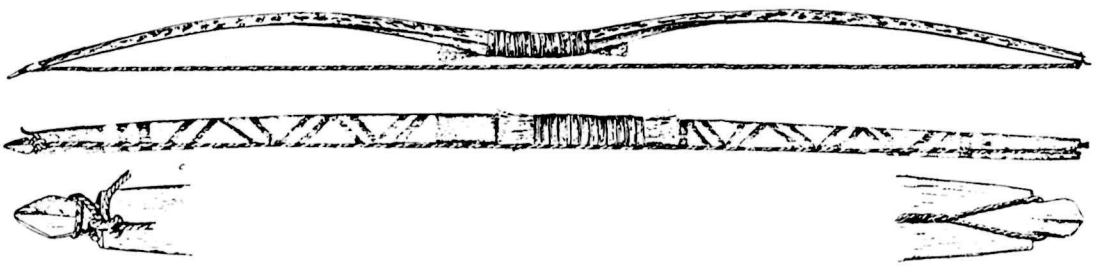
To be successful in taking deer as a lone Thompson hunter required close knowledge of the animals' habits and of the places frequented by them according to the season, and an ability to take advantage of cover, to track, and to shoot well. Sometimes single hunters in the mountains experienced much hardship and exposure.

> Some of them would start out with cold weather in the winter-time, taking with them neither food nor other clothing than that which they wore. They lived entirely on what they shot, and



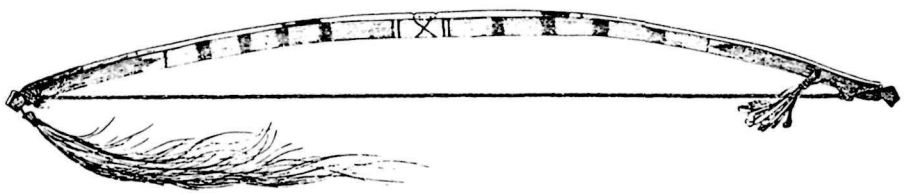
A. Sinew-backed bow: side view, front view, and cross section.

B. Bow wound with bark.



C. Bow covered with snakeskin; side view, front view, and ends.

D. Bow wound with bark: side view and cross section.



E. Bow with end ornaments.

Figure 3-5. Five Thompson bow varieties (Teit 1900:240 Figures 216-220).

> used the raw deerskins for blankets. They made rough kettles of spruce-bark or deer's paunches. A hole was dug in the soft ground near the fire, into which the kettle was placed, with brush underneath. The open end was made small and stiff by means of a stick threaded through it around the edge; and the sides of the open end were sometimes fastened with bark to one or two cross-sticks which lay on the ground across the opening. Hot stones were put in to boil the food. These paunches were also sometimes used as water-pails. (Teit 1900:246)

In deep snow in the mountains deer and elk were run down by Thompson hunters on snowshoes and were shot or clubbed to death. They were also run down by dogs when the snow lay deeply on the ground and the crust was thick. Elk were driven over cliffs by large groups of men. Black bear were generally killed with the bow and arrow, sometimes with the aid of dogs, but they were also taken in deadfall traps. Male black bears could be hunted over a longer season than the females: the latter denned up when the leaves began to fall in autumn, while the males entered their winter quarters much later. Grizzlies were hunted by many younger men because of the great prestige afforded one who had killed such an animal single-handed. According to the Thompson, they were much less fierce in some parts of the country than in others. Tradition tells of a particularly courageous hunter of the mid-1800s who is said to have hunted them by thrusting a double-pointed bone vertically in the animal's open mouth when it charged and then killing it with a stone club while it was desperately attempting to dislodge the bone upon which it had shut its jaws. Mountain goats and bighorn sheep were killed with bow and arrows. Beaver were sometimes taken with the aid of dogs and dispatched with a bone-tipped spear. Coyotes and foxes were dug or smoked out of their dens. Hares, squirrels, and grouse were shot with the bow and arrow or were caught in spring-pole snares of Indian hemp, set over their runs. (Teit 1900:248-249, 373)

With some explicit exceptions, the data of the preceding paragraphs describe hunting practices of the Thompson as a tribe and those of the Upper bands in particular. The extent to which they also apply to the Lower Division is not reported by Teit, though it may be assumed that most of these techniques, if not all, were likewise those of this downstream division on occasion. While the Upper people were plainly more generally hunting-oriented, Lower Thompson parties spent months pursuing game in the higher sectors of their territory and, as already observed, specialist hunters even existed within the division. Fortunately Ray (1942:116-124) provides hunting information for these downstream people specifically. I see no simple way of combining most of these data with those of Teit above without thoroughly muddying the description. The following summarizes this Ray residue material.

For the Lower Thompson Ray (1942:117-123, 140) confirms the running down of animals on snow by men wearing snowshoes, the stalking of them with bow and arrows and occasionally with clubs, the taking of grizzlies by daringly placing a sharpened bone in their mouth, and the use of trained dogs in hunting deer and bear. He also reports certain fresh data. Deer and elk were called with whistles of elderberry wood and cottonwood wood and by blowing upon a leaf placed in the mouth. Hunters are reported to have crawled into a hibernating bear's hole, tied a rope around its neck, and dragged it out. Hibernating ground hogs and perhaps bears likewise were occasionally smoked out of their dens. Beaver were ritually spoken to and called out of their houses. If this strategem failed, their dams were destroyed and the animals were clubbed in their effort to escape, or the hunter crawled into the house to capture the animals. Their musk was taken for perfume and their kidney for medicine. Deer, mountain goats, and birds were all caught in spring-pole snares. For deer the nooses were suspended from tree limbs on trails and were also set at openings in fences. For grouse the Indian hemp snares were placed on their trails, at their "dancing" grounds, on logs, on top of knolls, and in openings in stone or brush fences. Baited deadfalls were constructed for large and small game. Eagles were attracted to a brush hut by fish bait and were taken by hand by the hunter concealed within the hut. Young eagles were also captured in their nest. Birds' eggs were collected by the Lower Thompson and were boiled for food.

Among the Lower Thompson, the hunting leader divided the fat, meat, and skins almost equally among the entire party, only the best hunters being given a little more fat and an extra skin or two. A single hunter who chanced to have especially good fortune returned to his village and invited his friends to help him carry his kill home and share in the meat and hides. Skins and meat of trapped animals belonged exclusively to the trapper. (Teit 1900:264-265)

How meat was prepared for immediate eating is not well described in the ethnographic accounts. Roasting before an open fire and stone-boiling were, however, common methods.

For later consumption the flesh, with fat removed, was cut into thin slices, pierced with holes or slits, and dried by sun and wind on a pole framework, often over a fire. Sometimes it was dried and smoked over the lodge fire or hung up near the roof to receive this treatment. Chunks of fat cut from deer, elk, or bear meat were run through with thin sticks, the ends of which were supported by forked sticks thrust into the ground, and a hot fire was kindled close-by. The drippings were caught in troughs of bark, wood, or stone. This melted fat was stored in a deer paunch. Larger bones were broken up and the marrow was melted and stored in deer or elk bladders. (Teit 1900:234)

The killing of a black or grizzly bear required a certain amount of special ceremonial attention on the part of the Lower Thompson hunter. He sang or talked to his kill, sometimes marched around the animal ceremonially, and wept for it. Certain parts of the body had to be removed at the kill site. The head was eaten with the rest of the meat and the skull was "set up," although how and where are not revealed by Ray's (1942:129) record.

There were among the Lower Thompson a number of meat tabus that applied to all or to special subsets within the social group. For example, no one could eat deer and salmon together. Nor could anyone eat coyotes, wolves, mink, crows, eagles, meadowlarks, reptiles, caterpillars, slugs, grasshoppers, yellowjacket larvae, frogs, and unlaid eggs of the magpie, crow, and certain other birds. Children were forbidden to eat the land otter. Female children were not permitted to eat blood, even if cooked, and the head of deer and mountain goats. Women were not allowed to eat the heart and kidneys of the game. (Ray 1942:130-131)

Plant Collecting

Roots, berries, seeds, shoots, stalks, and other vegetable foods were important in the diet of the Lower Thompson. The data assembled below are drawn primarily from Teit (1900) and Ray (1942) and are cultural in their focus. Additional Thompson food-use information together with a partly now outmoded botanical identification of the taxa in question can be found in Teit's (1930b:237-239) ethnographic study of the Okanagan group. A far more extended and botanically refined inventory of Thompson subsistence taxa and their edible components is assembled in the final section of this present chapter, that considering specifically the Lower Thompson utilization of the mountainous segment of their tribal territory, including the upper Skagit portion of the Park.

Roots

Roots comprised a significant part of the Thompson food supply. They were gathered in early summer and in fall, some in the dry valleys but most only in the high mountains. According to Teit, the principal roots obtained were "Indian potatoes" (spring beauty corms), tiger lily bulbs, wild onions, and the roots of the yellow avalanche lily, chocolate lily, wild sunflower, and cattail. Gathered also were a number of other local roots that are not identified in Teit's monograph of 1900 either by common English terms or taxonomically but only by their native Thompson names. According to Ray, the main food roots of the Lower Thompson were camas and bracken roots. The lack of correspondence between these two short lists of Teit and Ray may result from the fact that the former is speaking of the Thompson as a whole—or probably more especially of the Upper Division—and the latter of only the downriver segment of the tribe. More than 30 additional Thompson food roots are listed by Turner (1978; see below), but none appear to have been individually of great importance. Bitterroot were secured by the Lower people in their barter with the Upper Thompson. (Ray 1942:131; Teit 1900:231-232, 236)

Roots were uncovered by women with a digger consisting of a curving hardwood stick, sometimes charred at the point, fitted with a perforated cross handle of wood or deer antler. As they were loosened from the soil, they were tossed into a small back-basket, which, when full, was emptied into a large basket close-by. Nests of squirrels and mice were also robbed of their roots and seeds. (Ray 1942:145; Teit 1900:231)

The occasional fish stocking of the Thompson has already been commented upon. In a second way in old traditional times the tribe undertook to increase its native food resources: sometimes they set fire to the hillside woods to obtain a greater abundance of roots (Teit 1900:230).

The Thompson methods of pit-cooking roots are described ethnographically. Certain roots were roasted in the earth ovens: the varieties prepared by this method are not specified by Teit, but the roots of the wild sunflower and large, lily-like roots are mentioned in passing. The pit was circular, 2.5 feet deep, and of sufficient diameter to contain the roots to be prepared. Four or five large flat stones were placed on the pit floor, and on these was piled dry fir-wood with "a quantity of small stones" on top. This heap was then lighted and allowed to burn until nothing but embers remained and the small stones had falled to the pit floor. Unburned wood was removed, leaving the ashes and heated stones. These latter were covered with a thin layer of damp earth and this earth, in turn, was overlaid with branches of bushes 6 inches or more in depth. Then followed in succession a layer of broken fir branches, one of dry pine needles, and another of fir branches, nearly filling the pit. On top of this heap the roots were placed. Then came more layers: fir branches, pine needles, and again fir branches. Finally the pile was covered with earth and a large fire was kindled on top to burn for 12 to 24 hours. Wild sunflower roots, difficult to cook, remained in the oven for two days. One of the great advantage of this root-cooking method was that large quantities of roots could be prepared at one time. (Teit 1900:236-237)

In regard to the above, it is worth noting that the roots were dry and that the bush-branches that formed the stratum above the thin damp-earth level are not described as having been fresh and moist, though they may have been. Further, as the following makes evident, no water was introduced into the pile. This cooking process was a dry roasting rather than steam-roasting combination, with presumed implications for the methods of preparing the roots further once they were removed from the oven and for the nutritional properties of the final foods.

The steam-roasting of roots, however, was also a Thompson practice: many roots and the black tree lichen were pit-steamed. Before the branches were placed in the pit, a stick was pushed vertically into the pit bottom to reach above the top of the final pile. The pile itself was constructed as in the preceding description. When the heap was completed, the stick was pulled out, water was poured down the resulting hole, and steam was formed as it struck the hot stones. "When sufficiently steamed, the usual fire was kindled on top." (Teit 1900:237) This method is of interest in its own right because it apparently involved the sequence of two cooking procedures, not a single steam-roasting combination from beginning to end as common elsewhere in the Plateau.

Ray's (1942:137-138) description of this cooking process as practiced by the Lower Thompson is in essential agreement with the above. Still, its minor differences as well as its points of coincidence are not without interest, especially in an archaeological context. According to Ray's informant, the pit was 18 inches deep; the fire was burned with the rocks; the basal layer over the heated stones was of serviceberry leaves or spruce or pine needles or grass; this stratum was covered with earth; the food came next; this was spread with rye grass or occasionally spruce bark or cottonwood leaves; finally came the earth covering and the fire on top of the pile. When camas and lichen were being cooked, water was poured into the pile.

Roots were sometimes flavored by pit-cooking them with other plants: wild onions with leaves and flowers of the hummingbird plant; wild sunflower roots with penstemon flowers; and other roots with flowers and stems of wild strawberries. (Ray 1942:138; Teit 1900:237)

Men were not permitted to participate in the process of pit-cooking roots (Hill-Tout 1900:513), a practice also observed elsewhere among Plateau groups.

Roots, apparently sometimes raw and certainly on other occasions after having been cooked, were threaded on grass or bark string and hung up to dry (Teit 1900:235, 236-237)

Berries

Berries and other fruit were important Lower Thompson foods. Native forms that were eaten include the serviceberry (six different varieties were recognized by the tribe), whortleberry, gooseberry, swamp gooseberry, soapberry, Oregon grape, chokecherry (two varieties), bird cherry, salmon berry, raspberry, black raspberry, strawberry, currant, bearberry, elderberry, high-bush cranberry, hawthorn berry (two varieties), salal-berry, rose hips, and the berries of the dogwood and mountain ash. Other berries that have not been identified botanically were also collected as food by the Lower Thompson. (Ray 1942:133-134; Teit 1900:231, 232-233) Several other berries, all comparatively unimportant as foods, are mentioned by Turner (1978; see below) as traditional Thompson fruit foods.

Serviceberries, huckleberries, and other berries were spread on mats and sun dried. Or, fresh, they were baked into cakes and placed in cedar-root or birch bark baskets and stone-boiled. When the berries had cooled, the cooking stones were removed and the berries were mashed with a stick or kneeded with the hands and then spread on a layer of pine needles, leaves, or dry grass on a pole frame to dry in the sun and wind. The juice in the basket was poured over the drying berries, which were formed into cakes. Some of the extra juice was drunk. (Ray 1942:139; Teit 1900:235-236)

A "first-fruits" ceremony was celebrated in every population grouping before berries could be gathered (Teit 1930b:290-291).

Minor Plant Foods and Masticatories

Stalks of the cow parsnip ("wild rhubarb"), peeled stems of balsamroot ("wild sunflower"), and sprouts of fireweed and bracken and of various plants of the raspberry, blackcap, and thimbleberry group contributed to the Thompson diet. Other shoots and stems that responded in some measure to food requirements are recorded by the ethnobotanist Turner (1978, see use of the Park section below), who also adds information regarding other food substances in the following paragraphs.

Seeds were eaten by the Thompson to some extent. An itemized listing of these plant parts collected and used as food is not provided in the ethnographic accounts. It is stated, however, that chokecherry pits were consumed for their subsistence content, an interesting bit of information since, according to Turner (1978:194), these stones contain toxic cyanide. To a minor degree pine seeds were eaten, as were seeds of the balsamroot, these latter mixed with deer grease and stone-boiled. Balsamroot seeds appear to be reported specifically as a Lower Thompson food. Hazelnuts were certainly a Lower Division food, although these folk secured their supply through barter from the Halkomelem downriver and from their Upper Thompson congeners who collected them in large quantities (Turner 1978:126).

The cambium layer of the black and yellow pine, spruce, balsam-fir, Douglas spruce, and cottonwood was "sought after in spring." To secure this sweet substance from between the bark and wood, the bark was separated from the tree with a piece of horn or wood and this edible layer was scraped off with a sharpened

bone or wooden implement. It is unclear whether the bark inner surface or the tree was scraped. In any event, the material was collected in a basket and generally eaten fresh. Still, that obtained from the yellow pine was not infrequently dried and stored for later consumption, and this may have been the case sometimes for cambium derived from other tree taxa.

A sugary crystalline substance that accumulated on some Douglas-fir needles and branches in drier parts of the country was also enjoyed by the Thompson whenever it could be found (Turner 1978:64; cf. Teit 1930b:239, fn. 5 for the Okanagan).

Mushrooms of several kinds were gathered, peeled, and eaten either raw or after having been slightly roasted. The black tree lichen was much eaten by the Lower Thompson.

Teas were brewed from various plant branches, twigs, needles, seeds, berries, bark, leaves, stems, and even flowers. Specific information on these drinks is provided in the Turner food plant inventory below.

While not food substances at least from the Thompson perspective, it is of interest in fully comprehending the Thompson utilization of the resources of their natural environment that western larch (tamarack) gum and the latex of hawkweeds were chewed for enjoyment. (Ray 1942:131-132, 139; Teit 1900:233, 237)

Food Preparation

In the preceding sections the preparation of certain foods has been described. Meat, berries, and roots were often mixed, however, in various ways and combinations. The preparation of these "combination foods" and more general information regarding the making of edibles suitable for consumption are dealt with here.

Several important methods of cooking food were in general use. In addition to pit-cooking of roots of various kinds and lichen in the earth-oven as already described, some foods were stone-boiled in coiled baskets, stirred with carefully smoothed maple sticks or occasionally with sticks cut into paddle shape. Sometimes among the Lower Thompson dugout wooden containers—even canoes—were used in place of the boiling baskets. The hot stones were handled with wooden tongs, two flat sticks held one in each hand. Two boiling containers—certainly baskets but presumably other vessels likewise—were customarily used, "one containing water for washing off any dirt that might adhere to the heated stones, and the other for holding the food." Stone-boiling was also accomplished among the Lower Thompson by placing the meat and water in a stomach case hung over a fire; presumably this was largely an expedient of hunters and traveling parties, though Ray does not so state. To prevent salmon from falling to pieces in the boiling process, the fish was tied up in a birch bark wrapping. Spoons, ladles, and other utensils used in meal serving and eating are described below.

Meat was twisted around inclined spits and roasted in front of the fire. Various foods were roasted under ashes or in the underground ovens. Some of these methods have already been referred to.

Meat and berry mixtures were popular, with roots sometimes playing their role in the combinations. For example, dried venison and dried berries were pounded together with a stone pestle, mixed with hot deer grease, fashioned into cakes, and put away in sacks or wrapped in skin or bark. Pulverized deer or elk meat was cooked with bear oil and berries. Deer blood, a favorite food, was mixed with roots, berries (e.g., kinnikinnick), and deer fat and boiled. Soups were made with broken bones and kinnikinnick berries. Salmon roe and bearberries together were boiled in water in which salmon or trout had been prepared. Salmon eggs were likewise cooked with kinnikinnick berries or serviceberries. Salmon, soaked in water until half-decayed, were cooked with berries and roots. Floury roots (generally bitterroot) and serviceberries were boiled together, sometimes with black tree lichen, and the resulting soft, thick mixture was eaten with a little deer grease. (Hill-Tout 1900:512; Ray 1942:135, 136-138, 139, 141-142, 144; Teit 1900:203, 236)

Food oil was obtained by the Lower Thompson by boiling salmon bones and sometimes bear bones. Of archaeological significance is the fact already referred that this oil-boiling process was at times carried out in a pit in the ground. (Ray 1942:139)

Water was carried by the Lower Thompson in tightly coiled baskets woven of willow materials and in birch bark containers. As a temporary expedient, it was carried in a deer or mountain-goat stomach case. In preparing food, stone mortars or more commonly flat grinding slabs were used by the Lower Thompson. Spool-shaped stone pestles and wooden pounding mauls were important tools in food processing and wooden pestles of the potato-masher variety were employed in crushing berries. Berries were also mashed in the hands. (Ray 1942:140, 143)

The liquid in which meat or fish had been boiled was drunk with the meal; water itself rarely accompanied meals. Drinks of the tea sort were also created from a number of plant parts, including dried stalks and leaves of wild celery, of the rose bush, of the bearberry, and, at least in the postcontact period, of "Labrador tea," a plant of the heather family also called "Hudson's Bay tea," "swamp tea," and by a number of other local terms. Fir twigs were also dried by the Thompson and "used for preparing drinks." Serviceberry bark was brewed by the Lower people to make a tea-like drink. (Ray 1942:132; Teit 1900:233; Turner 1978:147)

In Lower Thompson country foods were eaten off the ground, covered in summer with grass and at other

seasons with bark or cattail or tule mats spread on the dwelling floor. People at the meal squatted beside the ground cover. Liquids were served in the baskets in which the food had been cooked and were either eaten directly from these baskets or poured into small bark cups. Among the Lower Thompson, fish and roots were served in wooden trays or in basketry or occasionally birch or cedar bark dishes. Long-handled spoons, many large, were made of alder, maple, cottonwood, or birch wood and also of bighorn sheep horn. Short-handled spoons were fashioned of a deer skull-cap. Temporary spoons were created of a piece of birch bark. Ladles were fashioned of horn or wood. Napkins were of cedar bark. (Hill-Tout 1900:512; Ray 1942:140-142, 176; Teit 1900:199, 202)

When winter provisions were exhausted, a person in need was compelled to go begging in a ritualized manner. Wearing a dogskin blanket, rolled dogskins around his legs, and a birch bark mask painted black, to which horsehair whiskers and hair had been glued, he went to an underground dwelling known to have a food supply with a basket on his back. Inside, he danced, grunting, and received food gifts in his basket. (Teit 1900:299)

Technology

In this section are marshalled three sets of data, all concerned with material culture of the Thompson. The first considers the generation, the tending, and the uses of fire as a medium of technology in its broadest sense. The second brings together information on the various natural materials employed in technological processes, on the processes themselves, and on the cultural objects produced through the manipulation of these materials by these processes. The third describes the end products of an important segment of traditional Thompson technology, those artifacts that mediated between the individual and his natural environment and at the same time provided one of the few media in Thompson life for the visual expression of esthetic interests: clothing and ornamentation.

Fire Generation and Uses

Fire was kindled by the Thompson with a fire drill. One long dried stick of black-pine root or various woods was rotated smartly between the palms in a notch in a second dry stick. This latter piece was also side-notched from the top pit, so the incandescent wood fragments could fall down on the tinder of dry grass, shredded sagebrush bark, or cedar bark. Once the tinder was smoking, it was carefully blown to a blaze. (Teit 1900:203, 205)

With a "slow-match" rope of cedar bark, fire was carried from place to place in a basket or wrapped in green bark. Sometimes it remained lighted in the bundle for as long as two days. (Ray 1942:143-144; Teit 1900:205)

Fire served a number of functions essential to, or at a minimum of importance to, the traditional life patterns of the Thompson. Beyond its critical contributions in cooking foods for immediate consumption and smoking/drying them for future eating and in warming dwellings, fire was put to use, for example, in:

- Felling trees for various purposes.
- Shaping canoes and large "kitchen" utensils like dishes and serving trays.
- Group-hunting game by surround and driving techniques.
- Burning wild root grounds to make future crops more abundant.
- Smoking skins to be fabricated into clothing or to serve other functions.
- Charring the distal ends of the stick tools used by women in digging roots.
- Lighting dwellings during the dark hours.
- Warning friendly groups, through signal fires on heights, of the presence in the area of hostile raiding parties.
- Burning enemy dwellings in raids against enemy groups.

Traditional Plateau ethnographies devote little attention to the importance and uses of fire; and where some data on the subject are recorded, they are ordinarily scattered through much of the text. Accordingly, many uses of fire, including obvious and significant ones, are not noted in the literature. To illustrate: surely fire was generally called upon to dry wet clothing, but Teit, I believe, fails to mention the matter. A full and careful survey of such fire data for a single group where the ethnographic information is relatively full would, in my estimation, be a worthwhile exercise.

Technological Processes and Artifact Material Types

Here the material culture objects of the Thompson—tools, implements, utensils, etc.—are discussed from the perspective of the materials from which they were fabricated, with attention wherever data exist to the processes by which they were fashioned and to the uses to which they were put. Thus there are individual sections focused upon objects of stone, of wood, of plant materials, of materials of animal origin, and so on. This

approach is most successful from a data-manipulating viewpoint in considering object types that were fashioned of only one or two kinds of material and served their purposes in several rather different functional contexts. Wedges, for instance, are a case in point: they were fashioned either of wood or antler and served important wood-working functions in constructing dwellings, canoes, and a variety of other objects. To present descriptive wedge data in each of these activity domains would result in unacceptable redundancy. This approach to the data is least appropriate where objects were employed wholly or largely in a single specific cultural context: Thompson bows and arrows, for example, are merely noted in this section, being described in association with hunting practices, the arena of their principal use.

The inventory is imperfect in several ways. The above two schemes of reporting result in a scattering of technological data through the report, a deficiency only partly compensated for by a bare-bones listing of these dispersed descriptions in this section. Essential fabrication and use data for objects are often not to be found in the ethnographic literature. In the interests of space control, especially rich ethnographic information—like that on clothing—is necessarily summarized. Moreover, in the time available, it has been impossible to collect here all relevant technological materials scattered through Thompson ethnographic reports and even all to be found in this present study. As a consequence, the artifact catalog that follows must be considered very preliminary. It would appear, however, that, especially as a resource aid to archaeological research, a full artifact inventory of this kind might be worthwhile. Except as otherwise indicated, the data in this section are drawn from the detailed ethnographic study by Teit (1900:182-191), where illustrations of many objects can be found.

Implements and utensils of stone, bone, and wood were manufactured by men; those of skins and flexible plant materials and animal hair were made by women.

Stone Artifacts

Only two sources of stone used by the Thompson in the making of artifacts have been uncovered in the ethnographic literature. One was near the headwaters of the Skagit River. The other consisted of large "points" made and left by an earlier, unknown people. These were found in large numbers by the Thompson and were reworked by them into the shapes they desired. (Teit 1900:241)

Stone was battered into shape, flaked with an antler tool, and cut with "gritstone" and beaver teeth. Even "jade" and "serpentine" are reported to have been cut with "gritstone." Stone grinding and polishing were uncommon, although "steatite" pipes were polished with *Equisetum* stems—horsetail or scouring rush according to Hitchcock and Cronquist (1981:43)—and a mixture of grease and black pine pitch. (Teit 1900:182)

Stone tools included the following forms:

- Scrapers. Used in removing the fatty substance from the inside of hides. Also used in beating skins, stretched on a rectangular pole frame, to soften them; this scraper was fitted to a 3 or 4 foot wooden handle and so may be a different implement from that employed in defleshing skins. (Teit 1900:184)
- Hammers or mauls with enlarged ends of the "potato masher" type (Ray 1942:146; Teit 1900:183) (Figure 3-6). Used in driving antler wedges.
- Cobbles, apparently unshaped. Used as hammers in the initial, very rough shaping of boulders into blanks for arrow points. Hard stones were then used to trim off the edges of the blank in the next stage of the process. A hammerstone—surely not of the "potato masher" variety—was then employed to strike off large flakes. (Teit 1900:182)
- Clubs with flat sides. Used like hammers in driving wedges. (Teit 1900:183)
- Flat river rocks, used as pile drivers. (Ray 1942:146)
- Flaked axes of "jade" and serpentine (Teit 1900:183). Said to be illustrated by Figure 3-7, but this celt appears to have been given a final grinding and polishing. Used in canoe making.
- Flaked axes of "jade" and serpentine. Hafted among the Upper Thompson as shown in Figure 3-8 and among the Lower Division to a D-shaped wooden handle of a Vancouver Island type (Figure 3-9). (Ray 1942:146; Teit 1900:183) Used in canoe shaping.
- Chisels socketed into a wooden handle. Used in canoe building. (Ray 1942:147; Teit 1900:183)
- Flaked knives with a concave working edge and a straight, short wooden handle. Used for cutting and carving, and for scraping cedar roots for making coiled baskets.
- Flaked drills of glassy basalt fitted with wooden or antler handles.
- Small bowls of steatite and other stone. Used to hold red ocher and perhaps other paints. Scarce among the Thompson and probably not made by them.
- Large carved stone vessels. Used to catch oil drippings and in grinding tobacco leaves, berries, etc. (Figure 3-10). (Teit 1900:49, 184, 202)
- Large flat stones. Used in grinding dried meat and berries (Teit 1900:202).
- Arrow points fashioned from workable stone in a series of steps. A boulder was reduced in size with a cobble hammerstone. The resulting blank was trimmed with a hard stone, chipped with a hammerstone, and finally pressure-flaked with an antler tool. (Teit 1900:182)

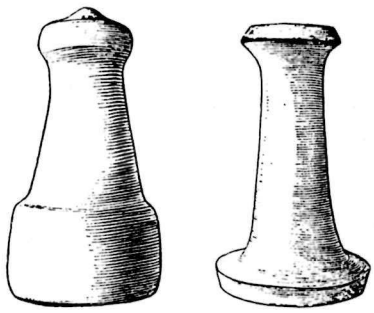


Figure 3-6. Thompson stone hammers (Teit 1900:183 Figures 120, 121).

Figure 3-7. Stone "axe" (Teit 1900:183 Figure 122). Though keyed in the text to flaked "axes" of jade and serpentine, this celt appears to have received a smooth grinding finish.

Figure 3-8. Upper Thompson stone aze hafted to handle (Teit 1900:183 Figure 123).

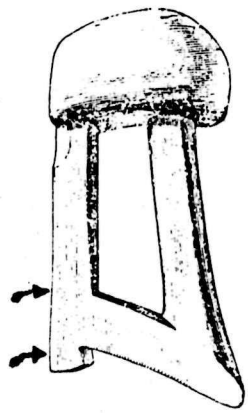


Figure 3-9. D type stone adz handle of Lower Thompson (Teit 1900:183 Figure 124). Arrows added to show surface against which blade was hafted.

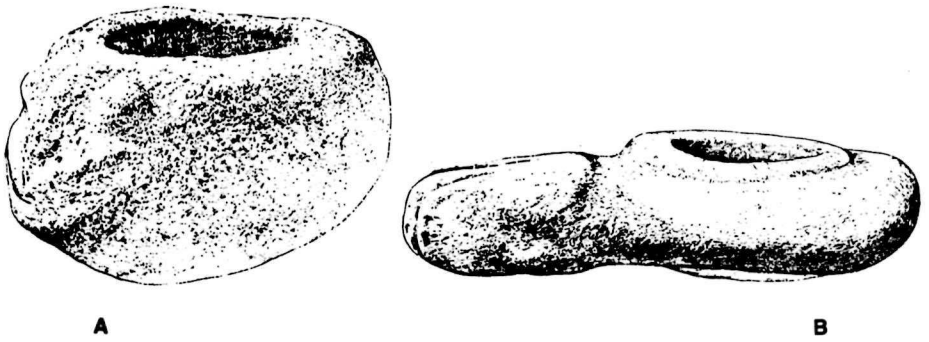


Figure 3-10. Large stone vessels, used in catching oil drippings and in grinding tobacco leaves, berries, and the like: A. representing a frog; B. depression with a snake coiled around it (Teit 1900:202 Figures 153, 154).

Figure 3-11. Lower Thompson wooden tray, 24.5 inches long (Teit 1900:202-203 Figure 155).

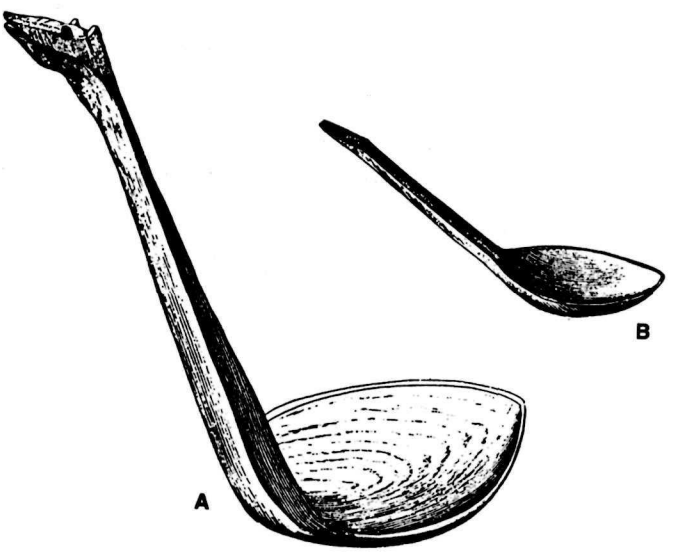


Figure 3-12. Wooden spoons: A. 18 inches long; B. 9 inches in length (Teit 1900:203 Figures 156, 157).

Artifacts of Wood

Wood was the basic material of a number of traditional tools and utensils. These included:

- Mallets fashioned of a piece of tree trunk with attached branch to serve as handle. Used in driving antler wedges in working wood.
- Wedges of yew wood.
- Needles (Teit) and/or awls (Ray) used in sewing skins.
- Root diggers employed in uncovering the small trailing roots of the cedar needed in making coiled basketry.
- Among the Lower Thompson, square boxes and buckets bent of wood as on the coast, taking the place of the woven baskets of the Upper Division.
- Pestles for mashing berries and driving wedges.
- Cooking stirrers, tongs, serving trays, and spoons (Figures 3-11, 3-12).
- Wooden dishes hollowed from a block of wood with stone, bone, or beaver-tooth chisels. (Hill-Tout 1900:512)
- Handles for axes, adzes, scrapers, knives, chisels, and drills.
- Troughs to catch drippings from chunks of animal fat, heated by a hot fire.
- Dugout canoes of cedar and pine logs.
- Canoe paddles. (Ray 1942:145, 147; Teit 1900:183-187, 202, 203, 204, 234)

Antler, Horn, and Tooth Artifacts

Antler was likewise a technologically useful material. Pieces of deer and elk antler were made into wedges which, driven with hammerstones or stone clubs, served to fell trees and to do much of the rougher splitting and cutting work in wood (Figure 3-13).

Forked segments of antlers, with one tine longer and round-pointed and the other shorter and sharp, were used in the final flaking of arrow points; the long blunt point took off the larger flakes and the shorter, sharper tine removed the smaller flakes (Figure 3-14).

Antler fragments were used in hafting some stone drills, knives, and chisels: the piece was first softened by being boiled and then the stone tool was driven into its end; when dried, the antler core became so hard and firm that no lashing or gum was required to fix the stone permanently in place.

With "horn" artifacts there are problems. Ray consistently used the term "horn" to cover both antler and horn; Teit sometimes does the same. Consequently, the following artifacts may have been of antler rather than of horn as the reports state. "Horn" chisels were used in dehairing buckskins for clothing and in woodworking. "Horn" needles were put in use in sewing skins. (Hill-Tout 1900:512; Ray 1942:145; Teit 1900:182, 183, 185, 186)

Beaver tooth blades were used as engravers, and beaver tooth chisels served more generally in working wood. Mounted beaver teeth found service as cutting and carving knives, even cutting "jade" and serpentine. (Hill-Tout 1900:512; Ray 1942:147; Teit 1900:182)

Bone Artifacts

Bone was sharpened and polished with "gritstone" and sand or with stems of *Equisetum* (horsetail or scouring rush) (Teit 1900:184).

Bone chisels were sometimes used to remove the hair from buckskins that were to be fashioned into clothing; they were also employed in wood working. A drawknife-shaped tool made of a deer ulna or more recently a horse rib, somewhat sharpened, was used to scrape the fleshy tissue from the inner surface of skins (Figure 3-15). The ends of this flesher were covered with sagebrush and skin to create padded hand grips. (Teit 1900:185)

Bone needles were used in sewing skins (Teit 1900:186). Whether these were true eyed needles is not made clear. Ray (1942:147) reports for the Lower Thompson sewing awls—clearly without eyes—made of the leg bone of deer and bear.

Pieces of bone, preferably of bear, were used as incising tools. The bone was notched, placed vertically against a bone object, and rotated so as to decorate it with a central dot and circumscribed circle pattern. (Teit 1900:183; see arrow flaker, Figure 3-14)

Bone awls, fashioned by splitting and pointing a deer long-bone, were used to split the small trailing roots of the cedar into strips for making baskets and in the coiling process itself to split the coil below to allow the stitching element to pass through it (see coiled baskets below for this weaving technique) (Teit 1900:187).

Bone hooks of various sizes were made to catch fish from sturgeon down to small fish and eels. Bone gorgets were likewise used in taking small fish. (Ray 1942:110-113; Teit 1900:252)

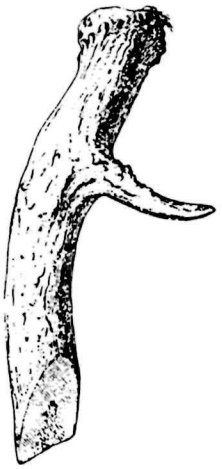


Figure 3-13. Thompson antler wedge (Teit 1900:183 Figure 119).

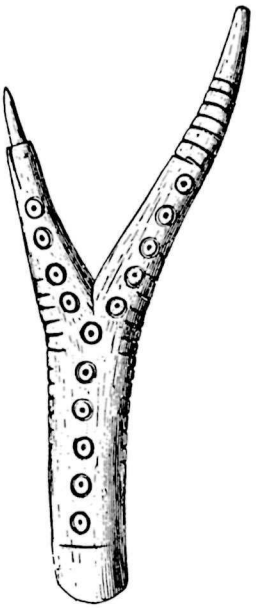


Figure 3-14. Antler arrow flaker ornamented with dot-and-circle pattern (Teit 1900:182 Figure 118.)

Figure 3-15. Bone tool used by the Thompson in fleshing skins. Ends were wrapped to serve as handles. (Teit 1900:185 Figure 129).

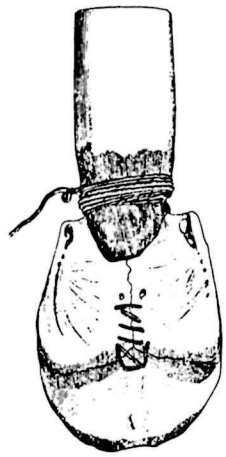


Figure 3-16. Short-handled spoon made of deer skull-cap (Teit 1900:203 Figure 158).

Spoons fabricated of the skull-cap of a deer and provided with a short handle were used in the cooking-eating context (Figure 3-16) (Teit 1900:203 Figure 158).

Artifacts of Fibrous Materials

Woven baskets, fabricated exclusively by women and girls, were important utensils among the Lower Thompson. Whether they also made bark baskets is unclear (see later Artifacts of Other Materials section). Without question, however, like the Chilcotin and Lillooet to the west and northwest and "a number of tribes inhabiting the Cascade Mountains, in . . . Washington," the Lower Division fashioned coiled basketry of split cedar roots (*Thuja gigantea*, which I take to be *T. plicata* [Hitchcock and Cronquist 1981:59]). Finger-sized roots were dug and buried in the ground to keep fresh until needed. Then they were uncovered, peeled or scraped, and hung up to dry. Later, in the weaving process, the roots were first split into long strips with a bone awl.

> [Pieces of] the desired width and thickness throughout their entire length are used for stitching purposes, while the others which split irregularly, or are too short or too thin . . . are put together in bundles of about a dozen each, to form the coils. In weaving, these are kept continuous and of uniform thickness by adding fresh pieces as required, and the whole is covered by whip-stitching with the long regular pieces of splint already mentioned. The coils are laid around, one on top of another, and stitched over and under, commencing at the bottom of the basket. . . . With each stitch the awl is made to split part of the splint whipped around the lower coil. The bottom of the basket is made either of coils worked in the ordinary manner, or of thin pieces of wood stitched over. Most of these baskets are water-tight. (Teit 1900:187-188; cf. Hill-Tout 1900:511-512)

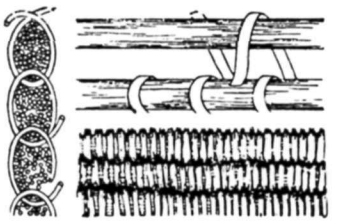
This coiling process is illustrated in Figure 3-17 (Underhill 1945:103). According to Hill-Tout (1900:511), the roots, before being woven into the basket, were sometimes dyed red with alder bark or black by being soaked in black slime or mud.

Baskets were also manufactured with "thin pliable strips of cedar-sap or other wood . . . used as coils instead of the bunches of split roots." These were stitched with the same materials and in the same way as the cedar-root baskets, but were less strong and durable and not water-tight.

Baskets were ornamented by a technique known as false embroidery, involving "hooking in strips of grass and bark with the stitches, so that they cover the latter on the outside only" (Figure 2-3). The grass employed was long, very smooth, glossy, and either yellow-white or, if previously beaten on a skin or mat with diatomaceous earth, white in color. The bark was chokecherry, either left in its "natural light reddish-brown color, or . . . dyed [dark brown or even black] by being buried in damp earth." (Teit 1900:188)

Large, open-work baskets of cedar twigs were also fashioned. The rim was made "by forming a coil out of the upper, free ends of the twigs, and whipping it with another long twig" (Figure 3-18). These, unknown among the Upper Thompson, were like such baskets made on the Coast. (Teit 1900:188)

A

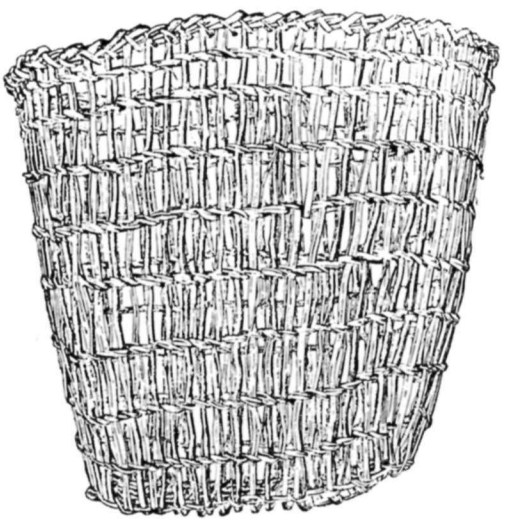


B

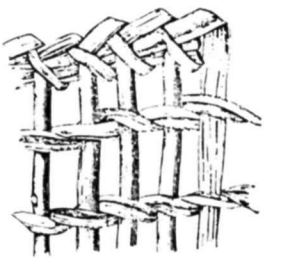
Figure 3-17. Technique of weaving a coiled basket (from Underhill 1945:103).

A. The weaver, a Coastal Salishan Duwamish woman, holds the cedar-splint warp in her left hand while the right pushes the awl through the completed warp below to make an opening for the stiff stitching weft.

B. Diagram of the horizontal warp and vertical sewing element. Left: end view of warp bundles and sewing stitch. Right top: horizontal warps with sewing stitch before being pulled tight. Right bottom: appearance of the finished basket.



A



B

Figure 3-18. Thompson open-work basket.

A. Complete basket (Teit 1900:202 Figure 148).

B. Detail showing horizontal wefts, vertical warps and technique of finishing rim (Teit 1900:189 Figure 131b).

Rigid twined baskets with round bottoms were also manufactured of willow bark by the Lower Thompson. At least some of these were employed as storage containers. (Ray 1942:159-161)

Baskets and bags of many kinds, shapes, and sizes were used by the Thompson for storage, carrying objects, cooking, and so on. Large oblong baskets were for storing food and clothing (Figure 3-19 A); conical ones for carrying things (3-19 D); nut-shaped ones for holding water (3-19 B); round ones for stone-boiling food; and ones with flat backs to hang against posts or walls for holding pipes and tobacco and fishing gear (Figure 3-19 C). Among the Lower Thompson they were woven of cedar roots as already noted; among the Upper Division, they were more commonly of birch and other bark. Large, open-work cedar-twig baskets served the Lower Thompson in carrying fish. (Teit 1900:199-201)

Bags, generally softer than the baskets and varying in size from small to large, were fashioned of matting—also of bark and hides (both stiff and dressed)—by folding the piece of material over and sewing up the sides with buckskin. These were used for storage, carrying provisions, and in other ways. Grass bags were ornamented with dyed grasses. Teit (1900:199-203) provides excellent illustrations of additional basket and bag types.

Tule and bulrush mats of various types were evidently made by the Lower Thompson, as they certainly were by the Upper people. These were sewed or woven together with bark twine made of dogbane (Indian hemp, *Apocynum cannabinum*), which was secured by the Lower group in trade. The fiber was shredded and cleaned by being pulled over the sharp edge of a board, and was made into two-ply cordage by being twisted on the thigh. (Ray 1942:163; Teit 1900:188-190)

Large dwelling mats were fashioned of reeds or rushes set in a long parallel row held together by a dogbane bark cord run through them at several places along their length (Figure 3-20 A). A rosewood stick was placed at each end of the mat as a strengthening element, and bark twine bound the reed or rush ends together to secure them in place. (Teit 1900:188)

Lodge floor mats and eating mats of reeds and rushes were twined with warps of two-strand dogbane bark strings and with wefts of grasses of different colors to create ornamental patterns (Figure 3-20 B). Other table mats and even bags were fashioned of tule or bulrushes held side by side by paired twining elements of dogbane twine or twine of *"Elaeagnus argentea"* (i.e., *E. commutata*, silverberry or wolf-willow [Hitchcock and Cronquist 1981:302]) (Figure 3-20 C) (Teit 1900:188, 190).

Mats were likewise woven in simple checkerboard fashion of cedar-bark strips, as on the Coast (Ray 1942:160, 163; Teit 1900:190).

Threads intended for weaving were prepared from dogbane or from milkweed (*Asclepias speciosa*) as described above for the former material. Nettle was used when neither of those materials was at hand. Rectangular bags and round bags, some with constricted necks, were woven of warps and wefts of two-strand twine, often with selvage edges of skin strips. Pouches were woven like the large floor and eating mats mentioned above. Sagebrush socks were woven by the same paired twining-element technique as the table mats and bags mentioned in the matting section above. (Teit 1900:189-190)

Nets were made of dogbane bark thread; the meshes were kept uniform in size with a wooden netting stick (Teit 1900:191).

Hide Artifacts

Skins were used by the Thompson for clothing, bedding, bags, and the like. Especially important were those of deer and elk, but the skins of bear, wolf, coyote, lynx, fox, marmot, hare, and marten were likewise put to service.

Methods of processing skins varied with the animal, with the use to which the skin was to be put, with the season and even with the weather at the time (e.g., whether warm or cool, when small fires sometimes had to be kindled to hasten the drying process; whether breezy or calm), and doubtless to some degree with the availability of processing materials, the skill and personal preferences of the processor, and other variables. Owing to these complexities and the fact that skin working methods involved multiple tool use and might reasonably be supposed to have left archaeological traces in some instances, much of Teit's (1900:184-187) data are summarized here.

These data also illustrate in summary fashion the richness of certain components of the Thompson culture and one of the significant contributions of women to the group's successful adaptation to their biophysical environment.

Buckskin intended for clothing had the hair removed with a stone scraper or a bone or "horn" (antler?) chisel; hides to be used as robes and blankets were allowed to retain their hair. The skins were then dried and the fatty tissue was taken from the inner surface with a stone scraper. This inner surface was next thoroughly rubbed with decomposed deer brains, marrow from larger bones, or oil obtained by boiling salmon heads until the skins were soft, pliable, and oily. When dried, they were stretched on a rectangular four-pole frame and beaten or pounded until soft with a sharpened stick or a stone scraper with a long wooden handle. (Teit 1900:184-185)

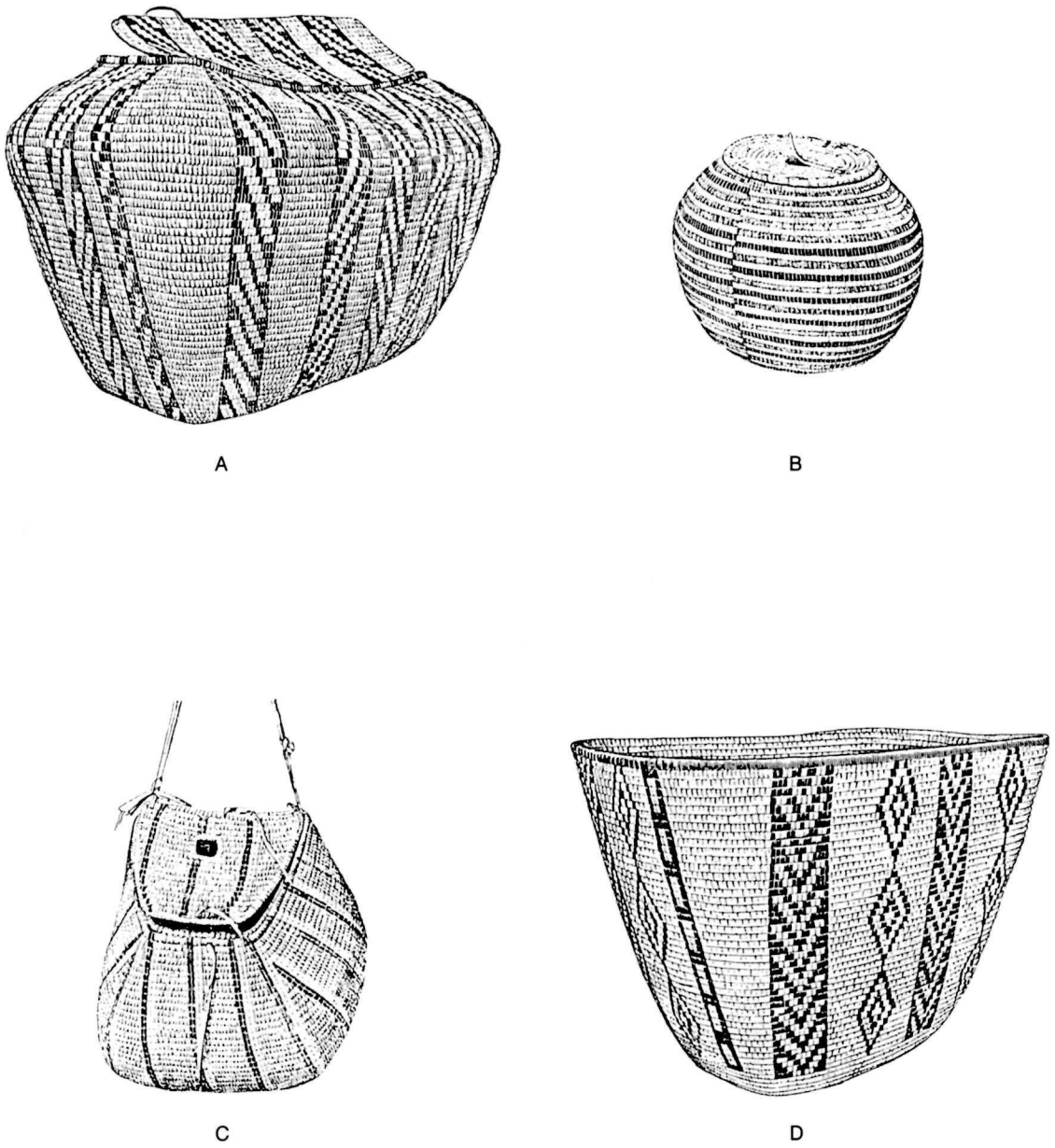


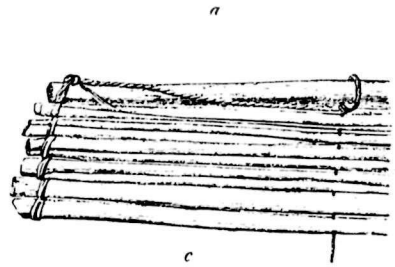
Figure 3-19. Four Thompson basket types.

A. Oblong basket for storing food and clothing (Teit 1900:200 Figure 143).

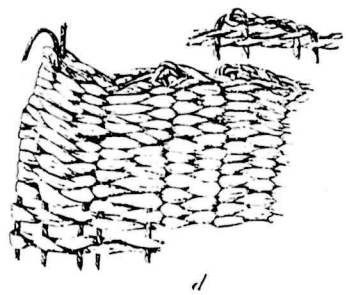
B. Round or nut-shaped basket for holding water (Teit 1900:201 Figure 145).

C. Flat-backed basket, placed against dwelling posts or walls, for holding small objects (Teit 1900:201 Figure 146).

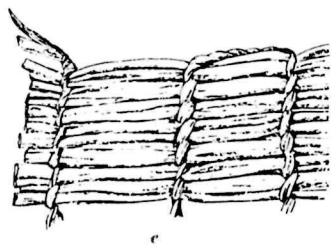
D. Conical carrying basket (Teit 1900:200 Figure 144).



A. Large bulrush mat used as dwelling covering (Teit 1900:189 Figure 131c).



B. Small bulrush and grass mat used as floor covering and "table mat" (Teit 1900:189 Figure 131d).



C. Small "table mat" of bulrushes (Teit 1900:189 Figure 131e).

Figure 3-20. Corners of three Thompson mats showing different weaving styles.

Some skins—often those to be made into moccasins—were treated on both sides in a process of special significance to archaeologists. They were "smoked on a framework of bent sticks, the ends of which . . . [were] inserted in the ground near the edge of a hole about a foot and a half in depth, and not much more than a foot in diameter" (Teit 1900:185). The fire was of rotten wood: fir bark mixed with dry ponderosa pine cones was considered best but sagebrush was frequently used; if a dark color was desired, juniper (*Juniperus virginiana*) was added to the fire. An old blanket was spread over the frame to keep the smoke in and the air out. Smoking was thought to reduce shrinkage when the skin became wet.

When a glossy appearance was favored as in gloves, the skin was left in water until the hair could be pulled off but the cuticle remained. These skins were never smoked. (Teit 1900:186)

The following illustrate further variations in the above processing procedures:

(a) The skin was soaked in water for several days. It was then thrown over a peeled, smooth log inclined against a tree—often with the tree bark notched to secure the upper end—and a scraper of a deer ulna or horse rib, slightly sharpened, was employed to peel away the fatty tissue. The hair and cuticle were removed from the outside in the same manner. When dried, it was smoked and then soaked again in a basket of water. After a day or more, it was rolled lengthwise with dry grass, and wrung dry with one end fastened with a rope around a log and the other to a stick which was turned. Next it was stretched on a frame and pounded until dry and soft as noted above and then smoked once more.
(b) Fawnskins were generally spread over the knee and softened by scraping with a sharp stone or scraper.
(c) Skins were sometimes tanned in a decoction of birch (*Betula papyrifera*).
(d) The process of rubbing a skin with brains was thought by many women to make subsequent smoking of the material unnecessary. (Teit 1900:185-186)

The Lower Thompson data reported by Ray (1942:124-127) are at sufficient variance with the generic Thompson information summarized above to suggest an outline of these downriver data. Deer skins to be tanned with the hair removed were fleshed, soaked in water, placed over a slanting log and scraped with a deer or elk rib tool, cured with deer brains or fish oil, stretched on a frame with a fire nearby or simply with the hands, and grained with a hafted stone or wooden implement. For waterproofing, they were sometimes smoked. This process involved sewing the skins together into a tent-like shape, and placing them around a conical or hemispherical frame, set over a pit three feet deep. The smoke was generated with a fuel of rotten pine or fir wood. Bear and coyote hides were tanned with the hair left on, and so also sometimes deer and wolf skins. The tanning and otherwise working with hides was largely, but not entirely, women's work among the Lower Thompson.

It will be noted that this description fails to conform to any single treatment method reported for the Thompson as a whole by Teit. It seems to some degree to represent a kind of distillation of the essential steps of several of his processes and the combination of these into a single procedure.

Flat pieces of hide—presumably untanned—were used as surfaces on which to keep paints (Teit 1900:184).

Skins were sewed with needles of wood, bone, and "horn" (antler?) and with awls of different sizes. Long thorns answered for pins. Thread was of willow and other bark, deer sinew, and buckskin. Skins were embroidered with porcupine quills, often dyed different colors, and later (but beginning in pre-White days) with horsehair, also frequently dyed. Beads were widely in use prior to 1858, after which they rapidly fell out of favor. (Teit 1900:186-187)

Blankets and pouches were handwoven of strips of twisted rabbit skin with string warps. Blankets were likewise fashioned of marmot and groundhog skins, these being sewn together not cut into strips and woven into a single piece as with the rabbit skins. (Ray 1942:164; Teit 1900:190)

Artifacts of Other Materials

Various other materials available within the Thompson natural environment were put to technological uses. Two of these deserve particular mention.

Bark—in small pieces or very large strips—served many purposes in traditional Thompson life. Bark baskets were fashioned by the Upper Division in large numbers from birch bark and occasionally poplar or spruce (Figure 3-21) and were more commonly used than woven cedar root baskets. The bark strip was folded to form the container bottom; the sides were made to overlap and were sewed together with split spruce or poplar roots. The rim was strengthened with a hoop of split willow twigs, stitched in place by a lashing over the rim. The exterior surface was often ornamented with incised or red-painted designs. Varying greatly in size, they served as storage and carrying containers, in cooking, and as cups and buckets. Large ones included one type made of poplar or spruce bark, about 3 feet high, 3 feet long, and 2.5 feet wide, with hoops around the middle and rim and often painted with "pictures." These large baskets were kept inside the dwelling and were used for the storage of provisions. (Teit 1900:187, 200-201)

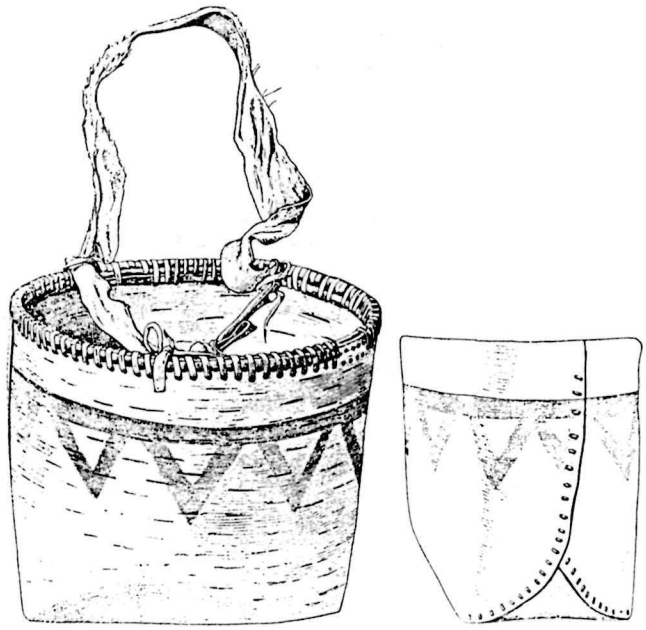


Figure 3-21. Upper Thompson birch bark basket, front view (A) and side view (B) (Teit 1900:201 Figure 147).

Whether the Lower Thompson fabricated bark baskets, with split-root side stitching and rim hoop as were common among the Upper people, is in some doubt. Teit remarks that they did not; Ray (1942:160-161) reports that they used baskets of birch, spruce, and occasionally cedar bark.

Bark served many other functions. Among these were the large strips that covered dwellings and objects stored on elevated caches, the smaller pieces that covered pit cache entrances and the entrance-smokehole of underground houses. Birch bark was used extensively as canoe-frame covering material by the Upper Thompson and to some slight extent also by the Lower Division. On occasion bark was pressed into service to line graves and then to fashion a conical tent over the grave.

Animal hair (often termed "wool") was used in weaving blankets, material culture items of considerable importance among the Lower Thompson. As to mountain goat hair, there is no question. It was made into flexible cordage by both Lower and Upper Thompson, sometimes first cleaned and whitened by being mixed with baked white diotomaceous earth and beaten with a flat stick. This cordage, in turn, was woven into the blanket. The technique of making the heavy thread, the weaving method, and the loom and spindle employed were essentially identical to those of the Lower Fraser groups. Most blankets were finished with a tassel fringe along one end. Ornamentation was achieved by weaving patterns into the fabric with threads of black-bear hair or goat-hair dyed yellow with lichens or red with alder bark. (Ray 1942:163-164; Teit 1900:184, 188, 191)

Whether dog hair was used in like manner, as it was on the coast, is less clear. Speaking of the Thompson generally and the Upper Division more particularly, Teit (1900:191) writes that the tribe "seems to have used . . . only" wild goat hair in their weaving, no dog hair. On the other hand, Ray's (1942:163) Lower Thompson informant indicated that his Division, whatever the case with the Upper group, put dog hair to the same fabric-making purpose as goat wool. With the available ethnographic data, there seems to be no certain way of resolving these discordant statements. One ethnohistorical fact, however, tends to support Ray's field information: ascending the Fraser Canyon in early July, 1808, Fraser (1960:116) secured "a blanket of Dog's hair" at a Lower Thompson village. It appears that here again we may have a significant cultural difference between the two Thompson divisions.

Pigment Substances

Coloring agents may be classified in various ways. For example, according to the form of the coloring material: i.e., whether a solid (crayon-like mass), a fluid suspension (paint), or chemicals in solution (dye). Or according to the method of application to the object to be colored: e.g., applied to the surface dry as a stick or

chunk, or mixed with some sort of carrying fluid and spread thinly over the surface with a finger, stick, brush, or similar device, or as a liquid in which the object is immersed to soak. Or according to the origin of the coloring substance: i.e., whether an inert mineral or earth substance or an organic—animal or plant—substance.

The published ethnographic data are generally insufficiently detailed to allow the information to be classified comfortably according to either the first or second classificatory schemes. Moreover, the first two classifications depend in part upon some previous processing steps, whereas the third focuses upon the coloring substance in its source state, following the materials approach of the technology section above. For these reasons the information below is organized according to this third viewpoint. This possesses the additional merit of meshing well with the central bioenvironmental adaptive interests of this study.

Because a clear distinction seems to be rarely made in the original data between paints and dyes, as defined above, it is not always clear which is actually intended. Consequently in the ethnographic data that follow I use the term given to the coloring material in the source. This is so even in cases like the *Lithospermum* one below where I believe dye, not paint, must be meant.

Red, yellow, and brown ocher were the sources of red, yellow, and brown paint respectively. The red mineral was found in considerable quantities within the Thompson boundaries. In fact, a Lower Thompson village in the Fraser Canyon bore a name which translates as "place where red ocher is obtained." Cuprous clay yielded blue paint. White earthen materials and burnt deer bones gave a white paint. A village locality, also within the canyon walls, was named by a term that called attention to it as a source of white clay that was burned to a fine white powder; this was used in cleaning mountain goat wool in making blankets and, when mixed with oil or fat, in producing a white paint. Powdered charcoal furnished black paint. All of these paints were kept in stone vessels or on hides and, when used, were mixed with melted deer grease, heated, and applied with a stick or finger. Mud was used to impart a brown or black color to grass to be employed in decorating baskets: the grass was simply buried in it. (Hill-Tout 1900:501, 502; Teit 1900:184)

Plant materials likewise furnished coloring substances. The root of the stoneseed or gromwell (*Lithospermum angustifolium*[?] [Hitchcock and Cronquist 1981:394]) yielded a red material used as a facial paint and especially in coloring skins; the fresh root was dipped into deer grease and rubbed on the object to be painted. Powdered hemlock fungus also furnished a red paint. The flowers of the larkspur (*Delphinium menziesii* [Hitchcock and Cronquist 1981:132]) produced blue coloring material that served both as a paint and as a dye. Yellow lichen juice provided a yellow dye. Rotten wood was boiled to give green and blue dyes, and alder bark likewise to give a light red dye. (Teit 1900:184)

Many tools and utensils made of stone, bone, wood, bark, or skin were painted. Heated prickly pear cactus (*Opuntia*) was rubbed on paints applied to skins to fix them. (Teit 1900:184)

Clothing

The clothing of the Upper and Lower Thompson differed a good deal as a consequence of environmental differences and so different patterns of resource availability and also as a result of differing opportunities for trade with other tribes. Although there were better and poorer hunters and sectors of their division territory that were better or poorer in deer, the Upper Thompson generally dressed in garments fabricated from dressed deer hides. The Fraser River country of the Lower Thompson, on the other hand, had few deer. (Teit 1900:206)

It is of interest that these differences in Thompson dress were perceived by the Okanagan, who told Teit that

> . . . the Thompson were not as uniform in their dress [as they themselves were], there being much greater variety in quality and style. Also some individuals were careless or peculiar in their dress, and some others were too poor to dress correctly. Possibly, however, [Teit speculates,] the chief reason may have been that the Thompson were more under different influences than the Okanagon, styles from west, north, east, and south all reaching them to some extent. (Teit 1930b:230)

Teit is surely correct in recognizing a higher and more complex level of extratribal influences on the Thompson. Yet intratribal differences in the availability of critical natural resources were obviously important in explaining Thompson dress variability, and even sociocultural attitudes and practices plainly played their role.

While the concerns of this survey lie only marginally with the Upper Thompson, it is useful to summarize here their typical clothing partly as an illustration of the hazards of extrapolating from their cultural life to that of the Lower Thompson.

Men's clothing among the Upper Thompson was as follows, garments well described and illustrated by Teit (1900; see also Hill-Tout 1900:508):

- Sleeved shirts of two deer skins or a bison skin, reaching to the knees, made and ornamented in several styles. (Teit 1900:206)

- Skin jackets sometimes worn in place of the shirts. (Teit 1900:207)
- Fringed leggings that reached above the thighs, or short knee-length ones. (Teit 1900:208)
- Buckskin breechclouts fastened to a belt or passing over the belt front and back. Some old men wore only a front apron instead. (Teit 1900:208)
- Moccasins with soles of unsmoked buckskin and a doeskin leg piece. Until about 1840, the common style was made of a single piece of skin up to the ankle; its seam was on the outside of the foot close to the ground. About 1800 a new type was introduced from elsewhere. This had a seam around the top of the outside of the foot and the upper extended down nearly to the toes. Still a third style was in vogue by 1900. For walking on slippery ground, two skin strips were sewed crosswise on the sole. Moccasins were occasionally ornamented with colored porcupine quills, goose feathers, and various other materials. In winter, grass or sagebrush bark was placed inside the footgear for warmth. Poor people wore long boots of sagebrush bark. (Teit 1900:209-212)
- Deerskin mittens, hair inside. (Teit 1900:212)
- Skin headbands. (Teit 1900:212)
- Skin caps, sometimes with the animal tail hanging behind. (Teit 1900:213)

Special clothing and ornaments were worn by particular groups within the Thompson society. Hunters' headbands were elaborate. One described by Teit (1900:213) was made of coyote skin daubed with red ocher with a front cross-piece of horsehair dyed yellow and red, a red-ochered buckskin fringe, and eagle down. From its top rose hawk and eagle feathers. Sometimes long buckskin streamers were tied to the headband or hair in back, and to these were affixed dyed feathers and yellow horsehair. Warriors' headbands were adorned with red ocher designs, eagle feathers, and down, and were likewise fitted with the back streamers. Shamans affected high headbands to which were attached flicker feathers, yellow-dyed horsehair, eagle down, and sometimes ermine and other skins. (Teit 1900:213-214)

The clothing of Upper Thompson women was quite like that of the men:

- Sleeved buckskin or doeskin dresses (longer than the male shirts), highly ornamented with fringes, dentalia, beads, dyed porcupine quills, goose feathers, and horsehair. The cut differed widely: some dresses were very wide while others narrowed considerably below the waist. (Teit 1900:214-216)
- A long, wide buckskin or sagebrush bark belt, rather like a bodice. (Teit 1900:216)
- Long or short leggings, sometimes ornamented along the sides.
- Moccasins.
- Broad deerskin headbands or caps. (Teit 1900:217)

Many poorer Upper Thompson people wore only the clout, moccasins, and a deer or dog skin blanket over the body (Teit 1900:217).

Girls wore a breech-cloth, and laced their robes tightly in front with buckskin straps. Their hair was plaited in four braids. They added necklaces and a buckskin cap or broad headband, this last adorned with embroidery or dentalia or designs painted in red. (Teit 1900:217-218)

In winter wealthy people wore robes of skins of beaver, coyote, lynx, wolf, or bear, hair side out. Poorer persons were forced to wear robes of sagebrush and willow bark and of deer, dog, marmot, and bison skins with the hair left on. Robes of woven skins of marmot, hare, and other animals were worn by both rich and poor. (Teit 1900:218)

Marmot robes were made of 10 or 12 skins sewed together, with a buckskin fringe at the seams. Bison robes were dressed with both sides soft and white, painted with designs, or with one side white and the other with the hair left on. Beaver robes required four to eight skins sewed together. Robes were also made of dressed deer skin. (Teit 1900:219)

Ponchos were fabricated of coyote, fox, and wolf skins, decorated with buckskin fringe and feathers, and generally lined with buckskin. Some men wore a very short poncho made of their guardian spirit bird or animal, the head in front. Ponchos were also fashioned of the black tree lichen, but the process is unfortunately not described by Teit. Rain-weather ponchos were also made of sagebrush, willow, and cedar bark (Figure 3-22). (Teit 1900:219-220)

The Lower Thompson data are not nearly as full. Presumably their clothing was generally like that of the Upper Division people unless otherwise noted by Teit or by Ray in the data that follow. Wealthier persons wore the same kind of breechcloth as in the Upper group, but many old men wore skin aprons instead. Occasionally men, Ray reports, wore willow bark clouts, and women sometimes a skirt of shredded cedar bark. Long, wide women's belts were also fashioned of cedar bark. Although some people preferred elkskin or deerskin caps, headbands were far more common, those of men consisting of bird or small animal skins with the head facing forward and those of women made of buckskin with dentalia ornamentation. Feather headdresses were not widely worn. In summer and in rainy weather, people went barefoot. In winter moccasins like those of the Upper

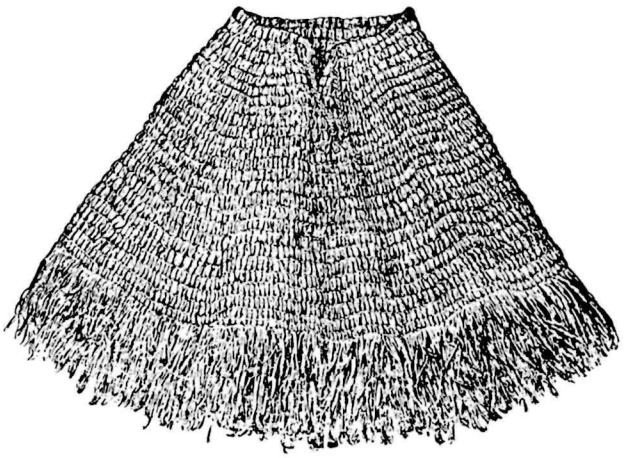


Figure 3-22. Rainy weather poncho of sagebrush bark (Teit 1900:219-220 Figure 194).

Division were worn, padded with softened bear or mountain goat skin with the hair on. Poor people made do with footgear of dog-salmon skins, the feet first wrapped with shredded bark, grass, or deer hair. (Ray 1942:164-168; Teit 1900:220)

No buckskin shirts were worn, only robes. Most of these were woven of mountain goat wool often with an edge fringe and with black, yellow, and red patterns woven into the cloth. Ray writes also of Lower Thompson "blankets" of dog wool, with "[white] earth or fibers beaten in" and woven on a roller loom; presumably these doubled as robes. Robes fashioned of the skins of deer, mountain goat, ground hog, and marmot tanned with the hair on were also common. Woven rabbit-skin blankets were rarely seen and painted robes of dressed deerskin were unknown. Ponchos were woven of mountain goat wool or cut out of skins. Poor people used robes, ponchos, and aprons of cedar bark, sometimes dyed red. (Ray 1942:163-168; Teit 1900:220)

Two early ethnohistorical footnotes to the preceding ethnographic data are worth reporting. On his summer journey of exploration in 1808, Simon Fraser (1960:94, 116) passed through the entire length of the Fraser Canyon and hence by the principal salmon fisheries of the Lower Thompson. Only twice is there mention of clothing in his journals. He writes of the Nailgemugh—Lower Thompson—as having "robes made of beaver &c" and of having traded from them "a blanket of Dog's hair." In a way the observations of Simpson (1947:38) in October, 1828, are of special interest, both for their information, though scanty, concerning the Lower Thompson and for what they tell us about Sir George and his perceptions of the Indians. He reports having seen "scores of Naked Wretches" at their rocky salmon sites as his party in their watercraft passed down the Fraser Canyon. "A Leather or Dog hair waist band, was the only article of dress they wore, many dispensed even with that, and the only Fur we saw among them, was one piece of Beaver coating, and a few Siffleur [marmot] or Ground Hog Skins."

Personal Adornment

Both sexes wore ear ornaments of dentalia suspended from skin or bark strips passed through ear lobe and rim perforations. Attached to these shells as tassels were scalps of the red-headed woodpecker. Often as many as four pendants were hung from the helix of each ear. Among the Lower Thompson abalone-shell ear ornaments and bone beads were sometime favored. (Ray 1942:171, 207; Teit 1900:222)

Ornaments through the nasal septum were worn exclusively by women. They were generally dentalia or a piece of bone, although copper and slate pieces were not unknown; while some were crescent-shaped, most of these ornaments were straight. Whatever the material, they extended outward beyond the nostrils. Those with hollow ends were made colorful by having red-headed woodpecker scalps inserted in one or both ends. Nose rings and lip plugs of the coastal labret variety were unknown. (Hill-Tout 1900:507; Ray 1942:171; Teit 1900:222-223)

Necklaces were widely worn by both men and women. Shells, claws, teeth, cactus seeds, seeds of the silver buffalo-berry, small flat circular horn and bone beads, and even berries were all strung on buckskin or

bark thongs for this purpose. Some necklaces fell close to the throat; others, occasionally worn in numbers, hung nearly to the waist. Small squares of sheet copper were hung from necklaces, but whether only after the appearance of the fur traders is not indicated by Teit. Young women strung cactus flowers as necklaces. Men had neck ornaments consisting of a skin thong with eagle feather pendants. Shamans with a grizzly bear guardian spirit and hunters who had killed this animal commonly wore grizzly claw necklaces to advertise their bravery. (Ray 1942:172; Teit 1900:223)

In early days every Thompson, male and female, was tattooed to some extent on some part of the body. Most commonly it was on the front of the arms and back of the wrist, less often on the lower legs, and rather rarely on the back of the hands. On the face it was confined mostly to cheeks and chin. There were significant differences between the sexes in the frequency in which the various body parts were tattooed. Also notable differences between the bands and two divisions: facial tattooing, for example, was more common among the Lower Thompson than in the Upper Division. (Teit 1930c:403-405)

Continuous tattoo lines were created by pulling a thin thread, blackened with powdered charcoal, under the skin with a fine bone needle; dots, by drawing the pattern on the skin with wet charcoal and forcing this substance beneath the surface by pricking it in with a cactus spine, thorn, or porcupine quill. The tattooing process was usually commenced at about puberty, and continued off and on through early manhood or womanhood. It was carried out by an age-mate of the same sex more or less secretly but without attendant ceremonies of any kind. (Teit 1930c:405)

Although done largely as ornament, especially that on the face, tattooing was likewise carried out to demonstrate courage; to assist in acquiring a guardian spirit; with guardian spirit help and sometimes under its explicit instruction, to insure success, health, and long life and to cure illness; and to show fidelity and affection in marriage. Some marks were representational, depicting, for instance, sweathouse stones, mountains seen on guardian spirit quests, dreams, and arrows (to help a girl secure a husband). Slaves were tattooed at times with ownership marks on their hands. (Teit 1930c:405-407)

Tattoo designs varied widely. Many examples are figured by Teit (1930c:408-418). Those added to the face were always straight lines: Lower Division women often had a few such lines radiating from the mouth sideways and others down over the chin, or one or two lines from the nose to the ears. Patterns on arms, wrists, and other body parts were wavy, curved, or zigzag lines, circles, triangles, star-like, and so on. Some patterns were symbolic and so were named (e.g., eagle's tail, rainbow), but most were merely described (e.g., mouth tattoo double line). Interestingly, in his very extensive collection of Thompson myths, Teit found no reference whatever to tattooing. (Teit 1930c:403-416; cf. Hill-Tout 1900:507; cf. Ray 1942:171-172; cf. Teit 1900:228)

Face and body painting was universal among the Thompson, the face more commonly than the body. Most people washed and painted daily, a few young people several times a day. Some Thompson actually changed their designs almost every day.

The colors applied were several shades of red (ocher)—especially a rich brownish red—yellow (ocher), blue, white (clay), black (charcoal), and perhaps rarely green. A micaceous hematite paint yielded a shiny, sparkling appearance. The red earth was found in considerable quantities within the Thompson borders. One of the Lower Division villages, in fact, bore a name which translates as "place where red ocher is obtained." Good red paint was also secured often by Thompson visitors at Vermilion in the upper Similkameen Valley, a location that I have not yet identified but which was evidently in early days in the country of the Athapascan Nicola tribe (Figure 3-1) (Teit 1930b:218). A locality within the Lower Thompson canyon was named by a term that called attention to the area as a source of white clay, material that, when burned to a fine white powder, was used in cleaning mountain goat wool in weaving blankets and was mixed with oil or fat to produce a white paint. Vegetable stains were not favored. Most paint was mixed with water or grease before being applied with the fingers or brushes, or was spread dry on a wet or greased skin. Paint pencils were also used. Sometimes paint was put on and then scraped off in places to create the desired pattern. Most people carried small paint bags attached to the belt, the material being replaced as necessary from a larger supply left home. Paint mortars and mixing dishes were utensils in nearly every dwelling.

Colors carried complex symbolic meanings among the Thompson. For example, red (and brown) signified good, life, heat, day, and so on; black, the opposite. Yellow carried the meaning of earth and things associated with it: grass, trees, stones, water, etc. Blue was the sky color. White (and gray) was the "spirit" color, that of the ghost, dead people, bones, sickness, and the like. Curiously, these color meanings seem to have been limited to the facial and body designs, not much applied to patterns on baskets, clothing, and so on, where it was the decorative effect that counted.

The purpose of face and body painting was essentially the same as in tattooing: much for ornamentation yet much also had strong connections "with religion, dreams, guardian spirits, cure of disease, protection, prayers, speech, good luck, war, or death." Some painting styles were special to shamans, warriors, young women, elderly women, and certain ceremonials. Teit records a list of over one hundred specific design patterns with their individual meanings and cultural associations, and he figures many of these in color: ornamental designs, designs linked to the ghost dance and others to guardian spirit dances, patterns con-

nected with dreams and guardian spirits, designs used in war dances, and painted forms applied by shaman instruction. (Teit 1930c:418-439; also Hill-Tout 1900:501-503, 507; Ray 1942:172; Teit 1900:228)

Body Care and Beauty Standards

As mentioned elsewhere in this report, sweat bathing and the cold plunge that followed were a practice of the Lower Thompson, but, Ray (1942:170) reports, were not regarded as of any great importance in maintaining physical health or in contributing greatly to hunting success and the proper conduct of ceremonials. Other data relating to body care are scattered through this survey. Here are considered a few odds and ends that fail to fit well in other contexts.

As a substitute for soap, the Thompson used water in which birch leaves had been allowed to stand, poplar-wood ashes, urine, and a special variety of white clay found on certain lake shores. Baths were occasionally taken by the Lower Thompson from hot water in birch bark baskets; the body was rubbed with spruce boughs. Rough skin was softened with deer back fat or, among the Lower Thompson, with salmon oil. In the Lower Thompson group, a cosmetic and hair oil was made from marrow extracted from bones that had been boiled and broken. Cosmetics consisting of deer, bear, and mountain goat tallow were also used as a protective coating for both face and body. (Ray 1942:136, 172, 182; Teit 1900:228)

Men removed their beard with horn or wooden tweezers and women narrowed their eyebrows in the same way. Frequently the hair part was painted red. (Ray 1942:169; Teit 1900:227-228)

As Teit (1900:224) observes, "special attention was paid [by the Thompson] to the hair-dress." The many stylistic variations in dress and ornamentation are so extensively described by Teit that only the principal facts and a few illustrations can be noted here. The hair was cut only in mourning. It was greased by the Lower Thompson with salmon oil, by the Upper bands with deer fat mixed with water in which balsam-fir, sweet grass, or other fragrant plant materials had been boiled. This grease was applied after the daily morning bath. Combs were thin, flat pieces of wood split finely at one edge and with the splints interwoven to separate their points slightly. (Ray 1942:170; Teit 1900:224) "A wooden comb of curious construction" was traded by Fraser (1960:116) from the Lower Thompson on July 9, 1808, one of the very few items mentioned in his narrative as having been secured from the tribe.

Hair dressing styles were very numerous. Among men: two side braids tied together near the brow; two side braids and one back braid; front hair with two braids beside the ears; front hair banged with the rest drawn back behind the neck; front hair knotted over the head; and so on. Women almost invariably divided the hair into two braids, the ends usually tied together in back. Buckskin strips embroidered with procupine quills or strips with dentalia or bits of bone, claws, or feathers attached were hung from the hair. Some men wore such strips, with the feathers, that were as much as four feet long. (Teit 1900:225, 227)

Smaller segments of Thompson society had their own particular fashions. Young women knotted their braids into small bundles on each side behind the ears. Both in normal times and when out on a raid, warriors wore their hair in special ways. For example, they knotted it on one side only and decorated this knot with hawk or eagle tail-feathers daubed with red ocher. Other fashions included rendering it stiff with white clay, painting it fiery red, and braiding it into different patterns, some that made it stand up like horns. Children to the age of puberty allowed the hair to hang loose. During their puberty rites, boys wore their hair knotted behind the head; girls put their hair up into two knots behind their ears. (Ray 1942:170; Teit 1900:225-226)

The Thompson had definite opinions as to the features that made for a physically attractive person: e.g., light smooth skin; tall stature; straight, spare body; long arms; legs of medium length; long, abundant hair; bare face with sharp hair line; and so on for hands and feet, cheek color, eye and nose shape; etc. (Teit 1900:229)

The Settlement

In this section are discussed the various structures that comprised the typical Thompson settlement in winter and in the open season, certain matters relating to the location and character of their residential and task-oriented sites, and the domestic and tame animals that were not an insignificant component of the Thompson settlement.

Structures

The structures of the usual Thompson community consisted of the dwellings in their seasonal manifestations, of several ancillary shelters (menarcheal and menstrual shelters, and sweat lodges), and of various processing and storage structures (drying racks and caches).

Dwellings

A number of more or less permanent dwelling types, in contrast with the insubstantial temporary shelters used, for example, by parties camping to take advantage of seasonal subsistence resources, were in common use among the Thompson in traditional times.

The most important dwelling was the semisubterranean winter house (Figure 3-23). It was

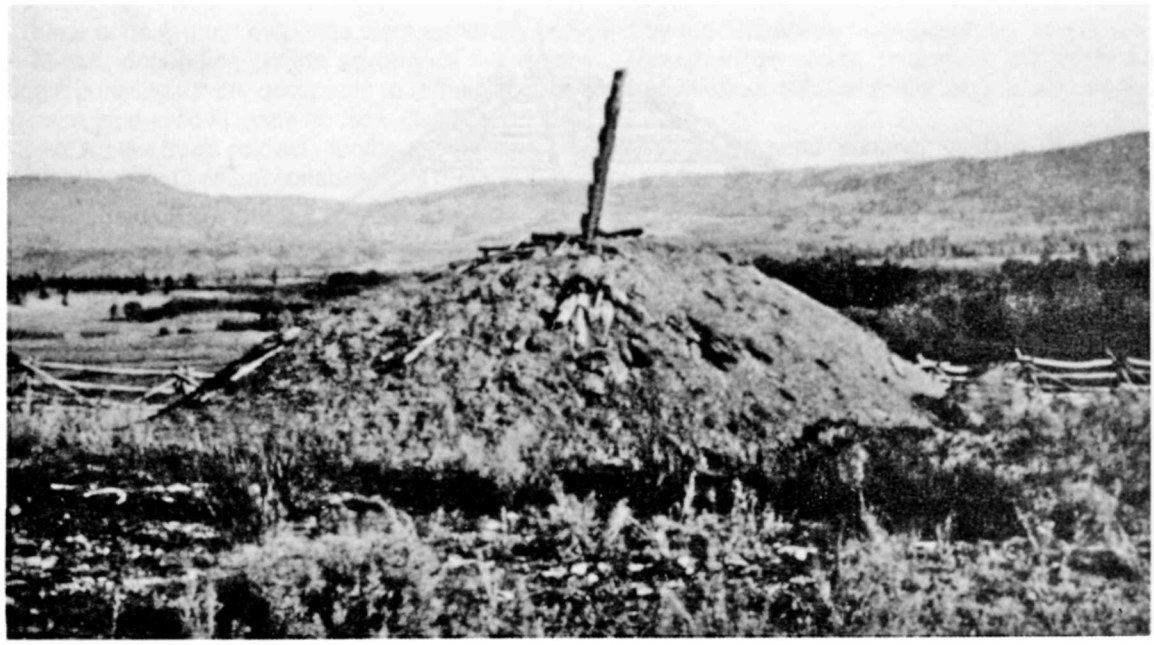
> . . . generally built in the valleys of the principal rivers, within easy distance of water, and . . . inhabited by groups of families related to each other, who, although scattered during the hunting and fishing seasons, dwelt together during the winter. These dwellings rarely numbered more than three or four at one place, and often there was but a single house. The size conformed to the number of people (from fifteen to thirty) to be accommodated. (Teit 1900:192; cf. Hill-Tout 1900:513)

Houses of this kind were located where the soil was loose. All the neighbors, fed by the house owner with the assistance of his relatives, aided in the construction, completing it sometimes in a single day. The outline of the pit was determined by knotting two bark ropes separately from 20 to 40 feet from one end to mark the full diameter of the structure and then laying them crosswise at right angles so their center points rested at the same spot. A man, by eye, described a circle, using the two rope ends and the two knots as his guide. The women dug the pit with their digging sticks, placing the dirt in large baskets from which it was dumped just outside the circle to be later used in covering the roof. (Teit 1900:192; cf. Hill-Tout 1900:512-513)

With all the heavy posts, lighter poles, withes, pine needles or grass, and other materials accumulated at the site, the framing of the structure began. Four heavy posts (Figure 3-24a) of green wood, barked but not squared and with the tops notched to receive the main rafters, were slipped into the holes into the ground prepared for their butts. Their bases formed a square and their tops a larger one since they were slightly inclined away from one another. Four sloping main rafters (b) were then put in place: each ran from the ground outside the pit, over the upper notched end of its post, and to near the center of the house and the apex of the roof. Eight short side rafters (c) were next added, one end resting on the ground and the other on a main rafter (b). Horizontal poles (d) were laid on so as to bridge the twelve rafters, large and small, and support the roof covering. To frame the square entranceway at the roof top, four heavy timbers (e) were bound to the ends of the rafters. Save for the entrance, the entire structure was covered tightly with small poles or pieces of split wood (f), running from the ground to the entranceway. These were covered with pine needles or dry grass and finally with a layer of earth, beaten and stamped down firmly. Because of the heavy rainfall in their country, the Lower Thompson lined their underground dwellings with large pieces of cedar bark, inner side out. (Teit 1900:192-194)

Entry into the house was down a notched log (g), the base of which was placed near the center of the floor while its upper end rested against the west side of the peak entryway and extended out above it. A groove ran along the length of the back of the log to serve as a handhold. The top of this ladder was often crudely carved into an animal or bird head or was painted red. Generally these figures were ornamental, but occasionally depicted the owner's guardian spirit. The bottom of the ladder was protected from the nearby central house fire by a stone slab set on edge between the two. Etiquette required that an entering person call out to allow women cooking below to protect the food from dust and dirt. Smaller supplementary fires were kindled near the four main posts in bitterly cold weather and sometimes to cook food if the dwelling was occupied by many families. The central section of the house between the four roof-supporting posts was used by all resident families. Behind and around this area, under the sloping roof, each family had its own quarters. Interestingly, the spaces between the four principal beams were called "houses" and took their name from the points of the compass. A thick layer of brush, fir boughs, or dry grass, renewed every three or four days, was placed over the floor and covered with skins or grass mats. Skins or blankets woven of bighorn sheep or mountain goat hair covered sleepers. Pillows were the rolled-up ends of the grass mats or skin bags filled with bulrush "fuzz" or bird down. Meat was spread on poles above the fire or simply hung near the roof and dried in the smoke. Food was eaten from large mats spread on the ground (Hill-Tout 1900:512, 513; Ray 1942:140, 179; Teit 1900:194, 199, 234). The interior arrangement, allocation of space, and the like are not otherwise described in the ethnographic literature.

The few details reported by Ray (1942:177-178) concerning this underground winter dwellings in its Lower Thompson from differ in no important way from the Upper Thompson data above except on one point. The diameter of the pit ranged from 12 to 20 feet, notably less than Teit's approximations. Possibly these structures were in fact smaller among the downriver division. On the other hand, it is not inconceivable that the two sets of measurements are both close estimates for the different time periods of Teit's and Ray's informants: during this 40 year span a considerable amount of depopulation occurred which may have been reflected in the dwelling size. Ray adds to Teit's data three items of some interest: the structure pit was approximately 4 feet deep; the basic roofing was of bark or brush or planks, these latter being evidently Teit's split wood; and a piece of bark was used to cover the entrance when this was desired.



A

B

Figure 3-23. Two semisubterranean dwellings in the Nicola Valley, photographed in the 1890s by Harlan I. Smith (Boas 1975: Plates 19 and 20). The dwelling in B is in ruins.

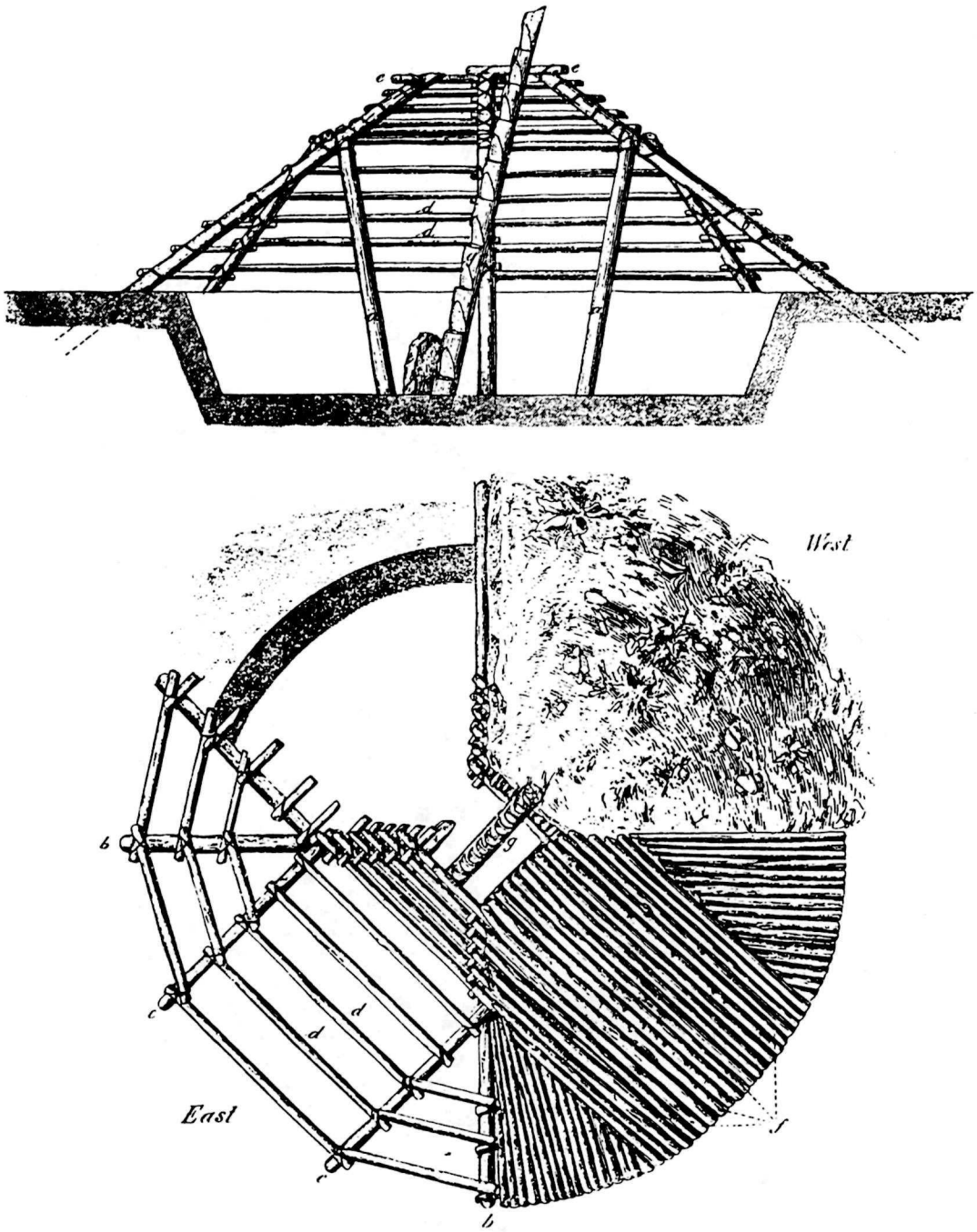


Figure 3-24. Construction details of Thompson semisubterranean dwelling after Teit (1900:193 Figures 135, 136).

These underground dwellings were generally occupied by the Thompson from December to February or even March, depending on the severity of the weather. Though inconvenient, they were extremely warm, making it possible for the occupants to remain scantily clad. Until about 1880 or a little later, almost the entire Thompson tribe lived in these houses. (Teit 1900:195)

Save for the three coldest months, the Thompson lived in above-ground "summer" lodges. These, among most of the Upper Division, consisted of a rectangular or square framework of poles, covered with mats or bark. One common variety (Figure 3-25 A, 3-26 A) was roughly rectangular in ground plan with straight sides and somewhat rounded ends. On a flat surface cleared of obstacles two pairs of strong poles (a) were tied together with willow withes at their small ends. The bases of each pair were separated and set in or on the ground to create two inverted V's about 10 feet apart. These were connected by four horizontal poles (b) on each side, bound in place. The gable ends (c) were framed with smaller poles, their tops against the end pole pairs (a) and their bottoms set out some distance so that the ends of the structure were rather rounded. The entrance was in one end. The entire shelter was covered with long reed mats in overlapping tiers, shingle-fashion, but with a long opening as a smoke exit and light entrance left at the top of the structure from one end to the other. A lodge framed in the same way but covered with cedar bark was used by the Lower Thompson. (Teit 1900:195, 197; cf. Hill-Tout 1900:513)

The Lower Thompson cedar bark dwelling of precisely this variety, exclusively a "summer" shelter, is described by Ray (1942:174-176, 180) with additional details. It was, he reports, 12 to 18 feet in length and 10 to 12 feet in width, positioned so its long dimension was with the prevailing wind. It was constructed with a double ridgepole. The strips of cedar-bark covering were generally placed horizontally, were overlapping, and were held more securely in place with vertical pole binders. The entrance was invariably at only one end; it was closed with a hanging tule or willow mat. The exterior was banked at the bottom with grass, covered with earth, and the interior was furnished with a tule mat lining. (Why this lining was in use in a warm weather structure is not explained.) The ridge was open only above the single fire, set in the central, end-to-end aisle. The floor was covered with rush mats or with twigs and leaves. Storage was over poles along the walls, over cross-poles or ropes, between wall and rafters, and sometimes at the ends of the dwelling or simply on the floor.

A lodge essentially like the preceding but with low vertical walls and a gable, inverted-V roof was also in use among the Lower Thompson according to Ray (1942:174).

Two slightly different reed-mat covered shelters (Figure 3-25 B, C) with a frame of four main poles set to form a square were also common among the Thompson. In both of these types all four sides inclined inwards. (Teit 1900:195, 197)

Conical lodges (Figure 3-25 D, E) with about a dozen or more pole supports arranged rather like those of a tipi were also in use by two Upper Division bands where they were covered with mats or the hides of large animals. A framework of this style was photographed in Thompson country by Harlan I. Smith in the 1890s (Figure 3-26 B). Conical dwellings are reported, however, not to have occurred among the Lower Thompson. (Ray 1942:179; Teit 1900:195-196, 197)

When many people gathered, as at Thompson "potlatches" and fishing sites, a larger structure (Figure 3-25 F) was necessary. It consisted essentially of two mat-covered lean-tos placed face to face. The diagram shows the simple construction details, but fails to suggest the typically large size of these shelters. The inclined roof poles (a) were set 10 to 12 feet apart. The distance separating the two halves of the house was about 15 feet; in this open space burned the large log fires. For better protection when needed against the wind, both ends were closed with fir-boughs or brush, making a single shelter often 50 to 60 feet long. (Teit 1900:196)

In autumn both the Lower and Upper Thompson constructed hunting lodges generally in sheltered valleys in the mountains near good hunting grounds. They were similar in their framing to the square lodges described above, but larger, fashioned of heavier poles, and covered with sticks and bark spread with fir branches. (Teit 1900:196)

In pitching lodges for rather short-term occupancy their entrances were generally positioned toward the place where the women secured the family's water. This prevented the women, when fetching water, from having to pass behind the part of the lodge where the heads of people were when they slept. (Teit 1900:327)

Temporary Shelters

A brush shelter, usually used but once for a very short time, was hastily constructed by Thompson hunting parties in winter and early spring. It had a square or conical frame of light poles and was covered among the Lower Thompson with long, wide strips of cedar bark. This Lower Division also made a small temporary shelter with a single slanting roof framed like one-half of the very large dwelling described above (Figure 3-25 A). (Ray 1942:179; Teit 1900:196-197)

The Lower Fraser made use of a summer shelter which apparently did not occur among the Upper Division bands—at least Teit fails to mention it. This was a flat-topped structure supported by four corner posts, with open sides and a roof of rush or willow matting or even of bark strips. Ray terms this a "temporary dwelling." Whether this signifies that it was in use only at fishing sites during the salmon season (as among the Sanpoil

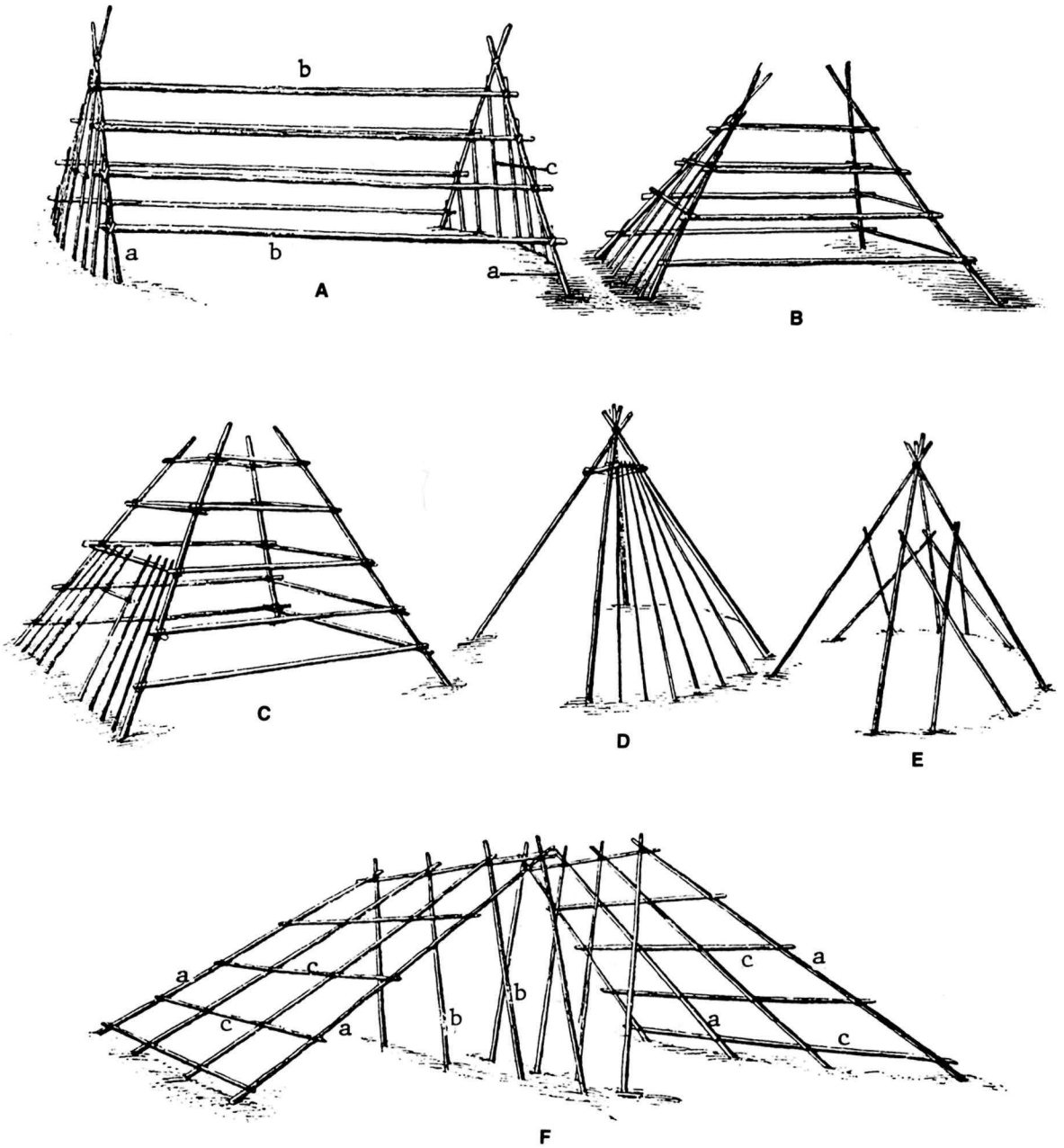


Figure 3-25. Construction details of six Thompson "summer" lodges after Teit (1900:197 Figures 137-142). The small letters in Teit's Figure 137 and 142 identifying the structural components have been replaced by larger and more readable letters.

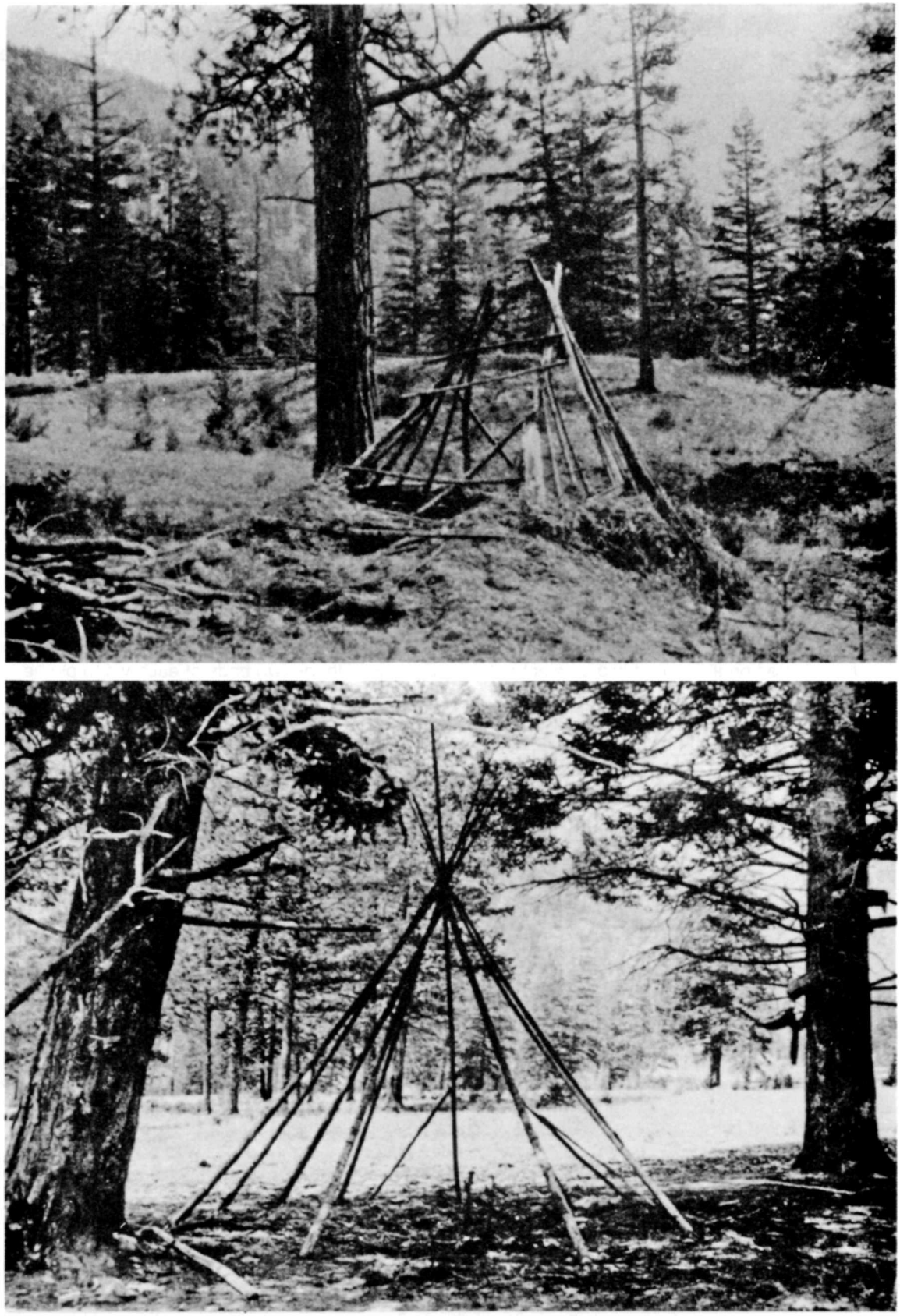


Figure 3-26. Framework of two Thompson summer mat lodges, photographed in 1890s by Harlan I. Smith (Boas 1975:2 of unpaginated introduction, Plates 21, 22). A: through much smaller, appears to be in the pattern of Figure 3-25 A. B: shows features of Figure 3-25 D and E.

[Ray 1932:34-35]) or that it was a shelter erected, for instance, by hunting parties to be used for no more than two or three days—as an alternative to the brush shelter described in the preceding paragraph—is not made clear.

Menarcheal and Menstrual Shelters

The menarcheal lodge of the Thompson was a temporary structure built as required near the village or hunting lodge. Conical, it was made by placing four small fir trees in a square, tying their tops and branches together, and filling in the open spaces with fir tops. It was just large enough to allow the girl to sit comfortably either in a shallow, circular pit or on the ground with her feet in the depression. (Teit 1900:198)

Every Thompson woman repaired to a small, generally conical structure "some little distance" from the village or temporary lodge as her shelter during every menstrual period. It was roughly constructed of brush among the Upper Thompson; of cedar bark by the Lower Division. The woman was taken food by other women but cooked it herself. In her hut she might weave baskets and engage in similar normal female pursuits, but she avoided all persons, especially males, venturing outside only when others were absent or asleep. At the close of her period and seclusion, she washed herself carefully, hung her clothing on a tree to be worn in later months, and put on fresh clothes.

This pattern of rigid seclusion was designed to prevent a menstruating woman from contaminating other persons and even animals and things. If, for example, a man ate food prepared by a woman in this condition or even ate in her company, or if he wore clothing made or patched by such a woman, he would have bad hunting luck and bears would attack him. Animals were insulted by any association with menstruation, however remote: accordingly, women were forbidden at any time to eat certain parts of large animals and, when menstruating, to eat *any* of their meat. While menstruating, they were not allowed to pass in front of weapons; to do so would make them useless unless purified. (Ray 1942:206; Teit 1900:326-327)

Sweat Lodges

Sweating was an important part of the cultural life of the Upper Thompson. Invariably close to water, sweat lodges were erected on a frame of two sets of bent willow wands with the two ends of each wand pushed into the ground and the two sets at right angles to each other (Figure 3-27 A). Each set had its longest wand in the center; its shortest at the two sides. Together they formed a dome-shaped framework. Withes tied the two series together wherever they crossed. The entrance between two wands was just large enough to allow a person to creep in. On one side of this door a foot-square pit was dug in the floor to hold the heated stones. The covering of these structures depended on their location and the frequency of their use. Those near villages, built with more wands to form a relatively tight network, were covered with a thick layer of dry pine needles and then a thick covering of earth; the doorway was closed with a blanket or skin. Or these were covered wholly or partly with bark. In contrast, those erected for more temporary and less frequent use were covered with blankets, which were removed to serve other purposes when the sweating was finished. The floor was covered with fresh fir-boughs, often with aromatic plants—like sagebrush or juniper—mixed in. These sweating structures accommodated from one to four people, all squatting. The sweating process was always concluded by a plunge into cold water. (Hill-Tout 1900:508; Teit 1900:198, 370)

A variant and apparently uncommon framework for the structure consisted of small poles erected in conical "tipi" form (Figure 3-27 B) (Boas 1975:2 of unpaginated introduction).

While not extensively practiced by the Lower Thompson according to Ray (1942:170, 180-182), sweating was still part of the division's cultural heritage. His description of the group's lodge differs in some details from the foregoing and extends it in others as the following summary reveals. It was always sited near fresh water to allow the cold plunge that without exception followed the sweating. Large enough for only one person, it was constructed of a bent willow or fir frame, sometimes in a pit six inches deep, and of a covering of bark and then earth. The round entrance was closed with a hanging mat. Except for the pit for the hot rocks on either side of the entrance, the floor was covered with fir "twigs." The fire pit for heating the rocks was outside. Squatting as he sweated from the hot steam, a man prayed to the Sweat House, calling it "grandfather" and singing special sweat-house songs.

A Lower Thompson person was allowed to sweat at any time during the day, an activity carried out for cleanliness, curing, good fortune, and training depending on the circumstances at the time. The sweat lodge was owned by a single individual but used communally. Women were not allowed to approach men's sweat lodges; they had their own, built identically to those of males. (Ray 1942:180-182)

The difference between the Lower and Upper Thompson in the importance of sweating as described by Ray and Teit respectively raises the interesting question as to whether Ray could be mistaken. I suspect not, except perhaps in one sense. It appears more than conceivable that in this practice the Lower Thompson leaned downriver toward their Halkomelem neighbors, among whom little attention was directed toward

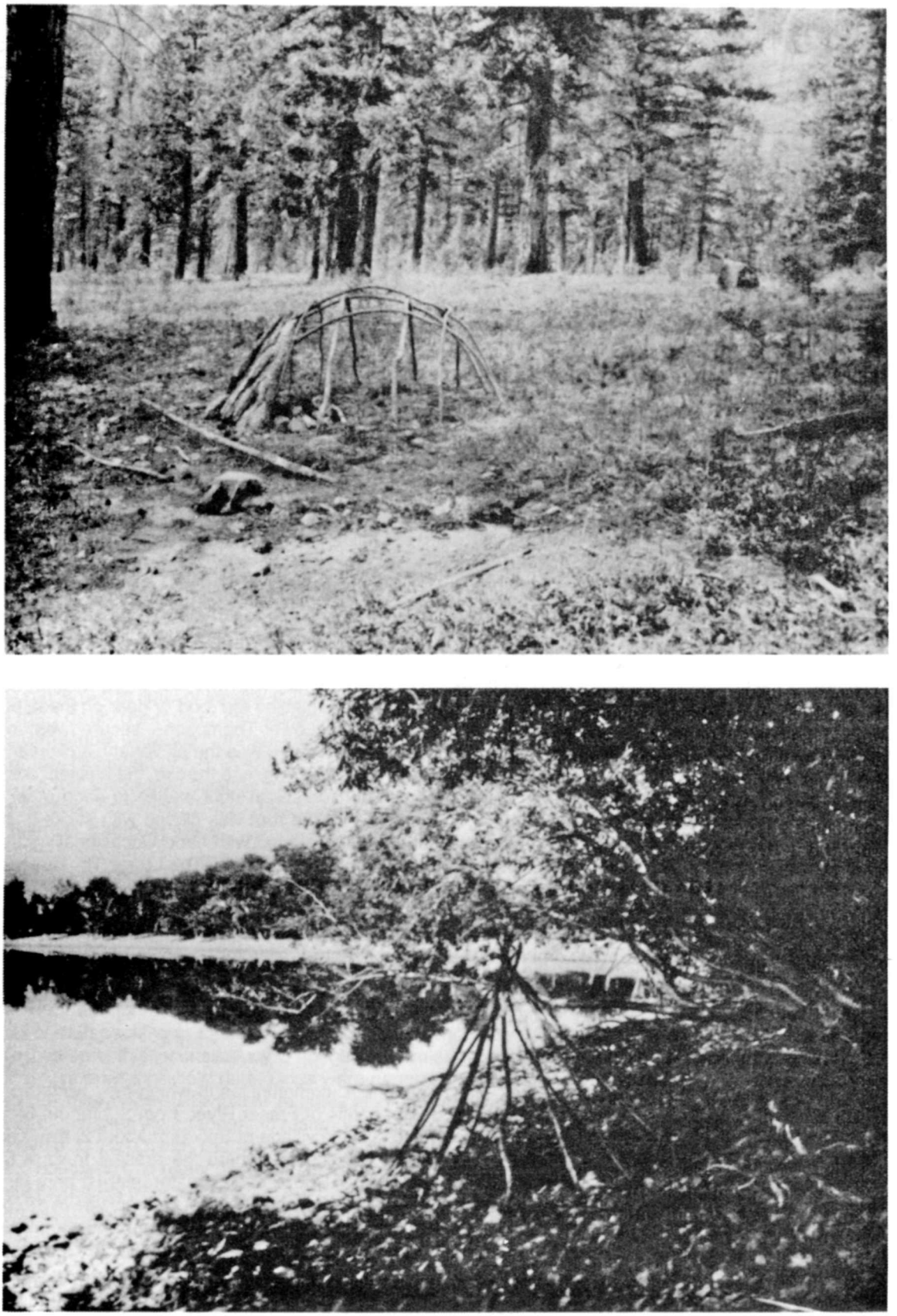


Figure 3-27. Framework of two sweat lodges, photographed by Harlan I. Smith in the 1890s (Boas 1975:2 of unpaginated introduction, Plates 23, 24). A: usual Thompson hemispherical type. B: occasional conical type, photographed in Nicola Valley.

sweating, while the Upper Thompson participated in the general central and southern Plateau pattern with its emphasis on sweat-bathing. Ray's data reporting an inconspicuous role for sweating among the Lower Division may, however, be less than fully correct. In the Plateau sweating was intimately associated with hunting. It could be expected, therefore, that the Lower people while at their canyon salmon fisheries and in their canyon villages paid comparatively little attention to the sweat lodge. But when they emerged from the chasm and went to the mountains to hunt—and gather and fish for smaller fish—they may well have followed the customary Plateau custom of extended sweat house use. Presumably this would have been notably the case for those Lower Thompson who were specialist hunters and those (perhaps the same group) who sometimes spent much of the year in the high country. As already remarked upon, Ray's Lower Thompson data seem oriented principally toward the canyon, fishing segment of their old life patterns.

Attendant Structures

In the vicinity of the dwellings, drying racks were erected. These consisted of a simple framework of poles: i.e., a supporting structure and a series of horizontal poles about five feet above the ground. In drying meat these horizontal poles were placed a few inches apart; beneath them fires were often kindled to assist in the drying process. Over mats placed on these poles berries were thinly spread to dry under the hot sun. From these platforms it appears, though Teit is not quite specific on this point, roots, threaded on bark or grass strings, were hung to dry. Poles were also arranged near houses for drying salmon: after proper preparation, the fish were hung over these until dry and hard. Nearby sweat house frames—uncovered, of course, at the time—were sometimes used as meat drying racks when the quantity was small and it was desirable to dry it quickly. (Teit 1900:234, 1930b:240)

Likewise near their dwellings—at least in the late 1800s—were constructed scaffolds of poles, about five feet above the ground, for storing cumbersome articles like saddles (Teit 1900:199). The indicated height of this platform is of interest in view of the extremely troublesome nature of the native dog in the Indian camp. Generally poorly fed and dependent on scavenging for most of their food, dogs were accustomed to attack every edible article—including those of tanned hide—wherever they could reach them. A storage surface of only five feet in height would have scarcely been out of their reach. Teit fails to indicate how the Thompson controlled this constant threat to their edible property.

Thompson caches for provisions and objects were of two varieties. One was fashioned by tying poles horizontally from lower limb to limb in a large tree with spreading top, placing the food or gear on these poles, and covering the pile with mats and bark—planks or bark among the Lower Thompson—secured with ropes. The platform was reached by a ladder. The more common cache, however, was the pit variety, a circular hole about four feet deep used exclusively for storing baskets of berries, dried fish, and the like, the baskets covered with birch bark. The roof was a double layer of poles placed horizontally at right angles to each other and covered with pine needles and earth. The entrance in the center of the roof was closed with sticks or bark, covered with earth. Among the Lower Thompson, at least, the pit was lined with bark. Occasionally these—especially those containing fish—were in the side of a bank with a side entrance. The Lower Thompson also used a large board box on posts at least five or six feet high with an end entrance, reached by a short ladder. Sometimes these were as much as 10 feet above the ground, according to Hill-Tout, to insure that the stored food was well out of reach of prowling dogs and other animals. These above-ground caches were in part an adaptation to the commonly hard, rocky ground in the canyon bottom. Accordingly, they were likewise in use among the Upper bands where the ground was too rocky to permit the digging of the pit storage structures. (Hill-Tout 1900:513; Ray 1942:137, 180; Teit 1900:198-199, 234)

Residential and Task Sites

The villages of the Lower Thompson—i.e., their "permanent" communities in which they wintered year after year—were located "at favorable spots along . . . [both] banks of Fraser River, from . . . [about 3 miles] below the [Upper Thompson] village of Si'ska in the north, to . . . [the village of Spô'zêm about 2] miles below [the town of] Spuzzum in the south" (Teit 1900:168). Si'ska was situated where the present town of Cisco (Figure 3-1) is located, about eight miles downstream from Lytton; Spô'zêm, of greater interest here since it was the downrivermost Lower Thompson winter settlement and therefore the nearest in direct line to the North Cascades Park, was about nine miles above Yale (Teit 1900:169, 171; BCGTB 1957). That Spuzzum was the southernmost Thompson village is also reported by Boas (BAAS 1890:801, 806; see NARN 1974:39, 41; cf. Hill-Tout 1900:501) on the basis of his own field research in the late 1880s.

The village sites of the Lower Division were unusually stable—substantially more so than among the Upper Thompson—and many families are said to have occupied the same village for generations. A roster of 19 of these locations, occupied in the 1890s, is provided by Teit (1900:169) for an approximately 37 mile stretch of the Fraser Canyon, about one every two miles on the average. Hill-Tout (1900:500-501), on the other hand,

lists 25 or 26 villages for this same river distance and the same time period. In earlier years a number of smaller villages were situated at sites no longer occupied in the last of the 1800s.

These winter settlements are of no further interest in the present context since Spô'zêm, the nearest of them to the Park, was about 48 air miles roughly north of the point where the international border crossed the Skagit River. In short, it is clear from Teit's data that no Lower Thompson—much less Upper Thompson—winter villages were situated within the Park boundaries, a far from remarkable circumstance considering the difficult winter climate of even the lowest stream valleys within Lower Thompson country inside the North Cascades Complex.

On the other hand, as noted above, the area south of the Canadian boundary claimed by the Lower Thompson was considered by them as an extension of their hunting grounds north of the border. This being so, the group must have occupied temporary hunting camps, as well doubtless as other short- and medium-term task camps and more strictly traveling camps, in the region of the Park and the present Ross Lake (Figure 3-1). Unfortunately, there appears to be no ethnographic or ethnohistorical information on the specific locations of any of these sites.

It is, however, of some interest that Spô'zêm village was not many air miles or possible trail miles nearer Ross Lake than the closest traditional winter village of the Northern Okanagan, that at Keremeos on the Similkameen River (Teit 1900:166, 174). In neither instance was there an easy direct route, mountains being the problem in both cases. Lower Thompson parties had two obvious options. One required the party to thread its way to the upper Skagit through a continuous tangle of high mountains without major stream paths to follow, a route that would have kept them wholly within their own territory. The second, following a less difficult path, led down the Fraser River to the Hope district in Halkomelem Tait country and then southeasterly to the Skagit via either the Nicolum and Sumallo or the Silverhope and Klesilkwa. The Northern Okanagan Keremos might have made the journey, for instance, by way of the Similkameen, Ashnola, Pasayten, Similkaneen again, and the Lightning Creek trail to the Skagit (see DEMR *Hope* quadrangle 1970). Both of these river routes would have been somewhat roundabout, as well as carrying the party through the territory of another tribe.

These data raise the question of why the northeastern, Ross Lake corner of the Park region was traditional Lower Thompson territory rather than Northern Okanagan country. Perhaps it was because of the relatively small size and unusually rugged contours of the Lower Thompson hunting-gathering territory above the British Columbia border, the tribe accordingly facing a more pressing need for the subsistence resources of this additional terrain in spite of its very difficult topography. But an important difference may have been that in early days the Lower Thompson, moving south down the Fraser, would have passed across the country of the friendly Tait tribe, while the Northern Okanagan would have had to traverse hostile Nicola land over a major part of their trail distance.

Different Thompson villages maintained their population integrity even when temporarily camping in a single locality. According to Teit (1900:294), when two or more groups took up residence at root grounds, they had their own camping areas.

Domestic and Tamed Animals

Any consideration of the Thompson village and its components cannot neglect the domestic and even tamed animal population.

Thompson dogs resembled coyotes in appearance. Though rather poor watch dogs, they were fine hunters. The best deer dogs were highly valued and taken good care of. It is uncertain whether dogs were trained to share light transportation duties. According to Teit, they were never used by the Thompson in any form of burden packing or hauling; among the Lower Thompson, Ray states, they were taught to carry packs. The resolution of this inconsistency is not obvious, unless relating to the different time period during which Teit and Ray gathered their field data. Dogs were generally named for some peculiarity in their marking or color. Some, however, were called after animals or birds that were noted for their swiftness, ferocity, or hunting abilities or that they were thought to resemble physically. (Ray 1942:159; Teit 1900:244, 256, 292)

Writing of the Lower Thompson specifically, Ray (1942:123-124, 163) reports that in the old days the Lower Thompson had many dogs, all with heavy hair. They were named, as Teit notes for the Thompson as a whole. Good dogs were leashed for their own protection and were allowed to live within the dwelling. They were trained with older dogs in the fine points of hunting, using deer parts in the training process, and were widely used in hunting both deer and bear. Dog "wool," like mountain goat wool, was used in weaving blankets on a roller loom. In times of famine dogs were eaten.

Horses reached the Upper Thompson toward the end of the 1700s. In early years they were extensively used for food. They were either named after the same fashion as dogs or given names like those possessed by people, including the special suffixes used for humans. (Teit 1900:292) I suspect that these animals were much less common among the Lower Thompson, but know of no hard data to support this proposition.

Beaver and bear were kept as pets by the Lower Thompson, the latter, however, on no more than a

temporary basis (Ray 1942:124). If these two animals were held in captivity, other wild species were almost certainly tamed on occasion, to judge from the general Plateau-wide pattern.

Travel, Transportation, and Intertribal Relations

The Upper Thompson had watercraft of three different kinds. The preferred and most common was the birch-bark canoe. The dugout, fashioned from a cedar log with fire and adzes, was a less favored alternative. The skin canoe, an elk or caribou hide stretched over a wooden frame, was a hunter's canoe, used principally in ferrying family and gear over water in his path when out in pursuit of game. Double-bladed paddles were employed with bark and skin canoes; a single bladed type was used with the dugout. (Hill-Tout 1900:515)

Among the Lower Thompson fine dugout canoes were manufactured of cedar, and others of lesser quality from pine logs. Several types were made, most with a projecting prow and some with an extending stern. None were commonly more than 25 feet long. They were shaped with antler wedges and stone mauls and then with stone adzes, axes, and chisels. When finished, they were filled with water which was brought to a boil with red-hot stones and into which were placed dried salmon heads. After this mixture had simmered for 24 hours or more, the wood had absorbed the oil and was less in danger of cracking. The exterior surface was often carved and painted in red, white, and black and ornamented with rows of elk or caribou teeth and shells. Cedar canoes made by specialists were sold in large numbers to the Upper Thompson. Paddles of maple, often painted, were provided with a crutch handle. Pointed fir poles were also used, one on each side, in propelling the craft. Bailers were of birch bark or bent cedar bark. (Ray 1942:155-158; Teit 1900:183, 184, 255-256)

Their dugout canoes were in constant use in the less turbulent sections of the Fraser Canyon and even, on occasion, to negotiate the rapids, truly dangerous journeys. In his narrative of 1808, Fraser (1960:89-98, 115-118) makes clear the importance of the canoe to the Lower Thompson. On more than one occasion his party, traveling through the canyon, purchased or secured the loan of native craft.

Only a few spruce bark canoes were in use among the Lower Thompson. The bark was sewn with spruce root fibers and stretched over a wooden frame. Seams were sealed with melted gum. (Teit 1900:183, 184)

Rafts of logs lashed together with withes were used in fishing and in crossing streams (Teit 1900:256).

Goods were carried overland on the back of both men and women with the assistance of tumplines of buckskin, of cedar bark, or woven of mountain-goat wool. The burdens—e.g., meat, berries, roots, camping gear—were placed in coiled or birch bark baskets, which were then strapped to the back. (Ray 1942:147, 148; Teit 1900:256)

For traveling in the mountains over deep snow, the Lower Thompson used snowshoes of an "owl sole" type unique to their division. Its frame was of maple; its network consisted of twisted strings of raw deer-hide or bear hide. Its special features, however, included the fact that it was rather egg-shaped, was slightly shorter than most Upper Division shoes, and, in particular, was more turned up at the front, all excellent adaptations for climbing their steep mountains. Further, it was rather wide-meshed, considered favorable for traveling on moist snow. Several of the subgroups within the Upper Thompson division likewise had their own peculiar, favored varieties. Fir branch toboggans were used by Thompson hunters in sliding down snow-covered hillsides. (Ray 1942:158-159; Teit 1900:256-257, 1930b:249)

Trails

A full tracing of the trails that ran within, through, and out of Thompson country is not possible from the fragmentary, scattered information appearing in the published ethnographic and ethnohistorical accounts. The following represents a compilation of such data as have been located, with special attention to the Lower Division.

Within the Lower Thompson country a trail ran the length of the Fraser Canyon, though whether there was a continuous path on both sides of the river is uncertain. This was an exceedingly difficult trail because of the sheer, towering cliffs and the great rock masses and the roaring stream with its almost or, in certain seasons, totally unnavigable rapids. Indeed, the several villages of the Lower Thompson "had little intercourse with one another, owing to the difficulty of travel in the Fraser Cañon" (Teit 1900:178).

The problems of traveling through this river stretch both by water and on land inside the canyon walls can best be comprehended by reviewing three early journeys through this fearful distance: that of Simon Fraser in late June and early July, 1808; that of Sir George Simpson in early October, 1828; and that of Richard Mayne in 1859. These data also illustrate the remarkable efforts made by the Lower Thompson to facilitate along-river travel. For reference at other points in this chapter, such other ethnographic observations as are made are included in the following summaries of these three journeys. These native cultural notes of Fraser are of particular significance inasmuch as he and his party were, so far as is known, the first Westerners to see the Lower Thompson in their own country and before anything more than a stray bit of Western material culture had reached them through the intertribal trading network. No effort is attempted, however, to locate with whatever

precision might be possible the natural features and Indian villages mentioned: in the present context it is sufficient to know that they lay between the confluence of the Thompson River, where Lytton now stands, just upstream from the northern limits of traditional Lower Thompson territory, and the foot of the canyon at Yale, just below the downrivermost Lower Division village.

The journal of Fraser (1960:86-98) recording his journey of exploration down the river contains the following relevant information:

June 19, 1808. Reached two large Hacamaugh [Thompson] villages at the Thompson river mouth. Observed two metal kettles and some Western clothing, trade items from posts east of the Rockies. "[C]hiefs and great men, appear to be good orators, for their manner of delivery is extremely handsome." Supplied with "salmon, berries, oil and roots in abundance and our men had six dogs [to eat]." Camped near Indian village.

June 20. Indians sang and danced all night. Obtained two wooden canoes. Presented with berries, roots, and oil in abundance. Asked for leather, but none was brought. Left villages at Thompson River mouth.

> Aided by heavy rapids and a strong current, we . . . came to a portage. Here the canoes and baggage were carried up a steep hill, the ascent was dangerous—stones and fragments of rocks were continually giving way from our feet and rolling off in succession; from this cause one of our men was much hurt, and a kettle bouncing into the river was lost. The Indians informed us that some years since, at this place, several of their people, having lost their balance from the steps giving way, rolled down to the river and perished, and we saw many graves covered with small stones all over the place. (Fraser 1960:89)

Encamped.

June 21. Indians singing and dancing on opposite bank. Terrible trouble for "three miles among rapids, cascades, whirlpools, &c. all inconceivably dangerous." Lost one of three canoes. (Editor's note: probably in "vicinity of Jackass Mountain, a dozen miles downstream from Lytton" [Fraser 1960:92 footnote 21]).

June 22. Four men brought canoes down by water, making several portages in the undertaking. Baggage carried by land. At village of about 110 men "were received with loud acclamations and generously entertained." Indians carried canoes past dangerous rapids. Encamped some distance from the village. At village Indians sang and danced and were very civil; gave Fraser's men three dogs and furnished party with "best [food] they could procure; but that best was commonly wretched if not disgusting." (Fraser 1960:92-93)

June 23. From past very dangerous experiences Fraser's men preferred "walking to going by water," even though walking "was difficult, the country being extremely rough and uneven." Canoes managed to negotiate rapids, but then one broken in portage. Camped at village of about 170 persons who call themselves Nailgemugh. Entertained "with singing, dancing, &c."

> The Nailgemugh Nation are better supplied with the necessaries of life than any of those we have hitherto seen. They have robes made of beaver &c. We visited a tomb which was near by the camp. It was built of boards sewed together, and was about four feet square. The top was covered with Cedar bark and loaded with stones. Near it in a scaffold were suspended two canoes, and a pole from which were suspended [word indecipherable], stripes of leather, several baskets &c. (Fraser 1960:94)

June 24. Secured two canoes by trading. By canoe for one mile, then a carrying place of 800 yards. Passed Indian camp. Arrived at portage

> with steep hills at both ends, where we experienced some difficulty in carrying the things. Ran down the canoes; but about the middle of the rapids two of them struck against one another, by which accident one of them lost a piece of its stern, and the steersman his paddle. . . . (Fraser 1960:94)

Repaired canoe. In evening arrived at Indian village of some 500 persons at some distance up the hill. Received from them "fresh salmon, hazle nuts, and some other nuts of an excellent quality. The small pox was in the camp, and several of the Natives were marked with it."

June 25. Embarked.

> After going a considerable distance, our Indians ordered us a shore, and we made a portage. Here we were obliged to carry up among loose Stones in the face of a steep hill, over a narrow ridge between two precipices. Near the top where the ascent was perfectly perpendicular, one of the Indians climbed to the summit, and with a long pole drew us up, one after another. This took three hours. Then we continued our course up and down, among hills and rocks, and along the steep declivities of mountains, where hanging rocks, and projecting cliffs at the edge of the bank made the passage so small as to render it difficult even for one person to pass sideways at times.
>
> Many of the natives from the last camp, having accompanied us, were of the greatest service to us on these intricate and dangerous occasions. In places where we were obliged to hand our guns from one to another, and where the greatest precaution was required to pass even singly, the Indians went through boldly with loads. (Fraser 1960:95)

Encamped at a rapid. On opposite bank an Indian fishing for salmon "with a dipping net." Fraser's Indian companions netted five salmon.

June 26. Continued portage, passing "over huge rocks," assisted by Indians. Determined navigation of river below to be "absolutely impracticable."

> As for the road by land we scarcely could make our way in some parts even with our guns. I have been for a long period among the Rocky Mountains, but have never seen any thing equal to this country, for I cannot find words to describe our situation at times. We had to pass where no human being should venture. Yet in those places there is a regular footpath impressed, or rather indented, by frequent travelling upon the very rocks. And besides this, steps which are formed like a ladder, or the shrouds of a ship, by poles hanging to one another and crossed at certain distances with twigs and withes [tree boughs], suspended from the top to the foot of precipices, and fastened at both ends to stones and trees, furnished a safe and convenient passage to the Natives—but we, who had not the advantages of their experience, were often in imminent danger, when obliged to follow their example. (Fraser 1960:96)

(Editor's note: Fraser was here in the Hell's Gate and Black Canyon area.) In evening was ferried across river to Indian camp where spent night. People still of Hacamaugh "nation," although "some men of a neighboring nation called achinrow [i.e., Tait tribe or perhaps more generally Upper Stalo Halkomelem] were with them." Promised canoes for next day by villagers.

> But the canoes being above the rapids, some of the young men went for them. It being impossible to bring them by land, or to get them down by water, they were turned adrift and left to the mercy of the current. As there were many shouls [shoals] and rocks the canoes were in the greatest danger of being broken to pieces before they got to the end of the rapids. (Fraser 1960:97)

June 27. Indians of village sang and danced. Indians carried part of baggage over a "route . . . as bad as yesterday." Came to the canoes that had been set adrift: one broken and the other much damaged. Repaired canoes. Some men with baggage embarked; rest walked. Came to a small camp of about 60 persons at a place called Spazum [Spuzzum] on the boundary line between the Hacamaugh and Ackinroe

> Nations. Here as usual we were hospitably entertained, with fresh Salmon boiled and roasted, green and dried berries, oil and onions.
>
> Seeing tombs of a curious contruction at the forks [the mouth of Spuzzum Creek] on the opposite [West] side, I asked permission of the Chief to go and pay them a visit. This he readily granted, and he accompanied us himself. These Tombs are superior to anything of the kind I ever saw among the savages. They are about fifteen feet long and of the form of a chest of drawers. Upon the boards and posts are carved beasts and birds, in a curious but rude manner, yet pretty well proportioned. These monuments must have cost the workmen much time and labour, as they were destitute of proper tools for the execution of such a performance. Around the tombs were deposited all the property of the deceased. (Fraser 1960:97-98)

Spent the night here in the downrivermost village of the Hacamaugh [Lower Thompson].

At this point Fraser moved into the country of the Tait group and so need not be followed farther in his downstream travels.

In July of 1808 Fraser (1960:114-118) and his party returned up the Fraser River heading homeward and so once again passed through Lower Thompson territory. In this account ethnographically interesting details are fewer.

July 8, 1808. Heading up the canyon from its southern terminus, met at the northern end of the first portage by two canoes from the Hacamaugh Nation. Borrowed these canoes while their Indian owners went on foot up to their village. At village received plenty to eat. Entertained "with a variety of songs, dances, &c. during the evening." (Fraser 1960:115-116)

July 9. Went by trail until met by two canoes sent out to meet him from next village. At village was given

> two excellent dogs which made delicious meals for the men, besides fish and berries in abundance. Here we procured a few articles of curiosity; viz., a blanket of Dog's hair, a matted bag, a wooden comb of curious construction &c. Among these Indians we observed a variety of tools, pieces of Iron and of brass, a bunch of brass keys which were from the crew of a ship that the Indians of the sea had destroyed several years before. (Fraser 1960:116)

July 10. [Fraser's account of this day is of singular interest for its description of the simple but effective Indian climbing framework. He might be accused of some level of fabrication or at least exaggeration were it not for the impressively similar account of Mayne (see below).]

> Kept the left side of the river accompanied by several Indians who shewed us the way. The road was inconceivable bad. We had to pass many difficult rocks, defiles and precipices, through which there was a kind of beaten path used by the natives, and made passable by means of scaffolds, bridges and ladders so peculiarly constructed, that it required no small degree of necessity, dexterity and courage in strangers to undertake a passage through such intricacies of apparent danger as we had to encounter on this occasion. For instance we had to ascend precipices by means of ladders composed of two long poles placed upright and parallel with sticks crossways tied with twigs. Upon the end of these others were placed, and so on for any height. Add to this that the ladders were often so slack that the smallest breeze put them in motion—swinging them against the rocks—while the steps were so narrow and irregular leading from scaffold to scaffold, that they could scarcely be traced by the feet without the greatest care and circumspection; but the most perilous was, when another rock projected over the one you were leaving. The Indians deserve our thanks for their able assistance through these alarming situations.
>
> The descents were still worse. In these places we were under the necessity of trusting all our things to the Indians, even our guns were handed from one to another. Yet they thought nothing of these difficulties, but went up and down these wild places with the same agility as sailors do on board of a ship.
>
> After escaping innumerable perils in [the] course of the day we encamped about sunset. The Indians tried to fish, but caught nothing; they, however, supplied us with plenty of dried fish. (Fraser 1960:116-117)

July 11. Continued on the route. Crossed a rapid river upon a bridge, and soon after came to end of portage where found three canoes in which those who were lame embarked. Others continued by land. Arrived at village where slept on June 24. Were favored by Indians with plenty of provisions. Camped at village. (Fraser 1960:117)

July 12. Procured "a sufficiency of fish" and set out. Those who were indisposed traveled by canoe; others who went by land had to use the canoes now and then to ferry across [side] rivers. Left canoes at portage.

July 13. Received 40 salmon as gifts; young men sent by chief to carry them. Chief reported "the Indians above were poor." [He was obviously speaking of the Upper Thompson above the canyon where salmon fishing was less productive.] Unable to secure canoes, but "Indians assured us that the rapids were too strong to use them with advantage." Passed a village where the Indians were poor and yet shared what little they had. (Fraser 1960:118)

July 14. Passed very treacherous rapids where party had such a narrow escape on June 20. Arrived at confluence of Thompson River. (Fraser 1960:118)

So much for relevant sections of Fraser's account. The difficulties of both the land trail along the canyon bottom and the water route through the Lower Thompson country at least during the summer high water are convincingly documented. Under these circumstances it is not surprising that intervillage social relations within the Lower Division homeland were not altogether close. On the other hand, during the winter season when the river water was at its lowest, it was possible for canoes to navigate the entire length of the Lower Thompson canyon stretch, though "always attended with considerable danger" (Mayne 1862:104). When the Fraser was low, cedar canoes were occasionally taken for trading purposes up the river from the Halkomelem country to the Lower Thompson village of Spuzzum, just above the lowest bad segment of the canyon rapids (Duff 1952:16).

In early October, 1828, Sir George Simpson (1947:36-39), searching for a practicable fur route by canoe from the interior to the sea as an alternative to the Columbia River route, descended the Fraser River from the Thompson River confluence. His narrative—not a daily mile-by-mile journal like that of Fraser— tells us nothing about the riverside trails, but it convincingly recounts his difficulties in negotiating the distance by canoe and boat, even though he had with him "three of the most skilful Bowsmen in the country, whose skill however was of little avail at times." His colorful description of this two-day journey and of the Lower Fraser people whom he encountered deserves quotation.

> [Almost immediately on leaving the Thompson River mouth] the character and appearance of the navigation became totally changed, assuming those of the very worst parts of Thompsons River; every new reach, as we descended, bringing to view fresh and more alarming dangers. The banks now erected themselves, into perpendicular Mountains of Rock from the Waters edge, the tops enveloped in clouds, and the lower parts dismal and rugged in the extreme; the descent of the Stream very rapid, the reaches short, and at the close of many of them, the Rocks . . . overhanging the foaming Waters, pent up, to from 20 to 30 yds. wide, running with immense velocity and momentarily threatening to sweep us to destruction. In many places, there was no possibility of Landing to examine the dangers to which we approached, so that we were frequently, hurried into Rapids before we could ascertain how they ought to be taken, through which the craft shot like the flight of an Arrow, into deep whirlpools . . . leaving our water logged craft in a sinking state. In this manner, the greater part of two Days was occupied, in which, we only made about 70 miles distance, as much time was lost in communicating with the Natives, who were exceedingly numerous and perfectly amazed and much terrified at seeing us, yet shewed no hostility, . . . Salmon, are innumerable and easily taken in those Rapids during the Fishing Season, and this accounts for the great population who house themselves in the Caverns & chasms of the Rocks, out of which on the least alarm being given . . . scores of Naked Wretches poped out, where a moment before there was not the least appearance of our being near the residence of man. Among the whole of this population of several thousand Souls, we saw no more than two or three Guns, but the men were all armed with Bows & Arrows, and either Bone or Iron bludgeons, and men, Women and children, had each a Knife attached by a leather thong to one of their wrists. A Leather or Dog hair waist band, was the only article of dress they wore, many dispensed even with that, and the only Fur we saw among them, was one piece of Beaver coating, and a few Siffleur [marmot] or Ground Hog Skins. (Simpson 1947:37-38)

An independent, more detailed, but less vivid record of this river voyage, in this instance in field journal form, was kept by Archibald McDonald (see Simpson 1947:xxxi-xxxiv). While strong on river conditions and navigational details, it furnishes little ethnographic information. Accordingly, nothing further need be said of it here beyond the fact that it corroberates Simpsons' resume of the perils of the journey.

The serious difficulties encountered by Simpson in navigating the Fraser Canyon were sufficient to convince him at last of the impracticability of the Hudson's Bay Company using this waterway to carry its peltries to the coast and its supplies from the sea to the interior. Yet it must have been used to some extent since Mayne (1862:96) reports that Fort Yale, at the southern end of the canyon, "was selected by the . . . Company as a convenient resting-place before commencing the arduous ascent of the Cañons, and where, having come down, they might dry the furs and skins that had got wet in the passage."

In May, 1859, Mayne (1862:97, 104-109) traveled by land from Yale to Lytton and discovered, as did Fraser, the great dangers of the trail, especially in the two very narrow canyon stretches. His account provides no ethnographically significant information save for its description of the trails.

The "Little Cañon," beginning just upstream from Yale, was about five or six miles long; the "Upper Canon," which commenced almost immediately above the upriver end of the little narrows, was six or eight miles in length. At least in 1859 there were three trails, sometimes merging in various ways for some distance. The lowest trail, a narrow one, was passable only when the river water was very low, "at which time there is a

ledge of boulders along the bottom of the cliff, over which a rough path was carried." The middle trail "passed along from ledge to ledge, at a height ranging from 50 to 800 feet above the river." When the lowest path was blocked by rock jutting out into the river, the traveler was compelled to scramble up to the middle trail. These two routes crossed from the west side of the Fraser to the east at the mouth of Anderson River. The highest trail, which in Mayne's day had become the "Mule Trail," led up a considerable height and through a gorge between the two mountains, returning to the river again between the two canyons. This "road," blocked by snow during seven or eight months of the year, passed from the west to the east bank of the river at the Indian village of Spuzzum. Mayne's path led along the lowest trail whenever possible, but, blocked by some rock bluff projecting out into the river, he was forced constantly to climb to the middle path.

> The mode of rounding these cliffs, which literally overhang the river, is peculiar, . . . There are two or three of them, the trail coming up to them on one side, and continuing again on the other. . . . [P]assing the intervening space . . . was managed by the Indians thus: they suspended three poles by native rope, made of deer-hide and fibre, and from the top of the cliff, the inner end of the first and third resting on the trail, and the middle one crossing them on the front of the bluff. Of course there was nothing to lay hold of, and the only way was for the traveller to stretch out his arms and clasp the rock as much as possible, keeping his face close against it; if he got dizzy, or made a false step, the pole would, of course, swing away, and he would topple over into the torrent, which rolled hundreds of feet beneath. The land-slips in the mountain crevices are also very dangerous. Several times we had to make an ascent of about 200 feet up a land-slip, at an angle of quite 35° , in loose sand, and with nothing to check our downward progress if the sand should slip quicker than we could scramble over. The most dangerous of these . . . is called the Jackass Mountain. Several people have lost their lives in crossing this . . . [dangerous stretch].
>
> This mountain rises abruptly out of the river, and the old trail leads across the face of it. To pass it several land-slips, of twenty or thirty yards wide, and at an angle of about 50°, had to be crossed. To do this the traveller had to make a bolt from the rocky ledge on one side to that on the other; and if he chanced to get dizzy, or the land slipped away with him, he must inevitably be lost. (Mayne 1862:106-107)

Remarkably the Lower Fraser people, carrying their heavy loads, passed along these great and dizzying hazards with wonderful ease.

Indian parties traveling between the upper Halkomelem country south and southwest of the Lower Thompson group and the bands of the Upper Thompson on the lower Thompson River had two possible routes that by-passed the Fraser Canyon dangers. One left the Fraser at the mouth of the Coquihalla, a stream noted for its trout, and led up this river. Perhaps where travelers left this stream and what path they took northward depended on their ultimate destination. But one track ran up the north branch of the Coquihalla, over to the south fork of Anderson River, down it and up its north fork, over to a tributary of the Nicola River, and finally down to the Thompson River. This entire route, save for a very short distance at the Coquihalla mouth, lay within Thompson country, the southern portion in that of the Lower Thompson. (Mayne 1862:67, 108)

An alternative by-pass route ran to the west of the canyon. It branched off the Fraser at the Harrison River confluence, went north by Harrison Lake, Lillooet River, and Lillooet Lake, passed over to Anderson Lake and Seton Lake, and then descended the "Inkumtch River" to the Fraser River. Here it joined the north-south trail from the Chilcotin confluence on the north to the Thompson River junction on the south. This route was wholly outside the Thompson homeland, except to the extent that the territory claimed by the Lower Thompson included a stretch of the eastern shore of Harrison Lake (Figure 3-1). (Mayne 1862:67, 93-94, 132-138)

To return to the Lower Thompson and their travel routes within their territory, trails obviously led southward from the Fraser Canyon to the Ross Lake sector, for the Division claimed this area as their hunting-gathering country, although, according to Collins (1974a:14-15), the Upper Skagit likewise considered it theirs. Lower Division parties crossed from a tributary of the Fraser River to "one of the northern headwaters of the Skagit River. They came in the winter on snowshoes and sometimes stayed through the summer to hunt and fish" (Collins 1974a:14-15, 66). Neither tributary is named and it appears rash to guess as to the streams in question. In part, the problem hinges on Collins' identification of her "Thompson" as having "lived . . . on the Thompson River, . . . and on the Nicola River. . . ." This would, of course, make them Upper Thompson, who, Teit's data (Figure 3-1) documents, laid no claim to the northern part of the Skagit Valley, not the much nearer Lower Thompson. It seems probable that Collins is merely locating the Thompson in a general way by reference to the main body of the tribe, with no intention of specifying a particular Thompson subdivision. Even assuming that it was the Lower Thompson to which Collins' informant alluded, whether she realized it or not, the data are too imprecise to permit an identification of the watercourses mentioned.

Trails also led through and out of the Lower Thompson area. An important route to the east, particularly

after the arrival of the horse, cut through the heart of their hunting and gathering territory. It ran up the Coquihalla Valley from the Fraser and over to the headwaters of the Similkameen. It passed down this stream to the Okanagan River in Okanagan tribal territory (Figure 3-1). In the Coquihalla gorge through the Manson Range the snow lay deep for many winter months, which later made the route impassable to Hudson's Bay Company pack trains during this period. (Mayne 1862:95, 387; Teit 1930b:250) This heavy snow cover, however, evidently created no serious problems for Lower Thompson winter travelers. As already noted, they were snowshoe people, with even special mountain-adapted footgear. Further, as just reported, parties of Thompson—surely specifically Lower folk—wearing snowshoes chose to journey in winter to the Skagit Valley-Ross Lake region.

A number of other trails ran wholly or in part through Upper Thompson country to the north of that of the Lower Division. The following is certainly not an exhaustive roster of these.

One trail led overland from the lower Thompson River to the Kamloops area, where the North and South Thompson Rivers joined. This route, followed by Mayne (1862:111-115) in 1859, left the Thompson at the mouth of the "Nicowameen River," about 9 miles above Lytton, crossed over to the Nicola River, followed this stream up to Nicola Lake, and moved along a chain of small lakes roughly northward to the Fraser in the Kamloops vicinity, just over the boundary in Shuswap territory (Figure 3-1). To travel by this path was shorter than to go up the Thompson River all the way, cutting off the long Ashcroft river bend, and, moreover, it avoided a difficult stretch of the riverside trail below Kamloops.

A route from Lytton up the Thompson River to Kamloops in Shuswap country was an important one, particularly in prehorse times. Trade items of southern provenience were brought by a well-traveled path northward to Kamloops from the Okanagan homeland, traveling via Okanagan Lake, the Spellumcheen River, Shuswap Lake, and the South Thompson River. The Kamloops-Lytton trail then took these goods down to the Upper Thompson. This line of travel was notable especially in early times because it was largely a water path and because it avoided the country of the Nicola, who were enemies of the Okanagan and Southern Okanagan in these prehorse years. (Teit 1930b:250, 252)

Later, with the availability of horse transport and the relaxation of hostilities between the Nicola and the Thompson and then between the Nicola and the Okanagan and Southern Okanagan, the overland Okanagan-Thompson trail via the head of the Nicola River and the cross-country Southern Okanagan-Thompson route via the Similkameen and Nicola Rivers gained significantly in importance. In both cases the trails led through open, well-grassed terrain with no physical barriers. Through increased use of these horse trails the Upper Thompson gradually became the principal recipients of influence from the south and southeast, taking over this position from the Shuswap. (Teit 1930b:252, 253)

Among the Lower Thompson, trails followed by a person or party were marked in various ways to inform those behind. For example, limbs were broken so as to point in the direction taken or stakes were pushed into the ground in an inclined position for this same purpose. (Ray 1942:190)

Trade

In early days the Lower Thompson carried on considerable trade with the Upper Thompson as well as with other neighboring tribes both toward the coast and in the interior.

With the Upper Thompson trade was almost entirely with members of the Lytton band, the group immediately up the Fraser River from them. Similarly people from the Spences Bridge band of the Upper Thompson on the lower Thompson River just upstream from the Lytton band, rarely came down into Lower Fraser country. The Lytton group were middlemen, passing on to other Upper Fraser bands goods acquired from the Lower Division and trading to these latter people items they had secured from the other three Upper bands as well as from tribes to the north and east of them. This pattern of restricted contact between Upper and Lower Thompson was partly the consequence of the great difficulty of moving into and through the river territory of the Lower people. But it was also the result of the Upper Division view that the Lower group was inferior to them. (Teit 1900:178)

To the Upper Thompson Lytton band, the Lower Thompson people traded dried salmon, smoked salmon-heads, salmon grease, dried huckleberries, hazelnuts, cedar bark, wood of different kinds for making pipe-stems, a special wood for fashioning bows, black-tailed deer skins for moccasins, woven mountain-goat hair blankets, baskets, cedar canoes, white vegetable paint, and red paint made of a fungus growing on hemlock trees. (The inclusion of hazelnuts in the above catalog is curious because, according to Turner [1978:126-128], the Lower Thompson *imported* these nuts both from the Halkomelem tribes downriver and also from the Upper Thompson, "who gathered them in large numbers.") In return, the Lower Thompson received from this Lytton band dried roots (e.g., bitterroots, wild carrots), berries (especially serviceberries, soap-berries, and wild currants), buckskins, Indian hemp for making thread and string, bighorn sheep spoons, buffalo-skin bags, bags of Indian hemp twine, mats, dentalium shells, red ocher, pipes, and tobacco. (Teit 1900:190, 232, 233, 259)

From the Lillooet to their west, the Lower Thompson frequently imported stone hand-hammers used in

driving elk-antler wedges in woodworking. These had a smooth cylindrical center, tapering toward the upper end, for the hand hold, a slightly enlarged upper end, and an enlarged lower "business" end but not the heavy termination of the typical nearby Plateau hammer. It was rather the hammer style of the Indians of Vancouver Island. (Teit 1900:183)

From Spuzzum at the southern end of Lower Thompson territory travel was relatively easy on down the Fraser. Accordingly, intercourse with near Halkomelem groups below them was not infrequent. To these tribes toward the coast, the Lower Thompson sold dried salmon; dried mountain goat meat; deer, elk, and mountain goat fat; wild lily roots and other roots; dried soapberries, serviceberries, and huckleberries; "moss cakes" (i.e., black tree-lichen cakes): dressed deer and elk skins; Indian hemp twine; cedar-root baskets; mountain goat skins and wool; and dentalia. In return the Lower Thompson received dried dog-salmon (i.e., chum salmon), sturgeon oil, rush mats, a grass variety, canoes, and abalone shells. (Teit 1900:178, 259)

The references to dentalia in the above lists call for comment. On the surface it seems very odd that the Lower Thompson would receive dentalia from the Upper Thompson and then trade these shells downriver to coastal (or near coastal) people, when the shells were of coastal origin in the first place. But the Upper Thompson are reported to have received their supply from the Shuswap to the north, who got theirs from the Chilcotin and Carrier to their west and northwest (Teit 1900:259). Evidently what we have here is a kind of trade loop that was structured rather like this: From the Nootka source on outer Vancouver Island the shells went to the mainland coast opposite the northern end of the island, then inland to the Chilcotin and Carrier, to the Shuswap, then to the Upper Thompson and Lower Thompson, and so on down the Fraser River to the coast opposite the southern tip of Vancouver Island.

In early days prior to the arrival of the horse, the Thompson traded very little with the Okanagan and Southern Okanagan. It appears to have been confined to the bartering chiefly of salmon pemmican and dentalia for Indian hemp and dressed skins. (Teit 1930b:253-254)

After horses were secured the Thompson had considerable intercourse with the Okanagan and evidently Southern Okanagan also, and trade increased appreciably. Occasionally the Lower Thompson at Boston Bar (Figure 3-1) were visited by Okanagan parties. To them the Lower people traded dried salmon in exchange for wild carrot and bitterroot roots, dried berries, and dressed buffalo and deer skins. To at least some extent, Thompson bartering parties journeyed eastward to the Okanagan country. To the Okanagan the Thompson "gave" especially dried salmon (as noted for the Lower Division people above), salmon oil, salmon pemmican, one or two kinds of roots, coiled baskets, dentalia, and some greenstone or "jade" celts, stone pestles, and stone hammers; occasionally even a slave. From the Okanagan the Thompson received in return mainly camas, horses, dressed bison skins and robes, dressed moose skins (rarely caribou skins), painted bison hide bags, parfleches, woven bags of the Nez Perce type, and shell and bone beads from down the Columbia. (Teit 1900:259, 1930b:217, 237, 253-254, 277)

The Thompson traded coiled basketry also to the Nicola, who themselves wove no such baskets. From the Nicola they secured red paint, or Thompson parties journeyed themselves to Tulameen Forks or Vermilion to collect the ocher. These Athapaskan-speaking people claimed to have borrowed their "bow-shaped" style of root-digger handle of ram's horn from the Thompson. (Teit 1930b:223, 240, 254)

Wild sunflower roots were acquired by the Lower Thompson in trade, since the plant was not native to their country. Interestingly, they were unable to barter fern and certain other of their food roots to the Upper Thompson, because the people of that division did not care for them. The Thompson are reported to have secured dried moose, caribou, antelope, and buffalo meat through trade, these animals not occurring in their territory, but the extent to which the Lower Thompson specifically participated in this exchange is not indicated. (Teit 1900:230, 260)

There was no formal medium of exchange among the Lower Thompson. However, dentalia in fathom lengths served as an informal medium. At least some of the above-mentioned native trade articles were packaged and exchanged in units, demonstrating a measure of standardization in such transactions. Indian hemp, for example, was put up in bundles about two feet long and two inches in diameter; six bundles equaled one "package." Dried salmon was assembled in packages of 100 fish, this unit comprising one "stick." (Ray 1942:190; Teit 1900:260; cf. Mayne 1862:299)

Intertribal Marriage

The only Upper Thompson band with which the Lower Thompson intermarried to any extent was the Lytton group on the Fraser and lower Thompson River immediately upstream from the Lower Division village of Si'ska. To the south the situation was somewhat different, at least for the people of the village of Spuzzum, the downrivermost community of the Lower Thompson close to the exit of the canyon. For these folks communication with "the villages of the Coast Salish [i.e., Halkomelem below them on the Fraser] was fairly easy, and consequently . . . intermarriages were not infrequent." (Teit 1900: 178; see also 179)

The extent of intermarriage in traditional times with other Indian tribes to the west (like the Lillooet) is not

indicated in the ethnographic accounts as I know them. However, to the east the Thompson occasionally married with Okanagan, especially those living in the more northern sectors of Okanagan country. Also, after friendly relations were established, they intermarried to some extent with the Athapaskan-speaking Nicola of the Nicola River and Lake and the Similkameen regions. (Teit 1930b:213, 215, 216, 223, 244) It is not surprising that intertribal marriage, at least among the Lower Thompson, was relatively uncommon considering the fact that, according to Teit (1900:178), even the villages of this Lower Division themselves "had little intercourse with one another, owing to the difficulty of travel in the Fraser Cañon."

Hostilities

The weapons of the Lower Thompson were bow and arrow, spear, knife or dagger, and war club. The bow was of the ordinary kinds as described in the Hunting section. War arrows were generally provided with barbed points and were sometimes fitted with detachable barbed foreshafts of antler or bone. The points were inserted in the shaft in a line parallel to the nock so as to enter between the enemy's ribs more easily, the bow ordinarily being held horizontally in shooting. They were "poisoned" with the juice of the flowers of the toxic baneberry, a preparation from certain roots, or with rattlesnake venom(?). Some warriors named their arrows after fierce animals or birds and painted these figures on the arrow shafts. The spears—thrust, not thrown—varied from 3 to 6 feet in length, shorter ones being preferred in wooded country. They were fitted with large stone points, at the base of which feathers were sometimes attached for ornamentation. The knife or dagger was of stone and double-edged. The club commonly consisted of a round stone encased in a thick hide and fastened to a handle; this handle was attached to the man's hand and wrist by a thong. In another type, if Hill-Tout understood correctly, the stone head was sewed in the center of an elk-hide strip, the ends of the hide being left to swing the weapon by. Clubs of stone, elk antler, bone, or wood, varying somewhat in their form, were also in use. Some of these wooden clubs were studded with stone or horn (antler?) spikes, according to Hill-Tout, and held to the wrist by a thong. To the preceding weapons roster of Teit save as indicated, confirmed at many points for the Lower Thompson by Ray, should be added the willow bark slingshot as both a man's weapon and a child's plaything. (Hill-Tout 1900:502; Ray 1942:152-153; Teit 1900:241, 243, 263-265)

Passing through the canyon home of the Lower Thompson in October of 1828, Simpson (1848:38) saw from his watercraft many members of this tribe at their salmon stations. Concerning their offensive weapons he notes: "Among the whole of this population of several thousand Souls, we saw no more than two or three Guns, but the men were all armed with Bows & Arrows, and either Bone or Iron bludgeons, and men, Women and children, had each a Knife attached by a leather thong to one of their wrists."

Defensive protection was secured through the use of the cuirass, vest, and tunic. The cuirass, extending from shoulder to hip, consisted of two flat boards in front and the same in back, laced together and covered with thick elk hide. The vest, which encircled the body, was of rods or narrow wooden strips, arranged vertically and bound together with bark strings; it was covered with elk skin, often fringed, ornamented with feathers, or painted with animal or geometric designs as instructed in dreams. Heavy tunics of elk hide, soaked in water before being worn, were also used for arrow protection. Whether the rawhide shield was part of the Lower Thompson defensive equipment is unclear: it was not used according to Teit, though common among the Upper Division bands; a round rimless rawhide shield was in use by the Lower group according to Ray. At any rate, the wooden or rod shield, also a common device among the Upper people, was clearly not a Lower Division artifact. (Hill-Tout 1900:502; Ray 1942:153-154; Teit 1900:265-266)

On the point of whether Thompson villages were ever stockaded the data differ. Hill-Tout (1900:500, 502) gives as a name for an old Upper Division village on the Fraser above Lytton a term translatable as "palisaded enclosure containing houses." (This village is not listed by Teit [1900:171-172] in his extensive Thompson settlement roster.) In contrast, Teit (1900:266), whose data I generally favor over Hill-Tout's, states that stockaded settlements seem not to have been a Thompson cultural pattern. On the other hand, small, heavy log-houses near major rivers were, Teit reports, not unknown among the tribe. These were largely covered with brush and earth, though they were provided with loopholes for shooting at attackers. Each had two or more long, low trench entrances, covered thickly with sticks, brush, and earth. Provisioned with food and water, they were impregnable: raiding parties were not equipped to lay seige in enemy country. Whether the Lower Thompson as well as the Upper Division constructed these structures is not made clear. (Teit 1900:266-267)

In early days, the Thompson often mounted raids on other tribes, although true tribal warfare was very rare. These expeditions, carried out by small parties or occasionally by groups of several hundred men often against the wishes of the chief, were for material plunder and slaves, adventure, and prestige, or to avenge murder, injury, witchcraft, or insults to chiefs or women. A dance was held in the village to generate support for the hostilities and to attract additional participants. To be an able fighter, specific spirit power was considered essential; any such man could lead a raid. Before the attack the raiders painted themselves and their clothing, red and black being the favored colors. The central technique was to surprise the enemy by stealthy early morning attack or "sudden onslaught," sometimes involving both treachery and what might be regarded as

considerable cruelty. Bird and animal calls were used in directing the party's actions. Houses were burned; scalps—occasionally even entire heads— were taken; young boys and girls were seized as prisoners and slaves. Sometime later formal negotiations were held through intermediaries to arrange a settlement, but the material spoils were retained by those who had taken them. On the other hand, captives from other tribes were sometimes sent home to carry the news of the slaughter by the Thompson of their companions. (Ray 1942:224-228; Teit 1900:267, 1930c:407)

The party was under the direction of an experienced leader. Spies were sent ahead to watch the camp to be attacked. Little food was taken along and as few fires as possible were lighted. Minimum clothing was worn; the face and often the upper body were painted in red or in red and black. Communication was by signals, signs, and animal calls. Armor was donned by some men before the attack. Generally the leader divided the booty and slaves. Some scalping and even beheading occurred, these relics usually being soon discarded though sometimes scalps or hair were retained to ornament weapons or clothing. (Teit 1900:267-268)

The Lower Thompson were generally regarded, both by themselves and by others, as less hostile than the Upper Division groups. This was especially the case for their lower bands, which maintained amicable relations with all their neighbors and were seldom attacked by them. The more upriver bands of the Lower Thompson, however, were raiders, sometimes sending parties against the Lower Lillooet (see Figure 3-1), who had large stores of fish and other goods, and frequently against coastal tribes of the Fraser delta, often in company with Upper Thompson warriors. These coastal people seldom retaliated, even though it was from these people that the Lower Thompson took their slaves, largely young women, most of whom were sold by their captors when they reached home. From time to time, however, the Lower Lillooet crossed the mountain range to retaliate against the Lower Thompson, in spite of the fact that these Lillooet were generally considered to be unskilled fighters. Apparently Lower Thompson raiders rarely went north to the Shuswap country; in contrast, Upper Thompson relations with these Shuswap were often, perhaps typically, hostile (e.g., Teit 1930b:269). The Lower Thompson were on friendly terms with the Okanagan to their east: when hunting parties met in the mountains presents were invariably exchanged. This, however, was not always the case with the Upper Thompson, parties of which in the real old days sometimes attacked the more northern of the Okanagan villages. Later, in the early 1800s, Thompson-Okanagan relations became very friendly, especially in the Similkameen Valley, where even extensive intermarriage occurred. When, on the other hand, Lower Thompson hunting groups encountered "Klickitat" hunters, fighting "always" ensued. (Teit 1900:268-270, 1930b:257, 265) By "Klickitat" in this context, Teit means the Upper Skagit (cf. Figure 3-1) and the region in question can only be the Ross Lake sector of the North Cascades Park complex; the Klikitat proper lived on the lower Columbia River (cf. Spier 1936:42-43).

Lower Thompson parties often met small groups of Athapascan Nicola when both were hunting in the Cascades "in the country back of Hope and Chilliwack." These contacts were always friendly. Quite plainly the geographical area involved was the region of the upper Skagit River north of the present international line. This latter point is indicated by the fact that the Nicola are reported to have never encountered "Klickitat—i.e., Upper Skagit as above—"who did not go so far north" as to come face-to-face with them. Thompson hunting and war parties, on the other hand, "sometimes went a long way south along the Cascades": i.e., as I interpret the statement, into the Skagit Valley and surrounding mountains south of the Canadian line. In contrast, long ago toward the end of the 1700s, before such intermarriage occurred, the Upper Thompson engaged in frequent forays against the Nicola in their homeland on the middle Nicola Valley and in the upper Similkameen country. (Teit 1930b:257)

The Lower Thompson were invariably on a friendly basis with the various Upper Thompson bands, no raiding occurring between them. On the other hand, bitter blood feuds developed very frequently between Thompson families over even trivial insults and quarrels, and one may presume that these intense misunderstandings came about from time to time between families in the two divisions. So common were these feuds, according to Teit (1900:270, 271), who lived among the tribe, that no man went unarmed, sentinels kept watch over some villages at night, in some places fires were extinguished in the evening, and no one was perfectly safe. Perhaps this was the state of affairs only in Teit's time, but he intimates that it was no less the aboriginal pattern.

Raids against enemies were serious matters with a spectrum of links to the non-material world. Especially important were efforts to enlist the assistance of the supernaturals and of the women relatives at home at a magical level. Before setting out, the men of the raiding party sweat-bathed for several days, asking their guardian spirits for success and protection. Dressed in feathers and paint and carrying their weapons, they danced a mimic battle with all its sounds and actions. While the party was gone, the wives, with painted faces and knives and sticks as weapons, danced in imitation of the fighting and supplicated their weapons to help their husbands kill the enemy. Only warriors with a scalp guardian spirit took and wore scalps, a guardian spirit that might be secured by washing in water in which arrowpoints had been placed. Men with a particular weapon as a tutilary were thought to be immune to injury by that weapon or, if injured, to have been able to recover quickly; they seldom wore armor in a fight. Warriors often smoked to the Sun, one of their favorite guardian

spirits, and sometimes painted on their bodies and weapons patterns with some association with fighting. When a man killed an enemy, he blackened his face with charcoal to protect himself from the victim's spirit. (Teit 1900:356-357)

Social Structure

In this section are discussed the bonds of kinship among the Thompson and various segments of their cultural life that were closely linked to "blood" relationships, the bonds of geographical propinquity and the social groupings that existed in response to them, and inherited class stratification.

Kinship and its Cultural Associations

The following pages describe the nature of kinship in the Thompson view, the family unit, names and the naming process, the concept of property and the inheritance pattern, and hospitality and the potlatch.

Kinship Bonds

Neither the village nor the cluster of villages that comprised the band was a fixed social unit in the sense of possessing a dedicated kin-linked population. Any person or family was free to move about within the tribe—or at least division—and take up residence as he or it chose. As noted below, no formal political authority existed within either the village or the band, much less the tribe. The strongest social links were those of actual kinship. There were no totemic clans among the Upper Thompson uniting persons who were bonded by fictive kin links as on the coast; only two small clans were represented among the southernmost Lower Thompson. These two families claimed clan membership and the right to use totemic masks, carvings, songs, and traditions on the grounds that they were related to families in the Tait tribe, just downstream from the Lower Thompson, which belonged to these coastal clans and hence possessed these rights and privileges. (Teit 1900:290)

Blood relationship was followed in both male and female lines for generations. Kin clusters owned their own family names which only members could use. Because these were inherited, every person who had had the name had acquired it ultimately from the same ultimate common ancestor. One of the most important duties of kin was to avenge the death of a relative by organizing or participating in a punitive raid. (Teit 1900:290)

Family

The family—certainly the nuclear family—was the basic social unit of production and consumption. Husband and wife formed a tight, cooperative, economic team, the customary division of labor placing certain essential duties in the hands of each so that together the critical needs of the family unit could be expeditiously met. Still, in many families some sharing of responsibilities occurred, if convenient to the person not normally expected to carry them out. Among the Upper Thompson the individual families owned the deer fences and fishing constructions that they themselves built. With the Lower Division it was the individual, rather than the family as a whole, who possessed the fishing and hunting constructions, or so Ray reports, but I suspect that this was largely a fiction and that in actual fact it was here also the family that effectively owned these subsistence objects. The father and oldest son directed the family affairs, "although custom required that they should not do anything of importance to the family without first consulting its other family members." Each "male member of age" had the right to express himself and offer his advice in family sessions. (Teit 1900:290)

Closely related families commonly formed cooperative social and economic units at a level immediately above that of the nuclear family. The occupants of a multifamily, semisubterranean winter dwelling or a large summer shelter were ordinarily related. Surely in the typical situation they had cooperated in its construction, though this statement is not to be found in the ethnographic records. At least in the underground lodge they shared the single central fire. Beyond this we know little of the customary functioning of this loose extended family unit: e.g., the degree to which food was pooled or later shared when eaten; to which they participated as a unit in religious ceremonies; to which they traveled together as a unit throughout the year as to root grounds during the summer season and into the mountains on hunting expeditions; to which they organized as a unit in raids in retaliation for injuries to a member family, and so on. But to some extent all of these cooperative interfamily activities must have taken place.

Names and Naming

Generally children received their first name after they could walk easily, a name taken from either the father's or mother's side and at least a year after the death of its former owner. Usually it was the nearest kin who assumed the name. The most honorable way of conferring a name was by holding a feast for neighbors for

this specific purpose. Very few names were held by two persons in the tribe at the same time. People changed their names frequently, some having as many as four or five in the course of their lives. (Teit 1900:290-291)

Nicknames were common and new ones were continually being invented. These frequently referred to something that had happened to the person, to a prominent physical characteristic, to a dream event, to a guardian spirit. These also became heritable cognomens. Men's and women's names of this kind were distinct: many of the men's ended in suffixes meaning "day," "head," and "stone"; many of the women's terminated in "water" or "bow." Among the Lower Thompson, names referring to animals and plants were common; among the Upper Thompson they were far less frequent. (Teit 1900:291-292)

Most names differed somewhat in pronunciation from the ordinary words for whatever the names alluded to. They were normally either contracted or amplified. (Teit 1900:292)

Property and Inheritance

In general, the entire territory of the Thompson was considered common hunting, root-digging, berrying, and bark gathering country of all tribal members irrespective of their division or band affiliation. However, some restrictions prevailed as exceptions to general public ownership. Men of one band were not permitted to construct deer fences in the country of another band. Fishing constructions at salmon sites and mountain deer fences were the personal property of their builders and immediate families; golden eagle eyries were owned by their finders. (Hill-Tout 1900:504; Teit 1900:293-294) Ray (1942:231) provides data specifically for the Lower Thompson: individuals owned fishtraps, small weirs, and spearing platforms as well as hunting pitfalls, deadfalls, snares, and traps, rights to which were sometimes inherited. Title to other fishing sites was wholly by right of use.

There was even some overseeing of the tribal property restrictions. Among the Upper Thompson, for example, an old woman watched over important berry grounds to insure that no gathering occurred until the fruit was ripe; at that time any Thompson women were free to collect the berries anywhere in their country. But any non-Thompson without relatives within the tribe or without specific use permission who were caught hunting, trapping, or gathering subsistence resources within the recognized boundaries of the Thompson might be killed. (Teit 1900:293-294)

Inheritance of personal property on death apparently followed a rather loose pattern governed largely by practical circumstances. It was divided among the sons (and sometimes the daughters as well) or among all male and female relatives of age, or all the property was taken by the closest male relatives. More specifically, deer fences, fishing stations, and eagle nests were inherited in various ways by the male children, the eldest having the right of first selection. He might be expected to choose the fences if he was a hunter, leaving the fishing sites to the next brother. Or all brothers might henceforth use the property in common. If a man died without sons, the nearest male relatives took his hunting places; if he was without male kinsmen, his daughters and their husbands had the right to his property. Males inherited canoes and all hunting, fishing, and trapping implements. Dogs not killed went to the male children; horses were divided among sons and daughters. The possibilities and permutations seem virtually endless. At any rate, sons who inherited from their father had an obligation to look after their mother. (Teit 1900:292-293, 294)

A woman's effects were hers alone. If a separation occurred, she took all of her property with her, including the berries and roots that she had gathered. A widow with children inherited the lodge, all of the kettles, baskets, and cooking utensils, and some of the blankets and robes. (Teit 1900:292-293, 294)

Hospitality and the Potlatch

True potlatches, gift distributions in which formal return gifts were expected, were not an active Lower Thompson pattern, but in a dilute form they occasionally occurred. They were held indoors in the spring or fall over a two-day period. All families in the village contributed property to be given away. Visitors from other communities, sometimes with faces painted, approached the village ceremonially. On the second day the property was distributed to all present, both men and women. Each person was called individually by a spokesman, in the name of the host, who then described the gift, held aloft, for the audience. Interestingly, even the local villagers received gifts. Reciprocal presents were made on the same day. The festivity was concluded by a dance. Potlatches of this very simple form were introduced from the Thompson to the Okanagan, among whom, however, they never took hold. (Ray 1942:231-232; Teit 1930b:277)

Socio-Territorial Units: Village, Band, Division, Tribe

The social units of the Thompson with a land base are not properly described ethnographically in any organized manner. The following summarizes such data as exist, scattered in bits and patches through the literature.

The winter village consisted of a few dwellings with their associated structures. Approximate population figures do not exist, to my knowledge, for the several individual villages listed in the settlement catalogs of Teit and Hill-Tout. But, Teit (1900:192) notes, they rarely numbered more than three or four lodges and often only a single one. Since these semisubterranean structures sheltered from 15 to 30 people, the typical village would have had a population roughly of from 25 to perhaps 100 persons. From his observations in October, 1828, Simpson (1947:33) writes that on the lower Thompson River from below Kamloops Lake to the river's confluence with the Fraser the "population is numerous, forming themselves into Camps of 10 or 12 Families at the different Rapids, where they collect Salmon. . . ." These data are not comparable to Teit's information, since Simpson's relate to the fall salmon season and the fisheries, not to the winter months. But his estimate of twelve families as a maximum in a single camp would seem to place the population of these largest groups at no more than 100 people. In the summer of 1808 Fraser (1960:92-94) encountered one "encampment" in the Fraser Canyon of "upwards [of] 500 souls," but a group of this magnitude may well have been a seasonal fishery aggregation from several winter villages or possibly even partly a collection of the curious drawn to a central point by the passage of his party.

Typically villages were composed of related families, yet these local units were fragile in the sense that individual families and households were free to relocate within the tribe as they preferred. Further, they were exclusively winter communities: during the remainder of the year the occupants scattered to hunt, fish, and collect plant products. In addition, because persons customarily married outside of their own village—the natural consequence of the interlocking kin relationships of the component families and the prohibition against kin marriage alliances—one of the partners in the union—normally the wife—faced relocation on a reasonably permanent basis. Moving to her husband's community, she became a recognized member of his village and band. If, on the other hand, the husband resided with his wife's people for a year and made his home mostly with them, he was considered a member of her village and band (Teit 1900:192, 325).

The village population comprised a social unit. In addition to the normal daily interaction between families, more formal visits, feasts, and gift exchanges were organized during the winter, in which families or family groups hosted each other. Owing to the interfamily marriage links, the village was to some degree an economic entity of production and consumption. For example, group hunts were carried out and the meat shared; a hunter favored with unusual success distributed meat among the other families in the village; and in deep winter families with plenty of stored food shared their supply with families running short. In a way a village was also a ceremonial group: its occupants carried out together the first salmon and first berry ceremonies each year. The village was likewise a loose political entity: a mild form of guidance in many areas of daily life was provided by one or more headmen, who exercised their benign leadership through the consent of the villagers and with their continued backing. The village was not, however, a property-holding entity or a clan node of the coastal variety.

In late precontact and early postcontact days, there were three certain band units—village clusters—within the Upper Thompson Division. With the tribal expansion in the 1800s into the middle Nicola and Similkameen regions at the expense of the Nicola tribe, a fourth band either expanded into a major band unit or then came into existence. These multivillage social composites were recognized as viable population entities by the Thompson themselves: each bore its own name. In general, the band through its individual component families exploited the fishing, hunting, and plant resources nearest its member villages, yet band men and women were free, if they chose, to pursue their subsistence quest anywhere within the tribal territory. To this freedom there was, however, one prominent exception: the members of one band could not erect deer fences in an area considered to be under the control of another band. Even less than the village, the band was not a political unit: there was no band headman save as some especially competent, revered, and powerful village head assumed this responsibility by consensus on some particular occasion. The extent to which the band as a unit played an active and recognizable role in Upper Thompson life is not reported, but it surely was minimal if it existed in any form. There were no bands among the Lower Thompson: evidently the group was too compacted and culturally homogeneous along their short stretch of the Fraser Canyon to develop such social subdivisions. Further, there was apparently far less social interaction among Lower Division villages than among the Upper Thompson: it was simply too difficult during much of the year to travel the trails along the bottom of the canyon wall and too dangerous to navigate by canoe the rapids, whirlpools, and very fast water in the river.

The two divisions of the tribe—Upper with its villages primarily on the Fraser in the neighborhood of the Thompson confluence and on the lower Thompson River, and the Lower with its winter settlements and summer fisheries in the Fraser Canyon sector—have been previously discussed. These too bore distinctive names. They differed slightly at a dialect level. Likewise they differed somewhat in their life style, partly in response to their differing ecological base and partly through their exposure to differing neighboring tribal constellations: predominantly to Plateau peoples for the Upper Thompson and to lower Fraser, coastal influenced groups for the Lower Division. Although once again hard data are wanting, it is obvious that, by and large, the people of one division experienced a higher level of social and cultural interaction than they had with persons in the other division. As with the band, so within the division there was no structured political leadership.

The Thompson tribe, composed of the above two divisions, has also been discussed earlier in this report. It is sufficient here to note that it was a named and so self-recognized unit; that its speech comprised a language unique to itself, unintelligible to all other Salishan tribes; that it regarded as theirs a block of territory with its varied, essential natural resources and defended this country against interlopers; that it, in general, shared these resources freely among its villages and bands; and that its people had more social interaction with one another than they had with the members of other tribes. It was also a peace group; neither the divisions nor the bands are known to have squabbled among themselves, although interfamily feuds occurred. It was not, however, a political unit in the sense that a tribal "chief" or tribal council existed and exerted an influence over the life and activities of tribal members.

Social Rank

Among the Thompson there were no formalized and recognized distinctions between nobility and commoners, although slavery was an accepted institution. Differences between individuals, slaves excepted, was on the basis of wealth and personal qualities and achievements. (Ray 1942:228; Teit 1900:289)

Slaves were acquired by Upper Thompson men both through participating in raids against other groups and taking captives and through the purchase of captives taken by members of other raiding parties.

> When a captive woman bore children to her master, she was considered one of the tribe, and neither she nor her children were ever afterward called slaves, at least openly. Some captive children were treated well, and were even adopted into the family of their master, but other slaves were often treated cruelly. (Teit 1900:290)

In Lower Thompson villages the situation was evidently much the same except that slaves were numerous and the status was seemingly a trifle more rigidly circumscribed. One might conjecture that they were rather more useful and economically productive in these downriver, more sedentary fishing communities than among the more mobile Upper Division bands where hunting was substantially more important. According to Ray (1942:228-229), Lower Thompson slaves were owned primarily by rich men who captured some themselves, purchased others from other warriors in their own group, and imported some from the coast. They lived in their master's house. Still, they were permitted to marry only other slaves, their children sometimes but apparently not always retaining slave status. Occasionally, slaves were ransomed by their own people or traded by the Thompson to other tribes: e.g., to the Okanagan (Teit 1930b:277).

Life Cycle

The ethnographic data concerning the life cycle of the Thompson are particularly rich in their coverage and detail. The following is nothing more than a summary of them.

Pregnancy

Pregnancy tabus on both the woman and her husband were very numerous, all intended to avoid the unfortunate consequences of her condition. A woman pregnant for the first time had to bathe, sweat bathe, and pray often. She could not touch salmon or scratch herself with her fingers. Her hair had to be dressed in a prescribed style. Her husband, for his part, had to bathe, hunt, and pray frequently. Any expectant woman had to bathe often, exercise vigorously, and eat sparingly to aid in an easy delivery. (Ray 1942:191; Teit 1900:303)

Any pregnant woman was forced to observe a great number of specific restrictions on her activities, each designed to prevent harm to herself, her husband, or her unborn child. She could not eat hare lest the child be born with a harelip; or anything killed by a hawk or it would resemble the animal killed; or the meat of a black bear, porcupine, lynx, dog, marmot, or a particular variety of trout. She could not look at a snake or anything ugly, step on certain animal tracks, tie knots, or see a corpse without visiting a shaman for purification. And so on. (Ray 1942:191-192; Teit 1900:303-304)

The husband of any woman with child had his own restrictions to observe. He could not hunt black or grizzly bear, porcupine, hare, fool-hens (else the child would likewise be foolish), squirrel, and a number of other animals. Some animals he could not eat, and other actions he was expected to avoid. (Teit 1900:304)

Birth

A woman gave birth in a special hut summer and winter, remaining there for the following two months. Lying on her side and holding onto a rope placed in position for this purpose, she had her child, delivering it onto a mat placed on the ground. An experienced elderly woman, later paid with a blanket, was sometimes in

attendance; often the woman was alone or with only her husband. The birth experience was usually a very easy one; even in very difficult cases, the mother was not permitted to cry out. If problems developed, the husband was expected to dive into a lake or stream and to follow this act by certain other specific actions intended to hasten the birth. In really troublesome and dangerous births, a shaman was summoned to exercise his skills. Immediately after the delivery, the Lower Thompson mother drank a concoction prepared from cedar. (Ray 1942:193-194; Teit 1900:304-305)

Among the Lower Division the afterbirth was buried by the midwife near water (Teit), or hung in a secluded tree in the forest (Ray). The navel cord was tied with something soft (like squirrel hair) and smeared with black-pine gum. Or, occasionally among the Lower Division, it was not tied but simply smeared with the gum and tule pollen. As soon as the birth had taken place, the father shot an arrow into the air to prevent the infant's navel from swelling. Later the navel cord was sewed up in buckskin, embellished with quills, and tied to the buckskin band that extended around the head of the cradle, from which jingling objects (bone beads, fawn hoofs, etc) were hung. (Ray 1942:195, 197, 199; Teit 1900:304-305)

Abortion was accomplished by drinking a certain substance, but was rare. Newly-born babies were occasionally drowned or strangled, a practice vigorously disapproved of. Twins were the object of special beliefs and practices: e.g., their mother was required to camp alone for some months; their father acquired a special relationship with bear, being immune, for example, from attack by grizzlies. Orphans were sometimes given to grandparents to raise. (Ray 1942:202; Teit 1900:305)

For four days following the birth, the mother did no cooking and kept away from the fire unless shielded from it by a mat. For 60 days a newly delivered Lower Thompson woman ate no boiled or roasted fresh food, no meat or sturgeon, and no fresh berries. For three or four months, she bathed mornings, drank dried salmon broth and herb tea, and kept herself separate from her husband. The new-born infant had its mouth cleansed, was washed in warm water in which bark had been boiled, and was sometimes smeared with a mixture of black-pine pitch and deer fat to prevent it from becoming a crying baby. (Ray 1942:196, 197, 198; Teit 1900:305)

Infancy

Infants were bathed in baskets. When a few days old, a Lower Thompson infant was placed in a coiled basketry carrier shaped like an elongated basin with straight sides and rounded ends. Buckskin flaps were laced up to hold the child. A hoop at the head end, with hanging trinkets, kept a blanket from the infant's face. Carrying straps allowed the device to hang horizontally on the mother's back. The Lower Division also used carriers fashioned of black bear skin, hair side inward. Before receiving the baby, the carrier was lined with softened cedar bark. The baby itself was wrapped with softened fawn skin with the hair left on. Sometimes objects were placed with the child to magically quiet it and prevent it from urinating often. According to Ray, the Lower Thompson occasionally made use of a deep, trough-shaped, birch-bark cradle, stiffened around the edges. (Hill-Tout 1900:506-507; Ray 1942:197, 200, 201; Teit 1900:306-308, 1930b:279)

A very young infant was given tea and broth only if its mother proved incapable of nursing it. It received attention of a magical sort to encourage it to develop qualities admired in later life: e.g., the soles of its feet were rubbed with chipmunk feet to make it fleet of foot. A few Lower Thompson with coastal wives allowed their women to deform their children's head frontally with a strap and pad of cedar bark; otherwise among the Thompson this practice was derided. Customarily, however, moss was placed between the feet, the nose was pulled, the eyes were opened wide, and the whole body was massaged to make the infant's form assume the configuration considered desirable. (Ray 1942:171, 196; Teit 1900:308)

The father generally gave a feast to neighboring families. In this celebration the infant was blessed by an old man or woman. An infant was at once given a temporary name of the nickname variety. After a month or so, it received a family name, that of a living or deceased kinsman, in a family feast in which gifts were distributed. Much later in life this name might be dropped in favor of another family name bestowed by paternal or maternal relatives or even of a self-chosen family name. Among the Lower Thompson these later names were sometimes unusual, taken from animals, plants, or dreams. (Hill-Tout 1900:506; Ray 1942:223-224; Teit 1900:309, 1930b:277)

Childhood

The outgrown cradle was hung in a tree some distance from the village, a new one always being made for each child. Once able to walk, a boy wore little or nothing; a girl, a breechcloth or robe. This was the pattern until puberty. Childhood was a time of great freedom. Children were, however, made to rise early and bathe all year-round to develop hardihood, and were forbidden to play after sunset and to make too much noise under pain of being carried away by Owl, which children greatly feared. (Boas 1975:2 of unpaginated introduction, Plate 22; Ray 1942:171, 201; Teit 1900:308, 309)

Children were often given to childless friends or to friends who had just lost a child of their own. They were reared well by these foster-parents and often thought more of them than of their real parents. (Teit 1900:308)

When a woman went up to the high mountains to dig roots or for some other reason, taking her child with her for the first time, she carried out a pattern of ritual acts. Because of the special interest of this present study in cultural behavior associated with high elevations, these details deserve to be quoted in full.

> . . . [T]he first evening after reaching her digging ground she would break a branch from a tree, and hang her child in its carrier on the broken limb. She painted her whole face, and sometimes the top of her head, red, and danced there before the infant, sometimes all night. She put her hands close together, as if holding something, blew in them, and ran off some distance; then, opening them, she made the motion of throwing away something. This was symbolic of taking disease or evil from the infant, and throwing it far away. She prayed constantly to the spirits of the place, or to the mountains themselves, asking that her child might never be sick, and that, if it were ever bewitched, and no shaman were near to help, nevertheless it might not die, or that she herself might have power to defeat the evil. She also addressed the spirits of the mountains on her own behalf, kneeling down, spitting on her hands, and rubbing her body upward over the front to the face, then over the top of the head backward, meanwhile praying that she might be delivered from all disease or trouble, that she might never be hurt in body, or be bewitched, and that, if sick, she might get well soon. (Teit 1900:309)

Twice during each winter boys and girls, from about 8 years of age until married, underwent a ritual whipping by an old man who descended into the dwelling through the smoke-hole entrance. Children could be spared the thrashing by a woman pretending to pick berries from the man's whip, by a man taking the whipping himself, or by the children bravely going forward one by one and pretending to pick his berries while dancing before him and singing. If lashed, a child was struck four times on its bare back, drawing blood. This rite was intended to help children overcome their bashfulness, to make them courageous, and to enable them to withstand pain. (Teit 1900:309-310)

First and second-born children were thought to become poor hunters and to be generally unlucky. The youngest son was felt to be the luckiest. Twins were announced to a mother before their birth by repeated grizzly bear dreams. They were regarded as different from other children, being under the protection of the grizzly, and were treated differently in many ways. They were, for example, thought able to create at will good or bad weather. Their father and mother were required to observe special behavioral restrictions and to perform special acts. For instance, the mother always nursed the eldest first. The entire family was compelled to move some distance from their village and for four years to live there in a fir-bough and bark lodge. When the twins first cried, a young man was selected by the parents to carry out a rather complicated ritual involving the grizzly bear in various ways. (Teit 1900:309, 310-311)

The first animal killed by a Lower Thompson boy was the occasion for a simple ceremony in which the food was eaten by the old people, though the lad himself was allowed none (Ray 1942:134).

Puberty

An incredible number of ritual proscriptions and prescriptions were associated with the attainment of puberty by both girls and boys, all with the purpose of making them healthy and successful and of protecting the community from the dangers of their condition at this time.

Girl's Puberty

On reaching puberty a girl was strictly separated from other people summer or winter, with her mother or close female relative serving as a kind of proctor. Sometimes her entire family moved into "the wilder parts of the mountains to give her a better opportunity to perform the required ceremonies." Otherwise she lived in a conical fir-branch and bark hut some distance from the village. During the day she squatted inside it, often in a deep hole. Her face was painted red; her hair was done up in a knot behind each ear; she used a bone scratching stick; she was wrapped in a heavy skin. For four nights she was forced to run hard, to split small fir trees, and to pray for a good husband. She dug long or deep trenches; wiped her eyes with small fir branches; remained unwashed; ate nothing; and drank water only through a hollow water-bird bone. She wore special clothing, including a fir-branch headdress. Inside her hut she sometimes wove baskets or engaged in ritual acts like picking needles off fir boughs; outside in the early morning or late evening, when she was least likely to be seen, she gathered firewood or ceremonially tied knots in tree limbs. Some nights she wandered to lonely parts of the mountains where she danced, prayed to the local spirits, and slept alone, all in search of a guardian spirit.

At the close of her isolation period she bathed ceremonially in a lake or stream, prepared her hair in a special way, and was escorted back to the village or camp by her mother. (Ray 1942:203-205; Teit 1900:311-313)

Even after the end of this four-day seclusion period, her ritual responsibilities continued in relation to eating, drinking, washing, praying, the clothing she wore, the paint she applied to her face, and a great deal more, many clearly symbolic of some desired future experience or condition. Again and again the Lower Thompson "pattern number" of four appears prominently in these rituals, which are described in uncommon detail by Teit (1900:313-317). In the old days the girl's isolation lasted for an entire year. Her hut was left to disintegrate of its own accord through time. Other things that she had used or worn were destroyed. (Teit 1900:317)

During subsequent menstrual periods women were isolated in a special conical brush or bark hut as already described (see Menstrual Shelter section).

Boy's Puberty

The ritual patterns followed by pubescent Thompson boys differed with their goals in life: aspiring hunters practiced hunting and shooting ceremonially; would-be warriors performed mimic battles and prayed to the Sun; those desiring to become successful gamblers played with gaming sticks. (Teit 1900:317)

Boys began their training when they first dreamed of an arrow, canoe, or woman, generally between the ages of 12 and 16. They then commenced a 4-day regimen of running, washing in cold water, painting their faces red, wearing special headbands and deer hoof ornaments, drinking through a tube, and using the scratching stick. Each night of the four they went to a mountain top, kindled a fire, danced, sang, and prayed. From then on, sometimes for years, they went alone to lonely parts of the mountains with water-basket, fire drill, and mat, remaining occasionally for as long as two months. There they fasted, living on what game they secured, sweat bathed, and prayed and were with the guardian spirits. Even after they returned home, they observed certain behavioral requirements: they ate sparingly, kept away from the fire, bathed twice daily, sweat bathed, and purged themselves. (Ray 1942:235; Teit 1900:317-319; cf. Hill- Tout 1900:510-512)

The sweat lodge used on these occasions apparently differed somewhat from the usual structure. The door, constructed of fir-branches, always faced east. Apparently, normally four or eight hot stones served to generate the steam. Inside the lodge sweaters struck their bodies with nettles, prayed, and sang, asking the Sweat-House to make them healthy, agile, wise, brave, and lucky and to help them be good hunters, trappers, and fishermen. After sweating, they rubbed their faces and armpits with pulverized leaves, fine river silt, or the white dust on cottonwood bark. They rolled in the dew, or washed themselves with dew- covered branches. (Ray 1942:206-207; Teit 1900:319)

The boys at this time were athletically active: during the night they jumped, ran hard, shot at marks, and so on. With a jadeite adz they made round holes in boulders, praying meanwhile. At daybreak they returned to their sweat lodges.

> When reparing to certain peaks and lonely places in the mountains, some youths set up a stone, danced and sang around it, and finally fired an arrow at it. If the stone moved or cried out, it was a sign that their efforts to become great hunters had been crowned with success. (Teit 1900:320)

These ritual activities continued until the youth experienced his guardian spirit dream. The nature of this experience and further information regarding the guardian spirit world are to be found in a later section of this study.

The Lower Thompson quest pattern differed in certain details. In the first place only a few boys and some girls were sent out on the search, going alone, at their father's behest, beginning at the age of about 12 years. The vigil typically lasted from four to eight days, repeated more than once over a period of several months. They were sometimes told where to go: e.g., to certain unfrequented lakes or mountains or to some isolated sweat lodge. They were instructed as to what activities to engage in: e.g., to keep alert, to sweat, to fast to the extent possible, to induce vomiting to maintain internal cleanliness, to drink certain medicines, and—as with the Upper Thompson—to carry out mimetic activities associated with the power they sought. They were given to carry with them a small part of the animal whose spirit they were to seek. (Ray 1942:235-237)

The spirit appeared to the Lower Thompson youth in a vision (occasionally a dream) in human form (sometimes as an animal). It gave him a special song and at times an object of symbolic significance to be carried and used throughout life. Upon returning home, his success or failure was made known only to his father or other proctor. (Ray 1942:237-239)

Many Thompson carried with them a bag containing a guardian spirit relic, like the skin of their spirit helper. Or they tied to their hair a part of the skin or the feathers of their spirit. (Teit 1900:320-321)

Adolescent boys were expected to observe their own set of tabus. They avoided menstrual lodges and

touching the winter lodge ladder, this latter because women had done so. They drank no water in which meat had been boiled; they ate no roots or berries or any food prepared by women; they always ate alone. They painted

> records, which were pictures representing their ceremonies and their dreams, on bowlders, or oftener on cliffs, especially in wild spots, like cañons, near waterfalls, etc. These were generally pictures of animals, birds, fishes, arrows, fir-branches, lakes, sun, thunder, etc. Figures of women symbolized their future wives. It was believed that the making of rock-paintings insured long life. (Teit 1900:321)

The nasal septum and ears were generally pierced to receive their ornaments about the time of puberty. Tattooing was also carried out then. (Teit 1900:321)

Marriage

From puberty until marriage, a Lower Thompson girl's activities were restricted: she was chaperoned at all times, occasionally even "concealed completely" according to Ray's informant, although how this was managed in a strict sense is difficult to comprehend given the necessarily open life style of the tribe. Love songs were sung—presumably wholly or largely by the young men; prayers for success in love were addressed to slain bears and sometimes to the Sweat Lodge. Love magic was performed with the assistance of birds' hearts or hair of the person being coveted. Magical concoctions were rubbed on, or worn on, the person himself. However, unchastity, if discovered, resulted in enforced marriage at the discretion of the girl's family. (Ray 1942:207, 212)

The only formal restrictions on marriage were those of kinship: unions between even distant known relatives were criticized. Hereditary ranks and classes created no marriage problems, since these social units were nonexistent within the tribe. However, wealthy people preferred to have their children marry into families of similar prominence: hunters into families of hunters; warriors into warrior families, and so on. The Lower Thompson, both Teit and Ray state, favored intervillage marriages. (Ray 1942:213; Teit 1900:325)

Girls were considered marriageable at 17 or 18 years of age, once their puberty rituals had been completed; most males married between the ages of 22 and 25. Usually the husband was some five years older than his wife, though occasionally the difference was as much as 20 or more years. Men rarely married women much older than they were, unless they were taking the widow of an older brother. Occasionally children were betrothed, an arrangement formalized by a good-will gift exchange; the children involved henceforth lived together. (Ray 1942:212; Teit 1900:321-322)

Various kinds of marriage arrangements were in practice. One of the most prestigious involved taking presents to the parents and relatives of the girl through a go-between. The girl's kin considered the offer and, if they regarded it as a favorable marriage, the consent of the girl herself was sought. Among the Lower Thompson, wealthy people, if pleased with the new son-in-law, sometimes returned all or part of these marriage presents. Generally, however, they were retained by the girl's parents and were distributed among her relatives. In another common and likewise honorable pattern, the girl's parents took the initiative. If the man's parents agreed to the proposed union, the principals were considered betrothed. (Ray 1942:208-210; Teit 1900:322-323; cf. Hill-Tout 1900:505)

Under both of the above arrangements the husband went later at an agreed-upon time to claim his wife. He remained at her home for several days, then took her to his own family dwelling for a period. After a time the couple returned to the woman's house with presents and were received with a large feast. For a period the couple remained with the wife's family. Later they returned to the house of the man's family, accompanied by the girl's kin and friends, where they, in turn, were treated to a fine feast. (Ray 1942:210, 211; Teit 1900:323)

Touching a girl, even accidentally, required marriage. Sometimes this action was taken openly as in religious dances. At times the man went secretly to the girl's house for four nights, sleeping each night on the edge of her blanket. If she failed to reject him, the pair were considered married and small feasts were celebrated. Depending on circumstances, the pair lived with her family or his. For their part, young women could similarly touch a man, but the latter was free to accept this overture or not. (Ray 1942:210; Teit 1900:324)

Elopements occurred, especially when a girl was chaperoned too closely by her parents or when they turned down all marriage offers. If her father pursued her and brought her home, he had to allow her to rejoin her husband. Young women were very seldom carried away by force. They sometimes committed suicide if their parents prevented marriage to one they favored or if they were compelled to marry against their wishes. (Teit 1900:324-325)

In general, residence after marriage was with the husband's group "to live with his family," although under certain circumstances it was with the wife's people. Even when it was in the man's village, the couple was expected to return temporarily to the woman's relatives. (Ray 1942:211; Teit 1900:292, 325)

Both the sororate and levirate prevailed among the Thompson. A widower was expected to marry his deceased wife's unmarried sister or other close female relative of the wife. Similarly, a widow was forced by custom to marry a brother or close male kinsman of her former husband, the eldest surviving brother having the first claim. She, in fact, could insist on such a union to support her and the children. This levirate custom resulted in a fair number of multiple wives. (Ray 1942:212-213; Teit 1900:325)

While monogamy was the norm, many men had more than a single wife—as many as seven or eight on occasion—if they were prominent and wealthy. Sometimes the several wives were sisters. Some hostility occasionally existed among the cowives, but this was somewhat reduced by assigning specialized duties to the women. (Ray 1942:231-214; Teit 1900:326) Apparently multiple husbands at the same time were unknown among the Thompson.

Divorce among the Lower Thompson was frequent, at the instance of either husband or wife. Desertion by a man released his wife from the marriage; the husband was criticized by others for this act if there were children. When a family divided, boys might go with either parent; girls, however, followed their mother. (Ray 1942:214)

Punishment for adultery appears to have been one-sided. A married woman's paramour was sometimes killed by the wronged husband and the wife at fault also. The fate of an adulterous husband with an unmarried woman, on the other hand, is not spelled out in the ethnographic accounts.

Berdaches were rare or unknown among the Thompson (Teit 1900:321).

Division of Labor

Adults of the two sexes divided the ordinary work of living in what appear to have been sensible ways that must have been roughly equivalent.

Men were expected to hunt, trap, and fish; to fight; to make all tools and weapons and fell trees; to look after the hunting dogs and help tend the horses; to protect their wives and beat them if they were lazy; and to instruct and advise their children, especially their sons.

Married women carried out almost all work of the house. It was their duty to help clean and dry fish, carry meat and game back to the camp or village, dig and cure roots, and gather and cure berries; to erect the lodges, keep them clean inside, light the fire, gather brush for beds, collect all firewood, fetch water, and wash and cook; to make all mats, baskets, sacks, and clothing; to dress all skins for clothing; to tend the horses; to look after the children and educate the daughters; and to be obedient and faithful to their husbands.

Some men assisted their wives in various of their duties: in tanning buckskin and erecting the lodges, by making tools for them such as their root diggers, and so on. (Teit 1900: 182, 295-296)

Death and Burial

When, among the Upper Division, a person expired within a semi-subterranean dwelling, the position of the ladder from the roof entrance to the floor was changed. The body was taken out and the ladder was then restored to its proper place. The Lower Thompson likewise removed the corpse from the dwelling without delay, through a hole in the wall when the house was an above-ground structure. A messenger announced the death to neighbors and friends, who then gathered at the dwelling and were feasted, though they had to force themselves to vomit immediately after the meal. (Ray 1942:215, 216; Teit 1900:327)

The body, without being washed, painted, or clothed in different dress, was doubled into a knee-chest posture and bound up in a tule mat, deer hide, or fur blanket. Among the Upper people, it was then placed on a temporary platform outside the house; in the Lower Division it was deposited in a tree until the burial. During that day and the following night it was watched over by relatives and friends with much ritual weeping, singing of mourning songs, and periodic face washing. These "watchers" were later rewarded with presents.

The interment took place the following day. Each group of families had its own burial ground some distance from the village. The grave was dug if possible where the soil was sandy to make the digging with the ordinary root digging stick less onorous. It was "swept out" four times with a fir or rosebush branch "to drive away evil influences," and was lined with grass or birch bark. The funeral procession was led by two pallbearers, who were later compensated for their services. Following them came the adult relatives and friends and lastly the children who wished to attend. Speeches of praise were made by an old man and by the kin of the deceased. The body was placed in the pit in a sitting position—perhaps in an extended posture among the Lower people—and the weapons, tools, ornaments, and "medicine bag" of the deceased, all broken to "kill" them, were deposited with it. Sometimes a small heap of stones was piled on the grave and sometimes a conical tent of bark or branches was constructed over the grave. Weapons, broken intentionally, clothing, and broken utensils were hung inside the tent or on a tree in the vicinity. Poles, painted red, were pushed into the ground nearby. One or more of the person's dogs and horses were killed and their bodies or skins were left close-by. A postfunerary feast was held with the mourners as guests, the food provided by relatives of the deceased. All

guests received small gifts in appreciation of their attendance at the interment. (Ray 1942:216-220; Teit 1900:328-330)

Prayers were addressed to the deceased person, asking that the surviving relatives not be harmed. Each year for some time thereafter the bones were gathered, cleaned, and reburied. Persons dying in the distant high mountains were often buried there of necessity and only months and even years later were the bones exhumed and carried back to the family burying ground. (Ray 1942:222; Teit 1900:330)

People who had handled the body were isolated for four days and observed various behavioral restrictions having to do primarily with eating, drinking, bathing, rubbing the body with fir boughs, and being fed ceremonially by relatives and friends. A lodge in which a person had died was burned; a winter pit-house was purified with water in which tobacco and juniper had been soaked and the floor was covered with fresh fir-boughs. Among the Lower Thompson the dwelling was fumigated by burning juniper boughs or in other ways. Property not placed in or at the grave was distributed among the relatives. A substantial number of other actions to magically protect the survivors were carried out: some, for instance, were designed specifically to prevent the ghost from returning to annoy and bring danger to the living. Mentioning the name of the deceased was tabu. Widows and widowers had to engage in many ritual acts in which the number four was very prominent; they were forced to eat, wash, and sleep in certain ways. They cut their hair and wore special thongs around their neck, wrist, knees, and ankles. The Lower group tabued hunting by a widower for a period, and root-digging and berrying by a widow for an entire year. Clearly the event of death and the days and months that followed were considered potentially very dangerous to the close kin and the families of the deceased. (Ray 1942:220-222; Teit 1900:331-333; cf. Hill-Tout 1900:506)

Long ago, according to tradition, the Lower Thompson buried their dead, doubtless following closely the pattern described above for the recent Upper Thompson. Then, it appears, stagings were erected and on these platforms grave boxes were placed. The bodies, wrapped in cedar-bark mats, were put in these boxes in a sitting position. Carved figures and poles surrounded these platforms. But for many generations before 1900 the Lower Thompson laid the bodies in large, square cedar boxes, supported on posts and provided with lids. These boxes and posts were often carved and painted. Each box belonged to one family or several related families. When one box became full, a new one was constructed close-by. Poles and grave figures, to which clothing and other articles were attached, were erected around these boxes. From their tops streamers flew in respect to the dead. Sometimes instead of human grave figures, carved figures of birds and animals were used. Near Boston Bar on the Fraser River in Lower Thompson territory stood at one time a very large, wooden human figure with a hole in the back large enough to hold a corpse awaiting burial. (Ray 1942:218; Teit 1900:329, 335-336, 1930b:289)

Tombs of this box variety are mentioned twice in Fraser's narrative. Near the upper end of Fraser Canyon in a Lower Thompson camp, Fraser (1960:94), in late June of 1808, "visited a tomb which was near by the [Indian] camp. It was built of boards sewed together, and was about four feet square. The top was covered with Cedar bark and loaded with stones. Near it in a scaffold were suspended two canoes, and a pole from which were suspended [word indecipherable], stripes of leather, several baskets &c." Farther downriver in the Spuzzum area he observed

> . . . tombs of a curious construction. . . . These Tombs are superior to any thing of the kind I ever saw among the savages. They are about fifteen feet long and of the form of a chest of drawers. Upon the boards and posts are carved beasts and birds, in a curious but rude manner, yet pretty well proportioned. These monuments must have cost the workmen much time and labour, as they were destitute of proper tools for the execution of such a performance. Around the tombs were deposited all the property of the deceased. (Fraser 1960:97-98)

The bones of the dead were frequently removed from the box by wealthy families, bundled together, recovered with new material, and replaced in the box. Feasts accompanied such reburials. (Ray 1942:222; Teit 1900:336)

Shamans, suicides, and twins were all buried in the same fashion as ordinary people. When a Lower Thompson person died far from home, the body was sometimes cremated. (Ray 1942:218, 219)

Political Organization

The leadership structure of the Thompson from village to tribe was exceedingly loose and informal, without sharply patterned, dominating proscriptions and prescriptions. The only exception appears to have been, if Ray's data are valid, among the Lower Thompson at the village level where the community heads exercised sanctioned powers, noted below, somewhat beyond anything reported for the Upper Division.

In the village of the "ordinary" size there was one person who was recognized by popular consensus as the

community head; in large villages two or more men comprised the leadership. These persons exercised no formally sanctioned leadership responsibilities beyond their own settlement, each village being autonomous in a technical sense though not necessarily completely so functionally as explained below.

The role of headman was not inherited. Rather the village leaders were men noted for their wealth, wisdom, oratorial abilities, and war prowess. Wealthy persons gained power largely by their liberality: they gave public feasts and presents, and they treated strangers well to spread their fame even beyond their Thompson tribe. Oratorial ability was especially important in determining leadership. When skilled orators were likewise wealthy and wise, they exerted great influence over their fellows. Fortunately, the most able generally favored peace and harmony. Some of these leaders were well-known and exerted important influence outside of their own village; even so, they seldom made significant decisions without consulting the people. At least this was the Upper Thompson situation. In the Lower villages, according to Ray (1942:230), the chief not only served as arbiter among his people but was able actually to "command" them and to receive tribute from them, though at the same time sharing his wealth with them. The most important and influential chief among the Lower communities was the headman at Spuzzum. (Ray 1942:229-230; Teit 1900:289, 1930b:270)

Village leaders were distinguished visually by no special clothing or ornamentation. No female village heads existed among the Upper bands, though they apparently occurred in unusual circumstances among the Lower Division. The Thompson had their native term for these leaders, one that is customarily translated in the ethnographic literature as "chief." (Ray 1942:229; Teit 1900:289) Within the above context, this designation of "chief" is used for convenience in this present report, though technically improper—except perhaps for the Lower Thompson—in terms of contemporary ethnological theory.

Under this leadership pattern, hereditary chieftainship, as well as politically tied noble-commoner distinctions, was impossible. Sons of chiefs enjoyed a certain amount of popularity on this account, but did not themselves become leaders unless they possessed the necessary personal qualifications. When they had these, they sometimes assumed the leadership status of their fathers, particularly among the Lower Thompson where this is known to have occurred in a line for several generations. (Teit 1900:289)

Other individual leaders took charge of specially-focused activities. A raiding party was led by the man considered by the members of the group best qualified to direct its activities. As a matter of course, his decisions were rarely made without consultation. Hunting parties followed the direction of the most experienced member of the group. In dances and religious ceremonies, the person to play the most prominent part in the activity assumed the leadership. (Teit 1900:289)

Within even the village there was no formal council to provide advice and guidance to the chief. Rather, whenever anyone had in mind to engage in any activity that concerned the community as a whole—e.g., a raiding expedition or a marriage—he called all of its men together. Sometimes men from other villages with an especially high reputation for wisdom were called in by messenger. Each man in this ad hoc advisory body had an equal right to express his opinions and to vote in decisions. If the group was convened to discuss war or a lesser raid, and if the decision was favorable and supportive, a "war-leader" was selected then and there and this person sent messengers to nearby groups to solicit warrior assistance. Women took no part in these assemblies and council sessions. Generally the advice of the oldest and most experienced man was accepted as the will of the group. The man who convened the meeting and his close friends were expected to furnish the food for the group. (Teit 1900:289-290)

With no hereditary "chiefs" or firmly established headmen at the village level, it is not surprising that there were none for the band, division, and tribe as a whole. To the extent that recognized leadership existed in these larger population entities, it was of the same loose sort as prevailed within the village: some man, through his skills of persuasion, wisdom, and liberality emerged to assume the leadership status as circumstances arose and wide public direction was needed.

Transgression and Punishment

There appear to be no organized ethnographic summaries of the Thompson view of criminal acts and means taken to seek redress. The few scraps of data assembled below have been extracted from miscellaneous cultural contexts and do no more than illustrate the customary pattern. One general point, however, is clear: punishment, if carried out, was at the hands of the injured party and/or his relatives and friends.

Adultery on the part of a married woman is a case in point. After a second offense, the man involved was generally killed by her husband and his kin and friends and she herself was either put to death or divorced (Teit 1900:326).

Similarly, shamans who were believed to have willfully caused the death of others through their malevolent supernatural powers were sometimes dispatched, with general public approval, by the surviving relatives and their friends (Teit 1900:361).

There were customary rules governing the construction of deer fences, the ownership of fishing sites, eagle nests, and various devices fashioned to take game, and the early picking of unripe berries. There was

also a tribal conviction that members of other tribes should not make use of the natural resources within the Thompson territorial boundaries. But how infractions against these individual and public protective rights were punished is not reported.

Certain actions were widely condemned but evidently not punished in a physical manner. Such, for example, was infanticide: the killing of unwanted infants was strongly criticized but seemingly the person responsible received no punishment other than the usual overt and more subtle expressions of public disapproval (Teit 1900:305).

There is nothing to indicate that suicide was regarded as a private or public offense among the Thompson. Obviously the person could not be punished if the act were successful. But this is a convenient place, under Western conventions, to note that suicide was not unknown among the Thompson. In the Lower Division, suicide was more common among females than males, occasioned sometimes through disappointment in love but more commonly as a consequence of domestic troubles. The act was normally achieved by hanging. (Ray 1942:230-231)

Intentional, accidental, and unknowing transgressions against the supernatural world—guardian spirits, spirits at large, unnatural beings, and so on—were punished by illness, bad luck, and the like by these entities by supernatural means. As illustrated in the following section, the occasions for these action slips were virtually limitless and accounted for many of the misfortunes that beset a person in the course of his or her life.

Religion and the Supernatural

In this section are gathered data describing those areas of Thompson life that bore directly upon the supernatural world: on the traditional Thompson view of the world around them and of the land of the dead and especially on the relations of people to supernatural beings and forces.

World View

The earth, some Thompson believed, was square; others thought it to have been circular. The point where the Thompson River reached the Fraser River was regarded as the world center, for here Coyote's son descended from the sky. It was considered to be relatively level in the center, but rising to mountains and lakes, covered with clouds and mist, around the edges. East and west were the two important directions; four was the "mystic' number occurring in all ceremonials and myths. (Teit 1900:337)

The present shape of the world, its mountains, valleys, and so on, was made thus by several transformers, the greatest of which were Old Coyote and then Old Man. These beings in that very early period possessed both human and animal characteristics. Most large rocks of remarkable shape in recent Thompson country were thought to have once been these beings, transformed into stone. The origins or causes of many natural phenomena were explained in the rich body of Thompson myths: cold and warm winds, thunder (a grouse-like bird shooting arrows), fog, and the like. (Teit 1900:337-338)

The entire countryside in the late 1800s was believed to be still inhabited here and there by many mysterious beings. They lived in the peaks, lakes, creeks, and waterfalls of the high mountains. Strange and inexplicable objects (e.g., canoes crossing lakes without paddlers) and beings (e.g., grizzly bears that emerged from lakes) were sometimes viewed in those areas, but seeing them resulted soon in death. Some rock paintings, especially those overlooking water, were thought to have been the work of these beings. The Lower Thompson believed in mountain monsters and in man-like, harmless dwarfs that lived in steep cliffs and deep forests, that wandered around the mountains shouting or weeping, that fled from hunters but sometimes played tricks on people. They occasionally saw gaunt, naked, ghost-like beings that chased people. They knew of very powerful giants, dressed in skins and having a peculiar powerful odor, that lived in caves and ran down game with their superior physical abilities and sometimes chased and stole people. (Teit 1900:338-341)

Heavenly bodies—the sun, sun-dogs, moon, stars (including the Big Dipper and the Pleiades by the position of which the Thompson told time at night), and rainbows—were talked about and explained in many Thompson myths. (Teit 1900:341-342)

The land of the souls or ghosts of the dead (seemingly no distinction was made by the Thompson between the two) and the trail leading to it were known in great detail from reports of shamans who had made the journey in an effort to recapture the soul of a dying person. In a common view it had streams to cross, log bridges, short cuts (taken by shamans), climbing and descending stretches, and so on. Three venerable guardians were stationed at different points along the route to turn back souls of people whose time had not yet come. Just before reaching the soul (or ghost) country the soul passed through a long lodge where it was greeted by the souls of the person's relatives and friends who had predeceased him. The land itself was a fine, warm land with plentiful food and much singing and dancing by the soul-people. (Teit 1900:343)

An alternate view of the trail to this afterworld had the soul crossing a lake in a canoe in dim light. Some Thompson held that there were animal underworlds, with concealed entrances, where the creatures were born,

from which they wandered from time to time to the Thompson territory, and to which they sometimes returned in numbers, explaining why animals were occasionally scarce among the Thompson. (Teit 1900:343-344)

Prayers, Beliefs, Prescriptions, and Proscriptions

Thompson prayers and observances were all predicated on the existence of spirits (and so powers) that occurred through all nature: those associated with the stars, mountains, animals, trees, and so on endlessly. While most spirits were individual and personal, a few were so generally prayed to that they might almost be regarded as having been tribal supernaturals: the sun, dawn, rain, tops of mountains, certain lakes, the sweat-house spirit, and perhaps Old Man. The objective of these prayers was, in general, to fulfill the suppliant's desires and gain protection from harm. (Teit 1900:344)

Certain parts of high mountains, especially peaks, were considered the country of particularly powerful spirits. Visiting these areas, Indians appeased their resident supernaturals with offerings of a lock of hair, a bit of clothing, a piece of tobacco, or a stone and prayed for good weather and a successful hunt. Women picking berries or digging roots on certain mountains or coming in sight of certain lakes always painted their faces red as an offering in return for good weather and good fishing. (Teit 1900:344)

Roots growing near a lake with a strong and mysterious spirit should not be dug, nor should reeds and grass growing in its water be collected under pain of bad luck. Some of the first berries gathered in the season were offered to the mountains by an old gray-haired person who danced and held the first fruit out toward the mountain tops, and whose companions painted their faces red and danced. During a spell of heavy precipitation, Rain was prayed to in a simple ritual in which a stick heated in a fire was put to use. The Chinook wind received prayers. Every morning an old member of each household prayed to the dawn. (Teit 1900:345-346)

Beliefs that certain acts magically brought about certain specific consequences were widespread. Arrows with red tail-feathers of flickers shot at enemy houses would set them afire. Biting dog's ears to make the animals howl would drive thunder away. Killing a frog caused rain. Pointing at a rainbow resulted in sores on the finger. The number of beliefs of these kinds was evidently legion. (Teit 1900:346)

"Owing to the mysterious powers which animals and plants were believed to be possessed of, numerous customs were observed intended to propitiate them. Women, widows and widowers, and other unclean persons, had to treat them with particular care." Teit (1900:346-350) illustrates this situation with many scores of examples. In summary, they had to do with how game (especially deer and bear) should be butchered, the meat handled and the offal disposed of. Deer meat, for example, was always taken into the hunting lodge through a hole in the back, not through the normal entrance, which was used by women. To insure hunting success, especially in bear hunting, a man sweat-bathed, supplicating his guardian spirit and sometimes the bear itself for a favorable hunt. Because bears could hear people talking, a hunter was careful not to mention a coming hunt. When one of these large animals had been killed, the hunter painted his face, sang the bear song, thanking it for allowing itself to be taken, and tied the skull to the top of a small tree. (Teit 1900:347)

In general, animals to be hunted had to be talked to and about with respect, and hunters observed numerous practices to assist themselves magically in attaining a successful hunt. Some creatures, however—snakes, frogs, shellfish, and particularly lizards—were abhorred and even feared. (Teit 1900:348)

Practices similar to those relating to deer, bear, and other important animals, though apparently far fewer, were followed in regard to fish. The Thompson, it is true, had no elaborate first salmon ceremonies such as were so common on the coast and among the Plateau tribes to the south. Still, children were not allowed to swim in rivers while the salmon were running. Sturgeon fishing gear was hung up in trees some distance from the house to avoid contamination. And there were other such fish-related procedures. (Teit 1900:348)

Many tabus regulating the eating of specific animals or parts of them were observed against untoward consequences for noncompliance. In some cases animals could be eaten by only one sex or one age group or only under certain conditions. In other instances certain actions were forbidden while others were enjoined to insure success. Such was the case with wild sunflower roots, which were difficult to cook. Women digging the root painted their faces and both while digging it and when cooking it abstained from sexual intercourse. By placing branches within the oven when putting it together and then pulling them out during the cooking operation and inspecting their condition, women could determine how well the roots were cooking. Men were forced to keep away from these ovens while the cooking was in progress. (Teit 1900:349)

Guardian Spirits and the Winter Spirit Ceremony

Each person among the Upper Thompson had his own guardian spirit, acquired during the puberty rituals. According to Ray's (1942:235) Lower Division informant, the situation was different in his group: only a few boys and some girls were sent out as adolescents in search of spirit power. (For a description of the quest, see Boy's Puberty section above.) Furthermore, it was rare for a Lower Thompson to secure a tutelary spirit unsought. These data together can only mean, it would appear, that not every man and even fewer women

acquired a spirit, unless they were obtained by gift from another person, by inheritance, or by some other route not noted by Ray. A few shamans among the Upper bands were thought to inherit their spirits unsought in dreams and visions from parents who had been particularly powerful in the supernatural domain. (Teit 1900:354)

Certain animals (mammals, fish, birds, insects, etc.) and certain objects (both natural—like mountains, lakes, rocks, thunder, clouds, fire—and man-made) could become guardian spirits but their powers were somewhat differentiated (e.g., powers to assist in hunting or fishing vs. those to help in controlling the weather, seeing into the future, finding lost objects, fighting as a warrior, gambling, or exercising the functions of a shaman) and of different degrees of strength (grizzly spirit more powerful for hunters than coyote). By the same token, some animals were considered not to possess the ability to play the guardian role: e.g., chipmunk, fool-hen, butterfly. Only a few birds—as an exception the eagle was thought by the Lower Thompson to be an especially powerful spirit—and a very few trees could assume tutelary responsibilities. (Ray 1942:234-235; Teit 1900:354-356)

A detailed listing of the spirits that normally associated themselves with persons with the different important life emphases is provided by Teit (1900:354-356). The following does no more than illustrate some of these associations.

- Hunters acquired as some of their guardians the wolf, wolverine, bear, deer, elk, owl, hawk, deer's nose, canoe, and snare.
- Fisherman got, among others, water, loon, all kinds of ducks, many varieties of fish, canoe, paddle, nets, spear, and weirs.
- Gamblers had many different spirits and different kinds of spirits: e.g., natural phenomena, mammals (mountain goat was especially important among the Lower Thompson), birds (e.g., hummingbird), insects (wasp, ant, spider, etc.), and objects (sweat house, moccasins, dentalia).
- Warriors preferred the grizzly, hawk, eagle, thunder, various weapons (e.g., bow, arrow, knife), and especially sun.
- Shamans had as their favorite tutelaries heavenly bodies (e.g., sun, morning star); natural phenomena (sunset, thunder, fire, fog, snow- capped mountains, etc.); mammals (e.g., bear, wolf, otter, badger); specific birds, fish, and reptiles; parts of animals (bird down); trees; objects (e.g., tobacco pipe); parts of the human body; and death-related objects (ghost, grave rock mound, etc.). Certain spirits became "powers" to shamans alone. (Teit 1900:354-356)

Women secured as their guardian supernaturals the mountain goat, basket, basket kettle, root digger, and packing line.

It is apparent that there was an obvious association between many of the supernaturals—and the living or inanimate "things" of which they were spirits—and the interest focus of the group to which they became tutelaries: hunters had among their spirits the wolf, hawk, and owl; fishermen, the loon, fishhook, and canoe; warriors, blood and various weapons. This is not surprising, but two features of the guardian spirit world, as exemplified by Teit's field roster, are remarkable. One is that parts of animals and things became tutelaries: e.g., deer tail, fir cone, gun nipple, and right side of an animal or object. The second: the spirit was an animal or object of an unusual or particular color, e.g., white stump, spotted dog, red fish, blue sky, and red cloud. (Ray 1942:235; Teit 1900:354-356)

All animals were thought to have names of their own, which the guardian supernatural could reveal to its human associate, giving the latter special power over the living animals. Knowing the sacred name of the grizzly and addressing the animal by this name rendered it gentle and harmless to the hunter. (Teit 1900:355)

Guardian powers were not vague, otiose, and fanciful supernaturals, but entered the daily life of the Thompson—at least the Upper Division—man and woman at every turn. Their intimate relation to the raiding party and its success or failure illustrates this point (see Hostilities section above).

The winter spirit ritual of the Lower Thompson was a simple one in contrast to the elaborate ceremony of the groups in the central and southern Plateau. It was no more than a one or two day session of spirit recognition in which each person in the gathering sang his own spirit songs, joined in brief periods of group dancing, and enjoyed a group feast. The entire community—men, women, and children—participated. (Ray 1942:253)

Shamanism

Both men and women among the Thompson became shamans through acquiring the proper guardian spirits and their powers. These were secured in essentially the same manner as "ordinary" guardian spirit powers: through a proper vision or dream. The tutelaries received were, however, at times specific shamanistic spirits. Typically shamans also obtained a greater number of spirits. At any rate, their close association with the

supernatural world and the special non-natural skills they possessed set them quite apart from laymen. (Ray 1942:240; Teit 1900:360)

To secure these spirits involved training over a long period, sometimes years. Among the Lower Thompson a man could even secure a dead person as a tutelary by performing certain rites with a human skull. With the assistance of their spirits communicating with them through visions and dreams, they were able to perform their acts for good or evil. To mark their status Upper Thompson shamans walked with staffs and smoked pipes with carved or painted symbolic designs. Lower Division shamans wore eagle feathers in their hair, painted their face with certain colors and designs, sometimes wore their hair in special ways that announced their shamanistic powers, and walked more slowly than laymen. (Ray 1942:241; Teit 1900:354, 360)

As noted in detail below, illnesses among the Thompson were thought to have various etiologies. Curing specialization on the part of individual shamans was primarily by reputation for curing successes, less because they had received different kinds of curing powers from their tutelaries. Shamans were well compensated for their successful treatments, although they received no fee for their first case. They established the level of their fee on the basis of the patient's status. Sometimes they actually delayed their treatment while they bartered for a more generous compensation. Further, they were "known" to have made healthy persons ill for the sole purpose of obtaining their property. In addition to a certain amount of greed as a driving force in the shamans' attempts to promote high rewards for their services, it was believed that the greater the payments to them, the more willing were their guardian spirits to work hard for cures when called upon in subsequent cases. Turn about, should they fail to effect a cure, they were compelled to return their fees to the kin of the deceased. It is not surprising that the prestige of shamans was on occasion greater than that of the "chiefs." At least among the Lower Thompson male shamans were more numerous than female ones, though the latter were considered as powerful as their male counterparts. (Ray 1942:240-241; Teit 1900:364)

Shamans were touchy about how others treated them. People, for example, did not startle them, or eat in their presence without inviting them to join in the meal, or allow their shadows to fall on them. It is not surprising that shamans were treated with respect.

Shamans had the power to cause sickness and misfortune in various ways. Even those who normally used their skills for good sometimes employed them for evil for the sake of gain or revenge. Using a deer nasal bone, they could "shoot" a person with their spirit. They could steal a person's soul and send it off to the sun, an act which, if not reversed, caused death. They could bewitch an enemy especially when the latter was eating, drinking, or smoking; for this reason people avoided doing thus in the presence of an unknown shaman. They could harm a person by using magically his nail clippings, a bit of his hair, or his weapons, unless the intended victim possessed greater supernatural powers than the shaman himself. They could make people fall ill by causing ghosts to frequent their houses. A shaman could cause a hunter to have bad luck by having a ghost accompany him on his hunt to frighten the game. Given this set of strong beliefs touching in such an intimate way on daily life, it is understandable that shamans were sometimes killed by relatives of persons who were thought to have died of witchcraft, if they suspected these wielders of great supernatural power as the perpetrators. In such instances, no compensation was claimable by the shamans' kinfolk. (Ray 1942:240, 241; Teit 1900:360-361)

If a shaman could be the cause of illnesses and misfortunes, so he had the power in many instances to cure ailments and reverse misfortunes. Sometimes more than one shaman worked on a case together or independently (Ray 1942:248). We have two accounts of Thompson shamanistic curing procedures: that of Teit recorded in the 1890s for the Thompson in general with special relevance to the Upper Thompson, and that of Ray secured in the 1930s for the Lower Thompson in particular. These are sufficiently different to merit individual summaries. Surely certain of these differences represent real group differences in procedures; others are undoubtedly only variations on the part of individual shamans on essentially the same procedures; still others are without question nothing more than informant data omissions on one side or the other. There seems to be no way to sort these out. The two accounts follow, the first, that of Teit, identified as "Thompson" and the second, that of Ray, labeled "Lower Thompson."

Summoned to treat a sick person, the Thompson shaman arrived with his face painted red and wearing various ornaments attached to his clothing: eagle feathers, pendants of small animal skins, and deer hoof rattles around his knees and ankles. He summoned his guardian spirits one by one, requesting their help in the case, until at last one agreed. He was then able to announce his diagnosis of the ailment. (Teit 1900:361-362)

Before commencing the treatment, the shaman among the Thompson painted his hair and sometimes other parts of his body, and removed his upper clothing. Frequently he smoked his long shaman's pipe with its eagle-feather pendants by which he communicated with the spirit world. From his mouth he sprayed over the patient water taken from a nearby basket. He performed remarkable feats to demonstrate his supernatural powers: he might make the water in the basket increase, decrease, or boil; or might swallow glowing embers from the nearby fire; or might perform acts of slight-of-hand or ventriloquism. During much of the time he sang the song of his guardian spirit, keeping time with his feet and occasionally imitating his spirit by voice and

gestures. He talked with his spirit in speech rather unintelligible to the audience. He sometimes danced in a jumping, jerky manner. He blew often on the patient's body and repeatedly passed his hands over it. Finally he attempted to suck the illness-causing agent from the person and, if successful, spat it out and exhibited it to the audience. It proved to be a deer hair, if the patient had failed to observe some hunting custom; blood if guilty of violating the tabu against associating with a menstruating woman; a bone if bewitched by another shaman. This object was disposed of by being thrown far away. At times, following his cure, he instructed a patient to paint his body in a certain way, to eat certain foods, or to give his (or her) children certain names, all based on dreams in which he was provided such advice by his spirit "power." (Teit 1900:362-363)

In cases of serious illnesses the Thompson shaman sometimes determined the cause to be the departure of the soul—of its own accord, by having been sent to the sun by a hostile shaman, or by being drawn away by a dead person. He was able to see it and overtake it on its journey to the soul-world if called to the case within two days of its departure. Wearing over his head a conical mask made of a mat, he pantomimed his spirit's search for the soul and, if necessary, its journey to the soul world to recapture it. He, through his spirit, first visited the group's graveyards and generally found the errant soul at one of them. If unsuccessful in this endeavor, he "left" for the soul country, taking shortcuts to try to head it off, jumping rivers and other trail obstacles, searching, talking with souls he encountered, and so on. If his efforts succeeded, he captured the soul and fled with it in his hands, fending off pursuing souls by stamping his feet to make his deer hoofs rattle and by fighting off assailants with a club he carried for this purpose. On his "arrival" back in the dwelling, he returned the soul to the person through his head. (Teit 1900:363-364)

In Lower Thompson villages when the services of a shaman were thought required, a messenger was dispatched to solicit his services. Gifts were taken to him then and others were promised. If the shaman consented to take the case, he went immediately to the sick person among his friends and relatives, who were expected to remain silent during the proceedings to follow. Without delay he began the treatment, washing his hands in cold water brought for this purpose and smoking as he sat beside the patient. (Ray 1942:242)

The first step in the treatment—an essential one—was the diagnosis of the ailment and its cause. To secure their aid, the shaman summoned his spirits by name. He placed his hands on the patient's body, blew and sprinkled water on him, and sang. Once the cause had been determined, he described it to the sick person and those in attendance, sometimes even naming the hostile shaman if the problem was believed to be shaman-initiated. He described the treatment he was to undertake and predicted its ultimate success or failure. (Ray 1942:243)

Curing was accomplished by the Lower Thompson in one of two rather different ways: by "drawing out" the illness agent or by removing it by sucking. On what basis the choice was made between these two techniques is not made clear by Ray's published data. To draw out the disease object the shaman repeatedly passed his hands over the ill person's body, though without touching it, blew on it, and finally removed the sickness, sometimes in parts, in the form of a foreign object. On the other hand, the sucking process consisted of two components. First blood was sucked out of the patient's body through a tube, the end of which was placed at the site of the intrusive object, commonly the temples, as determined during the diagnosis. The blood was allowed to flow from the tube into the shaman's hand. He then thrust his hands into the water that had been brought to his side when he had first arrived. This accomplished, the offending object itself was sucked out. Once this was in his mouth, the shaman lost control of his actions to such an extent that he had sometimes to be held by his assistants. The sickness—the object removed by the "drawing out" or sucking technique—was disposed of in various ways as noted below. (Ray 1942:243-244)

Illnesses among the Lower Thompson caused by a spirit, sent by a hostile shaman, invading a person's body could be cured only through its extraction by a shaman of greater spirit power than the malevolent one. The spirit took the form of a small object visible when removed to laymen as well as to the curing shaman. Once in the latter's power, it was sometimes simply blown back to its owner, resulting in his illness. More commonly it was held in the shaman's hands and "cut in two" by a helper, causing the death of the enemy shaman, or it was thrown into the fire or into water with the same result. (Ray 1942:245-246)

Sickness was also thought by the Lower Thompson to be brought about by a natural object—a hair, sinew, bone, pebble—being sent into a person by an evilly disposed shaman. Again, curing required its removal. This object, like the spirit in material form, was visible to both laymen and the doctoring shaman. (Ray 1942:246)

Illness sometimes resulted from the theft of one's guardian spirit by a malignant shaman. For recovery, the spirit had to be retrieved by a curing shaman and restored to the patient by being "rubbed into . . . [his] head." (Ray 1942:246)

Other pathological conditions were diagnosed by Lower Thompson shamans (as by their Upper confreres) as the consequence of the loss of a person's soul, as when stolen by an enemy shaman. Cure was effected by a ritual journey on the part of the curing shaman to the land of the dead in pursuit of the soul. Wearing a special hooded cloak fastened with a wooden pin, the shaman lay on the floor and went through a pantomime journey, recounting to the patient and audience his experiences en route and naming the places visited. Occasionally the soul was not encountered before it managed the entire journey to the spirit world. If the shaman succeeded

in overtaking it, he captured it on his cloak pin or between his hands and at once returned to the living world. Back from his mock journey, he bathed and blew upon the soul and returned it to its owner. (Ray 1942:246-248) While details differ, this curing pattern is very like that described above for the Upper Thompson under similar etiological circumstances.

Shamans were called upon, or took it upon themselves, to perform other services for persons or, in public spirit, for the larger community. Sometimes they were asked to cure especially valuable dogs and horses, using the same procedures followed in human cases. Occasionally through information received from their guardian spirits, they saw epidemics approaching as a fog blanket. To fend off this terrible danger, they had the people paint their faces and join them in singing their—the shamans'—guardian spirit song and dancing. From the food the people brought, they sacrificed bits to the epidemic spirit, and they and the people with them then ate the remainder. (Ray 1942:241; Teit 1900:364)

When game was scarce, shamans carried out a ritual to remedy the situation: they sat naked near a fire all night to secure a vision. In the morning after they and all the hunters with them had sung and washed in a nearby stream, the men went hunting where instructed by the shamans' vision. Some shamans had the power to look into the future—to tell whether an ill person would recover, what the weather was to be, whether the berries and salmon were to be abundant. Some, with their spirit power, could control the weather. Others could lay ghosts. (Teit 1900:364-365) With all of these specialist supernatural skills, it is clear why shamans were without question the most powerful members of a community, why they were both feared and relied upon for essential services, why many became wealthy, and why, in some measure, they were overtly or *sub rosa* at one another's throats.

Frequently shamans had contests to determine which of them possessed the greatest supernatural powers. These were very dangerous affairs, for losers either died or were somehow disfigured or crippled as a visible mark of their defeat. (Ray 1942:248; Teit 1900:363)

Magic

Charms which, in some non-natural manner, acted magically to produce the desired results were used by the Thompson to secure badly needed advice on some important matter, to protect hunters from danger, to cause lightly wounded game to die quickly, to change luck from bad to favorable, to obtain wealth, affection, or love. A few illustrations drawn from Teit's roster must suffice.

To locate game in bad times, a Thompson hunter noosed a fool-hen, cut its head off, and, praying, tossed its head up in the air. When it fell, its beak pointed in the direction of game. To protect himself from injury, a grizzly hunter wore the tail of a "double-headed" snake, the tail having two eye-like protuberances. To keep a wounded deer from running far, the skin of a mouse found "on the higher mountains" was placed on its track. To change for the better a gambler's fortune, his wife hung a stone hammer above his pillow and turned it rapidly around. To gain affection, the male and female of a certain plant, as the Thompson identified sex in plants, were bound together with a hair from the man and one from the woman and were buried. (Teit 1900:370-371)

Magical means were used by the Lower Thompson to cause an out-of-favor person to fall ill. To achieve this goal, fingernail fragments, bits of hair, and the like from the person to be damaged were used, even on occasion scraps of his clothing. As already noted, illnesses of this etiology were treatable by shamanistic intervention. Charms identical or similar to those above and minor acts the efficacy of which derived from their magical powers were also practiced among the Lower villages. But mentioned specifically for this downriver group are only love magic and magical acts for bringing rain (using a beaver skin) and changing the weather (making use of a mountain goat skin). (Ray 1942:254)

Omens and Related Notions

Dreams were the result of the soul leaving the body, walking about the countryside, and experiencing whatever the person dreamed about. They were regarded as important indicators of things to come, the interpretation of them in their smallest detail being of great interest. Dreams of dead or sick persons or of a person falling, paddling a canoe, walking, and so on were interpreted differently depending on the immediate context: e.g., whether they were naked or clothed, moving toward the east or west, heading downstream or up or coming ashore, fording a stream or disappearing in the distance, climbing a hill or descending. Unfortunate consequences predicted on the basis of a dream could, at least in some instances, be countermanded by painting the face the following morning, sweat bathing, praying, and taking other recognized positive actions. (Teit 1900:372)

Happenstance events of an unusual sort, as well as some dreams, prophesied death: an orphan's itching head, the special taste of a pipe, a peculiar cry of an owl or coyote near a dwelling, a dead mouse on the trail, a repeated howling of a dog, and many more. Certain actions were to be avoided lest they themselves cause untoward consequences: e.g., to cut a buckskin thong from around the neck—symbolizing cutting one's

throat—would bring about the person's violent death. If a person found a "lightning arrow-head"—a large projectile point or knife of unknown origin to the Thompson and widely found in their country—and took possession of it, he would ultimately go crazy. (And yet oddly they were said to have been picked up and reworked into new points.) (Ray 1942:233; Teit 1900:241, 372-374)

Some objects were by their nature unclean, contact with them to be strictly avoided to the degree possible. Corpses were especially so. Burial rites were designed to counteract these contaminating influences. To take a body across a river resulted in no fish catches for four days. A drowning caused a salmon run to cease temporarily. (Teit 1900:374)

Thoughtless or uninformed actions of many other kinds produced unfortunate but less disastrous consequences. Bathing above a salmon fishing platform adversely affected salmon for a time. Numerous acts affected the weather: mention of the coyote in winter by children, burning wood from a lightning-struck tree, and burning the hair of a bighorn sheep or mountain goat all brought cold weather. (Teit 1900:374)

Certain happenings or actions were merely and sometimes neutrally informative. For instance, sneezing meant that someone was talking about the person. The death of a person and the birth of twins and "Indians intruding on the haunts of spirits in the mountains" all changed the weather. Actions of other kinds—like burning beaver hair—predicted hot weather, wind gusts, or especially rain. The behavior of certain animals and the condition of certain plants also possessed predictive value: multiple berry crops in a single season foretold a hard winter to come; early migration of hares to lower ground as well as an early changing of their coats indicated an early winter. (Teit 1900:374-375)

Other omens foretold favorable events. A dog lying with its lower jaw on its forepaws indicated a visitor bringing food or presents. Many red worms in the wild cherries were believed by the Lower Thompson to predict abundant salmon. A sudden snapping of a morning campfire told a hunter that he would kill deer that day. (Teit 1900:373-375)

Omens of these and doubtless other varieties must have been numberless among the Thompson.

Prophets

It is unclear from the ethnographic record whether there were Thompson religious prophets, but such persons occasionally traveled through Thompson country from outside, each carrying some message from the spirit world they had visited in a trance and from which they claimed they had just returned. People listened respectfully to their discourse and dances were held wherever they went. (Teit 1900:365)

Some persons prophesied in secular matters through visions. They foretold the coming of Whites, the approach of epidemics, the introduction of dishes, stoves, sugar, and so on. One such successful prophet was a Lower Thompson chief who journeyed through the countryside about 1855 or before, telling of great changes to come. He, Teit concluded, received his information from Hudson's Bay personnel. (Teit 1900:365-366) It will be remembered from the preceding Chilliwack chapter that Fort Langley was established by the Company on the lower Fraser River in 1827.

Souls, Ghosts, and Unnatural Beings

Every person, animal, tree and other plant, and rock as well as fire, water, and so on was thought to possess its soul, seen only by shamans. On death or other form of destruction, all souls, with certain special exceptions, journeyed westward across a river to the underworld, retaining their earthly form. Humans there enjoyed a life without illness and with plenty of deer and berries. (Ray 1942:232-233; Teit 1900:357)

Each soul had a shadow that remained in the living world as a ghost for a short or sometimes very long period. The latter was the case, for instance, if a person were killed. While they were with the living, ghosts haunted the vicinity of the burial place, trying to bring fatal illnesses to their surviving relatives so their souls would join them in their journey to the afterworld. (Teit 1900:357-358)

Ghosts in the Upper Thompson country were ordinarily invisible to all but shamans, dogs, and horses, appearing even to them, however, only at night. Whistling at night was carefully avoided lest it attract them. Their appearance and behavior were well known: they were often naked; they were light-gray in color with mouth and eyes like blue fire. They leaned forward in a jerky walk, cried out humanlike when shot with an arrow, followed people but insisted in keeping to the trails, sometimes ate and drank with the living and on leaving stole their souls, and were repelled by a person's smoking. (Ray 1942:232; Teit 1900:358)

To the Lower people, on the other hand, ghosts appeared only in a frightening non-human form, lightning-like or flame-like, but still emitting characteristic gnawing or other sounds. They were seen especially at the site of deaths. (Ray 1942:232-233)

The souls of suicides and persons who had been very evil did not go to the afterworld: shamans simply never saw them there. But whether they were lost, died, or wandered forever on earth was not known. The

future of souls of people who drowned was similarly enigmatic. Souls of children who died were thought to be reborn in the mother's next child of the same sex. (Teit 1900:358-360)

Souls were believed to leave living persons sometimes for some reason, causing unconsciousness and ultimately death unless they were returned, or were recovered and brought back by a shaman before they reached the spirit-world. (Ray 1942:232; Teit 1900:360)

Certain localities on rivers in Lower Thompson country were regarded with particular awe. Presumably this was because they were believed to be the residence of unnatural beings or potentially dangerous spirits although this point is not made explicitly by Ray (1942:256). In any event, these places—better, their non-natural dwellers?—were propitiated and their status was recognized by travelers maintaining silence in their vicinity.

Diversions

In this section are discussed, to the degree that data exist, what might be termed the diversions of the Thompson, although every one of these action categories had its more serious cultural components, especially religious elements. Further these activities did not exist as separate cultural expressions. For example, singing and dancing were closely linked. Illustrative of this linkage are the observations of Simon Fraser. On his summer journey through the Fraser Canyon in 1808, Fraser (1960:93, 97, 116) mentions being entertained on three occasions by Lower Thompson—"Nailgemugh" to him—villagers "singing, dancing, &c." Similarly, the graphic and plastic arts were expressed as intimate components of weapons and utensils, dwellings, religious objects, and so on. And myths and legends, while diversions for the adult narrators and for the auditors as well, were also the means of inculcating in children the traditional wisdom of the tribal past, the way the physical environment of mythic times was brought into its present shape, and the ethical precepts and sanctioned behavior of the group.

Art

Aspects of the plastic and decorative art of the Thompson, as known in the late 1800s, were described by Boas (1900) in an addendum to Teit's general Thompson ethnography. The data that follow are largely extracted from this source.

One of the more notable features of traditional Thompson art was its poverty in the carving domain. Only three examples of utensils with associated carvings are described by Boas (1900:376): a stone vessel in frog form, another vessel with a snake coiled around it, and a spoon with an animal's head at the end of the handle (Figures 3-10, 3-12). A stone head, seemingly a bowl of some sort found "24 miles above Yale" and therefore near the North Bend-Boston Bar sector of traditional Lower Fraser country, is figured by Harlan I. Smith (1907:428 Figure 192) (Figure 3-28). A few hammerstones ornamented with animal heads at the knob end of the handle were in use in Teit's time. By 1900 only a few stone artifacts with associated carvings had been discovered archaeologically in traditional Thompson territory and a few of bone, suggesting that plastic art was no more common in prehistoric times. (Boas 1900:376)

A very few human and animal carvings in wood were erected over graves. But all were crude, unlike the elaborate and technically refined carvings on the Northwest Coast. (Boas 1900:377) Fraser (1960:98) briefly describes some of these carvings observed in a Lower Thompson village in the Spuzzum sector: the boards and posts of the tomb were carved with beasts and birds "in a curious but rude manner," all rather well proportioned. The carving of these representations must have been laborious and time-consuming, he speculates, without proper metal tools.

Thompson decorative art conceived of animals as adapting themselves to the form of the implement to which it was applied; hence it was quite unlike that of the Northwest Coast which consisted predominantly of symbolic designs painted on surfaces to the shape of which they bore no relation. The symbols of Thompson graphic art were largely highly conventionalized, not realistic. A cross, for example, might represent two trails crossing; a single line, one trail; a dot, an offering; and so on. The same symbol, however, differed in its meaning depending on the implement which it ornamented: a design on a pipe might signify a lake with a river flowing into it, but on tongs it might represent a basket and ladle. On the other hand, the Thompson tended to paint designs with the same meaning on different examples of the same implement: e.g., lance heads often received skeleton patterns. Designs depicting guardian spirits were very common, endeavoring to endow the weapons or implements with special supernatural power. Clothing of men was frequently painted pictographically as instructed in the owner's dreams. During their puberty ceremonies, boys often painted their shirts and blankets in the same way, representing the mountains, for example, over which they traveled in their guardian spirit search and others where they resided when trying to acquire a spirit "helper." Clubs were often decorated with patterns depicting the owner's guardian spirits; gambling implements with designs to bring good luck; digging stick handles with patterns representing dreams. Shamans' pipes were often etched with animal or bird

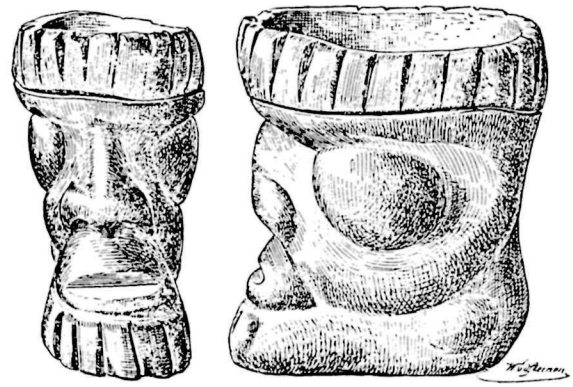


Figure 3-28. Sculptured stone bowl, about 5 inches high, discovered "24 miles above Yale" (Smith 1907:428 Figure 192) and hence about in the middle of the Fraser Canyon.

patterns. These highly conventionalized symbols were rarely adapted to the shape of the object to which they were applied. (Boas 1900:377-382)

Putting aside the common ornamentation with feathers, hair, elk teeth, claws, beads, shells, quills, and the like, it is worth special note, in light of the paucity of art objects per se, that tools, implements, and other items of material culture were often adorned with simple etched or painted patterns, geometric or representational. Some of these are mentioned above. References to this type of art are legion in Teit's ethnographic account. A few of these are the following: bows with painted patterns, spears with red and white painted skeletons, wooden clubs with simple linear designs representing ribs, hide shields with painted suns, wooden-rod vests painted with animal and geometric designs, hot-rock tongs with geometric and realistic patterns, horn (antler?) or wooden tweezers and antler arrow flakers with etched dot and circle designs, gaming pieces variously ornamented, and so on. And, of course, the basketry with their geometric imbricated designs and wild-goat hair robes with intertwined colored thread patterns. (Teit 1900:182, 188, 191, 199-202, 205, 227, 240, 263-266, 272-273)

In the late 1800s many pictographs existed in Thompson country. Most had been made by boys and girls during their puberty rituals. Teit's Thompson informants provided him with "readings" of many of these, indicating that the pictographic tradition was still alive during their youth (Boas 1900:381-382). Many pictographs existed on Stein Creek, a mountain stream that enters the Fraser River about 5 miles above Lytton. This was a favorite sector for seeking guardian spirits, according to Hill-Tout (1900:505-506), of the shamanistic variety. These rock patterns were made by these aspirants, sometimes as high as 20 or 30 feet up the face of sheer cliffs.

Dance

Dancing among the Thompson was both a social and a religious event, or at least those described in the following paragraphs were such.

During the course of the year, the people of each neighborhood met from time to time for an entire day to feast, dance, and pray. In winter the dancing was in a large semisubterranean dwelling; in the open seasons, the dances were held in certain places through the tribal territory where the people could easily assemble and the land surface was suitable, as on sandy flats beside a large river. In preparation, the surface was smoothed and, if too sandy, was sprinkled with clay brought from elsewhere. (Teit 1900:350-352)

The people assembled early in the morning, finely dressed and wearing wide belts, headbands often ornamented with dentalia, and their ornaments. All faces were painted in various colors and patterns: all red, red vertical stripes (chiefs), black (warriors?), red with micaceous spots (some women), alternate stripes of red and yellow, etc. With them each woman brought food to share. (Teit 1900:351-352)

The dances, beginning at sunrise, involved moving in a circular fashion in three concentric rows. They were led by a chief, who prayed and kept time, and by an assistant chief. The foot movements were accompanied by singing, praying, and symbolic arm and hand movements. Visions were sometimes experienced. During the first of the four morning dances, young men and women were allowed to touch one another to

indicate their desires for marriage. At the close of these four dances, a communal feast, accompanied by prayers, was held with some of the food that had been brought by the women. Another set of four dances took place during the afternoon. These were followed by a second feast. Finally at sunset, a third series of dances occurred. Upon their conclusions, the people dispersed to their own houses. (Teit 1900:353)

A number of other dance types were enjoyed by the Thompson in connection with other sorts of occasions. One or more women or sometimes a man simply rose and danced, at the close of which they gave presents to the spectators for watching them perform. Birds (like the prairie chicken) and animals (e.g., the hare) were at times imitated in their normal actions of feeding and so on, creatures selected because their activities were suited to dance imitation and also because they were rarely the guardian spirits of anyone. During dances it was common for performers of both sexes to put bird-down in their hair (but not eagle-down which was reserved for shamans) and to paint the face red or in perpendicular red stripes. (Teit 1900:385-386)

Music

The Thompson had very few musical instruments. Drums were used, however, to accompany dancing and singing. They were of a large circular shape, the frame of birch or hardwood and the single head of fawn skin, preferably previously used as clothing. Generally the head was painted with symbolic designs. To the rim, deer hoofs were attached to rattle. These drums were beaten by hand or with a stick with the end wrapped with skin and packed with deer hair and adorned with pendant hawk feathers. Although Teit fails to mention them, drums consisting of a raised plank or log placed on the floor are reported by Ray (1942:186) as having been used by the Lower Thompson. Sticks were also beaten together or against the ground to accompany dancers. (Boas 1900:299, 383-385; Ray 1942:185-187)

Deer-hoof anklets were worn in dances. This according to Boas (1900:384, using Teit's data) was the only Thompson rattle, but Ray (1942:186) states that the plain wooden rattle was also a Lower Thompson instrument.

Apparently the Thompson had neither whistles nor flutes as musical instruments (Boas 1900:383-385; Ray 1942:186-187). A leaf whistle was in use, however, in calling game, hence was not a musical instrument in functional terms (Ray 1942:187).

The many songs of the Thompson were classified by them into the following principal categories: lyric songs dealing with love, valorous deeds, etc.; dance songs; war songs; shaman's songs; sweat-lodge songs; mourning songs; prayer or religious songs; gambling songs used in the stick game (lehal); and cradle songs. (Boas 1900:384-385)

Feasting and Social Visiting

Feasts occurred in cold weather when the winter dwellings were occupied. Many were simply social gatherings to which neighboring families were invited to enjoy good and plentiful food and to talk. Others were more formally designed, though still social in their character. These consisted of a visit by one or more families as a group to a friend in the same community or in another village. A messenger, generally a women, was sent ahead to announce the coming visit, often leaving a present upon her departure. The host-to-be, with the aid of his friends, gathered and prepared the necessary food, especially quantities of a dish made of roots, berries, black lichen, and deer fat. Soon after their arrival, the visitors were feasted. On their departure after two or three days, they left presents for those who had assisted the host with the food and other preparations. (Teit 1900:296)

On other occasions three or four men went to a friend's semisubterranean house about bedtime, lowered a stone, decorated with feathers and with a cedar-bark "slow-match" attached, down the smoke-hole entrance, and, singing, swung it evasively from side to side. When it was finally caught by the occupants, the visitors threw in bundles of food, clothing, and the like while those inside scrambled for them. At some later date, the visit was returned in similar fashion. (Teit 1900:297)

The practice of wealthy persons giving large feasts of horse meat and distributing property as often as they could—a kind of attenuated "potlatch"—reached the Upper Thompson about 1850, though it had been adopted by the Lower Thompson somewhat earlier. Providing these occasions gained a person a great name for liberality and wealth. They were, however, not potlatches in the coastal sense: they were small and localized and the articles given away were presents, not calling for return gifts of any kind. They were apparently also devoid of the obsessive element of competition and of the ceremonial aspects of the coastal potlatch. In earlier times a wealthy man gave feasts to his friends in an open house arrangement, with visiting strangers invited to participate and receive small presents. One may suppose that the later, larger feast and gift distribution pattern was a further development of this earlier practice of generosity, with some knowledge of, and under the indirect influence of, the far more elaborate, complex, and formalized potlatch of the coast. (Teit 1900:297)

Games and Athletic Activities

Teit (1900:272-282) describes many games of the Thompson in considerable detail. The following is an abbreviated summary of his data.

Men played a game with carved or painted sticks. In each set of sticks two were encircled to mark them. Each of the two players spread his gambling mat before him and placed on it a bundle of dry grass. The beginning player took one of his marked sticks and an unencircled one, rolled them up in the grass, and placed them on the mat. His opponent then guessed which of the two sticks was the unmarked one. And so it went, score being kept with counters. (Teit 1900:272-273)

Women enjoyed a game played with beaver-teeth dice, marked variously on one side. They were thrown down on a blanket or skin and were counted according to how the markings fell. (Teit 1900:272)

Men played a ring and spear game. The ring was a stick bent into a circle and covered with buckskin, the unfilled space being packed with sand to make the ring solid and heavy. The ring inside the central hole had sewed to it six variously valued counters. The player rolled the ring, ran after it, and threw his small spear so that the ring would land on it. The value of the throw was determined by how the counters lay on the spear. (Teit 1900:274)

A game played outside in good weather but inside the dwelling when cold was enjoyed by children and occasionally adults. It involved rolling a ring between two rows of players, while these latter threw feathered darts with a sharp point at the ring as it passed. The objective was to strike the ring and have the dart penetrate it. (Teit 1900:275)

In another game a small, finger-sized ring was placed on the ground about 10 feet from the players, each of whom threw two feathered darts at the ring, attempting to drop them into the center of the ring. (Teit 1900:275)

A very popular game was the "guessing game," "stick game," or "lehal." It was played by both men and women among the Upper Thompson, but rarely by women of the Lower Division. Players knelt in two facing rows. Each side had two short "bones," one marked and the other not. The "hiding side," while beating time with sticks and singing their gambling song, passed the bones through their hands for a time and then invited their opponents to guess which hand held the unmarked bone. (Teit 1900:275-276; cf. Hill-Tout 1900:507-508)

A game with birch bark cards, marked with dots, was played according to Teit (1900:276-277). I assume that this was not a traditional precontact diversion, but cannot document this fact.

Two games were played with a smoothened, round ball fashioned of a knot that grew on fir trees and sometimes covered with buckskin. One of these games resembled roughly our baseball. The other was a form of lacrosse, played by two teams with crooked, webbed sticks to catch and throw the ball, the aim being to get the ball over the opponent's goal. (Teit 1900:277-278; cf. Hill-Tout 1900:507)

Boys' games included trying to catch a grass ball, tied to a string, with a wooden pin as the ball fell; throwing pebbles over ice and trying to strike stones on the smooth surface; and catching a bouncing pebble, covered with skin, with a handled net as it reached the bottom of a hill. (Teit 1900:278-279)

Smaller boys and girls played "cat's cradle," creating "deer," a "conical lodge," a "man stealing wood," and so on. They enjoyed hide-and- seek. They played with slings, tops of wood or bark, "bull-roarers" consisting of a piece of wood that produced a humming noise when swung rapidly from the end of a cord, and birch-bark or fir-bough toboggans. They made figures of birds, canoes, and the like on the ground with pebbles and they drew figures in the sand with sticks. Boys tried to spear balls of grass as they floated down a swift stream. The games children played were many and varied. (Ray 1942:184; Teit 1900:281-282)

Men, women, and children all enjoyed swimming, virtually every person possessing this skill, some the ability to swim long distances.

Men shot arrows at the nock of an arrow previously shot into a sandy bank, occasionally as far as 100 yards distant. Adult athletic games included foot-races, high running jump, long running jump, wrestling, and lifting of heavy stones. These competitive events were sometimes intertribal affairs. Thompson parties, for example, at times journeyed to a famous sporting center of the Upper Okanagan near Penticton to take part in such activities. The "tug-of-war" game was a common diversion. Betting accompanied all of these athletic competitions. (Ray 1942:182; Teit 1900:279, 280-281, 1930b:261)

Smoking

The smoking of wild tobacco, which grew in the warmest valleys of Thompson country, was an old practice of the men. In theory the use of the plant was considered the privilege of persons possessing supernatural power, shamans being the most notable members of this group, but since every (or virtually every) man had such power, smoking was practiced by a great many men. Women, however, seldom or never smoked. The Lower Thompson smoked much less than the upper bands of the tribe. (Teit 1900:302, 350)

The tobacco leaves were gathered, dried, and greased. When used, they were broken up and mixed with dried and roasted bearberry leaves. (Ray 1942:187; Teit 1900:300)

Tubular pipes were in use in the real old days. In more recent times pipes were L-shaped and generally of stone, though occasionally of sagebrush root or a buck's antler. Typically they had high, narrow bowls and long stems of maple wood. Occasionally they were provided with double bowls. Stone bowls were sometimes carved to represent heads of animals, birds, or men and were decorated in other ways, as with beads and feathers. They were kept in tubular buckskin bags with an opening in one end; these bags, sometimes fringed and ornamented with porcupine quills, were hung around the neck.

The social custom of passing a pipe around among all the men in a circle was common before speeches and discussions. Often two friends, meeting, smoked together briefly as a sign of good will before beginning their conversation. Smoking as a simple pastime was especially an evening practice and one enjoyed while storytelling. (Ray 1942:188; Teit 1900:300, 302)

A special rite was carried out by the occupants of each lodge when the first tobacco of the season was gathered and smoked. All the men and women who smoked sat in a circle while an elderly man in the center cut up the new tobacco, mixed it with roasted bearberry leaves, and filled a large pipe with the material. The pipe was sent around the circle, each person briefly smoking it ceremonially. (Teit 1900:349-350)

Myths and Legends

Several early and extensive collections of Thompson traditional myths and legends have appeared in print. Particularly notable are those of Hill-Tout (1900:534-583) and Teit (1898, 1912, 1917, 1937).

The mythology of the Upper Thompson, Boas (1898) has written based on his analysis of about fifty tales recorded by Teit (1898) in the 1890s, exhibits an unusual interest in mythic transformers and their activities. There were four such beings that, in their own ways, changed the shape of the world: Coyote and the three brothers Qoā'qLqaL (the most important of the trio), Kokwē'la, and Old Man. In general, they undertook their transformations, by fair means or foul, largely to serve their own personal and sometimes selfish ends. These changes were sometimes to the benefit of mankind to come, but others were for the worse. These beings were not, therefore, truly benevolent, altruistic entities, motivated by a desire to remake the world into a more pleasant and fruitful place.

Of these four transformers Coyote was the most important to judge from this early mythic corpus. A being of great power, he was responsible for many of the physical features of the countryside, some, largely incidentally, to the advantage of future generations. In many of his activities, on the other hand, he proved to be a sly trickster with motivations and behavior contrary to the traditional Thompson ethical canons. The Coyote mythology was, in Boas' view, both coastal and Plateau in its affiliation.

Of the three brothers, Qoā'qLqaL was no more altruistically intentioned than Coyote. The myths involving this supernatural personage were linked, Boas believed, to the mythic tradition of the lower Fraser peoples and were brought to the Thompson from that area in somewhat simplified form. Old Man appears in few elaborate Thompson myths and these seem related to the tales of the Kutenai of the southeastern corner of British Columbia and to those of the northern Great Plains region. Where Old Man appears he is often in power contests with Qoā'qLqaL. While most of the Thompson myths in this early Teit compilation are palpable borrowings from other tribes, they exhibit modifications in detail that adapt them more closely to the physical environment of Thompson country and to the tribe's cultural background.

Clearly in this analysis Boas' interests focus on the transformers' roles in making the world as it was in Thompson traditional times—or from the Thompson point of view on how and why prominent physical features of their territory came to be—and on area-wide diffusional relationships of the myths. In a recent evaluation of Teit's myth recordings, Maud (1982:68-69) argues *inter alia* that his myth assemblage of 1898 was collected with Boas' current interests in mind and that it is atypical of Thompson myths as a whole. The Thompson, Maud contends, were not nearly as concerned with etiological explanations of terrain features and the actions of natural forces—like thunder—as this particular collection suggests.

So far as Teit (1900:178) was aware, the Lower Thompson had no migration legends. In relation to this fact and its possible interpretation, a cautionary observation is in order. The absence of such traditions does not necessarily signify a population long resident in a particular area. Nor, contrary to some ethnographic opinion in the past (cf. Turney-High 1937:11-12), does the presence of migration accounts mean the reverse. Myths, legends, and traditions were such only, and may be historically essentially factual records of past events, or contain germs of historical fact, or be entirely fanciful. Only other kinds of evidence of a cultural, linguistic, archaeological, or biological-genetic sort afford commanding documentation in regard to human population stability and movements.

Unfortunately neither time nor space permits summaries and analyses of this extensive body of mythology. A careful sifting of these myths (and likewise of the published Thompson traditions) for bits of cultural information and traditional behavioral insights, the introduction of these data fragments into this present study, and a comparison of this information with the ethnographic facts collected by Teit, Hill-Tout, and Ray to illustrate possible Thompson culture change through time would be a useful and perhaps even revealing exercise. As

Teit (1930c:416) points out, for example, not a single reference to facial and body tattooing occurs in his myth collection, a curious fact considering its universal practice within the tribe in early traditional times.

Cognitive Culture

This section deals with those elements of Thompson traditional culture that are largely mental in their base or that rely importantly on a background of "observational" knowledge of a weakly empirical variety. Such, for example, are their notions of time and distance, their patterns of conventional gestures and signs, and, partly for lack of a more appropriate location within this ethnographic summary, their medicinal drugs, practices, and beliefs, some of which were surely efficacious while others were plainly nostrums (like folk-medicine everywhere), the potency of which, if such there was, was mental.

Time and Distance Units

The year was divided by the Lower Thompson into both lunar months and seasons. The latter recognized the major temperature and weather changes through the year. The former bore names indicating typical and important human activities associated with the period and, during the open span of months, the foods secured. These food-referencing designations underscore the absolutely fundamental importance of the subsistence quest to the people as opposed, for example, to one that might call attention to significant social or religious activities.

It is of particular interest that considerable differences prevailed between the moon designations of the Lower Thompson and those of the Upper Division, and further in regard to the moon that marked the year's beginning (Teit 1900:237). One may wonder if these variations are not somehow tied to subtle local environmental differences in the timing and importance of various regularly-occurring natural events in the various population clusters.

In general the Thompson, apparently including the Lower Division, commenced their year with the beginning of the deer rutting season. But many Lower people began theirs with the mountain goat rutting time. Also as exceptions, among various Upper Thompson subgroups the lunar year was thought to begin at the *end* of the deer rutting season or when the ground-hogs entered their winter dens, or—especially in the case of shamans—with the rutting season of the bighorn sheep. (Teit 1900:237)

Among the Lower Thompson, the common schedule was as follows, with the moons indicated as numbers. Moon 1, deer rutting time; 2, people enter winter houses; 3, last people enter winter dwellings; 4, alternate cold and warm winds: some people camp out in lodges; 5, last cold: people reenter winter houses for a time; 6, winter dwellings left for good; fish bag-netted; 7, short hunts; 8, berries picked; 9, salmon fishing began; 10, salmon caught and cured; 11, salmon oil prepared; finally "autumn" (unnumbered), large game hunted and smaller animals trapped. (Ray 1942:189; Teit 1900:238-239)

Five seasons were recognized by the Thompson according to Teit (1900:239; 1930b:347): (1) winter beginning with the first snows that stayed on the ground and ending with its disappearance from the valleys; (2) spring, the period of frequent Chinook winds; (3) summer, three lunar months long; (4) early autumn, two months in length; (5) late fall, a season of indefinite length because the time of the initial snowfall varied. The Lower Thompson year was divided into six seasons according to Ray's (1942:189) informant.

The heavens were also observed by the Thompson, and its phenomena were interpreted in various ways. For example, by sitting on certain rocks and viewing the sun's position in relation to specific trees or other marks on the mountains, the old-time Thompson determined the solstices "within a day" of their correct timing. A few constellations were perceived and named by the Lower Thompson. The position of the Little Dipper in the sky at night indicated the time. Closed parhelia were thought to foretell cold weather; so also light paraselene. The characteristics of the sunrise and sunset were also regarded as predicting future weather. The Lower Thompson saw a frog or a coyote on the moon. (Ray 1942:189-190; Teit 1900:239)

Only two of the cardinal directions were important to the Lower Division: toward the sunrise and in the direction of the sunset (Ray 1942:189-190).

Gestures, Signs, and Signals

Meaningful hand movements were considered essential to effective speaking and story narration. Many of these gestures were quite specific in their meaning and so were used when oral communication was unwise, as when hunting and on raids. Teit (1900:283-287) lists 87 gestures of this sign language. Sharp and subtle distinctions were made in subject areas of cultural importance. For example, signs distinguished between deer generically, buck, doe, buck sighted, buck trotting, deer jumping, deer lying down, deer falling, doe moving slowly and looking from side to side, deer on the alert, deer risen, and deer walking.

Shouting in different patterns and bird and animal cry imitations were used by hunters to communicate

information regarding the advance of the hunt. In high-mountain hunting near spirit haunts, special call signals were employed to enable hunters to distinguish between their own signals and the calls of spirits, using the usual signs, to summon hunters to them. (Teit 1900:287)

A complex pattern of simple but effective signs served to pass significant information to parties that might be following. These involved the use of sticks of varying sizes in different numbers and positions, of leaves that would wilt in time, and of animal bones or hair. These materials told, for instance, how many persons had left the camp, in what direction they had gone, the time of day of their departure and, by deduction, the number of days elapsed since they had left, the number of animals (if any) they had killed, the number of horses they had packing meat, and the number of enemy killed if the group was a war party. Branches were broken and left hanging as a party proceeded to apprise followers of the trail taken (Teit 1900:287-288).

Ethical Concepts and Conduct Codes

It was bad, the Thompson held, to steal, be unvirtuous, lie, be lazy, commit adultery, boast unless one were great, be cowardly, borrow often, be inhospitable or stingy, or be quarrelsome. The social consequences of such behavior differed in detail, but in general a person guilty of such condemned actions would be laughed at, gossiped about, avoided, mocked, and dishonored, and would find himself friendless and not trusted in speech or action. (Teit 1900:366-367) Surely this is a catalog of consequences that most Thompson were at considerable pains to avoid.

On the other side of the coin, it was:

> good to be pure, cleanly, honest, truthful, brave, friendly, hospitable, energetic, bold, virtuous, liberal, kind-hearted to friends, diligent, independent, modest, affable, social, charitable, religous and worshipful, warlike, honorable, stout-hearted, grateful, faithful, revengeful to enemies, industrious. (Teit 1900:367)

To ensure proper behavior some old person of the household especially on winter nights talked to the people, particularly the young, about acceptable behavior and its rewards and the unfortunate results of improper acts. He related his war and hunting experiences and his ideas of future life. He told the tribal myths. Often elderly persons took turns at telling the myths and legends until all their hearers had fallen asleep. (Teit 1900:367)

Secular Medicines and Medical Treatments

Ailments considered of natural causation—as opposed to those resulting from witchcraft, failure to observe guardian spirit dictates or customary procedures as in hunting and fishing, and inimical actions of the dead—were treated among the Thompson by various medicines, many of which consisted of plant substances. Fifty-four plant taxa were collected by Teit (1900:368-370) during his field research in the 1890s and are cases in point. They include medicines for a wide range of internal ailments, for unusual body statuses (e.g., chills), and for abnormal external conditions (e.g., burns, running sores), and others even to cause cradled infants to sleep.

These plants are listed by Teit according to their uses. Here they are reordered by plant form, alphabetized by Teit's botanical binomial. A further treatment of this roster can be found in the Steedman (1930) ethnobotanical analysis. Certain of Teit's plant identifications are now greatly outmoded. An attempt has been made elsewhere to mesh these old and now abandoned binomials with the contemporary taxonomy of botanists and to define the habitat characteristics, altitudinal preferences, and biogeoclimatological associations of them (Smith 1985a). These matters are, however, too complex to discuss here.

Teit's catalog of 54 medicinal plants follows:

1. *Abies grandis*. Decoction of young shoots and sometimes bark as a stomachic; (?) very strong decoction of gum and bark for gonorrhea. Possibly as curative for other health problems.
2. *Acer glabrum*. (?)Decoction of wood and bark drunk for sickness caused by exhalations from corpse.
3. *Achillea millefolium*. Leaves roasted until dry and brittle, powdered, and applied to running sore. Used in other medicines.
4. *Anemone multifida*. Bunch of fresh leaves and flowers placed across nostrils for nose bleed.
5. *Apocynum cannabinum*. Precise medicinal use unreported.
6. Arabis drummondii. Decoction of whole plant for kidney disease; very strong decoction of entire plant for gonorrhea; powder of leaves and stalks, sometimes— but rarely—mixed with grease, for running sore.
7. *Arctostaphylos uva-ursi*. Decoction of leaves and stems as tonic; decoction of root for blood spitting; water in which leaves and stems have been boiled as eye wash.

8. *Artemisia canadensis.* Decoction of whole plant for diarrhea.
9. *A. tridentata.* Decoction of stems and leaves for colds; bunches of stems and leaves, or leaves only, tied to nostrils for colds.
10. *Asclepias speciosa.* Precise medicinal use unreported.
11. *Astragalus purshii.* Precise medicinal use unreported.
12. *Canothus velutinus.* Decoction of stems and leaves drunk for dull pain and applied externally at same time to aching area. Decoction of four or five branches boiled for 24 hours together with four or five branches of *Shepherdia canadensis* (46); three large cupfuls drunk for gonorrhea for three days. Decoction used as a wash.
13. *Chaenactis douglasii.* Precise medicinal use unreported.
14. *Chimaphila umbellata.* Precise medicinal use unreported.
15. *Clematis ligusticifolia.* Precise medicinal use unreported.
16. *Cornus pubescens.* Decoction as tonic; decoction of wood, bark, and leaves drunk after childbirth.
17. *Delphinium menziesii.* (?)Decoction as tonic.
18. *Equisetum.* Ashes of burned stems as powder for burns.
19. *Erigeron filifolium.* Precise medicinal use unreported.
20. *Eriogonum heracleoides.* Entire plant with root roasted, powdered, mixed with grease, and applied to swelling with running sore. Precise other uses not reported.
21. *Euphorbia glyptosperma.* Rubbed on rattlesnake bite.
22. *Fatsia horrida.* Decoction of stems, cut in small pieces, as blood medicine; water in which mashed stems have been soaked drunk as stomachic; stems burned and ashes mixed with grease and applied to swelling with running sore.
23. *Ferula dissoluta.* Root roasted until brittle, powdered, applied to running sore.
24. *Fragaria californica.* Plant boiled slightly and used as wash.
25. *Gaillardia aristata.* Precise medicinal use unreported.
26. *Geum triflorum.* Precise medicinal use unreported.
27. *Helianthus lenticularis.* Dried, powdered, and used for running sore.
28. *Heracleum lanatum.* Decoction of root used occasionally for syphilis; decoction of root used for purification. Other medicinal uses but not specifically reported.
29. *Juniperus communis.* Decoction of stems and needles as stomachic; decoction as eye wash; decoction of stems and needles used for purification.
30. *J. virginiana.* Very small quantities of berries eaten fresh for kidney disease.
31. *Nicotiana attenuata.* Decoction as head wash for falling hair.
32. *Penstemon menziesii.* Decoction of stems, flowers, and leaves for kidney disease; stems, flowers, and leaves soaked in cold or warm water and used as eye wash.
33. *Peucedanum macrocarpum.* Leaves used as cradle padding, causing child to sleep and not be troublesome.
34. *Picea* sp. Decoction of needles and young shoots as wash for purification.
35. *Pinus contorta.* (?)Ointment from boiled gum, mixed with deer grease, rubbed on body for pains.
36. *P. ponderosa.* (?)Salve of boiled gum mixed with bear grease for eyes; (?)ointment of gum boiled and mixed with bear grease for sores.
37. *Populus tremuloides.* Decoction of stems and branches drunk freely for syphilis, accompanied by cold sitz bath of several hour's duration in same decoction; powder made of ashes of the wood, sometimes mixed with grease, for swellings with running sores; decoction used as a wash; used as medicines in other ways not described.
38. *Potentilla glandulosa.* (?)Precise medicinal use unreported.
39. *Prunus demissa.* Bark decoction as tonic; decoction of bark drunk after childbirth.
40. *Pseudotsuga douglasii.* (?)Decoction of branches or twigs as body wash for purification; (?) other medicinal uses also but undescribed.
41. *Rhus glabra.* Decoction a powerful syphilis remedy.
42. *Ribes* sp. Decoction of root as stomachic.
43. *R. hudsonianum.* (?)Decoction of leaves and stems for cold and sore throat; (?)decoction of leaves and stems as stomach medicine.
44. *R. lacustre.* Water in which cambium layer has been soaked used as eye wash.
45. *Rosa gymnocarpa.* Decoction of stems as tonic; water in which bark has been boiled used as eye wash; other medicinal uses but specifics not reported.
46. *Rubus* sp. Decoction of leaves for blood spitting; decoction of root as stomach medicine; decoction of leaves "for vomiting," [i.e., evidently to cause, not cure, vomiting condition].
47. *Salix* sp. Precise medicinal use unreported.
48. *S. longifolia.* (?)Precise medicinal use unreported.

49. *Sheperdia canadensis.* For decoction for gonorrhea see *Canothus velutinus* (12 above); decoction of bark as stomachic; decoction of bark [drunk] for purification; other medicinal uses known but unreported.
50. *Spiraea betulifolia.* Precise medicinal uses unreported.
51. *Symphoricarpos racemosus.* Decoction of stems as stomach medicine; other medicinal uses known but unreported.
52. *Valeriana sylvatica.* (?)Decoction of root for colds.
53. *Veratrum californicum.* Decoction made by boiling for a long time ashes of burned dried root used as blood medicine; decoction, in small doses, of ashes of burned dried root, mixed with bluestone reduced to ashes, drunk as medicine for syphilis.
54. *Zygadenus elegans.* Mashed-up root baked in ashes or roasted at a fire and rubbed on paining body part.

The significant implications of these botanical data for an understanding of how the Thompson utilized their homeland, including the Park segment, are analyzed and discussed at length by Smith (1985a) elsewhere and have been deleted from this present study in the interest of report brevity.

Only two roots are mentioned specifically by Ray (1942:131) as having been used by the Lower Thompson for their medicinal properties: those of the sunflower and the soapberry. The sunflower is, however, a non-native, introduced plant, but perhaps the native and visually similar balsamroot (*Balsamorhiza sagittata*) is intended. According to Turner (1978:216) Plateau Indians often call the sunflower by the term they apply to the balsamroot, or at least the seeds of the two by the same designation. Soapberry (*Shepherdia canadensis*) appears in the preceding Teit list.

Animal parts also served curative needs (Teit 1900:368-370):

- Dried beaver testicles were soaked in water and the liquid drunk for severe and sudden pain. The testes were redried and retained for future use.
- Bluejay meat was eaten "for vomiting," presumably meaning to promote that condition.
- A mixture of oil and water in which sturgeon liver had been boiled was drunk "for vomiting," again, I gather, to induce it.
- Rotten matter—e.g., decomposed salmon—which was full of worms was used to treat blisters on the feet. The person walked on it, remained off his feet until sundown, and then washed his feet in cold water.

More general descriptions of several additional medicines are provided by Teit (1900:368-370):

- Hot fir branches or small sacks or pieces of skin filled with hot ashes were applied to the abdomen for colic or cramps. Hot liquids were drunk for this same purpose.
- The sweat bath was resorted to for pains, soreness, or stiffness in any part of the body. This condition was also treated by repeated, and sometimes violent, rubbing of the area with the hands; by applying hot fir branches, ashes, coals, or stones; and by drinking hot water or medicine.
- Women's milk served as eye wash.
- Herbs were rubbed on the arms to purify them.
- Rattlesnake bites were treated by tying one or two wet buckskin strings, rubbed with red ocher and having as an attachment the head of a weasel or ermine, very tightly just above the punctures. When the region became greatly swollen, they were unfastened and tightly retied four or five inches higher up. "Cutting, burning, and sucking the wound . . . [were] resorted to," herbs were rubbed on the affected area, and shamans with rattlesnake guardian spirits performed incantations to aid in the recovery, all, I gather, after the application of the string bindings.

While sweat-bathing had a very significant ritual purification function, it also served importantly both in keeping physically clean and, in the Thompson mind, in curing certain ailments. Sicknesses were also occasionally cured by eating certain foods as prescribed by shamans who received the instructions from their guardian spirits in their dreams. (Teit 1900:370)

The Thompson performed a number of surgical operations, not all simple in nature. Boils were pierced with porcupine quills, and aching joints with large, sharp awls. Cataracts were removed, it is said, by touching the eyeball with a rough, charred bone from a black bear, causing the thick skin to adhere to the bone, raising the skin, and cutting it with a very sharp knife. Warts were removed by cutting them off close to the skin and applying black lichen which had been exposed to the fire until hot. Thought to represent subsurface accumulations of blood, moles were lacerated with an arrow point and allowed to bleed freely. Rheumatic areas were cauterized by placing powdered charcoal on the aching spots and burning it. (Teit 1900:370)

Use of North Cascades National Park and Ross Lake National Recreation Area

An attempt is made in the following pages to extract from the preceding ethnographic data all information relating directly or by implication to the Thompson use of the mountainous segments of their traditional territory and to organize these materials into a meaningful whole. The basic data having already been presented, literature citations often seem unnecessary and are accordingly frequently omitted.

The data of Teit and Collins together demonstrate that the Lower Thompson regarded the northern and northeastern segment of the Park and particularly all but the southernmost portion of the Ross Lake Recreation Area as a part of their traditional hunting and gathering territory, although the southern fringe of this lake area and the flanking mountains were likewise claimed by the Upper Skagit as within their subsistence grounds. From the Lower Thompson viewpoint this region was nothing more than a natural southern extension down the Skagit Valley of their Cascades Mountain country north of the British Columbia boundary. That the Lower Thompson not only claimed this region but made more than occasional use of it is independently attested to by the Upper Skagit record of their hunting parties having encountered Thompson parties in the area.

That the Lower Thompson exploited mountain country to any considerable degree may seem strange at first blush, for they wintered in their villages down in the deep, narrow Fraser Canyon between Spuzzum and Siska, spent much of the warmer season at their superb salmon fisheries along the Fraser, rarely saw people from neighboring villages owing to the difficulties of travel in the canyon, and, as the observations of Fraser and Mayne attest, must have found formidable and fatiguing the climb up out of the canyon, quite apart from the ascent of the mountain slopes themselves. Further, if Teit's appraisal bears weight, the Lower Thompson "were quieter and steadier . . . [than the people of the Upper Division and] slower and less energetic." And more: "They . . . [were] better fishermen [than the Upper Thompson] and more expert in handling canoes," implying in general a lesser ability or lesser interest as hunters. Still, the Thompson as a whole are described by Teit as having been fond of hunting and some were remarkably determined and persevering in their pursuit of game. This was hardly less true of the Lower Thompson, although by and large they plainly devoted less time during the year to hunting activities.

The ethnographic and ethnohistorical literature as I know it unfortunately says next to nothing explicitly and in an organized fashion concerning the Thompson use of their high country in subsistence and other activities. Such data as exist are widely scattered through the literature and are often almost in the nature of minor asides and chance remarks in many different subject contexts. Assembled as they are below, they are, however, reasonably full and, while far less comprehensive and detailed than one would like, are sufficient to establish the importance of the mountains to the Thompson and outline the principal associations of the tribe with this elevated terrain. Because these data are mostly generic Thompson data, they reveal very little about any differences that may have existed between the way in which the two divisions exploited their individual upper elevation resources. This appears, however, to be a relatively insignificant problem. However much the life patterns of the Lower people in their canyon centers may have differed from those of the Upper Division in their low, open country upstream from the gorge, the two groups could hardly have lived in their respective high lands very differently and made use of the animal and plant resources there in a very different manner, except as these responses were conditioned by minor biogeoclimatological variations between the two regions: the Lower country was largely in the Cascades and west of the mountain crests; the Upper extended eastward from the Cascades watershed down through the high mountains and out into the ponderosa-bunchgrass country. Similarly we are even more poorly informed about any differences that may have prevailed between the Lower Thompson use of their particular mountainous lands north of the present international border as against those in the Park region to the south. Here, however, there were notable biogeoclimatic differences that should be commented upon: above the line were six of these biozones in the remarkably ecologically diverse Lower Thompson homeland; below, only three (Franklin and Dyrness 1973; Krajina 1969; Smith 1985a). The significance of this difference in terms of the animal and plant resources of these Lower people has not yet been fully assessed, though a beginning has been made in this direction (Smith 1985a). At this point, because of the extent to which most animals and plants of the Lower Thompson territory occurred over a considerable elevational range and were adapted to varied habitat zones, it appears that the fact that the ecological base south of the boundary was more limited was of no great importance in practical subsistence terms (Clark 1973, 1976; Henry 1915; Piper and Beattie 1914, 1915; Smith 1985a; Taylor and MacBryde 1977). Accordingly, it is reasonable to assume provisionally that, unless the ethnographic facts or bioenvironmental data explicitly indicate otherwise, the general Thompson mountain-use information is in the main acceptably descriptive of the Lower Thompson use patterns within the Park sector.

Deer, salmon, roots, and berries were the staple foods of the Thompson tribe, deer being the principal food

of the Upper Division as salmon was of the Lower people. It seems to follow that Teit (1900:230) is referring in particular to the Upper Thompson when reporting that

> a large portion of the tribe lived in the mountains during the greater part of the year, moving about from one root-digging or deer-hunting ground to another, according to the harvest-time of certain roots and berries, or as the deer changed their feeding-grounds during the seasons. . . . Only when winter set in did they return to their winter houses.

Still, the Upper bands took many salmon at their Fraser and Thompson River fisheries: Simpson, for instance, reports small salmon camps at each rapid on the lower Thompson River in October of 1828. During much of the salmon period—especially in the autumn—the Lower Thompson, for their part, made good use of their excellent canyon-bottom fisheries, which yielded plentifully every year. And yet they, too, hunted game and collected roots and berries to an important extent. When engaged in these pursuits, Lower Division hunters and their wives, no less than the Upper people, must have followed the seasonal pattern described by Teit above.

The diversity of the subsistence base of the Thompson as a whole and the Lower Thompson more particularly is well illustrated by their calendric terms and these, in turn, furnish oblique insights into their subsistence utilization of their mountainous country. The moons of the year were designated according to the principal activities of the people, the main food obtained during the period, or some notable feature of the natural rhythm of the local animal or plant life. In counting moons, many Lower Thompson commenced with the rutting season of mountain goats. In view of the general Thompson practice of counting from the deer mating season or, in the case of one Upper Thompson band, from the entry of ground hogs into their winter dens, this alternative Lower Thompson pattern suggests the special importance of mountain goats to this division of the tribe. The designation of the months by the Lower Thompson also reveals those segments of the year during which the mountains were mainly visited in their subsistence quest. With the first month considered to be that of the deer rutting, the second through the fifth month found the people in their winter lodges. In the sixth, the second moon of the two spring months, they took fish in bag nets; in the seventh they went out on short hunts; and in the eighth they picked berries. During the ninth (the last summer moon) and the tenth and eleventh moons (the early autumn months) the Lower Thompson were primarily involved in catching and preparing their salmon. The final month, of somewhat indeterminate length and equivalent to late autumn, was the season when the people hunted large game and went trapping. Viewed as a sequence, these month terms imply that notable Lower Thompson journeys to the mountains took place in particular in early summer and even more importantly to the high country distant from their canyon winter villages and fisheries—including and perhaps particularly to that in the North Cascades Park area—in the mid- and late autumn period.

"Hunting, trapping, and snaring of game," Teit (1900:239) writes, "was one of the most important occupations of the Thompson Indians" as a whole. And even the Lower Thompson,

> although they had an abundance of fish, spent much time in hunting. They even hunted on the mountains on the western slope of the Coast Range. Hunting parties who visited the most southern part of their hunting-grounds were sometimes absent for seven months, returning only when the snow began to melt in the mountains. (Teit 1900:239)

This is a particularly revealing statement on two points that intersect with the limited special concerns of this present study. First, in light of Teit's boundaries for the aboriginal Lower Thompson territory (Figure 3-1), reference to the southern portion of the group's hunting country must almost certainly allude to hunting activities in the North Cascades Park region. Second, the melting snow note makes plain a subsistence quest pattern that one would hardly suspect, one in which parties left their Fraser canyon center to hunt in the mountains during some or even all of the colder months of the year. When these trips lasted for the seven-month period, they must have extended from, say, October through April. The span of time is made more transparent by the Thompson moon count calendar already discussed. Other evidence indicates that these task groups that wintered in the Ross Lake sector occasionally remained in the lake area into or even through the following summer.

These data must signify that the Lower Thompson maintained winter camps in relatively high country, presumably including the Park area. While many may be assumed to have been temporary camps, others were surely more in the nature of bases of longer occupation. Unfortunately, there is to my knowledge no ethnographic information regarding the location, settlement plan, and other characteristics of these cold season, mountain hunting occupation sites.

So much for Thompson subsistence resources in general and the somewhat differing emphases placed upon these major categories by the two divisions. In the following paragraphs the three principal food quest activities—hunting, fishing, and plant gathering—are briefly examined as they relate to the high terrain segments of Thompson country.

For all the importance of salmon to the Lower Division, hunting was an indespensible food provider to these downriver people. Specialist hunters existed among them no less than among the Upper Thompson bands. The Thompson as a whole—and so one must suppose the Lower group to a greater or lesser degree—ate many deer, elk, bighorn sheep, beaver, procupine, and squirrel as well as grouse, ducks, geese, cranes, and robins. Moreover, the downstream division also ate rock rabbits, animals not used as food by the Upper Thompson. Other animals were secured for purposes other than subsistence: e.g., for their various parts to be used technologically or as medicines. Principally the Lower Thompson "hunted . . . mountain-goat, black bear, and marmots," while deer were most important among the Upper Division.

Considering the restricted character of the canyon homeland from virtually every point of view, most of the above animals must have been obtained in the high lands outside the canyon. Unlike some Upper Thompson bands, the Lower villagers "had few deer in their country," probably especially in and on the flanks of their canyon home but also to some extent in their mountain forests. Nevertheless, they used deer hides in many ways and, in fact, supplied the Upper Thompson with the skins of black-tailed deer for making superior moccasins. Certainly the mountain goats that furnished the wool for their woven blankets and ponchos and the skins for moccasin stuffers, the marmots from which, when tanned, robes were fabricated, the elk whose skins—like those of deer—were made into caps and headbands, and the bear from the skins of which foot wrappers were fashioned for inside-moccasin wear were all hunted in the hills and high mountains beyond the canyon rim (cf. Dalquest 1948).

Details of the devices and methods employed by the Thompson in securing game have already been described. They need be noted here only as they relate, or may logically relate, in some measure to mountain hunting in general or to the Park region more specifically. These observations by Teit are largely of an oblique or incidental nature, but are nonetheless of considerable interest.

- "Stone for their arrow-heads . . . [was found by the Lower Thompson] near the head waters of Skagit River. Many points were made out of large chipped heads, which are found in great numbers in the valleys. The Indians believe that the latter were made by the Raven." (Teit 1900:241)
- "Bows and arrows were the principal weapons used [by the Thompson] in the pursuit of game." Deer were generally hunted with these weapons, frequently with the aid of their excellent hunting dogs. According to Teit,

> To hunt deer single-handed required intimate knowledge of the deer's habits and of the ground which they frequent at different seasons, ability to take advantage of cover and to get within range, and capability to track and to shoot well. Some Indians, especially single men, while hunting on the mountains endured much hardship and exposure. Some of them would start out with cold weather in the winter-time, taking with them neither food nor other clothing than that which they wore. They lived entirely on what they shot, and used raw deerskins for blankets. They made rough kettles of spruce-bark or deer's paunches. A hole was dug in the soft ground near the fire, into which the kettle was placed, with brush underneath. . . . Hot stones were put in to boil the food. These paunches were also sometimes used as water-pails. (Teit 1900:239, 244, 246)

- "A favorite method of procuring deer was by means of deer-fences [which were owned by those who made them]. These were formerly very numerous, and their remains may still be seen [in the mid-1890s] in several parts of the mountains. They were in common use as late as . . . [1880]."

> Some of these fences were built in order to catch deer in the summer-time, but most of them were intended for capturing deer from the latter part of September to the beginning or middle of December, since they were placed in those parts of the mountains which the deer frequent at that time of the year. They were generally built in little valleys or defiles between mountains, and especially in those which were favorite places of deer crossing from one mountain to another, or at spots where large numbers of deer generally passed on their way down from the higher elevations to their winter grounds. (Teit 1900:246)

- When sufficient hunters were on hand to join forces, deer were driven in winter often in "one of the larger gullies . . . as the deer frequent such places during cold weather." (Teit 1900:247)
- "Deer and elk were . . . killed in winter, when there was very deep snow in the mountains, by being run down by hunters on snowshoes, who shot or clubbed them when near enough. Dogs also soon ran them down when the snow was deep and had a thick crust." (Teit 1900:248)
- Nooses were set by the Lower Thompson on deer trails so as to catch the animal's head or antlers. Deer fences with nooses set in openings were, however, not much used by men of this Lower Division. (Teit 1900:247)
- Black bear were usually hunted with bow and arrow, sometimes with dogs to assist, and were also trapped in deadfalls. (Teit 1900:249)
- "Mountain goat and bighorn sheep were hunted with bow and arrows." (Teit 1900:249)

- Beaver were occasionally hunted with dogs and killed with a spear with a bone point. (Teit 1900:249)
- "Coyotes and foxes were often caught by digging or smoking them out of their holes." (Teit 1900:249)

How many of the animals reported above were available to hunters within the Park perimeters is not stated, but it appears from Dalquest (1948) that all but, it seems, the bighorn sheep should have been.

Further unequivocal evidence of Thompson hunting in high altitude country is provided by the fact that special communication signals were employed when parties were dispersed in the pursuit of game. "In hunting in the high mountains," Teit (1900:287) reports, "in those places which were thought to be the haunts of spirits, a different call was used, because, if the ordinary call were used, the spirits, it was said, imitated it, and might call one of the hunters to him."

Such data as we possess strongly suggest that the search for game was a principal motivation for Lower Thompson journeys into the higher elevations of their traditional territory and hence into the Park region.

The use of mountain goat wool by the Lower Thompson in making woven fabrics speaks further to the visits of parties to high elevations. It does not necessarily demonstrate hunting of the animals, however, though, as noted above, there is abundant other evidence for this practice: wool shed by the animals could be collected where, for example, caught in vegetation, it had been pulled from the animal.

There is little ethnographic information relating to the use of locations in the high mountains as fishing sites. As noted above, the stretch of the Fraser River occupied by the Lower Thompson was a rich salmon source. Owing to the nature of the river and its banks, it was particularly well suited to bag netting salmon, though not to spearing fish, fishing through holes in the ice, and, for the most part, to the use of weirs and traps. Furthermore, when they reached this area the salmon were still in good condition, and even in bad years they were plentiful. This being so, the Lower Thompson confined themselves to curing the fish they most esteemed—chinook salmon. Sturgeon of small size were also taken by the people of the Lower Division. The implication of these data is that the Lower Thompson normally had little occasion to search for fish outside of the Fraser River canyon. (Teit 1900:251-254)

Nevertheless, at least some hook and line fishing was carried out by this Lower group in the high country, while the people were in the region for some other reason. For Teit (1900:253) writes: "A few mountain lakes . . . contain[ed] trout; and the people who camp[ed] near by for the purpose of hunting and digging roots, fish[ed] for them from rafts with hook and line." Whether salmon could be found in the Skagit River headwaters that were claimed by the Lower Thompson, I do not know, for I have seen no references to salmon above the Newhalem sector. But in view of the group's rich salmon fisheries on the Fraser, anadromous Skagit River fish, if available, could hardly have been important, except perhaps as fish consumed in the immediate area of the catch. Trout and other non-salmonids of many types were likewise fished for by the Thompson, especially during the spring and autumn. Because both were seasons to be in the mountains, this small fish taking must have occurred largely in the high country.

Roots, gathered in early summer and in autumn, and also berries were important in the Thompson subsistence base. There is to my knowledge, however, no listing of the plants sought by the tribe, or more specifically the Lower Division, for food in their mountain environments. This is the more surprising since it is said that most of the root harvest of the Lower people took place in the mountains, and even that most of the roots "were obtained in the higher mountains only." The address this information vacuum, relevant Thompson data have been culled from Turner's (1978) compilation of the traditional food plants of the interior British Columbia tribes. An effort has been made to identify those native to mountain terrain and those specifically stated to have been collected and eaten by the Lower Thompson. Inasmuch as these data are somewhat technical and the discussion is rather extended, these basic data and my preliminary analysis of them seem rather out of place in this more general survey. Accordingly, they appear as a separate item at the close of this section.

Both roots and berries were secured by women, which in itself indicates that entire families undertook the journeys to the high country during the collecting seasons. In the preceding subsistence section of this chapter appears a partial ethnographic roster of the various food roots and berries of the Thompson, as well as a few stalks and sprouts and other lesser edibles. With the habitat biodata at hand, none of these plants can be identified as peculiar to that part of the Park Complex claimed by the Lower Thompson. The larger and more technical food plant catalog that concludes this present chapter identifies a substantial number of these plants as growing at mountain altitudes, yet provides no specific information in regard to the occurrence of these plants within the Park perimeters and the gathering of them there by Lower Division groups.

The Lower Thompson were skilled makers of cedar dugout canoes, many of which were traded to the Upper Thompson. Several types were fashioned, six of which are diagrammed by Teit (1900:255 Figure 237). Whether any of these varieties were in use in the mountains away from the Fraser River is not stated. This seems unlikely in view of the fact that bark canoes were also fabricated by these Lower people and, it is explicitly reported, were generally employed in crossing lakes and deep mountain streams. (Teit 1900:255)

Since much of the travel at higher elevations was surely by land, the back-packing of burdens must have

been customary when within the Park region. On this point, Teit (1900:256) states in general terms that in olden times goods were carried on the back by means of tump-lines of cedar bark or woven mountain goat wool. "Meat, baskets filled with berries and roots, and the few necessaries of a travelling family, were transported in this manner." Dogs were never used by the Upper Thompson as pack animals, "probably because," Teit (1900:256) suggests, "the country was too rough and mountainous," a description that certainly applies to the terrain within the Park perimeters. If they were sometimes fitted with packs by the Lower Thompson, as Ray states, this presumably occurred, following Teit's explanation, in lower and more gentle areas.

As noted in an earlier paragraph, winter hunting and travel in the mountains was not avoided by the Lower Thompson. When the snow was deep, they made use of snowshoes of a variety with rounded frame which Teit (1900:256-257, 257 figure 242), perhaps following the Thompson themselves, terms the "owl sole." This shape with its turned-up front was thought to be "best adapted for travel on steep mountains," and the rather wide meshes with which they were provided "were considered favorable for travel in moist snow."

In considering the extent to which the Lower Thompson utilized the resources of the mountainous sector of their territory and so to some degree those inside the limits of the Park, it is instructive to examine published traditional trade data for the group. These data indicate resources possessed in quantities above their own requirements, needs that were to some degree unmet by their own exploitative activities, and items for which they acted as mere middlemen, passing them from one outside group to a different tribe.

Teit (1900:258-259) provides a listing of materials exchanged between the Lower Thompson and the Lytton band of the Upper Thompson, whose country lay immediately up the Fraser River from that of the Lower Division. Also a roster of items traded between the Lower Thompson and the Okanagan, surely the Northern Okanagan whose traditional territory adjoined that of the Lower Thompson on the east; small parties of these peoples came "at long intervals" to Lower Thompson country to trade. And a catalog of materials that passed between the Lower Thompson and "Coast tribes," without doubt preeminently the Halkomelem tribelets along the Fraser River immediately downstream from the Lower Thompson. These data are assembled in Table 3-1. In addition to those appearing in this trade-item roster, wild sunflower roots—not native to the Lower Thompson area—were obtained in exchange, though their source is not specified.

If this inventory of trade goods is examined in terms of probable mountain provenience, the following items, starred in Table 3-1, emerge:

- To the Lower Thompson, bighorn sheep horn spoons from the Upper Thompson and no mountain items from the Halkomelem.
- From the Lower Thompson, woven blankets of mountain goat hair to the Upper Thompson and dried meat, fat, skins, and hair of the mountain goat, elk fat, dried elk skins, wild lily roots, and lichen cakes to the Halkomelem.

In the context of the interests of this study the natural habitat data for the mountain goats, elk, and bighorn sheep mentioned in the preceding two items require brief examination.

(1) The mountain goat, Dalquest (1948:407) writes,

> is an animal of the high mountains. Their habitat is the bare-rock cliffs and rock-strewn slopes of the Arctic-alpine and Hudsonian life-zones. Where extensive, open rocky areas occur they descend to the Canadian Life-zone. Even in winter they keep to the high cliffs where steep slopes and strong winds keep the snow from the plants on which they feed.

Their range in the early years in Washington State included "the entire Cascade range from Mt. Adams and Mt. Saint Helens north to the Canadian boundary." They extended "west to Mt. Baker, Mt. Higgins and Mt. Index and east to Lake Chelan. . . ." (Dalquest 1948:409)

(2) Elk were surely obtained in the mountains within the Park borders. For, according to Dalquest (1948:391, 393), elk were "found over most of the forested areas of Washington. . . . [They ascend] "to the open meadows of the Hudsonian Life-zone in the early summer and . . . [return] to the dense forests of the Transition and lower Canadian life-zones with the winter snows." This winter feeding area is in the 2,000± foot range (Smith 1985a) and so within mountainous terrain in the Fraser Canyon and Skagit Valley country.

(3) Bighorn sheep "inhabited most of the eastern Cascade Mountains, . . . [and] the cliffs of the Columbia River Valley in eastern Washington." They were also native to "the eastern or Columbian Plateau side of the river and therefore probably occupied the cliffs of Moses Coulee and the Grand Coulee. Their habitat seems thus to have included rocky areas from the Upper Sonoran to the Hudsonian life-zones." (Dalquest 1948:405)

As with the elk, it is evident that bighorn sheep were to be found at low elevations—lower even than the elk—as well as in the higher country. It is notable also that these native distributional data place these animals to the east of the crest of the Cascades, implying their absence on the western flank of these

Table 3-1. Items Traded by and to Lower Thompson.

Items	Northern Okanagan	Upper Thompson	Lower Thompson	Halkomelem
Dried salmon		◀----------		
Dried salmon	◀----------			
Dried dog [chum] salmon			◀----------	
Dried *kowi'a* salmon			----------▶	
Smoked salmon heads		◀----------		
Salmon grease		◀----------		
Sturgeon oil			◀----------	
* Dried mt. goat meat			----------▶	
* Mt. goat fat			----------▶	
* Mt. goat skins			----------▶	
* Mt. goat hair			----------▶	
* *Woven mt. goat hair blankets*		◀----------		
* Elk fat			----------▶	
* Dried elk skins			----------▶	
Deer fat			----------▶	
Dried deer skins			----------▶	
Dressed deer skins (buckskins)		----------▶		
Dressed deer skins (buckskins)	----------▶			
Black-tailed deer skins		◀----------		
Dressed bison skins	----------▶			
* Wild lily roots			----------▶	
skamete roots			----------▶	
Lomatium roots		----------▶		
Lomatium roots	----------▶			
Bitterroot roots		----------▶		
Bitterroot roots	----------▶			
Serviceberries		----------▶		
Dried serviceberries			----------▶	
Dried huckleberries		◀----------	----------▶	
Soapberries		----------▶		
Dried soapberries			----------▶	
Dried berries of some kinds	----------▶			
Wild currants		----------▶		
* "Moss" cakes			----------▶	
Hazel nuts		◀----------		
* Bighorn sheep horn spoons		----------▶		
Bison skin bags		----------▶		
Bark twine			----------▶	
Bark for thread and string		----------▶		
Cedar bark		◀----------		
Bark twine bags		----------▶		
Baskets		◀----------		
Cedar-root baskets			----------▶	
Mats		----------▶		
Rush mats of one kind			◀----------	
nxo'itlaxin grass			◀----------	
Wood for bows		◀----------		
Canoes		◀----------	◀----------	
Pipes		----------▶		
Wood for pipe stems		◀----------		
Tobacco		----------▶		
Red ocher		----------▶		
Vegetable paints (white and red)		◀----------		
Dentalia		----------▶	----------▶	
Abalone shells			◀----------	

*Mountain-derived items.

mountains. If so, they suggest their absence as a significant part of the aboriginal fauna of the Lower Thompson hunting territory, which, in the Fraser Canyon, lay in the heart of these mountains and in the Park region to the south was entirely on the western Cascades slopes.

These trade data fail to approximate amounts of each item exchanged or even to hint in other ways at the importance of the individual materials as trade products. But at least in terms of the raw numbers of mountain-derived items—those starred in Table 3-1—as against those derived wholly or in large part from lower elevations, they seem relatively unimportant. But it is certainly true that appreciably more of them moved from the Lower Thompson to other groups than the reverse. Even here, however, they were limited, so far as our present information takes us, to mountain goat and elk products, "wild lily" roots, and lichen cakes. The sole possible high elevation item received by the Lower Thompson, according to Teit's record, was the bighorn sheep horn spoon, which must have been relatively insignificant as a cultural item in comparison to the mountain goat meat and other products traded out.

It is of incidental interest that all mountain-derived materials bartered out by the Lower Thompson went down the Fraser River. (Most Upper Thompson people, incidentally, disliked mountain-goat wool blankets because they made their skin itch [Teit 1900:260].) In any event, these items of high country provenience among the Lower Thompson demonstrate further their exploitation of high mountainous terrain.

The ethnographic data on Lower Thompson warfare confirms in a convincing way their use of the mountainous region of the Park south of the international border. The group was less warlike and less skilled in fighting than the Upper Thompson, as they themselves admitted and the people of the Upper Division asserted, and had "very few real trained warriors among them" (Teit 1900:269-270).

The Lower Thompson were generally "on good terms with all surrounding tribes [with whom they had frequent contact] and rarely sent out any war parties" against these nearby groups. Nevertheless, they occasionally engaged in hostilities with the Halkomelam tribelets on the Fraser farther downriver (Teit 1900:268-270). This fact raises the possibility that they met Chilliwack parties in the upper reaches of the Chilliwack drainage basin, where their territories adjoined or even overlapped (Figures 2-1 and 3-1), and contended with them there, just within the northwestern boundary of the Park. There appears, however, to be no mention of such affrays in the ethnographic literature.

The Lower Thompson were on very friendly terms with the [Northern] Okanagan, "and, when their hunting parties met members of . . . [this] tribe in the mountains, they invariably exchanged presents" (Teit 1900:271). But "when they fell in with hunting parties of Klickitat, . . . they always fought one another" (Teit 1900:271). As Teit's map of Thompson territory and their neighboring tribes reveals (Figure 3-1), his "Klikitat" in this instance were Upper Skagit, admittedly a curiously mistaken designation for these people. But this statement of Lower Thompson-Upper Skagit hostility is not inconsistent with a similar report of inimical Upper Skagit-Lower Thompson relations by Collins (1974a:115). Indirectly these data provide further evidence of the Upper Thompson—and Upper Skagit—utilization of the valleys and high mountains of the Park, for this is where hunter groups of the two tribes would have met according to both Teit's tribal map and Collins' Upper Skagit territorial information.

According to Teit (1900:269), the Lower Thompson captured slaves from lower Fraser River groups. Nothing is said, however, about their taking them from peoples encountered in the Cascades to the south. On the other hand, they are reported by the Upper Skagit to have taken as slaves a few people of their tribe (Collins 1974a:118).

We know little about the sociocultural dimensions of the Lower Thompson in their high mountain regions or, for that matter, for the Thompson as a whole at higher altitudes. However, the territory claimed traditionally by the Lower and Upper Thompson together was considered to be open to hunting parties of the entire tribe. As Teit (1900:293) remarks:

> Land was looked upon as neither individual nor family property, since every one had a right to all parts of the common country for any purpose. There were no particular hunting-grounds peculiar to, or the sole property of, certain families or bands. Of course each band had their usual hunting places, naturally those parts of the country nearest to their respective homes; but Indians from other villages, or other [bands or] divisions of the tribe, frequently hunted in each other's hunting-grounds without being considered intruders; and sometimes hunting-parties representing two or three tribal divisions [bands] would hunt over the summer hunting-grounds of another [band or] division without rousing any feelings of resentment.

There were, however, two exceptions to the holding of mountainous tribal land in common.

(a) The Lower Thompson were not permitted to build deer fences in the mountains of the Upper Thompson, just as men of one band of the latter were not allowed to do so in the high country of another Upper band or in

that of the Lower Thompson. In fact, a deer fence was "looked upon as the property of the individual who . . . maintained the fence. The erection of another fence in the same pass, in proximity to the first, would materially affect the chances of capturing deer by it" (Teit 1900:293-294).

(b) Golden eagle eyries were regarded as the property of individuals or families (Teit 1900:294).

On the other hand, while available to all Thompson hunters with the two preceding exceptions, the Park region was plainly utilized primarily by Lower Thompson hunting groups, otherwise Teit's informants would not have defined the area as Lower Thompson country (Figure 3-1). It was, after all, appreciably nearer the winter villages and summer fisheries of the Lower Division than those of the Upper people. Further, the latter had large areas of mountainous territory available to them without journeying so far afield and perhaps they were more at home in their drier bioenvironment east of the Cascade crest than in the less familiar country of the higher slopes and crags west of the Cascade watershed.

The territory of the Thompson was vigorously protected from trespass by non-Thompson, unless these latter had kinsmen among the Thompson. Indeed, as Teit (1900:293) phrases the matter, if a person "not related to a Thompson Indian were caught hunting, trapping, or gathering bark or roots, within the recognized limits of the tribal territory, he was liable to forfeit his life." This explains the Thompson hostilities against the Skagit in the upper Skagit Valley and nearby mountains within the boundaries of the North Cascades National Park to which both Teit and Collins attest: the Thompson, claiming this territory (Figure 3-1), obviously saw the Skagit encountered within the area as unrelated intruders.

Hunting, trapping, and snaring, as well as fishing, were among a man's important duties (Teit 1900:295). The Thompson, according to Teit (1900:295), perhaps including the Lower Thompson in spite of the great economic importance of their splendid Fraser River salmon fisheries, regarded "hunting [as] the most honorable occupation." The importance to the Thompson as a whole of deer fences and eagle eyries, both predominantly of the high country, is underscored by the rather formal rules that governed their inheritance. Like fishing stations on the Fraser, both fences and eyries:

> were inherited by all the male children, the eldest having the right of dividing, and taking his choice. If he was a hunter, he generally took the deer-fence, leaving the fishing station to . . . [others]. Sometimes these places were used by all the sons in common, until some of them died, the survivor claiming all, and his sons inheriting from him. If a man died without sons, the nearest male relatives took his hunting places. (Teit 1900:294)

Game taken by Lower Thompson hunting parties, which generally worked the higher terrain, was distributed by the hunting chief in a formal manner: this in itself suggests the more than casual importance of animals as food. The meat, fat, and skins were divided equally among the group, except that the best hunters were allotted a skin or two and a little more fat than the others. A man, hunting alone, who killed several animals invited friends to return to the kill site to help in the butchering and skinning process; he then divided all among the group. "Skins and meat of animals which a man trapped belonged entirely to himself." (Teit 1900:295)

As with the hunting grounds, the root digging and berry gathering areas, mostly up in the mountains as already observed, were likewise common property of all Thompson (Teit 1900:294). Women, of course, dug and cured or cooked the roots and collected and cured the berries (Teit 1900:296).

Little is reported concerning the more social aspects of traditional Lower Thompson life associated with root and berry gathering in the mountains. However, that certain rituals were carried out by the Thompson while engaged in such activities at high altitudes is attested by the following:

> When a mother went up the high mountains to dig roots, etc., taking her baby there for the first time, the first evening after reaching her digging-ground she would break a branch from a tree, and hang her child in its carrier on the broken limb. She painted her whole face, and sometimes the top of her head, red, and danced there before the infant, sometimes all night. She put her hands close together, as if holding something, blew in them, and ran off some distance; then, opening them, she made the motion of throwing away something. This was symbolic of taking disease or evil from the infant, and throwing it far away. She prayed constantly to the spirits of the place, or to the mountains themselves, asking that her child might never be sick, and that, if it were ever bewitched, and no shaman were near to help, nevertheless it might not die, or that she herself might have power to defeat the evil. She also addressed the spirits of the mountains on her own behalf, kneeling down, spitting on her hands, and rubbing her body upward over the front to the face, then over the top of the head backward, meanwhile praying that she might be delivered from all disease or trouble, that she might never be hurt in body, or be bewitched, and that, if sick, she might get well soon. (Teit 1900:309)

At puberty, a Thompson girl "was at once separated from all other people" to live in a conical hut of fir branches and bark and to perform in private the many ritual, largely symbolic acts summarized in an earlier section of this Lower Thompson chapter. Of particular interest in this immediate context is the fact that sometimes "parents, when one of their daughters reached this age, would move into the wilder parts of the mountains to give her a better opportunity to perform the required ceremonies" (Teit 1900:311-312). In the late 1800s the period of isolation lasted four months, but long ago, according to Teit's (1900:317) informants, it extended over a year. One reference to a specific ritual use of high elevations by the new menstruant is given us in Teit's detailed description of the girl's various puberty activities:

> [Some] of the first menstrual fluid was preserved by the girl, and tied up in a rag. It was afterward taken to the top of some lofty ridge, deposited in the windiest spot which was devoid of vegetation, and there burned by the girl, who prayed that she might never be troubled with prolonged periods of menstruation. (Teit 1900:316)

The ritual procedures followed by Thompson boys during their puberty years varied according to their aspirations in life. Those, for example, desiring to become great hunters practiced "hunting and shooting in a ceremonial way" (Teit 1900:317). If, on the other hand, a lad "wanted to develop into an extraordinary man, the ceremonial isolation and practice were extended over years, which he spent alone with his guardian spirit in the mountains, fasting, sweating, and praying, until he gained the desired knowledge" (Teit 1900:318). While most of the ritual acts carried out by adolescent boys are not described as having required a high altitude environment,

> [on] the night of the first day they had to repair to a mountain-top and light a fire, and dance and sing there all night. The next three nights they repaired to the same mountain-top, or some other near by, where they spent the night dancing, singing, and praying to the Dawn of the Day, also firing arrows at targets in the early morning. They lighted the fire and prayed, that they might live long and always be healthy. The fire was also intended, it is said, as a signal to all the world that they had attained puberty. They then left their homes at intervals, and went to the lonely parts of the mountains, where they remained from two to ten days at a time. If the weather were good, they generally staid away a month or two at a time, living on what game they shot. The first time they returned to the mountains, they had to stay four days and nights, during which they were supposed to fast. Some staid eight days. (Teit 1900:318)

Further:

> On repairing to the mountains, they took along a water-basket and a fire-drill, also a mat. There they fasted sometimes for many days. They also purged themselves with medicine, made themselves vomit by running a thin pliable stick, or four small sticks tied together, down their throats, and purified themselves by means of the sweat-bath and by washing in cold water. This last, however, was not done until the second sojourn in the mountains, or about ten or more days after the beginning of the ceremonies. (Teit 1900:318-319)

Moreover:

> When repairing to certain peaks and lonely places in the mountains, some youths set up a stone, danced and sang around it, and finally fired an arrow at it. If the stone moved or cried out, it was a sign that their efforts to become great hunters had been crowned with success. (Teit 1900:320)

The mountain environment within which boys searched for their guardian spirits was sometimes painted by boys, during their puberty ceremonials, on the aprons which they wore. Boas (in Teit 1900:380) describes and figures one such apron. The patterns represented include a depiction of "four mountains resting on an earth-line, with a lake between two of them. These are the mountains over which he travels. At the bottom are the principal mountains where he resides while trying to obtain a guardian spirit. The spikes . . . [up the sides and over the top of the mountains] represent trees; and the long lines inside, gulches."

From these few data it is evident that many of the boy's puberty activities not noted above but summarized in an earlier part of this chapter were carried out either by choice or by custom in a mountain environment.

The Thompson Indians believed:

> . . . in the existence of a great many mysterious beings. The 'land mysteries' are the spirits of mountain-peaks. In the lakes and at cascades live 'water mysteries.' Some of these appear in

> the form of men or women, grisly bears, fish of peculiar shape, etc., emerging from the water. Any person who may happen to see these apparitions will die shortly afterward. (Teit 1900:338)

Teit mentions such unusual beings in certain high mountain lakes and creeks in Upper Thompson country; people passing in their vicinity avoided looking at these localities lest they see these apparitions and die. He likewise identifies specific Upper Thompson mountainous areas with their resident mysteries, the viewing of which was an evil omen (Teit 1900:338-339). Presumably the Lower Thompson likewise recognized certain high country lakes and mountain masses with similar in-dwelling monstrous beings, but no examples of such are provided.

The Lower Thompson also believed:

> . . . in different kinds of [seemingly non-resident] monsters to be met with occasionally in the mountains; as, for instance, a human body of white color, without any limbs, which constantly rolls over the ground, uttering cries like an infant. A person who sees any of these monsters will die shortly afterward. . . . On some cliffs, pictures in brilliant colors are seen, which vanish as suddenly as they appear. (Teit 1900:339)

Monsters of this kind, according to Teit (1900:339), appear to have been unknown to the Upper Thompson. This point is of some importance since it calls attention to the cautions that should be exercised in assuming that data assigned by Teit to the Upper Thompson—as opposed to the Thompson in general—necessarily apply to the Lower Thompson as well.

The Lower Thompson, like the Upper people, gave credence to a race of human-like folk, inhabiting steep cliffs and forests, some of whom were dwarfs and others very tall. Informants described them thus:

> [They] can make themselves visible or invisible at will . . . the dwarf women do not exceed three feet in height. A few of the men, however, are tall, surpassing the tallest Indians in stature; but none of them are of medium height. They all wear clothes similar to those formerly worn by the Indians, but have never been seen with bows and arrows. They inhabit low, dense forests, or live in dense woods in the mountains. It is said that they never kill, steal, or chase people. Some people believe they are cedar-trees, or their spirits, and that they have the power of transforming themselves. They are rather fond of joking, and playing tricks on people. (Teit 1900:339-340)

Two specific examples of encounters with these supernatural beings are reported by Teit (1900:340). In one instance a man, after pushing his wedge into the canoe he was fashioning, fell asleep, was awakened by a dwarf with the wedge in his body, and was told by this being before it vanished that he (the man) should henceforth paint his face red when shaping a canoe to make the labor easier. In the second case, a woman slept overnight in the forest and woke at dawn with a piece of burnt cedar wood in her body, placed there by a dwarf while she slept.

In addition, naked, gaunt, human-sized beings, with visible bones and very large, protruding eyes, were reported to have chased Thompson people until they fainted (Teit 1900:340). Presumably these occurred in the Lower as well as the Upper Thompson area.

Giants, some 30 feet tall, did not inhabit their country, according to the Lower Thompson, as they did that of the Upper Thompson. Nonetheless, they occasionally entered it from the territory of the Upper Thompson or Okanagan.

> [These beings] dress in bear or dog skins. Some wear long black robes, while others again go almost naked. Sometimes they chase or steal people. They are not known to have any weapons. Once a giant is said to have chased two hunters, who sought refuge in a large fir-tree. Presently this giant was joined by two very tall friends, who tried in vain to reach the hunters. The latter shot at the giants, who caught the arrows in their hands and broke them. After a while one of the giants discovered that he had lost his dog-skin apron, and seemed very much concerned about it. They all concluded to go in search of it, and left the hunters, who then came down from the tree, and went home. (Teit 1900:340-341)

As made clear in the preceding general survey of the Lower Thompson traditional lifeways, individual guardian spirits were the principal supernatural figures of the tribe. In a sense, however, the tops of mountains and certain lakes might be considered tribal deities. Speaking of the Thompson as a whole, Teit (1900:344) explains:

> Certain parts of the high mountains, especially peaks or hills, were considered sacred, being the residence of 'land mysteries'. . . . Some of these places, when trodden upon by human foot, were always visited by snow or rain. In other places, snow or rain fell only when they were trodden upon or visited by a stranger for the first time. Indians, therefore, when hunting in the vicinity of these places, visited them, and appeased the spirits by making an offering to them, thus insuring good weather during their stay, and good luck while hunting. These offerings generally consisted of a lock of hair, a rag from the clothing, a little [gun]powder, a few shot, a piece of tobacco, a stone, and so on.
>
> The women, when picking berries or digging roots on certain mountains, always painted their faces red. In general, they paint their faces wholly red before coming in sight of certain lakes, that they may be favored with good weather and good fishing. The paint is considered as an offering to the spirits. Sometimes, when they came in sight of these lakes, they made the sign of good will or blessing . . , and prayed to them to give them good weather and plenty of fish. They also did this to some of the mountain-peaks near their hunting grounds.

Whether any bodies of water such as mentioned in the following description existed in Lower Thompson country is not specified in the ethnographic literature. But inasmuch as women from this group are known to have dug roots at higher elevations, this is quite possible. Teit (1900:345) writes:

> Roots, etc., growing near a haunted or mysterious lake, should not be dug or gathered. Vegetation near such a lake is called its 'blanket.' Swamp-grass and reeds growing in the water of the lake are called its 'hair.' The lake, if robbed of its blanket, will take revenge by visiting sickness, bad luck, or death upon the root-gatherer, or by sending an apparition or death-warning to the person, shortly after which the offender herself, or one of her near relatives, will die.

Some of the first berries of the season were given by the Thompson "to the earth, or more generally to the mountains." This offering was made by an old, gray-haired person, who, dancing, "held the fruit out toward the mountain-tops. . . . The people painted their faces red, and danced for some little time." (Teit 1900:345) Again, this is supposed to describe a custom that prevailed among both Thompson groups.

A great many specific practices with magical or supernatural overtones were mandated among the Thompson in connection with the subsistence quest, and others were proscribed. Three examples relating to hunting, importantly a high terrain pursuit, will illustrate those that were prescribed:

- "If a deer-hunting party had bad luck, they staid in camp for a day or two, sweat-bathing, singing, and praying to their guardian spirits to give them success, and also asking the deer to present themselves to be shot at" (Teit 1900:346).
- "Deer's bones were always burned by the hunters while on hunting-trips, as a safeguard against the spell resulting from any woman who happened to come in contact with the fresh bones, or from any dog which might take a bone in its mouth" (Teit 1900:346-347).
- In bear-hunting, a man preceded his hunt by sweat bathing, during which he prayed to his guardian spirits and begged the bear to allow itself to be taken without danger. The bear skull was tied to a small treetop, as high up as could be reached, and left there. (Teit 1900:347)

Two examples, also associated with hunting, are sufficient to illustrate subsistence-related tabus:

- A deer's head was never given by a hunter to a man who was the first or second born of a family, nor did a hunter ever eat with such a person. To do otherwise would result in the deer becoming very wild and difficult to shoot. (Teit 1900:347)
- Deer meat was never taken into a [temporary or open-season] lodge through the normal entrance, since this door was used by women. In a hunting lodge it was carried in through a hole in the back of the structure. (Teit 1900:347)

Surely these very numerous customs, bolstered by magical or supernatural sanctions, were observed when hunting in the mountains no less than when pursuing game at lower elevations. Assuming their practice in the mountains, some—like placing bear skulls in trees—might have left their mark, at least for a time, in the high country. Others testify to cultural traits—like hunting sweat lodges and hunting lodges—which might, with great good fortune, be preserved in the archaeological record. And still others—like the burning of the deer bones—would explain why in mountain hunting sites few osteological remains of deer hunting should be expected.

But none of these ritual or ceremonial practices are explicitly reported by Teit as having been observed in the high terrain, and so none, save for the preceding examples, are noted in this section. These behavioral

mandates, both positive and negative, are summarized, however, in the earlier general section devoted to the Lower Thompson.

Among the many animals that might be acquired by the Thompson as guardian spirits were hoary marmots that became tutelaries of some hunters, and mountain goats which (as well as common marmots) were obtained by some "gamblers, runners, etc.," and which were secured by some women. The mountain goats, at least so far as they were associated with "gamblers, runners, etc.," were, Teit (1900:355) observes, principally Lower Thompson guardian spirits.

Charms of many sorts were used by the Thompson in various ways, as noted in the preceding general culture description. One, consisting of the body or skin of a mouse worn by hunters, is of particular interest because the mouse was "found on the higher mountains" (Teit 1900:371). Failing to overtake a wounded deer, the hunters placed this charm on its tracks, causing it to travel only a short distance before dying.

Among the many beliefs recorded by Teit were those that regarded human activities, intentional or otherwise, as affecting the external world by a kind of magical potency. Two are reported that testify to the Thompson use of the high country: the intrusion of Indians "on the haunts of spirits in the mountains" caused weather changes; the burning of ptarmigan feathers or the hair of the mountain goat or bighorn sheep resulted in sudden cold weather or a snowstorm (Teit 1900:374), a statement that provides further, though oblique, evidence of high terrain hunting.

As noted above, winter hunting camps were sometimes established in the mountains and so presumably from time to time within the Park boundaries. Surely summer camps also, though I have found as yet little hard data in support of this assumption beyond a Skagit statement reporting meeting Thompson hunting parties in the present Ross Lake region in the warm season. How these mountain camps were arranged and socially organized, if differently from villages and camps at lower elevations and along the Fraser River, we do not know. But Thompson hunting parties were led by their most efficient member, at the request of the group and subject to its approval (Teit 1900:289). This is to say, obviously, by the man most skilled in hunting the particular animal in the region being hunted over and most competent in directing the collective activities of the party.

Mountain Food Plants of the Thompson

The ethnographic data identifying many of the native plants and plant parts that found their way into the diet of the Thompson and describing the ways in which they were secured and prepared have been summarized from several sources with a few supplementary notes from Turner's (1978) ethnobotanical publication (see Subsistence section). Here the ethnobotanical information regarding Thompson food flora—and a few tea plants and masticatories for good measure—is examined in greater detail, with a particular focus upon the elevational distribution of these floras. The central question is this: which of these Thompson subsistence plants grow in lower, middle, and high mountain environments and hence are plants that the Lower Thompson may reasonably be assumed to have exploited in their aboriginal territory within the North Cascades Park perimeters?

To my knowledge there are three compilations of the food floras utilized by the Thompson: viz., one by Teit (1930b:238-239) in his Okanagan ethnographic study where he lists the Thompson plant names beside those of the Okanagan, botanically identified; one by Steedman (1930) based on Teit's extensive field records of the 1890s; and one by Turner (1978). Turner's data are in several respects the most useful for present purposes. They report largely her own field findings among the Thompson in the 1970s, present a thoroughly competent and contemporary botanical identification of the plants, and are placed within the domain of earlier and on-going ethnobotanical studies, including her own, on the Northwest Coast and in the British Columbia Plateau. They demonstrate a familiarity with Teit's pioneering information and make use of it as appropriate. In this published semipopular inventory, however, her Thompson data are not compiled in catalog form for the Thompson alone, as in the case of the Teit and Steedman reports, but are buried in her description of the botanical characteristics, habitat, geographical distribution, and traditional (and present-day) uses of each plant by the interior British Columbia Indians as a group: the Thompson information must be teased out of this context, plant by plant. Further, collected some half century after Teit's field research, there must have been some slippage in the information available relating to traditional Thompson plant knowledge and subsistence usage: e.g., memory loss of plants once used, especially those marginally collected in early times; of peripheral uses for plants whose principal dietary contributions were the only ones remembered; and of the fact that certain of their present and recollected food plants were added to the roster of Thompson food sources in postcontact times as borrowings from nearby tribes or even from Whites or Oriental neighbors. Nevertheless, these Turner data are the best available for present objectives, in part because of their habitat and geographical distribution notes, and this is the information presented below.

In brief, the purposes of this flora listing are threefold: to provide a more complete and botanically precise roster of Thompson food plants and their native uses, prepared by a competent, experienced ethnobotanist, than the somewhat general observations in the preceding subsistence section; to specify those plants in the

catalog that grow in low, mid, and high elevations of traditional Thompson territory, thus furthering the general Indian-land adaptation interests of this study; and more particularly, as already stated, to suggest the floral subsistence resources presumably available to the Lower Thompson within the borders of their country inside the Park.

The plants catalogued below are individually identified either with the Thompson ("T") as a whole—perhaps more especially with the Upper Division although this point is generally left uncommented upon—or with the Lower Thompson ("LT") or with both explicitly. In a few instances this Thompson identification is assumed rather than specifically stated by Turner: i.e., when plants are reported to have been eaten by "all of the Indian groups of the central and southern [British Columbia] Interior," "virtually every Indian group in British Columbia," "all Interior Salish groups," or something similar. No attempt has been made to incorporate into these Turner data the information from the ethnographic sources summarized previously, lest her material be contaminated by less carefully collected and analyzed data or by botanically misidentified or archaically identified plants. Furthermore, any such conflation would be unwise, since it would require assembling from the scattered root, berry, stalk-stem, seed, and other separate ethnographic sections all use information appearing to relate to a single plant, when, in fact, there may be no assurance that they all belong to the same taxon, and then often taking a best-guess approach to the taxon in question, the botanical binomial either not being given in the ethnographic record or being an outmoded designation.

It has not been possible to check Turner's plant habitat and distribution statements or to make them more refined for the British Columbia Thompson country specifically, as through the use of the botanical-ecological information in the Hitchcock and Cronquist (1981) Northwest flora compendium or in the Krajina (1969) biogeoclimatological study. Nor has it been possible to locate and extract comparable plant habitat material from such floral studies of the western Cascades slopes in the general Park region as may exist. Owing to the incompleteness of this environmental background and its lack of focus on the specific Park sector as well as for other reasons, the following plant data must be viewed as a preliminary summary.

Considering these habitat deficiencies, it is fortunate that in the general Park area the same biogeoclimatic zones extend north and south of the border, the differences within this Thompson mountain terrain not being latitudinal but primarily those of elevation, slope direction, precipitation, and the like (Smith 1985a). Accordingly, Turner's plant habitat information for British Columbia north of the Park appear to be satisfactorily applicable to the Skagit sector of the Park exploited in protohistoric and early postcontact times by the Thompson. Unhappily, habitat data are not furnished by Turner for every plant for which she documents Thompson food use. In a few such cases, mostly where the plants are reported to have been gathered by the Lower Thompson, the essential ecological information has been extracted from the Hitchcock and Cronquist volume. The remaining plants of unspecified habitat are assumed for the purposes of this present analysis to have been non-montane floras, doubtless an assumption that further research would prove inaccurate for some.

This is not the place to discuss in detail the biogeoclimatic zones of the Lower Thompson country. This situation is very complex, as might be expected from its location astride the Cascades, having not only great elevational, temperature, and precipitation differences but also both coastally pointed flora on the west side and interior linked plants on the east. As I plot these zones from Krajina's (1968) very detailed data, they were the (1) *Coastal Western Hemlock Zone* in the Skagit Valley and its northern extension into Canada and along the Fraser Valley; (2) the *Interior Douglas-fir Zone* in the Fraser and Coquihalla Valleys; (3) the *Mountain Hemlock Zone* in the higher country flanking Zone (1); (4) the *Engelmann-Spruce Subalpine Fir Zone* in the high Cascades, and (5) the *Alpine Tundra Zone* in the loftiest mountains (Smith 1985a). The Chilliwack Valley assigned to the Lower Thompson by Teit as hunting-gathering territory is excluded from consideration as actually Chilliwack tribal country as already noted.

The lower and upper elevational limits of these several zones vary considerably in the Thompson country between the leeward and windward faces of the mountains and according to other factors, including very local ones. But roughly the boundaries of the five zones enumerated above are these: Coastal Western Hemlock: 0-3,250 feet; Interior Douglas-fir: 2,000 (locally somewhat less)-4,000 feet; Mountain Hemlock: 3,300-5,500 feet; Engelmann Spruce-Subalpine fir: 4,000-7,000 feet; and Alpine-Tundra: 5,500 feet to the highest peaks. The Interior Douglas-fir band is considered by Turner (1978:17) to lie at "moderate elevations."

The lowest elevation of the aboriginal Thompson hunting-gathering country inside the Park boundaries is a little below 1,600 feet, in the bottom of the Skagit Valley now inundated by Ross Lake. This strip along the river lay, according to Krajina's plotting, in the Coastal Hemlock Zone, as already noted. The higher mountain slopes on both sides of the river are in the Mountain Hemlock Zone. The very high peaks and their immediate vicinity, both to the east and west of the middle Skagit Valley and the Park, rise to over 8,000 feet and lie in the Alpine-Tundra Zone. Apparently neither the Interior Douglas-fir nor the Engelmann-Spruce-Subalpine Zones occurs to any important degree in the general Park region south of the international border.

Turner's plant habitat information is, however, not keyed to these technical zones but rather largely to rough and general elevation bands. Using her almost entirely descriptive material, it seems reasonable and informative to divide into three elevational categories the Thompson subsistence floras she identifies:

(a) Plants for which she gives no habitat data whatever and those said to grow at the lowest elevations with nothing to indicate higher altitude growth. These latter include the plants that she describes as existing on dry hillsides and open plains, in valleys and foothills, on sagebrush deserts, near sea level, and so on. Of the 108 Thompson subsistence taxa mentioned by Turner, 59 plants belong in this group. In the following plant list no habitat data are entered for the individual taxa in this category, even where such are provided by Turner: these floras, if Turner's information is followed, are of no immediate interest in this mountain-use section. To designate these plants, they are unmarked with stars.

(b) Plants growing as high as the lower and middle altitude mountains and their valleys—possibly at still more elevated levels but Turner provides nothing to demonstrate this point. These comprise the plants that Turner (and Hitchcock and Cronquist where called upon for supplementary information) describes as found "in the mountains," "in montane elevations," "in mountain meadows," "in lower mountains," " on lower mountain slopes," "at moderate elevations," "at mid-montane altitudes," "in mid-elevations," "up to 2,500 feet," and the like. Of the 48 definite mountain-environment plants (this category [b] and the following category [c]), 28 fall into this lower and mid-montane group. These floras are marked with a single star in the roster that follows.

(c) Plants specifically stated by Turner (in a few instances by Hitchcock and Cronquist) as occurring in the high mountains, some also, of course, at lower elevations as well. This cluster consists of those floras stated to grow "in high elevations" or "in high mountains," "at upper elevations in the mountains," "well up in the mountains," "in the mountains and high valleys," "in high mountain valleys," "on mountain ridges above lower mountains," "in subalpine" or "alpine country," "near timberline," "toward tree-line in the mountains," "above tree-line," and so on. In this high altitude group fall 21 of the 48 mountain flora. This signifies that half of the mountain subsistence plants were available high up on the mountain faces. These floras are indicated with double stars in the listing that follows.

In the case of the montane plants of categories (b) and (c), such germane habitat facts as are reported are entered with each plant.

In summary, the significance in the present context of the plant listing that follows is indicated by these symbols: T: Thompson, tribal division unspecified; LT: Lower Thompson specified; *: plant occurs in lower and mid-elevation mountains but not higher; **: plant occurs in high elevations, in many cases lower also.

1. LT *Acer macrophyllum*, broad-leafed maple.
   Young shoots peeled and eaten raw. Sprouted seeds boiled and eaten. (Turner 1978:208)

2. *T *Alectoria fremontii*, black tree lichen, black tree moss.
   Cleaned of twigs, soaked in fresh water to remove bitter substance, steamed overnight in grass-lined pit, cut into cakes. Eaten immediately or dried and stored for future use. Dried "moss" cakes had to be soaked to make them soft before eating. Stored properly, cakes lasted three or more years. To add flavor, often cooked interspersed with layers of onions or mixed with serviceberries. Dried "moss" dipped in broth or soup and eaten like a cracker. Often boiled in a soup. Boiled with dried Indian carrots, yellow avalanche lily corms, tiger lily bulbs, serviceberries, or dried deer meat. In an emergency eaten raw. Especially in montane forests. (Turner 1978:35-39)

3. LT *Allium acuminatum*, Hooker's onion.
   Bulbs eaten. (Turner 1978:71,72)

4. T LT *Allium cernuum*, nodding onion.
   Bulbs sometimes eaten raw, "leaves and all." Usually steam-cooked in pit oven, at times interspersed with layers of shrubby penstemon and red alder leaves, and occasionally covered with scrapings of alder bark to give them reddish color. (Turner 1978:71)

5. T *Allium geyeri*, Geyer's onion.
   Bulb "undoubtedly" eaten, since it grows in Botanie Valley. (Turner 1978:71)

6. T *Amelanchier alnifolia*, serviceberry, Saskatoon berry, June berry, shad-bush.
   Most popular and widely used berry. At least four varieties recognized. Dried on mats like raisins. Or mashed, boiled in baskets with hot rocks, and spread on grass, mats, or rocks to dry in cakes. Or placed on racks over a fire or sun dried. Often juice collected and added little-by-little to drying berry cakes, or saved to use in other cooking. Dried cakes broken up and eaten as snack. Or soaked and boiled with bitterroot or salmon eggs, cooked with tiger lily bulbs, deer meat, or bear grease, mashed with other berries (e.g., red-osier dogwood berries), or rehydrated and eaten as dessert. Berries cooked in soups and stews or used to sweeten other dishes. Dried berries were a common trade item, especially between interior and coast. (Turner 1978:181-182)

7. **T *Arctostaphylos uva-ursi*, kinnikinnick, bearberry.

Berries eaten raw or "fried"(?) with salmon oil or bear fat or boiled in soups or with deer meat or salmon. They were too dry to be eaten alone. Young leaves boiled or merely immersed in boiling water to make a tea, drunk as beverage or as tonic or diuretic. Sea level to high elevation. (Turner 1978:143-144)

8. LT *Armillaria ponderosa* (?), pine mushroom.
   Eaten in Fraser Canyon area. (Turner 1978:42)

9. *T *Balsamorhiza sagittata*, balsamroot, spring sunflower, wild sunflower.
   White succulent shoots dug before plants appeared above ground and eaten raw; a good famine food. Large taproots beaten to loosen tough outer skin and peeled; white inner part steam-cooked overnight; cooked, they had a sweetish taste. Eaten immediately or threaded on a string or stick and dried. Flower stems broken off, peeled, and eaten raw, steamed, or boiled for their pleasant nutty taste. After flowers gone to seed, the small black fruits were sun-dried or roasted; then eaten whole or generally pounded into a flour. Properly dried seeds, well sealed, lasted for years. From lowlands to moderate elevations in the mountains. (Turner 1978:116-119)

10. T *Berberis aquifolium*, Oregon grape, barberry, mahonia.
    LT Berries, though tart, gathered when fully ripe and eaten fresh. (Turner 1978:124-125)

11. LT *Berberis nervosa*.
    Berries eaten fresh. (Turner 1978:124-125)

12. T *Brodiaea douglasii*, fool's onion.
    Corms eaten. (Turner 1978:73)

13. *T *Brodiaea hyacinthina*, fool's onion, cluster lily.
    *LT Corms eaten raw or boiled and dried. Open flats to midmontane meadows. (Turner 1978:73)

14. T *Calochortus macrocarpus*, mariposa lily, sago lily, desert lily.
    Corms ("sweet onions," "wild potatoes") eaten raw or threaded and dried with or without being steam-cooked first. Flower buds eaten raw, being sweet from nectar at base of petals. (Turner 1978:75)

15. T *Camassia quamash*, blue camas.
    Bulbs eaten, perhaps only in dried form as a trade item. (Turner 1978:77)

16. LT *Cantharellus cibarius*, chanterelle.
    Mushroom, eaten fresh or dried. (Turner 1978:42)

17. T *Chimaphila umbellata*, pipsissewa, prince's pine.
    Leaves, stem, and roots boiled to make tea. (Turner 1978:211)

18. *T *Cirsium edule*, wild thistle, Indian thistle.
19. *T *C. hookerianum*, Hooker's thistle.
20. T *C. undulatum*, wavy-leafed or woolly thistle.
    Roots of all three species eaten. Peeled, cut up, steam-cooked in pits or boiled in stews. *C. edule*: chiefly in the mountains; *C. hookerianum* in montane areas; *C. undulatum* in foothills and plains. (Turner 1978:121)

21. **T *Claytonia lanceolata*, spring beauty, Indian potato.
    Small, round corms eaten in large quantities, an important source of carbohydrates. Dug, washed, and steamed in underground pits or boiled with very little water. Resemble potatoes in taste, but sweeter. Sometimes cooked with other roots (e.g., yellowbell bulbs). Could be stored for later use, though whether smoked, dried on mats, or cooked, mashed, formed into cakes and dried is unclear for the Thompson specifically. Sagebrush foothills to alpine meadows; usually at higher elevations, especially mountain meadows. (Turner 1978:172-174)

22. T *Coprinus comatus*, shaggy mane.
    Mushroom, cooked and eaten when young. (Turner 1978:44)

23. **T *Cornus stolonifera*, red osier dogwood, red willow.
    Berries, though extremely bitter, eaten fresh, frequently pounded and mixed with sweeter fruit such as chokecherries or serviceberries. From valley bottoms to near timber-line. (Turner 1978:137-138)

24. T *Corylus cornuta*, hazelnut, wild filbert.
    LT Buried in ground for 10 days or more to allow prickly husk to rot away. Sometimes process

hastened by adding water to hole before it was filled in, and by covering nuts with wet mud. With husks removed, nuts shelled and eaten. Often located already husked in squirrel caches. Lower Thompson traded them from Fraser Valley Halkomelem and from Upper Thompson, who gathered them in large quantities. Upper people also traded them to Shuswap. (Turner 1978:126-127)

25. T *Crataegus columbiana*, red hawthorn, red thornberry, red haw.
26. T *C. douglasii*, black hawthorn, black thornberry, black haw.
    Fruit of both species were eaten, though not highly regarded because of their large seeds, lack of taste, and mealy texture. (Turner 1978:185)

27. T *Disporum hookeri*, Hooker's fairy bells.
    Berries eaten raw. (Turner 1978:80)

28. T *Epilobium angustifolium*, fireweed, willow-herb, blooming sally.
    Succulent pith at center of young stalks eaten raw. Stems also boiled or steamed, but this was less common. (Turner 1978:170-172)

29. **T *Erythronium grandiflorum*, yellow avalanche lily, yellow dog-tooth violet, snow lily, Indian sweet potato, Indian potato.
    Starchy corms eaten in large quantities. Botanie Valley north of Lytton in Thompson territory was a prime locality for gathering these corms. Many families from different parts of the country collected there annually to harvest these and other wild plants.

> For immediate use the corms were steam-cooked, roasted in hot ashes, or boiled for a short time. To preserve for winter, they were allowed to soften for a few days, peeled, then threaded on a string of twisted red cedar or Rocky Mountain maple bark and hung up to dry, until they were hard and brown. Circular strings of avalanche lily corms, usually of measured length from hand to elbow, were an important trading item. The corms could also be dried unstrung and stored in sacks. Before being eaten the dried corms were soaked until they had regained most of their moisture, then boiled or steam-cooked in underground pits until they were soft and chocolate-brown. (Turner 1978:82)

    In mountains and high valleys. (Turner 1978:81-82)

30. T *Fragaria vesca*, wild strawberry, tall strawberry.
31. T *F. virginiana*, wild strawberry, blue-leaf strawberry.
    A favorite fruit, especially of children. Usually eaten fresh. If large enough quantities were obtained, mashed and spread over grass or mats to sun-dry. Dried cakes eaten thus or rehydrated and eaten alone or used as sweetener. Flowers, leaves, and stems sometimes used to flavor roots in cooking pits. (Turner 1978:187)

32. **T *Fritillaria lanceolata*, chocolate lily, Indian rice.
    Bulbs boiled in soups or steam-cooked. Not dried for storage, although they could be kept fresh for a short time in underground pits. Sea level to high mountain valleys. (Turner 1978:83)

33. T *Fritillaria pudica*, yellowbell, yellow snowdrop.
    Bulbs eaten raw, boiled, or steam-cooked for a short time. Used only "sporadically"; not often stored. (Turner 1978:87)

34. *LT *Gaultheria shallon*, salal.
    Berries mashed and dried in cakes. Lowlands to lower mountains. (Hitchcock and Cronquist 1981:344, Turner 1978:208)

35. **T *Geum triflorum*, purple avens, old man's whiskers.
    Roots boiled or steeped to make tea as beverage, appetizer, or medicine for colds and fever. Foothills to subalpine ridges. (Hitchcock and Cronquist 1981:212, Turner 1978:215)

36. **T *Heracleum lanatum*, cow parsnip, Indian rhubarb, wild rhubarb.
    Young stalks and leaf stems peeled and eaten raw, or occasionally boiled, steam-cooked, or roasted for short time. Sea level to above tree-line in the mountains. (Turner 1978:95)

37. **T *Hieracium* ssp., hawkweeds, mountain dandelions.
    Leaves and coagulated latex of two or three species chewed. Stem was broken allowing milky latex to exude and harden. Collected into a little ball, it was chewed for pleasure. From lowlands to moderate or high elevations. (Steedman 1930:492, Turner 1978:122)

38. **T *Hydrophyllum capitatum*, waterleaf.
Long, fleshy roots always eaten cooked, either boiled or steamed. Frequently eaten with other types of roots, such as yellow avalanche lily. Plants common in Botanie Valley. Lowlands to well up in the mountains. (Turner 1978:168)

39. T *Hygrophorus eburneus(?)*, ivory-capped Hygrophorus.
Mushroom, eaten freshly cooked or dried. (Turner 1978:39)

40. **T *Juniperus communis*, common juniper.

41. *T *J. scopulorum*, rocky mountain juniper.
Branches and berries of both species boiled to make a "tea" beverage, but mostly a medicine for colds and other ailments. *J. communis* grows from near sea level to subalpine or alpine areas; *J. scopulorum*, on dry plains and valleys and lower mountains. (Turner 1978:51-52)

42. *T *Larix occidentalis*, western larch, tamarack, western tamarack.
Sweet-tasting gum that exudes from tree and hardens in air was broken off and chewed for pleasure. In mountain valleys and on lower slopes. (Turner 1978:53)

43. *T *Lewisia columbiana*, bitterroot.
Eaten occasionally but less favored than *L. rediviva*. At higher elevations than *L. rediviva*, which grows in lower mountains. (Turner 1978:175, 179)

44. **T *Lewisia pygmaea*, bitterroot.
Taproot eaten on occasion though not as well liked as *L. rediviva*. In mountains to above tree-line; high mountain slopes. (Turner 1978:175-179)

45. *T *Lewisia rediviva*, bitterroot, sand rose, desert rose, rock rose, spatlum.
Most important of all edible roots to Upper Thompson; Lower Thompson also fond of it and used it whenever available. Roots peeled, very bitter red-orange structure near root top removed, then baked or boiled and eaten. Or dried for several days on a mat or strung on strings or sticks to allow them to be kept for a year. Traditionally stored in fiber bags, sometimes buried in earth pits lined with pine needles. To avoid stomach problems, dried roots had to be boiled or steamed in small earth pits; almost always mixed with other foods, especially serviceberries. Aboriginally a major item of commerce in southern interior British Columbia. Thompson obtained it from Okanagan and traded it on to the Lower Thompson and Lillooet. Sagebrush plains to lower mountains. (Turner 1978:174-179)

46. **T *Lilium columbianum*, tiger lily, Columbia lily, panther lily.
Large bulbs eaten; "very popular in the old days" in spite of their peppery, bitter, and strong taste. Often used as flavoring to enhance taste of other foods. Never eaten raw. Boiled, sometimes with two water changes, or steam- cooked for several hours. Cooked roots sometimes sun-dried, either whole or mashed in thin cakes, and stored for winter. Often boiled and eaten with other foods (e.g., deer meat, fish, fermented salmon roe, serviceberries). Sea level to subalpine elevations. (Turner 1978:87-90)

47. T *Lithospermum incisum*, long-flowered stoneseed, puccoon, gromwell.
Large deep taproots cooked and eaten. (Turner 1978:129)

48. T *Lomatium ambiguum*, Indian celery.
Flowers, leaves, stems, and seeds used for flavoring and tea as with *L. nudicaule*. (Turner 1978:109)

49. *T *Lomatium dissectum*, chocolate tips, wild celery, bitterroot.
Roots, especially from young plants, eaten. Sea level to moderate elevations in the mountains. (Turner 1978:102-103)

50. T *Lomatium macrocarpum*, wild carrot, Indian carrot, desert parsley, hog-fennel, biscuit-root.
Long taproots, strong-tasting and peppery, were eaten raw but generally roasted or boiled, often with other foods. Cooked with meat or tiger lily bulbs and fermented salmon roe. (Turner 1978:105, 106)

51. *T *Lomatium nudicaule*, Indian celery, wild celery.
Young sprouts, leaf-stalks, and leaves were a popular green vegetable, eaten raw or boiled. Young roots also eaten. Flowers, leaves, stems, and seeds used as flavoring for teas, soups, meat stews, and tobacco. As tea, plants fresh or dried were put into water and brought to a boil; considered good for colds and sore throats. Botanie Valley furnished good supplies of these plant parts. From valleys and foothills to moderate elevations in the mountains. (Turner 1978:108-109)

52. T *Lomatium triternatum*, Indian celery.
Flowers, leaves, stems, and seeds used for flavoring and tea as with *L. nudicaule*. (Turner 1978:109)

53. **T *Lycopus uniflorus*, bugleweed, water horehound.
Fleshy tubers were washed and steam-cooked in pits. Have a sweet, pleasant taste rather like a mild radish. Lowlands to upper elevations. (Turner 1978:168-170)

54. T *Opuntia fragilis*, prickly-pear cactus.
55. T *O. polycantha*.
Succulent stem segments collected, spines scorched off, segments roasted or pit-cooked and peeled, inner fleshy part eaten. "Flesh," mixed with berries, cooked into soup. Fruits also eaten mixed with berries. (Turner 1978:131)

56. LT *Osmaronia cerasiformis*, Indian plum.
Berries regarded as edible, but not much eaten lest lungs bleed. (Turner 1978:209)

57. *T *Osmorhiza chilensis*, sweet cicely, sweet root, dry land parsnip.
Thick aromatic roots either steam-cooked in underground pits or boiled with salmon roe or meat in stews. Had a delicate, sweet flavor. From sea level to moderate elevations in the mountains. (Turner 1978:109-111)

58. T(?) *Phaeolepiota aurea*, golden Phaeolepiota.
Mushroom probably eaten (as it certainly was among Okanagan and Lillooet) with cottonwood mushroom. Boiled or mixed with deer meat to make soup. Dried for winter use. (Turner 1978:46-47)

59. **T *Pinus albicaulis*, white-bark pine.
**LT Large seeds roasted in hot ashes and often combined with serviceberries when eaten. Also parched and pounded with mortar and pestle into fine flour, which was mixed with water to form mush. Often traded by Lower Thompson to Upper Thompson in exchange for hazelnuts. "Subalpine to timber-line, on ridge-tops, and exposed rocky slopes"; "toward tree-line in mountains"; seeds gathered each year "from local mountain ridges." (Turner 1978:55-57)

60. **T *Pinus contorta*, lodgepole pine, shore pine, jack pine, black pine.
Sweet, succulent cambium eaten fresh. From sea level to subalpine elevations. (Turner 1978:58, 60)

61. *T *Pinus ponderosa*, ponderosa pine, yellow pine, red pine, bull pine.
Cambium eaten. Seeds eaten raw as confection. Up to 3,000 feet. (Turner 1978:60, 62)

62. LT *Polypodium glycyrrhiza*, licorice fern.
Rhizomes chewed, especially for colds and sore throats. (Turner 1978:207)

63. T *Polyporus sulphureus*, sulphur Polypore, cottonwood mushroom(?).
Usually boiled and fried. (Frying was not a traditional Thompson cooking method. How they were prepared following the boiling in early days, if they received further treatment, is not described.) (Turner 1978:47)

64. *LT *Polystichum munitum*, sword fern.
Rhizomes eaten. Near sea level to midmontane elevations. (Hitchcock and Cronquist 1981:53, Turner 1978:207)

65. T *Potentilla anserina*, silverweed, cinquefoil, Indian sweet potato.
Long, fleshy roots steam-cooked or roasted and eaten. Also eaten raw. (Turner 1978:188-189)

66. T *Potentilla glandulosa*, cinquefoil.
Leaves or entire plant boiled to make tea, "said to have slight stimulant properties." (Turner 1978:215)

67. *T *Prunella vulgaris*, self-heal, heal-all.
Plant soaked in cold water to make a common drink. Turner was unable to confirm. From sea level to mid-elevations in mountains. (Hitchcock and Cronquist 1981:406, Steedman 1930:494, Turner 1978:215)

68. *T *Prunus emarginata*, bitter cherry, bird cherry, wild cherry.
69. T *P. pensylvanica*, pin cherry, bird cherry, wild cherry.
Fruit eaten on a casual basis. *P. emarginata*: sea level to moderate elevations in the mountains. (Turner 1978:189)

70. T *Prunus virginiana*, chokecherry, wild cherry.
A very popular fruit in spite of their large stones and slight astringency. Eaten fresh, or sun-dried on mats, or mashed and dried in cake form. Cakes soaked in water before being eaten or pounded with salmon roe, heads, or tails. (Turner 1978:191-192)

71. T *Pseudotsuga menziesii*, Douglas fir.
Young twigs and needles made into a tea with tonic properties. Sugar—"a white crystalline substance which forms under special circumstances on the leaves and branches of some trees"—eaten as a confection. If gathered in sufficient quantities, preserved to use through the winter. Sometimes mixed with other foods (e.g., black tree lichen, balsamroot seeds) as sweetener. (Turner 1978:62, 64-65)

72. *LT *Pteridium aquilinum*, bracken fern.
Rhizomes eaten raw or peeled, roasted, and pounded into flour. Young shoots ("fiddle-heads") eaten raw, after being soaked in salt water; possibly a non-traditional food, the eating of which was learned from local Japanese. Widespread except at higher elevations. (Turner 1978:49-50)

73. *LT *Pyrus fusca*, wild crabapple.
Fruit eaten. Coastal bogs to mountain slopes up to 2,500 feet. (Hitchcock and Cronquist 1981:222, Turner 1978:209)

74. *T *Ribes* spp, wild gooseberry.
Eaten but not highly regarded. Secured mashed wild gooseberries mixed with bitterroot from Okanagan in trade for dried salmon. Some species on wooded mountain ridges; others on lower mountains; others on wooded hillsides. (Turner 1978:164-165)

75. LT *Ribes bracteosum*, stink currants.
Eaten though not often. Seldom dried or stored for winter. (Turner 1978:163)

76. T *Ribes cereum*, squaw currant.
Rather tasteless and dry berries eaten fresh. Not dried or stored for winter. Eaten also to relieve diarrhea and gain strength. (Turner 1978:162)

77. *T *Ribes hudsonianum*, northern black currant, wild black currant, Hudson Bay currant.
Eaten; liked by some people but not by others. At the edge of mountain meadows. (Turner 1978:162-163)

78. **T *Ribes lacustre*, swamp gooseberry.
Small berries, used fresh or cooked. Sea level to subalpine forest. (Turner 1978:166-167)

79. T *Ribes sanguineum*, red-flowering currant.
Usually mixed with black currants or other fruit. Not often eaten and rarely dried for winter. (Turner 1978:163)

80. T *Ribes viscosissimum*, sticky currant.
Eaten infrequently. Seldom dried and stored for winter use. (Turner 1978:163)

81. T *Rosa* spp, wild rose.
Outside rind of hips eaten casually or as scarcity food. Tea made from leaves, branches, and inner bark. Leaves and bark of *R. gymnocarpa* toasted, dried, and powdered and then smoked. (Turner 1978:197)

82. T *Rubus idaeus*, wild raspberry.
Extremely popular food. Eaten fresh or mashed and dried in cakes for winter. (Turner 1978:201)

83. T *Rubus leucodermis*, blackcap, black raspberry, wild loganberry.
LT A common food. Mashed and dried in cakes. Dried berries soaked in water and eaten as dessert or mixed with dried meat or fish like pemmican. Lower Thompson peeled and ate young shoots in spring. (Turner 1978:201)

84. T *Rubus parviflorus*, thimbleberry.
Very popular. Soft and juicy, so seldom picked in large enough quantities to be dried for winter. Sometimes mixed with wild raspberries or blackcaps. Young shoots in spring peeled and eaten either raw or with meat in stew. (Turner 1978:204)

85. *LT *Rubus spectabilis*, salmonberry.
Berries eaten fresh, seldom dried. Young shoots eaten in spring. Lowlands to midmontane elevations. (Hitchcock and Cronquist 1981:224, Turner 1978:209)

86. *LT *Rubus ursinus*, trailing wild blackberry.
Berries eaten but not widely available. From near the coast to midmontane elevations. (Hitchcock and Cronquist 1981:225, Turner 1978:209)

87. LT *Sagittaria latifolia*, arrow-head, wapato.
Secured tubers from Halkomelem people below them on the Fraser. Carried up river in large baskets. Steamed in pits or boiled like potatoes. (Turner 1978:208)

88. *T *Sambucus cerulea*, blue elderberry.
Large quantities of fresh berries eaten; much fruit dried for winter use. Near sea level to moderate elevations in the mountains. (Turner 1978:132-133)

89. LT *Sambucus racemosa*, red elderberry.
Berries steamed or boiled. Salmon sometimes soaked in red elderberry juice overnight before being baked; gave the fish an excellent taste. (Turner 1978:133)

90. T *Scirpus* sp.
Pollen and flowering spikes occasionally eaten, especially by children. (Steedman 1930:484, Turner 1978:68)

91. T *Shepherdia argentea*, silver buffalo-berry.
Berries occasionally eaten fresh or dried, although sour. (Turner 1978:211)

92. **T *Shepherdia canadensis*, soapberry, russet buffalo-berry, soopolallie, foamberry.
Sour, bitter berries used fresh or dried for later use by being boiled and spread on trays over small fire. In use, berries were placed in basket, water was added, and the mixture beaten to a foam with hands or a beater. Serviceberries and other sweet berries were mixed to act as sweeteners. From lowlands to subalpine forests. (Turner 1978:138-140)

93. T *Sium suave*, water parsnip, swamp parsnip, wild carrot, wild saccharin.
Sweet, finger-like roots washed and eaten raw or steam-cooked. Raw roots crisp and delicious. Young green shoots eaten. Dug at Nicola and Coldwater Lakes. (Turner 1978:113, 115)

94. T *Smilacina racemosa*, false Solomon's seal.
95. T *S. stellata*, star-flowered Solomon's seal.
Ripe berries of both species eaten raw; seedy but extremely sweet. (Turner 1978:90, 92-93)

96. **LT *Sorbus sitchensis*, Sitka mountain ash.
Berries eaten occasionally. In mountains between 2,000 and 10,000 feet. (Hitchcock and Cronquist 1981:227, Turner 1978:209)

97. T *Spiraea pyramidata*, spiraea.
Stems, leaves, and flowers boiled to make tea. (Turner 1978:215)

98. T *Typha latifolia*, cattail, bulrush.
Long, white rhizomes eaten, after being pit-steamed. Considered one of the most delicious of spring foods. (Turner 1978:93, 95)

99. *LT *Vaccinium alaskaense*, Alaska blueberry.
Fruit eaten fresh or dried. Lowlands to montane environments. (Hitchcock and Cronquist 1981:350, Turner 1978:208)

100. **T *Vaccinium caespitosum*, dwarf blueberry, mountain blueberry, low-bush blueberry.
Berries extremely popular, said to be sweetest, best-flavored blueberry variety. Eaten fresh as a treat or mashed and dried in cakes. A common trading item in early days. Usually at higher elevations; common above timber-line. (Turner 1978:148-149)

101. *T *Vaccinium membranaceum*, mountain bilberry, black mountain huckleberry, blue or black huckleberry, twin-leafed huckleberry.
Large, dark berries eaten fresh or dried under the sun or over a small fire. Mountain slopes. As "season progressed the women would venture higher into the mountains to get them." (Turner 1978:150)

102. *T *Vaccinium ovalifolium*, oval-leafed blueberry, mountain blueberry, high-bush blueberry.
Generally not as popular as other blueberry and huckleberry types, having coarser seeds and tending to rot easily. Eaten fresh or dried. No specific mountain habitat information; but "later in the

season at higher elevations"; "usually gathered at the same time as black mountain huckleberries." Also note alternative popular name "mountain blueberry." (Turner 1978:153)

103. T *Vaccinium ovatum*, evergreen huckleberry.
Sweet berries much gathered according to Steedman, but Turner doubts availability to Thompson. (Steedman 1930:487, Turner 1978:209)

104. T(?) *Vaccinium oxycoccus*, bog cranberry, wild cranberry, moss cranberry.
Tart berries eaten raw or boiled with meat. (Turner 1978:156)

105. LT *Vaccinium parvifolium*, red huckleberry.
Berries eaten fresh or dried. (Turner 1978:209)

106. *T *Valeriana dioica*, mountain valerian.
107. **T *V. sitchensis*.
Dried powdered roots and leaves mixed with tobacco as flavoring. *V . dioica*: in mountains; *V. sitchensis*: at mid- and upper elevations in mountains. (Hitchcock and Cronquist 1981:455, Turner 1978:215)

108. **T *Viburnum edule*, highbush cranberry, squashberry.
Tart berries eaten raw, the juice swallowed and seeds discarded. From near sea level to subalpine forests. (Turner 1978:134-136)

Note that these data say nothing about differences in the quantities and quality of these subsistence plants between those of the lowlands, lower and middle mountains, and high elevations where the same plant grows in two or three areas. Nothing about the locations of the most important food plants. Nothing about the relative lengths of their seasons at different altitudes. Nothing about the levels of labor expenditure required in getting to the gathering areas, in the harvesting process, and in transporting the plants back to the camp or village. Nothing about any other elements of Thompson life that would enter into a decision as to whether to undertake a collecting journey to the high country as against securing the same food resource closer by: e.g., how the men of a party might be productively engaged while the women collected and processed the plant parts. But the fact remains that, according to the clear ethnographic record, Thompson parties frequently visited their middle and high mountains. Irrespective of whether the principal motivation for the journey was to collect vegetable materials, to hunt, or to pursue some still different goal, the women, it must be supposed, generally used this opportunity to gather whatever food plants were in season in the vicinity. Further, some plants that grew over a considerable range of altitudes attained their best form in their higher growing grounds. As Turner observes regarding *Lewisia* spp. in particular:

> The best time to dig bitter-roots is just before the plants flower, when the buds are still tightly closed but showing a pink hue. This varies from early to late May, depending on the elevation. Different populations of bitter-root vary considerably in the size and bitterness of their roots. Generally, plants of higher elevations (over 760 m or 2,500 ft) produce larger, less bitter roots than those of the dry desert lowlands and valleys. (Turner 1978:176, 178)

There was likewise some patterned movement of plant gathering parties up the mountain slopes following the ripening of some taxa. Such was the case, for example, for the mountain bilberry (*Vaccinium membranaceum*):

> These large, dark berries were eaten when available by all Interior Indian peoples. They were harvested from July to September, depending on the elevation; as the season progressed the women would venture higher into the mountains to get them. (Turner 1978:150)

In summary, the taxa in the above ethnobotanical catalog that are marked with asterisks were plants that were gathered by the Thompson when they left the Fraser and Thompson River valleys to pursue their subsistence quest in the mountainous sections of their country. On this evidence almost half of the food flora utilized by the tribe, 49 plants of the 108 total, were available in their mountain environment, 21 at high or very high elevations. As the information accompanying the specific plants in the inventory reveals, many mid- and high altitude floras grew also in the lower mountains. Evidently many of these mountain plants were to be found in the Skagit Valley and nearby high country within the Park confines, territory roamed over in traditional times by Thompson subsistence quest parties.

Finally, what do these data say regarding the Lower Thompson use of mountain plant foods, as opposed to use by the Thompson in general? Unfortunately, not much. It appears that Turner obtained her Lower Thompson information, as identified in the plant catalog above, somewhat incidentally in the course of her Upper

Thompson inquiry. Moreover, it is probable that she sometimes collapses into a generic "Thompson" category positive data regarding a specific plant which she secured in the field separately for the Upper and the Lower Divisions. Nevertheless, it is of interest that of her 108 subsistence taxa, 25 are explicitly mentioned as having been utilized by the Lower people. Of these 25, eight are identified as occurring in mountainous country of low or medium elevation and two in high elevation terrain. Considering the extent to which the ethnographic evidence indicates that Lower Thompson parties utilized their high territory food resources, this can only be seen as a very fragmentary assessment of their mountain plant activities. Still, since the Division homeland and the center of its village life were deep in the Fraser Canyon, where the tribe had its remarkably productive salmon fisheries, the fact that a third of their alimentary flora, as reported by Turner, grows in the mountainous regions is worth noting. However, that these ten taxa occur in the mountainous segments of Lower Thompson country does not necessarily signify that their edible products were harvested in these upland areas. In fact, eight of the ten also grow at low elevations, the two wholly high-land forms being the white-bark pine in subarctic terrain and above and the Sitka mountain ash at 2,000 foot elevations and above.

IV

CHELAN

Data Base

Consistent with the procedure adopted in the preceding chapters, the summary of the traditional life patterns of the Chelan presented in the following pages represents a merging of the available ethnographic and ethnohistorical data. Unfortunately both sets are singularly meager, requiring a special fall-back and not very satisfactory descriptive procedure that must be explained.

The ethnographic information for the Chelan is essentially limited to casual remarks in ethnographic studies of nearby tribes. Fortunately, however, they were one tribe in a small cluster of regional groups that possessed quite similar life patterns: the Chelan, the Methow of the Methow Valley immediately upstream, and the Entiat and Wenatchi in their own valley systems below on the Columbia (Figure 4-1). Accordingly, in theory it should be possible with caution to extrapolate from the traditional life habits of the last three groups to those of the Chelan. As a practical matter, however, this is possible to only a limited degree, for the Methow and Entiat are ethnographically as poorly described as the Chelan. The Wenatchi, in contrast, are measurely better known, thanks largely to the single study by Ray (1942). The best that can be done is to make maximum use of what little Chelan information is available, extending it by reference to relevant Wenatchi data. Because the Chelan data are so scanty and that for the Wenatchi so much fuller, the pages that follow often have the appearance of a Wenatchi study with occasional references to the Chelan, expanding upon, confirming, or altering the Wenatchi ethnographic facts to the explicit Chelan situation.

This "altering" aspect calls for further comment. While the Chelan and Wenatchi evidently shared many basic cultural traits (Ray 1939:145-149; Teit 1928), they are either known or can be reasonably presumed to have differed in at least some segments of their lifeways. In the first place, no two tribal groups in the Plateau, however close geographically, followed precisely the same constellations of cultural patterns, just as every group had its own speech peculiarities. These differences in cultural behavior were fostered by a mixture of circumstances of varying importance: the influence of different sets of past leaders and community pattern-setters, contacts with a somewhat different groups of tribes, and other differences in their histories. But a factor of generally greater importance was the special features of the ecological niches to which the culture of the group was adapted. In the case of the Chelan and Wenatchi the two tribes occupied rather difference bioenvironments. That of the Chelan was a unique riverine-lacustrine and intensely mountainous one: while occupying a short stretch of the Columbia Valley, they were essentially a lake people, maintaining most of their camps and winter villages on the shores of Lake Chelan and exploiting in particular the small streams and timbered mountain slopes draining into the lake (Smith 1983). The effective bioenvironment of the Wenatchi, in contrast, was largely a riverine one, their mountains playing a lesser role in their life: the tribe lived on the banks of the Columbia and even more importantly along the Wenatchee River and its major tributaries and made great use of these stream resources, including hordes of salmon in season. To the extent possible, this study makes a particular point of identifying the cultural consequences of these environmental differences.

The Columbia "tribe" (the "Moses Columbia" of the latter part of the nineteenth century) on the eastern side of the Columbia River are sometimes linked, as noted below, with the Chelan, Methow, Entiat, and Wenatchi into a "Middle Columbia (Salish) group." After the Wenatchi, the Columbia are ethnographically the best known of this larger cluster. Yet in this present report, these Columbia data are not widely referred to, since, in spite of a deeply rooted life-mode similarity, their culture rested on a third ecological base, one including a Columbia Valley segment and a major part of the dry Columbia Basin with its steppe and shrub-steppe vegetation (Franklin and Dyrness 1973:6, 45). Further, their lifeways in posthorse times tilted toward those of the bison-hunting Sahaptian neighbors to the south. The Columbia cultural data are, therefore, only marginally useful in the Chelan context.

In the interests of clarity, an effort is made to assign data explicitly to the Chelan or Wenatchi (or occasionally to some other group). Where not so identified to avoid tiresome repetition, the information is to be understood as Wenatchi-specific.

The greater part of the limited ethnographic data for the Wenatchi is to be found in Ray's (1942) culture

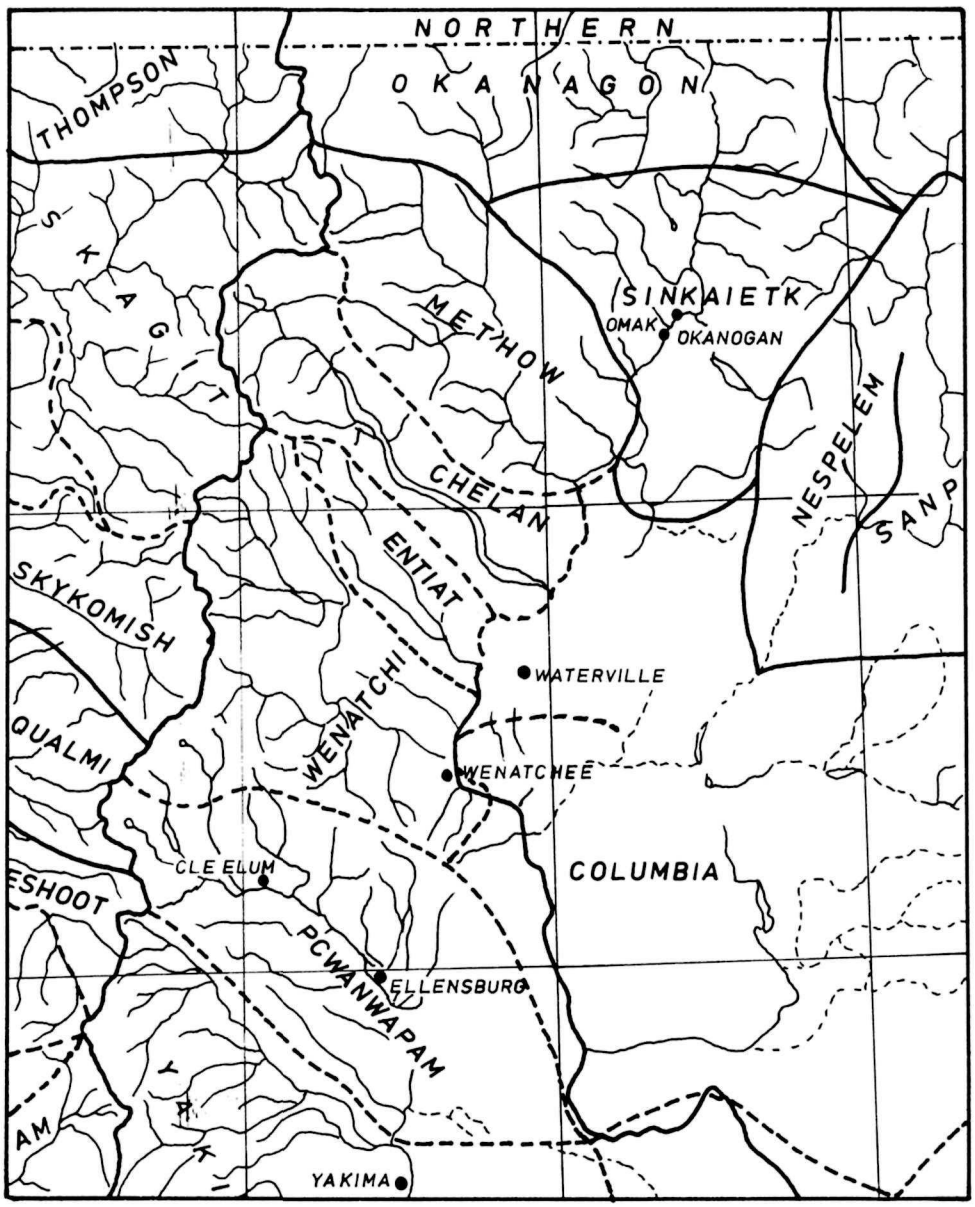


Figure 4-1. Approximate traditional territorial boundaries of Chelan, Methow, Entiat, Wenatchi, and Columbia. The Sinkaietk are the Southern Okanagan. (After Spier 1936:42-43, modified by addition of Entiat, elimination of Sinkaqai'ius as a tribal entity, and redesignation of Middle Columbia as Columbia.)

element survey. This provides detailed information concerning many segments of traditional Wenatchi lifeways, though this is less rich than for other groups investigated at later times in his field research period. There is, however, a problem in the use of these data in terms of this present study: because they are recorded in an individual item-list fashion, the functional relationships between items and especially between item clusters are neither invariably apparent nor always reconstructable with assurance. Thus weir and fish trap elements are cataloged separately, rendering it difficult to sense how the weirs and traps were combined in organic complexes. Specific instances of this kind are noted in the ethnographic summary that follows.

A second difficulty lies in the interpretation of Ray's (1942:104) symbol "( )," which he explains as indicating that "informant qualified answer by terms such as 'sometimes' or 'a few.'" But in his tables he uses both (+) and (−) without defining the difference between the two. Perhaps (−) signifies "sometimes absent," implying that the trait was generally present, and the opposite for (+). This interpretation seems improbable to me, but I really do not know. Accordingly, I have opted for translating the two identically to indicate 'sometimes,' 'occasionally,' or 'a few.' Thus: "Traps: withes of fir (+)" (Ray 1942:107) might be reported in this study as "traps were sometimes made of fir withes" or "a few traps were fashioned of fir withes." And Ray's (1942:111) "eel hook (−)" might here appear as "the Wenatchi had a few eel hooks" or "they occasionally used hooks for eels."

A third point in regard to my free use of Ray's survey data: in most instances I pass over his negative data entries. Plateau informants even in the 1930s were unaware of the full richness of their traditional culture. This was especially true, of course, of those cultural traits that disappeared soon after first White contact. But their native lifeways were, in general, characterized by alternative ways of achieving the same objective. Surely this was partly a response to a typically broad range of bioenvironments within the country of a single tribe. But it appears also to have been partly related to their basically loosely structured society in which individual choice and experimentation were not only permitted but fostered. As a consequence, no informant, however knowledgeable, could be expected to be well acquainted with the variant behavior patterns followed by only a few tribal members or that had been practiced under peculiar, infrequent conditions or in atypical geographic sectors of the group's territory. Negative evidence is, in short, somewhat tainted by these circumstances.

Fourth, the Wenatchi were the first group surveyed by Ray, using a list of traits that was very incomplete in comparison with the expanded element roster that guided his later inquiries among other tribes. Accordingly, the failure of a cultural trait to be mentioned in the following survey as an aspect of Wenatchi culture cannot be interpreted as necessarily indicating its absence among the group.

Finally, Ray's Wenatchi data have been subjected to a careful cross-checking process. This is necessary since traits are sometimes mentioned in one context but not elsewhere where they might be expected to appear. One illustration: bark baskets are noted as Wenatchi water carriers in the "Utensils and Dishes" section, but the entire "bark basket" section is left blank for the Wenatchi, evidently indicating only that no data were gathered as an inquiry unit concerning bark containers (Ray 1942:140, 160-161). Still, I have doubtless overlooked some dispersed data of this kind.

Not included in this Chelan section are data reported by Teit (1928) for his Middle Columbia Salish cluster except where the Chelan are mentioned specifically or inferentially. It is often impossible to determine—at least as presented under Boas' editorship—whether tribally unassigned data apply to all the Middle Columbia peoples—Chelan, Methow, Entiat, Wenatchi, and Columbia—or to some limited segment of this large cluster. When "Wenatchi" are identified specifically with data, it is uncertain whether this information describes the situation for the Wenatchi tribe alone or for the entire "Wenatchi" group—the Chelan, Methow, Entiat, and Wenatchi proper. Incidentally, in gathering these Middle Columbia ethnographic facts, Teit (1928:89) apparently relied on Columbia and Wenatchi informants, having had none from the Chelan and Methow. Evidently Ray's "Wenatchi" data, on the other hand, relate only to the Wenatchi people and so possess in this present context the particular merit of tribal specificity.

Early historical documents relating specifically to the Chelan area are likewise not numerous. To this point, no more than 19 dating to the 1811-1850 period have been identified as concerned with the Columbia Valley segment of the aboriginal territory of the Chelan; only one is known for the Lake Chelan area.

The Columbia River data may be considered first. It may seem surprising that there are so few accounts of travels through the area in this initial 40 year period, particularly in view of the very considerable annual movement of Euroamerican traders up and down this major river highway and, later in the period, the journeys of missionaries and casual travelers. Unfortunately, however, most of these travelers kept no record of their goings and comings: many were men who were bold adventurers and fine canoemen but who possessed little education. Others apparently chronicled their adventures only to have them lost or still curated as archives. Of those riverfarers whose accounts have made their way into print, some report on only one or two of their several journeys, or reduce their daily travels to only the barest essentials, or recount their journeys in narrative form too deficient in specifics to be helpful. And virtually all slight the Chelan and middle Columbia segment of their river travel. How can this patent disinterest in this particular region be explained?

To understand this circumstance, it is necessary first to review briefly those segments of these published, pre-1850 travel accounts that concern the Columbia Valley in Chelan territory. Whatever ethnographic data are

provided are not included here but are integrated into the culture-descriptive sections to which attention is soon turned.

- In early July, 1811, David Thompson (1914:52, 1962:344-345; Smith 1983:25-35), descending the Columbia from Kettle Falls, evidently saw no Indians in Chelan country. As the first White man to traverse the river from Kettle Falls to the Snake River confluence, he had "as usual" put ashore when he had observed villages of the Sanpoil, Nespelem, and Methow and as he later did at the Columbia village at Rock Island. Both as a matter of trading strategy and to insure his safety when he expected later to ascend the river slowly against its strong current, placing him at a disadvantage in case of native hostilities, he stopped wherever he found an Indian camp to explain the purpose of his journey of exploration and to smoke with its occupants (Glover 1962:344). While he is entirely silent on Indians in this Chelan sector, the fact that he passes the area without pause seems proof enough, in light of his expressed and observed policy, that he noticed no native camps in this distance. These data are of special interest not only because they report the initial Euroamerican journey through the Chelan sector of the Columbia, but also because they have implications for an understanding of salmon fishing among the Chelan, a matter discussed below in the fishing context.
- In late August, 1811, Alexander Ross (1966:103, 139-142, 289-290; Smith 1983:43-51) canoed up the Columbia from Astoria on his first upriver journey. Passing through Chelan territory, he observed "a small but rapid stream, called by the natives Tsill-ane, which descended over the rocks in white broken sheets." Indeed, he was even informed by the Indians that "it took its rise in a lake not far distant," the first reference to Chelan River and Lake in the historical literature. A short distance farther up the Columbia he met "some Indians," put ashore, and encamped for the remainder of the day and following night. Precisely where this encounter took place is uncertain. For several reasons, however, the location seems to have been about 6.5 miles upstream from the Chelan confluence (Smith 1983:49-51) and at any rate within Chelan territory. Ross' few observations concerning these "very friendly, communicative, and intelligent" people—surely Chelan and the first Chelan seen by Whites in their own country—are noted in the following culture-descriptive sections.
- In April, 1814, Alexander Ross (1956:21-31; Smith 1983:51-59) again ascended the Columbia River, on this occasion with a flotilla of watercraft. In his travel record no mention is made of the Chelan or their country as he moved up the river. Nor is attention directed to either when, a few days later, he left the area of the Okanogan confluence and rode horseback down the Columbia through the Chelan sector to the Kittitas Valley in search of horses and then, with purchased animals, returned along the river trail to the Okanogan Valley.
- Gabriel Franchere (1854:276-280; Smith 1983:59-63), a member of Alexander Ross' large boat brigade of April, 1814, makes no mention of seeing Indians along the riverside between Priest Rapids and Kettle Falls.
- By his own account, Ross Cox (1957:5, 218-227, 256; Smith 1983:63-66 made several journeys up and down the Columbia River between the mouth of the Snake and the confluence of the Okanogan. For most of these watercraft passages, we are favored with no information. In November of 1815, he relates however, the frail bark canoes and cedar-plank boats of his party were halted by river ice, as they moved up the Columbia. This point of blockage was certainly below the Chelan region, at Rock Island I believe on the fragmentary evidence provided. In mid-February, 1816, after a hard winter's encampment and following the breakup of the river ice, Cox and most of his group continued their water journey upstream to the Okanogan, mentioning no Indian sightings en route.
- In April, 1817, Ross Cox (1957:268, 271-272; Smith 1983:66-71) undertook his final journey up the Columbia from Fort George, on this occasion in a party traveling in two barges and nine canoes. Again, unfortunately, he mentions no Indians as he traversed the distance from Priest Rapids to "Fort Oakinagan."
- In late June and early July, 1817, Alexander Ross (1956:94-95; Smith 1983:71-73), traveling in a boat of the North West Company brigade, made his way through Chelan country. While he mentions no Indians specifically for this section of the Columbia, he writes on leaving Priest Rapids:

> Henceforth we travelled among those more friendly [Indians] as we advanced towards the north. The innumerable bands of Indians assembled along the communication this year rendered an uncommon degree of watchfulness necessary, and more particularly as our sole dependence lay on them for our daily subsistence. I have passed and repassed many times but never saw so many Indians in one season along the communication; . . .
>
> On arriving at Oakinacken . . . I set out immediately for my winter quarters at the Shewhaps [Shuswap], . . .

Though some slight room exists for interpreting these comments regarding band numbers as applying only to the troublesome groups downriver from Priest Rapids, it seems, coming at the close of his brief journey account as it does, to apply to his entire canoe experience from Fort George to the Okanogan. This would include the segment of the Columbia River from Priest Rapids to the Okanogan confluence and so presumably to the Chelan territory. Yet whether any of these "bands" were in fact at the riverside within Chelan

boundaries remains problematical. In any event, these statements are of considerable general importance in revealing, through the eyes of a competent and experienced observer, the extent to which Indians varied greatly in their numbers along the river from year to year and season to season, but more significantly at the same season from year to year. And, furthermore, that this variation occurred during the first decade of Euroamerican contact.

- Early in November, 1824, George Simpson (1931:36-53) descended the Columbia from the Boat Encampment at the foot of the Rockies. Below the Okanogan he notes passing "a small River." That this can only have been the Chelan River I have elsewhere demonstrated (Smith 1983:73-75). Importantly, he states explicitly that he "Saw no Indians on the communication to Day," i.e., during the day when he passed through the Chelan territory. Were the three and perhaps as many as five Chelan winter villages reported ethnographically to have been located on the west bank of the Columbia not occupied that winter for some reason, for surely they should have been in their cold season settlements by November? Or were the dwellings, on the river terraces, subterranean pit structures with earth-covered roofings raised so little above the land surface as to be invisible from canoe level? If the latter were the case, why were there no ancillary, specialized structures to be seen—e.g., platform caches and even summer salmon and plant food drying racks, for, according to Ray (see later section), three and possibly five Chelan sites on the Columbia supported warm season camps? Interesting and, it would appear, unanswerable questions.
- On April 3, 1825, Simpson (1931:130-131; Smith 1983:74-75), returning up the Columbia from Fort George in a flotilla of four boats, moved through the Chelan area without comment of any sort.
- In 1826 David Douglas (1972:71, 75, 85, 122-124; Smith 1983:75-77) journeyed through the Chelan area on no less than three occasions: the first heading up the Columbia in late March and early April; the second moving downstream in June; and the third again descending the river in August. In all of these water passages he mentions only once seeing Indians, or evidences of them, between the Okanogan mouth and Priest Rapids: on his August trip at Rock Island well below the Chelan country. This appears odd and must, it would seem, reflect nothing more than Douglas' disinterest in the native peoples, save where he needed their services. Because the salmon were still running—he observed in August an old man spearing these fish opposite Fort Okanagan—he had excellent opportunities to view activities at various river fisheries and summer camp sites. This would have been especially the case at the Methow Rapids where he was compelled to take to his feet down the riverside while his Indian companions ran his canoe down the fast water, and again at the Wenatchee River confluence where he encamped over night; both of these localities are reported ethnographically to have been the site of summer camps. The point, to repeat, is that no mention by early river travelers of Indian villages or camps or of Indians laying in their store of salmon cannot be safely interpreted, failing some evidence to the contrary, as signifying the absence of native communities and activities in or along the river.
- On April 4 and 5, 1827, Edward Ermatinger (1912:70-78; Smith 1983:77-83), in the York Factory express boat, followed the Columbia through the Chelan homeland. On the evening of the 4th, after having traveled the distance from his night camp of the 3rd, pitched "5 miles above the Piscouhoose [Wenatchee] River," he made camp "a league above the Clear water Creek," i.e., Chelan River. The "league" of the fur personnel at the time seems to have been about seven miles, as Simpson's (1931:52; Smith 1983:73) journal of 1824 demonstrates. This suggests that Ermatinger and his party encamped at or very near where, on independent evidence, I suggest that Alexander Ross pitched his camp on July 27, 1811 (see above). Alternatively, if the dictionary definition of the league "of English-speaking countries" as about three miles is assumed to have been that of Ermatinger, then his night's stopping locality would have been approximately where his traveling party paused to sleep on April 3, 1828 (see 1828 item below). On April 5, 1827, he arrived at Fort Okanagan. In his journal entries of neither the 4th nor the 5th is any mention made of sighting Indians.
- In October of 1827, Ermatinger (1912:110-112; Smith 1983:83-88) and his Hudson's Bay Company party coursed down the Columbia from the Boat Encampment to Fort Vancouver. Unfortunately, Ermatinger makes no reference to any Indians between the Okanogan and the White Bluffs area below Priest Rapids.
- On April 3, 1828, as a member of the Hudson's Bay Company express of two boats bound from Fort Vancouver to the Boat Encampment, Ermatinger (1912:112-118; Smith 1983:88-89) again passed through Chelan territory. The night of that day found the party camping "2 or 3 miles above Clear Water Creek [Chelan River]." The site of this encampment, if his mileage estimate is essentially accurate, would have been very near the town of Beebe, or perhaps slightly farther upriver. Once again there is no reference in Ermatinger's account to any sighting or encountering of Indians in the Chelan region during either this day or the 4th, when, after breaking camp, the travelers negotiated the northeastern corner of the Chelan country and moved on into the homeland of the Methow.
- In late May and early June, 1828, John Work (Lewis and Meyers 1920:106-107; Smith 1983:90), with a large brigade, journeyed by boat from Fort Colvile to Fort Vancouver. On May 28, the party, aided by a strong current and by being propelled with oars rather than with paddles, traveled the entire distance from the Okanogan confluence to just upstream from Priest Rapids. While Indians are mentioned at Priest Rapids, no

sightings of natives between Okanogan and these rapids are recorded. As in the case of so many of these early accounts, Work's report of this journey is one of great terseness, with no room for what he would reasonably consider commonplace and irrelevant.

- On August 8, 1828, John Work (Lewis and Meyers 1920:112-113; Smith 1983:92), as a member of a brigade with nine heavily laden boats, moved up the Columbia through the lower part of Chelan country, to camp that night "a little above Clear Water [Chelan] River." Here the flotilla was met by a man with horses from Okanagan. On the 9th, Work and a companion left the watercraft and rode through the northeastern sector of the Chelan area and on to the fort. Work, whose narrative of each day's events hardly exceeds a half-dozen lines, provides no information concerning the Indians of the Chelan and Methow regions, though he reports on August 6, when the party passed Rock Island, that there were "Very few Indians in the River, and Salmon very scarce" and that in the Wenatchee sector his group "Traded some Salmon from the Indians." His informative salmon and salmon fishing remarks, coupled with the Chelan focus on the Lake Chelan subsistence area (discussed below), suggest that the few Chelan, in fact, may have been on the Columbia when Work passed, but this is, of course, in a measure conjecture.
- On June 2, 1836, Samuel Parker (1842:300-307; Smith 1983:92-93) left Fort Okanagan in a bateau with two Indians and two French voyageurs. Guided by his companions and driven by the river "in full freshet," he put behind him on this first day the entire distance to a point a few miles above Priest Rapids. He fails to mention Indians in his account of this day when he rushed through the Chelan country. However, he observes on June 3, during which he traveled through Priest Rapids and all the way to Walla Walla, that salmon were "ascending the river in great numbers, and groups of Indians are scattered along pursuing the employment of catching them." And later, writing retrospectively, he contrasts the life style of the Middle Columbia Salish—Chelan, Methow, Entiat, Wenatchi, and Columbia—with that of the Sahaptian peoples farther down the Columbia River, the gist of which is remarked upon in a later section of this present report.
- On August 20, 1841, George Simpson (1847 1:141, 153-162; Smith 1983:93-94) embarked from Kettle Falls in a flat-bottomed bateau, propelled by six oars, high water, and a strong current. Driving very hard as was his headlong style, he passed through the Chelan area on his second day of travel, making no reference to Indians until he reached his evening camp at Rock Island.

So much for the early historical documents pertaining to the Chelan segment of the Columbia River. Plainly they furnish precious little information regarding the Chelan and their homeland in the 1811-1850 period. Two of these early travelers (David Thompson in July, 1811, and George Simpson in November, 1824) either explicitly report no Indian sightings along this Chelan River stretch or present data making this a safe deduction. Only one traveler (Alexander Ross in August, 1811) mentions observing and camping with Indians on the riverside in Chelan country. On three other occasions parties journeying on the river (those of Edward Ermatinger in April of 1827 and of 1828, and John Work in August, 1828) encamped for the night on the river bank in Chelan territory yet fail to note Indian sightings within Chelan borders. In the remainder of the water passings identified above—13 out of the total of 19—the travelers moved through the Chelan homeland without pitching camp within the Chelan boundaries and without so much as a word concerning Indians. These last 16 river boatmen whose travels have been brought to print may have observed no signs of residential units or of Indians themselves, or, seeing them, may have simply neglected to mention the fact. This question deserves some attention for what it reveals concerning both these early Euroamerican river users and the Chelan and their traditional life style.

Why might it be expected that these travelers along the water highway would have seen Chelan or at least their cultural marks in passing through their country? For several reasons, among which the following appear the most persuasive:

- The river journeys summarized above were distributed through nine months of the year: only September and, not surprisingly considering the cold season conditions of the river and the severe winter traveling problems in general, December and January saw none.
- According to the ethnographic evidence (Ray 1936:141; 1974a:419, 423), the Chelan maintained both winter villages and warmer month camps along the Columbia riverside. Four of the documented 19 early travels were made in the period from late October through March. During this season all Chelan villages on the river might reasonably be expected to have been occupied. Warmer weather river journeys were more frequent, 15 from April through September: specifically April (5), May (2), June (2), July (2), and August (4). During at least some of this open time-span, residents should have been in or near their "summer" camps (Ray 1936:141; 1974a:419-423) along the river banks. At least one of these summer settlements was a fishing—presumably salmon—camp (Ray 1974a:423). In the midst of the salmon time, some fishermen from this camp and other river bank camps should have been observed at the tribal fisheries, perhaps at the two rapids below the Chelan confluence termed by Symons (1882:maps 14, 15) Downing's Rapids and Bar Rapids and even at his three "ripples." Surely, especially in view of the important Chelan summer food resource region around Lake

Chelan, open season camps would not have been maintained on the Columbia River unless salmon fishing and probably plant collecting afforded serious subsistence opportunities. Further, the people of these Columbia River winter and summer communities must have engaged year-round in other subsistence tasks and technological pursuits along the river terraces and facing hillsides: e.g., hunting and plant gathering in season, food drying and storage, mat and basket making, hide tanning.

- As reported above, one trader (Ross in August, 1814) rode on horseback round trip along the river trail through the entire Chelan territory, and one (Work in May, 1828) negotiated the northern end of the river path out of Chelan country aboard a horse. While stream voyagers might have been fully occupied in forcing as much water behind their craft as possible—as was certainly sometimes the case—or in otherwise managing their canoe or boat, thus missing Indians on the river and Indian encampments on the stream bank, these two land travelers must have had an unparalleled opportunity for seeing Chelan at or in the vicinity of their summer river camps. Yet neither so much as mentions catching sight of an Indian or any Indian sign while within Chelan borders.

On closer examination, however, the infrequency of historical references to Indians in the Chelan River sector becomes rather more comprehensible.

- With few exceptions, travelers were intent on making as expeditious a traverse as possible through the Chelan homeland and, in fact, through the entire Columbia Basin river reach. The nearest trading posts were at the Okanogan River mouth above and the Walla Walla confluence below, the two posts between which the watercraft were generally moving. The Chelan region offered nothing of commanding interest in terms either of native groups or of commerce: the Chelan were simply too culturally unspectacular and too poor in traders' terms to warrant breaking a journey.
- The Chelan were wholly inoffensive. Between the Okanogan and Priest Rapids only a single falls, that at Rock Island well downstream from the Chelan southern boundary, generally required landing and portaging, though under certain water conditions a few rapids caused small problems, including a bit of fast water just below the Chelan River confluence. When navigational difficulties occurred and moving impedimenta for a short distance along the river bank became a necessity, the Chelan, like their immediate neighbors, exhibited none of the annoying and often dangerous aggressive tendencies common among the native groups of the lower Columbia. There was no cause for a traveler in Chelan country to note Indian presence on such occasions.
- Relatively few Chelan maintained their residence either in winter or in summer along the Columbia. On ethnographic evidence (Ray 1936:141; 1974a:419, 423), only six residential sites were located on the riverside. For two of these the season of occupancy is undescribed; of the remaining four, one appears to have been used only in winter, one in summer, and the other two in both seasons. This compares with eight winter villages around Lake Chelan and 11 summer month camps (Smith 1983:264). Clearly the Chelan population was concentrated in the lake section (see demography unit below).
- Even the April clustering of journeys may help to explain the infrequent references to Indians on the river. Too early to begin activities at the Columbia River fisheries, the people were almost certainly scattered out on the early spring collecting and hunting grounds, following the seasonal activity pattern of the Sanpoil (Ray 1932:27) and Southern Okanagan (Spier 1938:11).
- The Chelan area attracted no early missionary interest of significance. Perhaps the tribe was first exposed to formal Christianity in 1838 when the Catholic priests Blanchet and Demers journeyed down the Columbia River and therefore necessarily passed through Chelan territory. From time to time while en route they stopped, as they did also in later years, to instruct briefly and baptize native groups residing on the river banks (Byrd in Durham 1972:11 fn. 20). Whether the Chelan received these ministries I do not know. At any rate, nothing like the early, extensive, and informative records of De Smet, Spalding, the Walkers, and others for the eastern Plateau exist for the Chelan—not even for the other Middle Columbia Salishan groups. Perhaps as early as 1858, however, Catholic services were held at Wapato Point, a bit of land extending out into Lake Chelan near Manson (Byrd in Durham 1972:9 fn. 19, 11 fn. 20), but information concerning these religious contacts seems also to be wanting.

In sum, it may be concluded from these data, supported by additional information presented later, that:

(a) Early travelers on the Columbia in the Chelan homeland normally had no incentive or occasion to come ashore except to serve their own immediate purposes, as to take meals and encamp for the night;
(b) White boatmen traveling the river should have observed from their passing craft, even though they were moving in haste, some Indian villages and camps on the stream terraces and some Indians at their tasks;
(c) Travelers who kept journals evidently considered their sightings of Indians within the Chelan borders too trivial to record;
(d) Sightings were probably fewer than might be supposed because the Chelan population along the Columbia was not large, the tribal center being rather in the Lake Chelan region; and

(e) Sightings were less frequent than might be expected because salmon fishing was for the Chelan a less important Columbia River activity than it was for other nearby river tribes and because, as Teit (1928:114) observes for the Chelan and the Middle Columbia Salishan groups in general: "Much of the summer and fall season was spent on the higher grounds, hunting, root-digging, and berrying."

It is unclear, in short, how best to balance out haste and disinterest on the part of the early passersby on the one hand and, on the other, the relevant aspects of Chelan population distribution, seasonal movements, and other cultural factors as contributors to the general failure of the river travelers to note Chelan presence along the Columbia in the 1811-1850 time span.

To place these Chelan data in perspective it is instructive to view them within a slightly broader geographical context. In the records of only two of the 19 river journeys précised above—those of Thompson and Ross, both in 1811—are the Methow, above the Chelan, mentioned and in not one is the existence of Indians in the Entiat country, immediately downriver from the Chelan, attested to. Obviously, the Chelan were no more slighted by these early stream travelers than were their adjacent Salishan neighbors. Evidently the same complex of circumstances that was responsible for the 1811-1850 inattention to the Chelan operated in the case of all three of these neighboring, culturally resemblant tribelets.

For the Lake Chelan and Stehekin segment of Chelan traditional territory, I have uncovered only a single traveler's account for the entire 1800-1850 time span.

- In late July and August, 1814, Alexander Ross (1956:36-42) attempted to cross the Cascades to the coast, traveling on foot with an Indian guide and two other Indian companions and following an old Indian traders' trail but by his time very obscure. He went down the Columbia to the Methow mouth and then ascended the Methow Valley. After a short distance, however, he was compelled to leave the river. From this point on, his route is difficult to follow, though he provides compass readings and mileage estimates. While not all who have attempted to define his route agree on its precise plotting, most bring him through Twisp Pass into the Upper Stehekin drainage well above Lake Chelan, to which he makes no reference though he learned of this body of water in 1811 from Indian informants (see above). From this northwestern corner of Chelan country, within the Park borders, most then take him over Cascade Pass and down the North Fork of the Cascade River in Skagit Indian territory to a point identified by Spaulding (in Ross 1956:41 fn. 25) as "just below the forks of the Cascade River" before abandoning his attempt and returning to his Okanogan post. But if he, in fact, crossed the Methow Mountains by way of Twisp Pass, he may well not have gone on to Cascade Pass but, reaching Bridge Creek, may have ascended that stream to Rainy Pass and proceeded down the west side of the divide to the headwaters of Granite Creek. Beckey (1981:280 fn. 24), whose firsthand knowledge of the North Cascades in general seems unparalleled, favors this Rainy Pass trail or, if Ross moved up the Early Winters Valley from the Methow River rather than the lower-down Twisp Valley, then a mountain saddle farther north than Rainy, which I take to mean Methow Pass as a possibility.

  Evidently during his entire journey, both out and back, Ross encountered no Indians. If his turn-about point was on the Cascade River as noted above, only a few more miles would have brought him to Skagit summer settlements.

  So far as known, this was the earliest Euroamerican penetration into the Stehekin and upper Cascades River regions, assuming that his path was in fact via this route.

In the years that followed, a few early fur trappers and voyageurs may have traveled into the Lake Chelan area and trapped around it. Remains of old cabins—described by early settlers as Hudson's Bay Company trapping shelters—existed near the mouth of Flat Creek, about 13 miles up the Stehekin Valley, and at Twentyfive Mile Creek, on the southwest side of the lake, approximately 17.5 canoe miles uplake from its southern end (see Byrd in Durham 1972:17 fn. 31). But for these early lakeside activities, I have as yet seen no solid documentation.

Although in the early 1850s George McClellan of the Stevens survey expedition investigated—and recommended against—the Methow Valley as a possible cross-Cascades railroad route, it appears that no field examination was made of the Lake Chelan and Stehekin Valley area to measure its potential. It was discovered that the short stretch up the Chelan River to the lake was too rugged, crooked, and canyon-like and the lake side was "shut in by high mountains, which . . . [left] no passage along its margin" (McClellan in Stevens 1855:196; Duncan in Stevens 1855:213). This was more than sufficient to demonstrate the impracticality of this route.

A few years later, however, "a large group of prospectors . . . [traveled the lake] as a short-cut from the Snake River to the Fraser River gold rush in 1857-1858" (Byrd in Durham 1972:17 fn. 31). This appears to be the first unquestioned use of the lake by Whites, though only as travelers en route over the Cascades.

The first historically documented exploration of the lake area—as opposed to casual travel across its waters—appears to have been that of D. C. Linsley and John A. Tennant in mid-July, 1870: they went the

length of the lake and undertook railroad surveys in the river system at its head (Beckey 1981:215). Unfortunately, no record of this reconnaissance is in my hands.

In 1879-1880 Col. Merriam and Thomas Symons visited the lake in their search for a suitable site for a military post and, while there, investigated the lower 24 miles of the lake in a dugout canoe with two Chelan Indians from their village on the Columbia about one mile above the Chelan River mouth. Within a year or so Merriam canoed to the upper end of the lake. As a result of these Merriam-Symons surveys, Camp Chelan was established in 1880 at the southern tip of the lake, where, however, it remained for only a few months (Symons 1882:39-40, 123; Byrd in Durham 1972:12 fn. 22, 17 fn. 32). To my knowledge there is no published record of these explorations save for the few lines in Symons' account. In it, however, there is nothing to suggest a contemporary Chelan presence in the lake area, and it seems probable, because of Symons' obviously warm relationship with the Columbia River Chelan, that he would have reported Indians on or around the lake had he observed them.

Other early but post-1876 documents relating to the history and natural history of the lake and Stehekin sectors may be found reproduced in Stone's (1983) compilation, from which, unfortunately, I have not had time to extract data relevant to this report.

Introduction

Ethnonymy

The Chelan as a group have been treated in the historical and ethnographic literature in three ways:

(a) They have been regarded as a distinct tribe with their own designation, reflecting the view of the Chelan themselves. Thus:

- Writing of the Chelan River and the Indians whom he encountered on August 27, 1811, just up the Columbia from the mouth of the Chelan, Alexander Ross (1966:139-140, 290), the first White known to have seen these people, called both the Indians and their river the "Tsill-ane."
- In his journal of his voyage down the Columbia River in 1824 and return upstream in 1825, George Simpson (1931:168) lists the "Tsillani" among "the different Tribes inhabiting the Banks of the Columbia from the Cascades Portage to the Rocky Mountains," a roster obviously secured from local Hudson's Bay Company records.
- In recent years the ethnographers Ray (1936:103, 119, 122, 141-142, 1974a:419-423) and Spier (1936:15, 42-43) have regarded them as a separate tribe under the name "Chelan."

This view of the Chelan mirrors their sense of themselves, as a distinct people whom they term the *tcɩtɬa'n* (Ray 1936:122). Obviously derived from this term are the designations in the preceding roster. The separateness of the Chelan as a cultural and population entity was recognized by other nearby groups. The Klikitat, for example, called them the *tcEla'lpam* (Teit 1928:91), *-pam* being one of the Sahaptin suffixes denoting "people of" (Jacobs 1931:220).

(b) They have been considered a band or very small tribe distinct in a sense but properly comprising with other nearby groups on the west side of the Columbia a single large tribal unit. Thus:

- Ross' (1966:289-290) separation of the Chelan into a distinct tribe has already been noted under (a) above. It should be observed, however, that he considers the Chelan but one "tribe" of a dozen that comprised the Oakinacken "nation," three of these others being the Piss-cows (Wenatchi), Inti-étook (Entiat), and Battle-le-mule-emauch or Meat-who (Methow).
- Whether based on his own field research or on that of his assistant W. E. Myers in 1907-1909 is uncertain, but Curtis (1911 7:xii, 65, 69) speaks of the "Sfsilámuh, at the mouth of the Tsilán, or Lake Chelan," as one of the small groups of tribes or bands that are sometimes lumped with the Methow as "Methow" and more often included with the Entiat and Wenatchi as "Wenatchee."
- Teit (1928:89, 90, 91, 93, 95) views the Chelan (Tselē'n, .stcelē'nex) as a band or tribelet—like the Methow—of the large Wenatchi tribe, though differing slightly in dialect from the Methow and Wenatchi proper.

(c) They have been described as a small component of a single large tribe that aboriginally occupied territory between the middle Columbia River and the Cascades. The Chelan—like other member groups—are not said to have possessed separate linguistic, cultural, or political identities at even the band level. In light of the conviction of the Chelan themselves that they comprised a distinct cultural unit ([a] above), this treatment is surely only the consequence of seeing the tribal units of the area in terms of supratribal cultural and linguistic

entities and makes no pretense of concerning itself with population groupings at a more local level and according to the Indians' own view of functional social groupings.

- Gibbs (1855a:412) includes within his "Pisquouse" tribe the Indians of the Chelan area as well as those of the Methow, Entiat, and Wenatchee drainages.
- Winans (1871:487, 489) writes only of the "Mithouies, into which he collapses, without naming them, the Methow, Chelan, and Entiat.
- Presumably following Winans, Mooney (1896:734, 736, plate 88) recognizes only a "Mitaui" tribe, which includes, as is evident from the territory it is said to have controlled, the Chelan as well as the Methow and Entiat.
- Hodge (1912:850), perhaps taking his lead from Winans and Mooney, places the Chelan—without naming them—within the Methow, whom he defines as "as Salishan tribe . . . formerly living about the Methow r. and Chelan lake."
- Evidently using Teit's field data though not in a very perceptive manner, Boas (1927:tribal distribution map) merges the Chelan with the Entiat and Wenatchi—and perhaps with the Methow also—as a single grouping under a "Wenatchi" designation.

A more extented discussion of the above data has been developed by Smith (1983:153-161).

It is of some historical interest that both the earliest references to the Chelan and the most recent ethnographic considerations of them have generally recognized the Chelan and their neighbors as local—especially river basin—population entities as did the Indians themselves. In contrast, the references of the second half of the nineteenth century and early 1900s tend to merge the Chelan with other nearby Salishan speakers, seeing cultural and linguistic similarities among them and extending the term for one large component of the cluster to designate the entire group.

This inclination to collapse the Chelan (as also the Entiat) within the Methow above them on the Columbia River or with the Wenatchi downriver reflects the erroneous notion that the Chelan were in traditional times a small and insignificant people, as were the Entiat between them and the Wenatchi certainly were. This concept of the Chelan may have been partly a consequence of the fact already commented upon that the tribe was primarily a Lake Chelan group with, according to Ray (1936:141-142; 1974a:419-423), a few summer camps and winter villages, all normally small, on the Columbia River (Smith 1983:278-281). As a result, most of the Chelan population could not have been seen by the early river travelers, and those who were observed on the riverside were doubtless engaged in pursuits very like those of their neighbors below and above them on the Columbia, in a sense atypical for the Chelan tribe as a whole.

Tribal Territory

The traditional territory of the Chelan included a short stretch of the Columbia River on both sides of the mouth of Chelan River, Lake Chelan, and, it must be presumed, the total watershed of the lake. The aboriginal village locational data of Ray (1936:141-142; 1974a:420-423) for the Chelan and for their Methow neighbors on the north and the Entiat on the south define with some precision the extent of the Columbia west bank held by the Chelan. Specifically, their territory extended from the mouth of Antoine Creek, or slightly up the Columbia from that point, downstream past the entrance of Chelan River and as far south as just below the mouth of Navarre Coulee (Smith 1983:166-168). The extent to which the tribe made use of the east side of the Columbia River is much less clear. Still, it is reported (Ray 1974a:423) that they collected roots in the Badger Mountain region, so it is safe to assume that to some degree they exploited the subsistence resources of the east side of the Columbia opposite their west bank country.

The limits of traditional Chelan country west of the Columbia plainly included the entire Lake Chelan area. Consistent with the general tribal land utilization pattern in this section of the Plateau, it may be reasonably concluded that the Chelan claimed as their own all streams—none, however, of any magnitude—that drained into Lake Chelan from the Sawtooth Ridge watershed on the northeast and the peaks of the Chelan Mountains on the southwest. On the northwest in aboriginal and early contact times their tribal lands embraced the entire Stehekin River drainage up to the crest of the Cascade Mountains. In terms of the special interests of this present report, these data mean that the entire Lake Chelan National Recreation Area and all of the adjacent southeast corner of the North Cascades National Park fall within the country claimed in traditional times by the Chelan (Figure 4-2).

Cultural Affiliation

As two views of the Chelan in ethnic identify terms ([b] and [c] in above) suggest, the group has been considered by some ethnographers as comprising, in various combinations, a single cultural entity with the

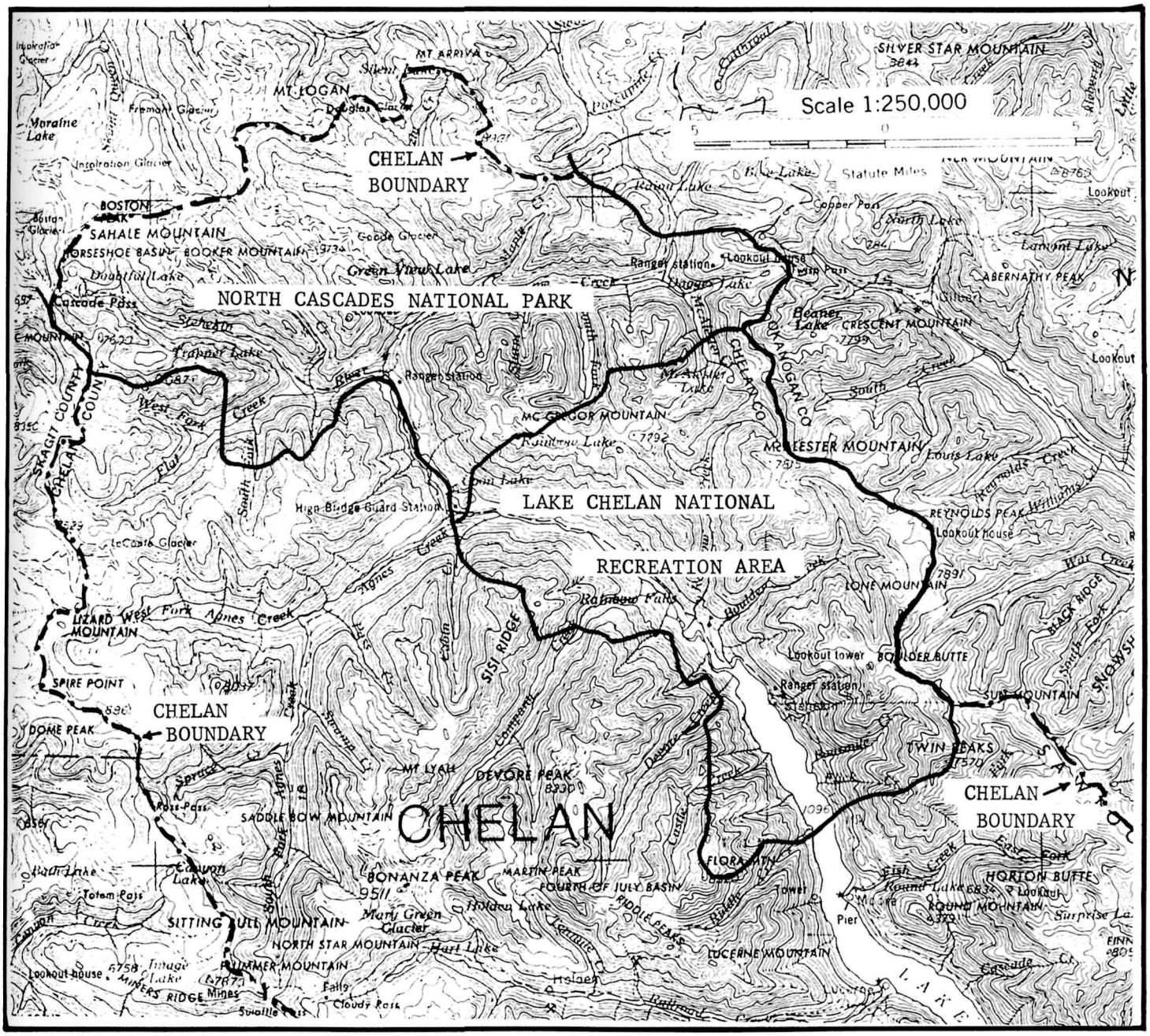


Figure 4-2. Limits of traditional Chelan territory in relation to boundaries of Lake Chelan National Recreation Area and southeast corner of North Cascades National Park. The lower part of the lake and the short Columbia River sector within Chelan country lie beyond the borders of the Park Complex and are not included in this map. Base map: USGS *Concrete* quadrangle 1955.

Methow upstream and the Entiat and Wenatchi downriver. Thus Teit (1928:89:93) regards these four groups as comprising a single "tribe" essentially uniform in life style, to which he applies, by extension, the term "Wenatchi." He further links this enlarged "Wenatchi tribe" culturally with the Columbia of the western Columbia Basin and adjacent Columbia River Valley, designating this larger, two-component entity the "Middle Columbia Salish."

Even those like Ray (1936:103, 108; 1939:149; 1974a:419-435) who regard the Chelan as a distinct tribal group ([a] above), reflecting the perspective of the Chelan themselves, assume a basic conformity in the

traditional lifeways of the Chelan and Wenatchi as well as of the Methow and Entiat. Thus all four groups, though the Entiat are unnamed, make up Ray's "Central Interior Salish" cluster in his 1936 village study. Similarly, all four—again the Entiat remain unspecified—are coalesced for descriptive purposes in his 1939 general analysis of cultural relations among the native societies of the Plateau; here, as with Teit, he extends, for the sake of convenience, the more specific term "Wenatchi" to this larger, multi-unit entity. In his 1974 more extended native village catalog of this section of the Columbia Valley, Ray at last distinguishes the Entiat from the Chelan, Methow, Wenatchi proper, and Columbia as a separate "tribal" population. Nevertheless, he continues to recognize a fundamental similarity in the life modes of the first four of these groups, the Columbia being placed in a different cluster with the Southern Okanagan, Sanpoil, and other tribes to the north.

Of these four tribes, ethnographic information is available in some detail only for the Wenatchi.

It is of interest that observers as early as Parker (1842:313) sensed differences in cultural and tribal ethos between the Middle Columbia Salishans on the one hand and both the upriver Salish-speaking groups and the downstream Sahaptians on the other. He writes:

> Between Okanagan and the Long Rapids [Priest Rapids] are detachments of Indians, who appear poor, and wanting in that manly and active spirit, which characterizes the tribes . . . [like the Okanagan and Colville upstream]. South of the Long Rapids, to the confluence of Lewis' [Snake] river with the Columbia, are the Yookoomans [Yakima], a more active people.

Evidently the Chelan were included by Parker in this "poor" group cluster. At any rate, his characterization of these Middle Columbia tribes is basically perceptive. Their peaceable and unspectacular life mode stood in contrast to the life ways of the Okanagan, Spokan, and Colville in Parker's day. The Okanagan had had a trading post in their country for 25 years; the Spokan had had one for some 15 years before it was relocated to Colville; and the Colville had had a post for the previous 10 years, to say nothing of possessing their great intertribal salmon fishery at Kettle Falls. And the Middle Columbia life patterns contrasted likewise with the ways of the horse-rich, buffalo-hunting Sahaptians with their post at the mouth of the Walla Walla, their great intertribal rendezvous, their fiercely hostile relations with the Shoshoneans to their south, and their vigorous, exciting life style in general.

Linguistic Affiliation

The Chelan were evidently not only very similar to the Wenatchi culturally, but the two spoke the same Interior Salishan language, though they differed slightly at the dialect level (Teit 1928:93). Together with the Entiat and the Columbia, they comprised the language unit now commonly termed "Columbian" by Plateau linguists (Thompson 1979:693-694). The speech affiliation of the Methow is somewhat less evident. Teit (1928:93), on the basis of his field research among the Columbia in 1908, and later Ray (1932:10), relying on Sanpoil information, place the Methow with the Columbian language tribes, though Teit recognizes some leanings toward the Okanagan language to the north and east. More recently, Kinkade (1967) and Thompson (1979:683-694) regard Methow as an out-and-out Okanagan dialect. Kinkade observes, however, that there is some evidence that Methow at an earlier date was part of the Columbian continuum but for some reason has shifted during fairly recent times toward Okanagan until it became wholly a dialect of the Okanagan language.

The relevance of these data to an attempt to describe—largely, unfortunately, to reconstruct—traditional Chelan culture is commented upon below.

Demography

No even roughly reliable head count of the 1811-1850 period exists for the Chelan. This is partly because their population center lay on Lake Chelan, well back from the Columbia River highway, the people of these lake winter villages and summer camps not being really seen until the 1850s. Partly because, as already noted, the Chelan were so frequently lumped with other groups in various ways and combinations; in these cases it is impossible to segregate the Chelan from the whole. Partly because of the inherent problems in making head tallies owing to the high mobility of the population and to variations in village and camp sizes by season and from year to year. And partly because of the effects of new waves of epidemics that passed through the middle Columbia region in the first half of the nineteenth century. For a more detailed discussion of these difficulties see Teit (1928:97-99), Ray (1932:21-22), and Smith (1983:137-138).

How unsatisfactory the earlier data are may be illustrated by the following estimates. According to Gibbs (1855a:417-418), Wilkes in 1841 approximates the "Okinakane" population at 300. If the Chelan—and the Methow, Entiat, Wenatchi, and perhaps the Columbia also—are included in his roster, they are presumably buried in this very small 300 estimate: Wilkes may be following Alexander Ross (1966:289-290) who, early in the 1800s, included the Chelan and the other native groups down the Columbia below the Okanogan Valley as far as Priest Rapids with the Okanagan as "tribes" of a single "nation," his "Oakinackens." Warre and Vavasour

give a figure of 300 for the "Okanakane, several tribes" in 1849. Again the Chelan and their neighbors as noted above may be incorporated in this population approximation. Dart's data of 1851 give 300 to the Rock Island people (Columbia) and 320 to the "Okinakane" and in 1853 this same field investigator assigns 550 to the "Pisquouse [Wenatchi] and Okinakane" together. The difficulties inherent in sorting out these data in terms of the Chelan and the other tribal units of the Middle Columbia, if they are numbered in any of these figures, are more than obvious.

Similarly, Mooney's (1928:16) data of the early 1900s on this segment of the Columbia River are too confused to be helpful. No mention is made of the Chelan. Presumably they are included with the Methow, who, whatever the case for the Chelan (and Entiat), are explicitly entered in his list with the "Isle de Pierre [Rock Island] (Columbias, Moses' band)." This composite Methow-Columbia unit is estimated to have had a 1780 population of 800 and to have numbered 324 in 1907. Mooney also lists the "Piskwau, etc.," a group embracing not only the "Wenatchi" but also several Sahaptian tribes to their south. It is conceivable, though unlikely, that the Chelan are buried in this Piskwau cluster of linguistically dimorphous tribes, to which he attaches a 1780 figure of 1,400 persons. No separate 1907 census count is given even for this cluster: it is merged with still other tribal groupings before population estimates are presented.

According to Teit's (1928:97-99) Columbia and Wenatchi informants, the Middle Columbia groups were very numerous peoples in precontact times. By the mid-1800s, however, through disease and wars they had become mere remnants of their former size. While there may be some overstatement in these remembrances of former strengths, at least the effects of waves of pestilence, which Teit reports in some detail on informant recollection scourged them four times or more in the first half of the nineteenth century, were without doubt devastating. He concludes that "it may be safe to conjecture that the total population of the [Middle] Columbia group [the Chelan, Columbia, Wenatchi, Entiat, and Methow] at one time was at least about ten thousand." Surely the head-count figures of the preceding paragraph grossly underestimate the demographic strength of the Middle Columbia peoples in aboriginal days and even in the middle 1800s.

In this context it is instructive to note that the population of one Columbia village, that at Rock Island, was estimated by David Thompson (1914:53; Glover 1962:345-346) on July 7, 1811, at about 800. This figure was arrived at by pacing off the length and width of the two very long, tule dwellings of the camp, approximating the number of families at about 120 by using these dwelling measurements, and then multiplying this family number by an estimated average family size. In spite of the documented epidemics of the early 1800s, these data for this single 1811 community suggest that Wilkes' 1841 300-person estimate for the "Okinakane" tribe as a whole (if this was Wilkes' intention) was probably too low—perhaps substantially low—even for 1841.

For the Chelan proper the only genuinely informative demographic data known to me are the Chelan winter village and summer camp estimates of Ray (1936:141-142; 1974a:419-423) together with the somewhat arbitrary figures that I have assigned to those Chelan population aggregates of Ray for which he provides no head count approximations but only descriptive guides of the "very large," "large," and "small" variety. The premises assumed and methods followed in translating Ray's adjectival estimates into numbers have been described elsewhere (Smith 1983:276-277). Ray's approximations, based on informant inquiry, are for the mid-1800s. It may be taken as a certainty that the Chelan population was somewhat greater in earlier times.

As I compute Ray's demographic data, I arrive at a winter Chelan person count of about 225 in the Columbia Valley villages and 1,185 in those villages occupied around Lake Chelan. The corresponding summer estimates are 230 persons for the river-side camps and 990 for those in the lake area (Smith 1983:278, 280, 318-320). Plainly these numbers, even if for some reason slightly skewed, underscore the lake population focus—and therefore subsistence resource area emphasis—of the Chelan.

Subsistence

The subsistence resources of the Chelan included fish, game, and plant foods, apparently in a relatively balanced supply. It is a shame that so little is known about this so basic a segment of Chelan culture and the details of the group's adaptation to its particular bioenvironment.

Fishing

Fish must have provided an important component to the food resources of the Chelan, though certainly a somewhat smaller share than among the Wenatchi. At least in protohistoric and postcontact times, salmon were unable to reach Lake Chelan and its feeders, the tumbling waters of Chelan River—"a roaring little stream" Symons (1882:42) calls it—between the lake and the Columbia being too difficult for them to ascend (Ray 1936:141; 1974a:420). Even on the Columbia the tribe appears to have maintained established villages and camps at only six sites, if the memory of Ray's (1936:141-142; 1974a:419-423) informants can be relied upon. Of this half-dozen, only three are stated to have been occupied in summer. And only one—that one

mile north of Navarre Coulee—is specifically mentioned as a locality from which fishing was carried out in the Columbia and even this camp had no more than from three to 30 dwellings (Ray 1974a:423).

From these ethnographic data, fragmentary though they are, it is difficult not to conclude that Chelan territory was poor in suitable salmon fishing localities. This conclusion is to some degree supported by the historical records of David Thompson, Alexander Ross, and much later Thomas Symons. When descending the Columbia in early July, 1811, when the water was very high, to explore the river for the North West Company, Thompson (1914:52) mentions only a single rough stretch of fast water in the river course that I define as lying within traditional Chelan boundaries, that about 2 miles, by his estimate, below the mouth of Chelan River. Here on July 6, 1811, he encountered a strong rapid and islands, which, however, caused his canoe no difficulty. Earlier, on July 3 and 4, Thompson 1914:44, 47, 49, 50, 52, 54; Glover 1962:340-346) had received presents of "2 half dried salmon" and five poor salmon from the Sanpoil, who were taking them at a small weir; on the 5th, gifts of "5 good roasted salmon" and "a good salmon" from the Nespelem; and at an earlier hour on the 6th, when he had observed as he passed and briefly visited a Methow village at the Methow River confluence, a present of "3 roasted salmon." Later, from the Rock Island Columbia, the next people he came upon below the Chelan country, he obtained two salmon. Nevertheless, he makes no mention of seeing a single Indian at the swift water, noted above, in what we know to have been Chelan territory, nor, in fact, in the entire Chelan length of the Columbia.

Why were there on Thompson's passing no Chelan taking salmon and apparently no river camps such as reported as summer settlements ethnographically? Perhaps the water was still running too deep over their main river fishing rapids, for Thompson (1914:48), as already noted, reports that the river was very high. Possibly because the other groups were fishing at the time not in the Columbia itself but on lateral streams (as the Sanpoil certainly were), salmon streams that appear to have been lacking in the Chelan homeland. Whatever the reason, these Thompson data convincingly demonstrate that the Chelan were not at their river fisheries when his small party traveled by and so indirectly argue for the special importance of the Lake Chelan region as a major subsistence resource area for the tribe.

On July 26, 1811, Alexander Ross (1966:139-140) of the Pacific Fur Company, by dint of "a good deal of pulling and hauling," ascended a rapid which he terms "Whitehill rapid." Here he found the river making "several quick bends" and "almost barred across by a ledge of low flat rocks." This difficult stretch was either that which Thompson had passed and reported upon when heading downstream 20 days earlier, or, more probably, that about five miles farther downstream later described by Symons as a boulder and bar rapids. The precise location of Ross' barrier is, in any event, unimportant in this present context, for both possible rapids were within Chelan borders. Ross encamped for the night at the head of this swift water without seeing there a single Indian. The following day, after an early start, he passed about 10 a.m.:

> a small but rapid stream, called by the natives Tsill-ane [Chelan], which descended over the rocks in white broken sheets. The Indians told us it took its rise in a lake not far distant.

Not far upriver he met some Indians (presumably Chelan), put ashore, and spent the night. From these friendly natives he secured "some salmon, roots, and berries." On the following day but one, he reached the Methow River, which he calls the "Salmon-fall River," where the Indians presented him with an "abundance of salmon." As in the Thompson instance, to summarize, no natives were to be seen at the fast water below the Chelan River mouth, but those met above that mouth had some salmon, although, unless we squeeze too much from Ross' brief account, not nearly the rich supply possessed by the Methow.

Seventy years later Symons (1882:39, 42, Figures 13-15), passing down the Columbia in a bateau in early October, 1881, to assess the navigational possibilities of the river, notes nothing but an occasional "little ripple and sand-bar island" between the entrance of the Methow and the confluence of the Chelan River. Below the Chelan River, he passed "an occasional ripple . . . and came soon to some quite strong rapids." These, which he named "Downing's Rapids," are without any doubt those mentioned by Thompson and possibly also by Ross. About seven miles downstream from the mouth of the Chelan, he came upon "a rapid, where the water flows over a bowlder and gravelly bar, on which there was a depth of from seven to eight feet." This location (Symons 1882:map 15) is just downriver from the point, precisely 7 miles below the Chelan River just as Symons estimates, where the Columbia bends sharply to the northwest for about 2 miles (USGS *Wenatchee* quadrangle 1957). Though not the rapid noted by Thompson on July 6, 1811, it may quite possibly be Ross' Whitehill Rapid. Symons evidently observed no Indian settlement at either his Downing's Rapids or this boulder-and-bar rapid and found no Indians fishing at either, although he had camped with the Chelan at their "principal village" 1 mile up the Columbia from the Chelan River entrance and later found several Indians spearing salmon from canoes at the Entiat River mouth slightly farther downstream.

These historical notes suggest, like the ethnographic data, that the Columbia River rapids in Chelan territory did not lend themselves to salmon fishing for some reason, either in the high water of July or in the lower water of early October. And further that there were in Chelan country no tributary streams that offered

acceptable salmon fishing possibilities like the Methow and Entiat Rivers. These conclusions are supported by Ray's (1936:141; 1974a:419, 423) informant-derived data that in traditional times the Chelan gathered for salmon at the Entiat fishery, actually a relatively unproductive location, at the entrance of the Entiat River into the Columbia, and at least the people of the large Chelan winter village at the lower end of Lake Chelan journeyed to the Wenatchee River for salmon fishing. Further, after about 1870, members of the tribe were accustomed to fish for salmon at the important Methow fishing location at the Methow River mouth.

To focus these data on the special interests of this study, it appears that an important fraction of the fish in the Chelan diet must have been nonanadromous varieties, fish that were available in the small streams that fed Lake Chelan. Ray (1974a:420-423) lists 13 Chelan habitation sites around the edge of the lake. Of these, 11 were occupied in the summer season. Two of this number are said to have been at the mouth of creeks emptying into the lake, but Ray's data fail to mention fishing as a subsistence activity of these communities. On the other hand, some fish are reported to have been taken by people living at the large village at the lake outlet. These data surely understate the importance of nonanadromous fish taken around the lake shores.

In contrast to the salmon situation among the Chelan, the salmon resources of the Wenatchi were very substantial: in normal years fish were secured in great quantities at localities along the Columbia and even more importantly at sites on the Wenatchee River and certain of its laterals (Ray 1936:142-143; 1974a:424-426; Smith 1983). Indeed, the salmon yield where Icicle Creek flowed into the Wenatchee River was so renowned that the locality became during the season an intertribal fishery (Ray 1974a:425). It is obvious, in short, that salmon must have been of lesser significance to the traditional Chelan than among the Wenatchi, and that nonanadromous fish must have contributed more to the Chelan food supply.

In leaving this salmon issue, a bit of sheer speculation may not be wholly inappropriate. The Chelan area appears to lie in a geologically instable region. The early historical documents report that mild and strong earthquakes were not uncommon. According to Byrd (in Durham 1972:11 fn. 20, 12 fn. 23, 20 fn. 43, 24 fn. 52), Ribbon Bluff (or Cliff)—along the western side of the Columbia River just downstream from the Chelan River mouth (see Symons 1882:42, map 15)—was thrown into the river by a quake in December, 1872. This same disturbance produced a huge geyser at Chelan Falls, which, after continuing for "a long time," gradually subsided. Throughout most of 1873 "the whole mountain range between Lake Wenatchee and Lake Chelan was shaken" by almost daily tremors. In 1887 a very early White settler at Entiat recorded "three days of severe earthquake" shocks. In September, 1899, a very large underwater land shift, possibly a large rockfall, produced huge waves on Lake Chelan.

Further, Lake Chelan was subject not only to a normal spring high water owing to the usual seasonal runoff but occasionally to true flooding when precipitation and temperature conditions were right. Thus in 1894 the lake area experienced a huge flood that *inter alia*

> raised the lake level 11 feet over the 1892 low water mark, washing out all the old Stehekin River logjams, . . . changed the course of Fish Creek . . . , washed out and caved in the Chelan River banks below [Chelan] town until it sounded like thunder and felt like earthquakes, [and] rechanneled a fourth of a mile of the mouth of the Chelan River; . . . (Byrd in Durham 1972:2 fn. 6; see also 1 fn. 2 and pp. 7, 8).

It seems theoretically possible that in prehistoric times either major, though local, earthquake activity or massive lake flooding with consequential outlet erosion could have significantly changed the drainage pattern of Lake Chelan. That the lake surface was higher even in late prehistoric days is suggested by the well-known pictographs on the sheer rock wall at the upper end of Lake Chelan, observed by Merriam about 1880 (Symons 1882:40). The highest of these are reported to have been at least 35 feet above the lake level in predam times and to have been reachable only from watercraft when the level was, say, 30 feet higher than in the early historic period (Cain 1950:15; Symons 1882:40; Byrd in Durham 1972:24 fn. 52). If these data are basically accurate, some quite recent—even in the historical time scale—shift in the outlet arrangement of the lake must have occurred to lower its southern rim. Earth movements or perhaps even massive flood action (or both) might have produced the barriers in Chelan River that in ethnographic times prevented salmonid ascent to the lake or possibly removed such barriers, allowing anadromous fish navigation to the lake, and later created them again. Or altered the outlet from some other course to today's tortuous, rocky Chelan River canyon. Two possible early outlets would appear to have been Knapp and Navarre Coulees, the first about five miles long and the latter approximately eight miles in length, as compared with Chelan River which today falls the about 375 feet from the lake surface to the Columbia River in only about three miles (Byrd in Durham 1972:7). In this connection it is of interest that in 1892 the sternwheeler Stehekin, cut in two, was hauled by wagon up Navarre Coulee from the Columbia to the lake: obviously this "road" is nothing like the twisting Chelan River canyon with its boulders and falls. And as already noted, the modern highway runs up Knapp Coulee from the Columbia to Lake Chelan. Either of these drainage streams, if such there was, might have been manageable to anadromous fish. A careful examination of the topographic and geological evidence would doubtless test these highly speculative

hypotheses, but its seems conceivable that salmonids were able to ascend to Lake Chelan and the Stehekin drainage during some periods in the prehistoric past.

In the absence of specific ethnographic information for the Chelan in regard to fish varieties and fishing techniques, save as noted below, the Wenatchi data are summarized here in keeping with the procedural scheme already explained.

Among the Wenatchi, anadromous fish, especially salmon, of which the Chinook variety was most important, and steelhead trout, comprised staple foods. As already noted, migratory fish were certainly much less important among the Chelan, but of these fish that were taken by this group, either in their own section of the Columbia or at fisheries in the country of neighboring tribes, these two varieties were presumably the most significant. Eels were also taken by the Wenatchi as a food, but whether this was likewise true of the Chelan is not entirely certain. They are said to have been considered inedible among the Flathead, Kutenai, Kalispel, Carrier, Chilcotin, Shuswap, Lillooet, and Klikitat (Ray 1942:104). On the other hand, they were eaten among the Coeur d'Alene, Sanpoil-Nespelem, Southern Okanagan, Thompson, Kittitas, Tenino, Umatilla, and Nez Perce as well as among the Wenatchi (Spinden 1908:206; Post in Spier 1938:18; Ray 1942:104). Inasmuch as these fish were widely eaten in the central and western Plateau, whatever may have been the situation elsewhere in the area, it may be presumed that they were also considered an appropriate food resource among the Chelan, but evidence on the point is lacking.

A catalog of nonanadromous fish caught by the Chelan for food is not available, nor for that matter by the Wenatchi. But, according to Post (in Spier 1938:11-18), the Southern Okanagan, a short distance up the Columbia from the Chelan, supplemented their salmon and steelhead, taken from June until October, with suckers, trout, whitefish, squawfish, lamprey eels, and ling. All of these fish were native to the Columbia Basin region (see Wydoski and Whitney 1979) and so presumably all or most were available to the Chelan in their lake area.

Several different fish are noted in the early historical records as occurring specifically in Lake Chelan and its feeders, including the Stehekin system. These include several varieties of trout: bull trout (Dolly Varden), rainbow trout, and cutthroat trout (Durham 1972:15; Byrd in Durham 1972:12 fn. 25, 15 fn. 26). This list could certainly be extended or at least further documented by a fuller search in the early local records.

Save for Ray's report, mentioned above, that fish were caught by Chelan living in the village at the southern end of the lake, we know nothing ethnographically about fishing localities in the lake sector. Historical accounts of the late nineteenth century, when White settlers were first moving into the region (Byrd in Durham 1972), provide some useful general and specific information.

- Large numbers of rainbow and brook trout were found in numerous streams putting into the lake, Fish Creek being especially notable for its brook type (Durham [1972:15] writing in 1891). (The true brook trout [*Salvelinus fontinalis*] is an introduced species in Washington [Wydoski and Whitney 1979:47].)
- The best fishing in the lake "at proper stages of the water," according to early White anglers, was where "a rill, a brook or a foaming torrent comes leaping over the cliffs, and is disolved in a mass of spray and foam before it strikes the blue-black waters of the lake" (Durham 1972:12). While these non-native fishermen were using pole, line, and hook—a technique not particularly favored by Plateau tribes—these date suggest the possibility of traditional tribal weirs, other types of traps, spear fishing, or still different fishing methods at at least certain of these locations.
- Around the mouths of the creeks where they enter the lake are the feeding grounds for the large lake trout that attain lengths of 2 to 2.5 feet (Lyman [1899:198] writing ca. 1898).
- Large trout were caught in considerable numbers at the very head of the lake where the swift current of Stehekin River flows into the lake (Durham 1972:23).

Mountain streams likewise had their fish. When in 1886, Wm. Sanders and Henry Domke made their difficult way over Sawtooth Ridge from the Methow country to the upper segment of Lake Chelan, they lived much of the time on fish taken in the small streams they encountered, Canoe and Prince among them (Durham 1972:19-20).

Evidently Lake Chelan was natively very rich in fish. In the early 1890s, the hotel at Lakeside on the south shore of the lake near its outlet is reported to have had a standing order for 100 lbs. of fresh fish weekly (Byrd in Durham 1972:15 fn. 27). Moreover, commercial fishermen, quite active on the lake at this time, supplied the Waterville and Coulee City markets with fish (Durham 1972:15).

The methods by which the Chelan took their fish are not described in the literature, but, as a Plateau people and neighbors of the Wenatchi, they presumably, like the Wenatchi, used weirs for both large and small fish. Among the Wenatchi these were constructed by lashing woven fencing against tripods placed straight across the stream. Single weirs were made to slant, the top inclined upstream, and were fitted with a semicircular trap on the upstream side close to the stream bank. Weirs were also built in pairs, the downstream barrier being lower and provided with an opening to allow the fish to pass into the area between the two weirs where a trap of

some kind was fashioned. From the trap the fish were removed by being speared from a scaffold adjacent to the weir (Ray 1942:104-106, Figure 66).

The Wenatchi likewise built dams straight across streams to force small fish and eels to concentrate at a low point in the barrier, where a basket trap was placed (Ray 1942:106).

Two types of traps are described for the Wenatchi, both made generally of willow though sometimes of fir. One, surely set in weirs as described above though not so stated by Ray, was of the double funnel variety, either cone-shaped or of truncated cone shape, with a converging stick mouth and a detachable end through which the fish were removed. This was a creek variety of trap (Ray 1942:107; Figures 162, 163). It may be supposed that it was in use among the Chelan no less than by the Wenatchi, and that the Chelan placed them at or close to the mouth of at least some of the small streams that emptied into Lake Chelan.

The second kind of Wenatchi fish trap was an open basket affair, set below falls where salmon, in attempting to ascend the fast water, fell back into the trap (Ray 1942:108). Since salmon, at least in protohistoric and postcontact times, were unable to negotiate the rushing torrent of Chelan River from the Columbia River to Lake Chelan, the Chelan could not have used a trap of this sort for salmon in the lake area. Perhaps, however, they may have placed such a trap on the Chelan River close to its entrance into the Columbia where the migrating fish would have been stopped by a falls, the existence of which is suggested by Alexander Ross' comment of 1811 noted above and by the very small community of Chelan Falls as shown on the USGS *Ritzville* quadrangle (1953). This assumes that anadromous fish in useful numbers would attempt to swim up a stream from which none could have come as fingerlings. It seems unlikely that the Chelan set basket traps on any of the very few, small streams—Chelan River possibly aside—that reach the Columbia in their territory. Ray (1974a:423) describes the summer camp at Navarre Coulee as, *inter alia*, a fishing settlement, but surely this was at or near a spearing site not a basket-trap-under-a-falls locality.

Among the Wenatchi netting was an important fishing adjunct, used in making both seines and bag nets. It was woven with a boat-shaped, wooden or deer-rib shuttle and a rectangular wooden or rib mesh-spacer, except when the mesh was large enough for the weaver's fingers alone to regular the mesh size (Ray 1942:110).

Wenatchi Indian-hemp seines were of the conical bag sort, fitting with stone sinkers, either encased in hide and attached to the net, or fashioned of a round or oblong stone, grooved either transversally or laterally and tied to the net around this groove. To the end of this bag seine was affixed a fish tail spinner (Ray 1942:109-111).

Dip nets of two varieties were part of the Wenatchi fishing gear. The scoop net, employed in taking salmon, consisted of a circular hoop and an A-frame handle (Ray 1942:109; cf. Figures 294, 295). The vertical-lift net was constructed with a handle of two parallel poles, between which was stretched a small net to warn the fisherman of the arrival of a fish above his net bag (Ray 1942:110; Figure 309).

Hooks, used among the Wenatchi both for salmon and for small fish, were of wood or deer bone and were two-piece, sharp-angled artifacts. They were baited with grasshoppers, crickets, and periwinkles or, when trout were angled for, with fish skin (Ray 1942:110-112; Figure 360).

Single-pronged harpoons were widely used by the Wenatchi. This device consisted of a point, round in cross section, and of a separate two-piece wooden, horn (antler?), or bone butt, to which the point was seized. In the butt was a wedge-shaped socket into which the long shaft was fitted and from which it separated when the point lodged in a fish (Ray 1942:112; see Figure 437). V-shaped or two-pronged spears with points of hardwood firmly fixed to a foreshaft which was, in turn, bound to a shaft were also put to use in fishing (Ray 1942:112-113; Figure 470). Three-pronged spears—leisters—were employed in night fishing for small fish and sometimes even for salmon. The side elements were fitted with inside, retrograde barbs of bone or mountain goat horn; the center point was of hardwood or of deer, elk, or bear bone. This unit was lashed to a foreshaft into which the main shaft fitted (Ray 1942:113; Figure 490).

Fish were also shot with three-pronged arrows and sometimes were even caught in the hands from the shore or when wading. Occasionally trout were poisoned (Ray 1942:114). The active ingredient of the poison is not identified by Ray.

To improve a Wenatchi fisherman's chances of success, a shade was constructed on the bank to throw the fishing spot into shadow. Torches were used at night in canoe fishing and fires were sometimes kindled on the beach nearby (Ray 1942:113-114).

In addition to the fishing implements proper, other material culture objects were associated with Wenatchi fishing activities. Woven maple or willow bark baskets served as fish creels. Special rod-shaped clubs were used in dispatching fish; eels, however, were killed by being bitten (Ray 1942:114, 115).

The preparation of salmon among the Wenatchi involved cutting the sides off the fish with an unhafted stone knife and hanging the flesh, spread open with cross-sticks, from a pole to dry. Salmon eggs were dried and stored in salmon skin or hide containers (Ray 1942:134-135).

The first salmon ceremony was celebrated by the Wenatchi only for Chinook salmon. The fish were taken

in a regular trap placed in a community weir. In anticipation of the coming salmon, two shamans prayed while watching the weir at night and with the arrival of the fish supervised the ceremony. In a ritual manner, the stomachs were removed and discarded; the heads, tails, and backbones were separated; the backbones were broken, not cut; and the fish were roasted. Finally, the fish were eaten by the chief and the young and old men (Ray 1942:115-116).

Among the Wenatchi, the bones of salmon as a class had to be thrown back into water (Ray 1942:129). River water was ritually drunk as "salmon soup." Eels were cut open under water (Ray 1942:140), which I assume was a ritual requirement rather than a response to some more prosaic and practical consideration.

Freshwater clams were eaten by the Wenatchi, either boiled or cooked in an earth oven. The meat, strung on a circular string or kept on a stick, was dried for later consumption (Ray 1942:135-136).

Hunting

Game contributed importantly to the Wenatchi food supply. Skillful hunters sometimes gained special esteem and to some degree men specialized in hunting particular animals (Ray 1942:123).

Although there are no ethnographic data that address the point head-on, hunting would appear on all available evidence to have been even more significant as a subsistence activity among the Chelan than among the Wenatchi, precisely because fish, especially anadromous types, plainly contributed considerably less to their food resources. To some degree it must have been a year-round Chelan pursuit, both near the lake and especially up in the surrounding mountains. Ray's (1974a:419-423) village/camp catalog for the Chelan (see below) mentions that certain specific settlements were considered excellent spring hunting bases (e.g., village 10) and others especially fine summer hunting centers (e.g., villages 11, 12). Even one village-camp location on the Columbia River just north of Navarre Coulee was close to mountains where hunting was good.

Large game included deer as the most important animal to the Wenatchi, but also elk, antelope, mountain goat, bighorn sheep, and brown and grizzly bear (Ray 1942:116-117). For the Chelan more specifically we have the following ethnographic and historical notes regarding the animals native to their territorial ecosystems:

- Natively and still in the early 1890s, "an astounding amount of game" was to be found in the Lake Chelan area. "Grouse, deer, mountain goat, [black] bear, and even cougar were often seen." Grizzly bear and bighorn sheep also lived around the lake. (Durham 1972:18; Byrd in Durham 1972:18 fn. 33, quoting early sources.) A few specifics are recorded in the following paragraphs.
- Beside the Columbia River, several deer were observed by Ross (1966:139) in late August, 1811, at his evening camp located below the Chelan River mouth at the head of the rapids which I provisionally equate with Symons' boulder and bar rapids (see above).
- In the Lake Chelan sector, informant data indicate that some deer were hunted by the Chelan on the unwooded peninsula and in the adjacent shore areas in the vicinity of the Chelan village near the present town of Manson (village 5 in the roster below) (Ray 1974a:421).
- The lake region was evidently marvelous mountain goat country. They are mentioned ethnographically in a way that implies that they comprised a particularly significant resource of the Chelan (Teit 1928:113). The large village at the foot of Lake Chelan (1 in the village-camp roster below) was "an important goat hunting base" (Ray 1936:141). Teit (1928:113, 116) reports the Chelan use of goat wool in weaving robes.
- Mountain goats are among the figures represented at the prehistoric pictograph site at the head of Lake Chelan (Cain 1950:15; Durham 1972:24; Byrd in Durham 1972:24 fn. 52; Lyman 1899:195).
- Mountain goats were still so numerous in the early 1890s that "they seemed inexhaustible" (Byrd in Durham 1972:18 fn. 35). In 1891 Durham (1972:18-19) wrote after a steamer trip up the lake:

> Far up the mountain sides are beheld numerous bands of . . . goats [looking] down upon us from their dizzy heights. . . . When the first settlers went upon the lake, one could row all day long without losing sight of large bands. It was no uncommon occurrence to count 100 of these goats in a single band, and large numbers of them were shot from row boats, often falling over the cliffs into the water.
>
> A settler . . , who has taken a place at Fish Creek Point, 50 miles up the lake, killed 50 during this past winter . . . . The meat of the kids is considered a delicacy, but . . . [not so] a piece of salt billy-goat. . . . .
>
> [Between] the lake and the Methow, . . . they are occasionally seen . . . in bands of 300 and 400.

- On the northeast side of the lake at about the halfway point are two mountains bearing the official names of Little Goat Mountain and Big Goat Mountain (USGS *Concrete* quadrangle 1955). In the late 1890s, Lyman (1899:198) observed, a great many goats still lived on their crags. From these heights their paths, quite like cattle trails, descended to the lake water.

- Bighorn sheep are confirmed ethnohistorically for Chelan territory by David Thompson's (1914:42; Glover 1962:345) journal entry of July 7, 1811: canoeing down the Columbia, he sighted his first bighorn sheep since leaving Kettle Falls, as it looked down upon him from a riverside cliff, when he reached the Beebe sector just upstream from the Chelan River mouth (see Smith 1983:26). Significant or not, he mentions no other sheep downriver while he was still in the Plateau.
- Bighorn sheep appear to be attested to likewise by Ross' (1966:139) observation, on August 26, 1811, of an "ibex, the white musk goat" while nighting at the rapids referred to in the deer item above. Although mountain goat were common in traditional Chelan territory (see above), I regard this sighting as probably that of a sheep, presumably female, rather than a goat, primarily because the latter were typically animals of the lofty, craggy mountains (e.g., Dalquest 1948:407).
- Bighorn sheep are reported to be depicted in the pictographs at the upper end of Lake Chelan referred to in the mountain goat section above (Cain 1950:15; Byrd in Durham 1972:18 fn. 33, 24 fn. 52).
- These native sheep were often mentioned by the very early travelers and settlers in the Lake Chelan region. They must, however, "have been very quickly wiped out" (Byrd in Durham 1972:18 fn. 33, quoting 1892 and 1893 records).
- Bear—black, I assume—were taken by the Chelan living in their village near the site of Manson (village 5) (Ray 1974a:421).
- Grizzly bear, according to Byrd (in Durham 1972:18 fn. 33) were "fairly common" in the Lake Chelan region; specimens weighing as much as 800 pounds were not unusual.
- Cougars were to be found back in the mountains (Durham 1972:18). Byrd (in Durham 1972:22) reproduces a photograph of a large animal killed in 1907 in the upper Lake Chelan country.
- Lynx occurred in the Lake Chelan area (Byrd in Durham 1972:27).

Given the hunting patterns of the Plateau in general and of the eastern Cascades tribes in particular, it must be assumed that all of the preceding animals were considered fair game by the Chelan. Caribou and moose are reported to have been absent in traditional times in Wenatchi country (Ray 1942:116). The nonoccurrence of these two animals in the Wenatchee drainage—as well as in Chelan country—as native species is confirmed by Dalquest (1948:403, 404).

Rabbits were the most significant of the smaller animals from the Wenatchi point of view; raccoons, beaver, and ground hogs were also hunted to some extent (Ray 1942:117, 118, 123, 166). For the Chelan explicitly we have only the following ethnographic notes:

- Small game was taken near the outlet of Lake Chelan and near Manson on the lake shore, and muskrats and other small animals were caught at Wapato Lake (Ray 1974a:420-421). It would be surprising if they were not hunted or trapped throughout Chelan country, but the fragmentary ethnographic data fail to so state.
- Marmots were hunted by the Chelan. From their skins robes were fashioned. (Teit 1928:116)

The above few references to game animals in Chelan country are largely random and anecdotal, only secondarily ethnographic. In any case they obviously present a very superficial, incomplete, and sometimes only inferential listing of the native mammalian fauna. It is informative, therefore, to check and extend these observations by comparing them with the zoological assessment of the indigenous mammalian forms of the Chelan homeland to be found in the final Park-use section of this Chelan summary.

Waterfowl—ducks and sometimes geese—were taken by the Wenatchi, but apparently played a minor role in the subsistence resources of the tribe (Ray 1942:116-117). Grouse were secured and surely eaten, though the bird is mentioned in the ethnographic literature, to my knowledge, only as a source of feathers used in stuffing pillows (Ray 1942:179). The Chelan use of water and other birds is unknown.

Certain animals and birds were avoided as food by both sexes among the Wenatchi. This list includes the coyote, wolf, mink, and land otter, though foxes were eaten. Among the birds, the buzzard, raven, crow, and eagle were regarded as inedible. Reptiles, frogs, and grasshoppers—as well as insects in general—were considered noncomestibles. Children were expected to avoid eating mammal fetuses, fawns, blood, the meat near the kidneys, and deer heads (Ray 1942:130-131).

Among the Wenatchi, animals were hunted both by group methods and by men hunting individually. Group hunts, directed by a leader, included surrounding the game, driving it into natural enclosures, and forcing it through narrow passes where it could be easily shot (Ray 1942:117).

Individual Wenatchi hunters stalked animals with bow and arrow or club, ran game down in brush or, wearing snowshoes, in snow, and drove them into pitfalls. Hibernating bear, skunks, and raccoons were smoked out of their dens. Grizzly bears were killed by thrusting in their open mouth a bone with the two ends sharpened. Beavers were clubbed or snared by their feet. Ground hogs were occasionally hunted with the aid of dogs (Ray 1942:117, 118, 119, 123).

Deadfalls were used for smaller game; pitfalls for larger animals and sometimes also for smaller species.

Deer head disguises were not in use among the Wenatchi, but white fur was employed in some manner (not explained by Ray) to attract mountain goats (Ray 1942:121, 122).

Grouse and quail were caught by the Wenatchi with spring pole snares set on logs. Land fowl were shot from blinds and were killed with slings. Eagles were taken from their nest, plucked of the feathers desired, and returned to their nest to be taken again later (Ray 1942:121-122, 123).

We know little about secondary or ancillary hunting procedures followed by the Wenatchi for particular animals. It is reported, however, that in bear hunting, the man dropped dust to test the wind and, when after beaver, the hunter "spoke to" the animal or "called it out" (Ray 1942:123).

In view of the importance of hunting among the Wenatchi, it is not surprising that certain tabus and ritual mandates associated with hunting activities were observed and a number of simple ceremonial practices were followed. Those cited in the ethnographic literature surely represent only a small fraction of the total number, particularly since many must have been observed at no more than the individual hunter, family, or small group level. Further, these cultural prescriptions and proscriptions were without question to a degree dynamic: some old practices disappeared as new ones were developed or borrowed and as rituals practiced by a few gained in favor while others lost their following. But concerning such changes through time among the Wenatchi we know little or nothing. The following are the general tabus, prescriptions, and ceremonial observances listed by Ray (1942:127-130) for the tribe.

A Wenatchi man sweated in his sweat lodge before departing on a hunt and remained continent both before and during the hunt. While the hunt was underway, the activities of his wife were restricted, though in precisely what ways is not described by Ray.

The pursuit of deer, bear, and mountain goat especially called for ritual observances.

(a) Before leaving on a deer hunt, a man was expected to announce his intention and to seek success by securing a lucky piece of some sort from some old man. On the other hand, the animal, once killed, received little special treatment, except that its eyes were broken "to prevent revivification," and the meat was brought into the dwelling through the back. Unlike the practice in other Plateau tribes, the meat could be given away while the game was being brought back to camp, the fresh meat was allowed to touch the ground and to be stepped over, the cooked meat could be taken out of the dwelling, and the heart could be eaten by the hunter (Ray 1942:128-129).
(b) Before departing to hunt the brown bear, the hunter prepared ceremonially by being continent, sweating, and perhaps announcing his hunting plans. While hunting he sang to the bear. After a kill, he sang or talked to the dead animal and wept for it, calling it his brother. At the place of the kill, he removed the eyes and sinew below the tongue, to be given later to an old person, lest the "dead animal . . . lick all [the] fat off." The head was eaten by the hunter, who invited friends to join him. Finally the skull was set up, although precisely how and where are not described (Ray 1942:129).
(c) The head of a mountain goat had to be sprinkled with down and cooked by roasting. No one could step over it (Ray 1942:127).

Plant Collecting

Vegetable foods played an important role in the Wenatchi diet. The details, however, are scandalously thin.

Roots were extensively used among the Wenatchi as a food resource, in particular camas and bitterroot. To some extent, wild onions were also dug and eaten. (Ray 1942:131, 137, 138, 139)

For the Chelan specifically I have identified the following meager data:

- When on August 27, 1811, Alexander Ross (1966:139-140) visited the Chelan group on the Columbia a short distance above the Chelan River entrance, he received from them some roots to eat.
- Root gathering grounds were located on the unforested peninsula and in the adjacent shore areas near the Chelan camp in the Manson sector and apparently on the south side of the lake opposite Green's Landing (camps 5 and 12 in the village/camp inventory). The root collecting country on Badger Mountain east of the Columbia River was visited for roots by the Chelan from the river village near Navarre Coulee. Doubtless there were other root gathering areas in Chelan country, but these are the only ones mentioned by Ray (1974a:421-423) in his Chelan settlement roster.
- Apparently bitterroot was either particularly abundant in Chelan country or of exceptional quality, for one of the Sanpoil-Nespelem terms for the Chelan was "bitterroot people" (Ray 1932:11). This is much as the Kalispel were designated by the Nez Perce "camas people" (Curtis 1911 8:163) and as the Spokan division of the Little Spokane River were called by other Salishan groups "steelhead trout people" (Ray 1936:122) and the Lakes of the Arrow Lakes region "(a small speckled fish of the lakes) people" (Ray 1936:11).

Digging sticks of the Wenatchi were of serviceberry wood with a cross-wise handle of wood, deer antler, or mountain goat horn (Ray 1942:145).

Because berries contributed importantly to the subsistence base of Plateau peoples in general, it must be assumed that this was equally true of the Wenatchi—and Chelan—but, except for the mention of chokecherries, Ray (1942:132, 136, 138, 139, 161) provides no specific Wenatchi data on the fruit gathered and the nature of their use. That they were significant, however, as a food resource is indirectly indicated by the Wenatchi practice of first-fruit ceremonies for berries (Ray 1942:133).

That the Chelan gathered berries as a food resource is clear enough, but beyond this unexceptional fact little relevant information has yet been found in the ethnographic and historical sources.

- In late August, 1811, Ross (1966:139-140) received berries—as well as salmon and roots—from the Chelan group, a few miles upstream from the Chelan River confluence, with which he spent the afternoon and night.
- On October 5, 1881, while visiting the area at the foot of Lake Chelan, Symons (1882:41) observed an old Indian woman, "who had been to some point up the lake," now returning home with a large basket of elderberries on her head. Unquestionably she was from a Chelan camp in the neighborhood, through Symons saw none where he was at the lake outlet, quite probably because the "beautiful bunch-grass-covered plateau" where the lake narrowed into the Chelan River had been wholly taken over by government troops in the spring of 1880 (Symons 1882:40).
- According to Ray's (1974a:421) Chelan informant, abundantly yielding berry grounds existed in traditional times in the vicinity of Willow Point on the north side of Lake Chelan.

Stems were widely used by the Wenatchi, as was the cambium layer of the lodgepole pine. This "sap" was removed with a deer-rib scraper or one of a curved, slat-like piece of wood and was then cleaned with grass.

Seeds—specifically those secured from pine cones and sunflowers—were eaten by the Wenatchi to some extent. The seeds were struck from the plants with beaters made of rawhide on a willow frame. The pits of chokecherries, as well as the pulp itself, and occasionally acorns were likewise consumed. (Ray 1942:131-132, 161)

- In Chelan country sunflowers—like berries—grew especially prolifically in the vicinity of Willow Point, giving their name to the year-round village located there (Ray 1974a:421). Ray is not explicit on the matter, yet implies that these plants were a source of food, undoubtedly their seeds. If the plants were, as I suspect, balsamroot (*Balsamorhiza sagittata*), their roots, young shoots, and bud-stems as well as seeds may well have been eaten as was common among the Indian groups of the southern interior and drier parts of British Columbia (Turner 1978:115-116).

Among the Wenatchi, pine nuts and tree lichen were also a part of the food supply (Ray 1942:137, 138, 139).

Food Preparation and Meal Patterns

Food among the Wenatchi was boiled with hot stones in a woven basket or a dugout wooden vessel, steamed in an earth oven, or roasted on sticks inclined toward the fire (Ray 1942:136-137).

The earth oven was used for bear and deer meat, for wild onions and especially camas, for pine nuts, and for lichen. In this steaming process, a layer of skunk cabbage leaves was placed under the food to be cooked and layers of these same leaves and rye grass were spread above the food. Water was poured inside the pile to generate additional steam and a fire was kindled on top. (Ray 1942:137-138)

Pulverized meat was mixed with camas and with salmon eggs and chokecherries. Animal bones were boiled to make soup. Blood was boiled in tripe with berries and then dried and stored for subsequent eating. (Ray 1942:136, 138, 139)

Sunflower seeds were parched on hot rocks. Whole chokecherries and pine nuts were mascerated. Before being prepared as food, acorns, which as noted above, were not much eaten, were buried in mud to leach them. And certain foods (surely plant foods like seeds) were processed with flat, eliptical basketry sifters. (Ray 1942:136, 137, 139, 161)

Bark baskets were used by the Wenatchi to carry water. Spoons with rounded bowls were fashioned of mountain goat (not bighorn sheep) horn and others, with a short handle, were made of maple or alder. Spatulas of willow wood and clamshell spoons with wooden handles were used as eating utensils. Woven basketry ladles, paddle-shaped food stirrers of wood or an animal rib, basketry dishes and dishes of cedar or alder, and folded cedar-bark bowls also served as cooking and eating implements. Meals were served on mats spread on the ground. Cedar bark was used as napkins. (Ray 1942:140-142, 176)

Food Ceremonialism

Consistent with the degree to which vagaries of the weather and more subtle factors affected the availability of game and the abundance of fish and plant foods, the Wenatchi possessed a body of ceremonials

designed to soften these influences or even turn them to their advantage.

Rituals were held for the first berries and roots to be harvested during the growing season. Similar rites were carried out for deer, although at what times and under what conditions are not stated. (Ray 1942:133)

Wenatchi ceremonials for plant products are described by Ray (1942:133) as follows, if I understand his synoptic trait list entries. The rite for a particular plant was initiated by the ritual leaders, two or three in number, collecting the edible plant parts when they first appeared in their proper stage of development. These specially gathered materials were prepared and eaten in a feast, the shamans eating first. Before the celebration of this ritual each season, these plant parts were strictly tabued as food (Ray 1942:133-134).

In addition to these seasonal rites, special ceremonial recognition was given to the first animal killed by a boy and the first fish caught by him. Similarly with the first roots gathered by a girl. The ritual was a simple one, consisting of a feast held in the child's home. The food obtained by the child was not eaten by the child but only by older people. (Ray 1942:134)

Technology

A number of general manufacturing techniques not associated among the Wenatchi with a single class of objects and also several multipurpose tools and utensils can best be described in this general technology section.

Wood working was accomplished among the Wenatchi with the aid of a number of comparatively specialized tools. Straight wedges, of mountain goat horn with a unilateral bevel or of cherrywood, were used in splitting wood. Both straight chisels and curved ones of horn were in use. Spool-shaped mauls, one-piece elk antler hammers, and elbow adzes consisting of a stone blade attached to a handle fashioned of a natural fork of a tree were other common Wenatchi tools. All-purpose knives of obsidian and carving knives of wood or stone were also among the implements in the Wenatchi kit (Ray 1942:145-147).

Mortars were of wood and were oblong in shape, running either parallel with or across the grain. Stone mortars are reported to have been unknown. On the other hand, pestles, tapered in shape, were of stone, wooden devices to serve this purpose not having been employed by the Wenatchi. (Ray 1942:142-143)

In Wenatchi country, matting was twined with tules as the stiff element. It was also fabricated by sewing rushes together into a single layer surface and providing it with a "willow twined edge." The sewing was accomplished with a curved, 18-inch, hardwood needle with an eye in the distal end. Mats were also woven in a checkerboard pattern. (Ray 1942:160, 163) Matting was fashioned by the Chelan from tules and cattails (Ray 1974a:421).

Cordage was made by the Wenatchi of willow, Indian hemp, animal hair, and sinew. The fibers were first scraped with a bone tool and drawn through a split stick to remove the excess and unwanted material. They were then rolled into cord by the women, using their thighs as the stationary surface. Indian hemp was also braided into cordage. (Ray 1942:161-163)

Coiled, twined, and twilled baskets were woven by the Wenatchi, the first of these types being the most extensively used. Coiled baskets were made on a bundle foundation and were ornamented with imbrication with buffalo grass, bear grass, cedar bark, or cherry bark. The design elements applied to the exterior surface of the basket in the imbrication process were colored with dyes obtained from alder and Oregon grape roots and by placing the elements in mud (Ray 1942:159-160).

Twined baskets, constructed of Indian hemp, included an openwork type and a flexible, round bottom variety. Other twined baskets fashioned of willow strands or rushes were used by the Wenatchi to store articles (and also food?). Details of the twilled baskets are unreported. Cedar split baskets and baskets of rushes were woven in checkerboard patterns. (Ray 1942:160, 161) Among the Chelan, baskets were made of tules and cattails (Ray 1974a:421). Surely other materials were used as well, but these are not mentioned in the casual references in the fragmentary ethnographic literature.

Wenatchi fire drills were of a single piece of wood and were fitted into a hearth consisting of a piece of cottonwood, pine root, or willow root. Fire was also kindled by percussion with a piece of flint. Tongs were made of two pieces of wood, perhaps bound together at the handle end (Ray 1942:143-144).

Weapons

Weapons among the Wenatchi consisted of bows and arrows and of clubs. Spears, daggers, and shields and armor are reported to have been unknown. (Ray 1942:148-154)

Three types of bows were in use: the self bow (the wooden bow alone), the sinew-backed bow (with sinew glued to its back to increase its strength), and the compound bow. The first two types were made of syringa wood taken from the protected side of the tree. They were about 4 feet long, were narrow and eliptical in cross section, and had recurved ends. The grip, sometimes constricted, was wrapped with buckskin. They were provided with a string shock absorber. The compound bow was constructed by splicing together pieces of

bighorn sheep horn; concerning this bow variety little is known. The Wenatchi bowstring was of two-ply sinew (Ray 1942:148-149).

Among the Wenatchi, the wooden arrow shaft was straightened with hands and teeth and perhaps sometimes with a perforated wooden straightener used as a wrench. It was polished with sand or with a sandstone abrader, and customarily painted or charred spirally. Its butt end was notched to receive the bow string. The shaft was fletched with three half-feathers from an eagle, placed with the back of each quill against the arrow wood, and fixed in place with a wrapping of pitched sinew. The feathers were trimmed, evenly for short arrows and longer at the butt end for longer shafts. The point varied in material and form depending on the use to which the arrow was to be put. That of the basic hunting arrow was of flint or obsidian; bone and shell heads were unknown. Untipped but sharpened shafts were used for birds and rabbits. Arrows with a blunt or occasionally knobbed head also served as bird arrows. Three-headed arrows were fishing devices. Compound arrows, constructed of two pieces, perhaps of wood and stiff grass though this is not clear, were used in shooting birds and rabbits. (Ray 1942:149-151)

Poison is reported to have been applied to the point for grizzly bears alone (Ray 1942:151). Whether this substance, whatever its nature, was in fact physiologically active or merely magically effective may be questioned.

In shooting, the bow was held diagonally by the Wenatchi and drawn with the "primary release" (Ray 1942:149, 151): i.e., the string was pinched between thumb and forefinger, the remaining fingers held free of the string.

The quiver, carried on the back not at the side, was fashioned of an uncut raccoon, coyote, or otter hide or of a cut and sewed bear skin (Ray 1942:151-152).

Wenatchi clubs, their only other weapon, were of stone, apparently unshaped, or of hemlock wood with a knobbed head (Ray 1942:152).

Clothing

The dressing of skins among the Wenatchi was an important women's task. When a hide was to be prepared without the hair, it was first soaked in a pool to loosen the hair and then, placed over a slanting log, was scraped to remove the dark outer layer of skin and the hair. The tool used in this operation was a deer leg bone instrument or a stone scraper fashioned of a piece of schist. The skin was cured with animal brains. Then, stretched over a frame if it were large, it was rubbed with a hafted stone instrument to stretch it. Finally it was hung from a pole over a small fire, its edges weighted down with small stones, and smoked to render it waterproof. Skins were colored with the aid of pulverized roots. Bear, coyote, and wolf skins were tanned by the Wenatchi with their hair left intact (Ray 1942:124-126).

Wenatchi men wore a breechclout and shirt, leggings, a headband and cap, and mittens, in part according to the season.

The breechclout, a year-round item of clothing, was of buckskin or of skin with the fur left intact. The shirt was fashioned of two deer skins, one for the front and one for the back, tied at the sides, and cut so as to provide short sleeves. Leggings, of thigh length, were worn with the fur outside and only in winter. The fur headband is not described; in some manner, however, it symbolized the man's guardian spirit. Coyote or badger caps and caps made of eagle or duck skins were part of the male garb. Mittens, fashioned with the thumb separate from the rest of the hand, were constructed so the fur was worn inside. (Ray 1942:164-168)

Women among the Wenatchi wore a skirt and dress, leggings, and a basketry hat. The skirt, a one-piece garment, was of shredded bark or sagebrush fiber. The dress, a two-buckskin gown as with the men's shirt, had short, unsewed sleeves and was adorned with applique ornamentation. Leggings of buckskin were either of half-knee length or of knee length. Basket hats with a chin strap were fabricated by the wrapped twining technique. (Ray 1942:164-167)

Some items of Wenatchi clothing were worn by both sexes. This was the case with the cape, robe, and moccasins. The cape was of unsquared fur, fastened over the shoulder, or was a square garment woven of shredded bark or occasionally of rushes, fastened around the neck and over the shoulders. The robe consisted of raccoon skins sewed together, of rabbit skins woven together by hand, or of mountain goat wool woven on the fixed loom.

In regard to robes, we have two specific Chelan references. First, the Chelan, most particularly among the Middle Columbia Salish, wore blankets of mountain goat wool. Their special use of this garment is explained by the fact that the tribe "lived near the habitat of the goat." And second, "Marmot robes, woven goat's-wool robes, and woven rabbit-skin robes, were much used by the . . . Chelan" as well as by the Wenatchi. (Teit 1928:113, 116)

The moccasins, worn daily throughout the year, were of one piece with a side seam, fashioned of tanned deer or sometimes bison skin or made of bison skin with the hair left on. They were fitted to the foot with a front drawstring. (Ray 1942:167-168)

Body Care and Ornamentation

Men plucked the hair of the forehead to raise and square-off the hairline. Although sometimes allowing the hair to fall loosely, men generally plaited it into three braids, one in back and one on each side. Women wore only the two side plaits, tying the lower ends with a thong. Both sexes spread bear oil over the hair and, according to Ray, plastered it with white clay, although I would be surprised if this was a daily treatment. The hair was dressed with a hardwood comb. The eyebrows were also plucked to improve their appearance (Ray 1942:169-170).

The sweatbath, described elsewhere, was considered among the Wenatchi as a means for caring for the body properly (Ray 1942:170).

Among the cosmetics in use among the Wenatchi was tallow obtained from deer, mountain goat, and bear. This substance was, in fact, not only employed in this way, but also as a protective covering for the face and body. Whether marrow was likewise applied as a cosmetic is uncertain, for Ray's data are contradictory. At one point he unambiguously states that marrow was extracted by the Wenatchi from animal bones and used as a cosmetic and hair oil (Ray 1942:136) and at another place in this same culture element survey he (Ray 1942:172) indicates that "marrow (buffalo, deer)" was not employed as a cosmetic by the Wenatchi.

Intentional flattening of the forehead was not a Wenatchi practice, according to Ray (1942:171), nor was the nasal septum pierced. On the first of these points, I believe Ray to be correct: the Wenatchi were just to the north of the uprivermost Plateau groups of the Middle Columbia that practiced head deformation—a lower Columbia Valley trait—in protohistoric times and even then to a most minor degree. In the case of the septum perforation, on the other hand, the memory of Ray's Wenatchi informants seems faulty. When on July 7, 1811, David Thompson (1914:54), the first Euroamerican known to have traveled through the Middle Columbia area, stopped to smoke with the Indians at Rock Island, he reported in his diary entry of that day that "many of these people, like the others, have shells in their noses." For whatever reason, he had not encountered native groups in the Chelan and Wenatchi sectors (Smith 1983), but he had just visited both Sanpoil-Nespelem and Methow Indians on the Columbia upriver (Thompson 1914:44-52). Evidently he was referring to these groups when he wrote "like the others." If these people both above and below the Chelan and Wenatchi wore nasal septum ornaments, it is reasonable to assume that they were likewise a custom among the Chelan and Wenatchi. Apparently this form of adornment lost favor very quickly—not only in the Wenatchi area but certainly among the Nez Perce (Smith 1985) and Kalispel (Smith 1936-1938)—after the beginning of the nineteenth century and the appearance of the first Whites in the region.

The ear lobe among the Wenatchi was pierced to receive decorative shell pendants. Ornaments also included necklaces and bracelets. The former were of bone beads and just possibly of dentalia and of claws or animal teeth; others of trade beads were also in fashion. Bracelets, worn by women around their wrist, consisted of strings of shells, bent rib bones, and trade beads. (Ray 1942:171-173)

Facial painting was a Wenatchi form of decoration (Ray 1942:172).

The Settlement

In this section are described the residential and associated structures of the Wenatchi and of the Chelan where data are available, the traditional villages and camps of the Chelan in terms of their location and other details, and the structural components of the customary settlement.

Dwellings and Associated Structures

Wenatchi dwelling types and their furnishings and the ancillary sweat lodge are detailed in the following pages, with notes relating specifically to the Chelan where these exist. Unfortunately, information on other structural forms—e.g., food drying racks, caches, menstrual lodges, and ceremonial structures—that must have stood with the living units in the typical Wenatchi (and Chelan) community is lacking.

Dwellings

The Wenatchi long, winter dwelling, set in a pit about 1 foot deep, was constructed with parallel sides and rounded ends. It varied from about 18 to as much as 80 feet in length and from 14 to 20 feet in width. In cross section it was shaped like an inverted V, the two sides sloping straight from the ridge to the ground. The frame consisted of pairs of inclined pole-rafters set into the ground, the tops of each pair crossed and bound to the two ridge poles that ran the length of the structure. Down the sides the rafter pairs were also united by several longitudinal poles, to which they were lashed with willow cordage. This frame was covered with overlapping courses of mats of sewn tules, each mat tied to the poles. Against the outside surface of the lowest mat course, grass was piled to a height of about 3 feet and then covered with earth. The space between the two ridge poles

was left open along the entire length of the structure. Directly under it ran a center aisle of bare earth, on each side of which were the living areas with floors covered with rush mats. Along this middle walkway strip were placed the fires, each in a shallow pit; each fire served two families, one on either side of the dwelling. Storage for food and various articles was provided in the rounded ends of the structure; for personal belongings between the walls and rafters; and for firewood alone on the floor. The interior space was entirely without partitions. Entrance to the house was through a door at one end or one at each end, or occasionally one on one side. The bottom of this entrance was raised about 6 inches above the ground; the opening was closed with a hanging tule mat. Immediately inside this doorway was a short aisle, with walls of some sort, leading to an interior door which opened into the dwelling area proper and the end of the center, unmatted walkway. The end storage areas already noted were on the two sides of the end aisle partitions. This structure among the Wenatchi was exclusively a winter shelter: with the end of the cold season, it was generally dismantled and the poles and tule mats were stored until late in the following autumn. (Ray 1942:174-176)

In addition to the long mat lodge, the Wenatchi lived in semisubterranean lodges during the winter season. This dwelling, reported to have been an "old-type" structure, was constructed over a pit about 4 feet deep and 15 to 20 feet in diameter. The roof, conical or pyramidal in form, was framed with radiating poles with a pitch of 20 degrees or more. Over these poles was spread brush and mats and sometimes planks and over these materials a layer of earth. The dwelling entrance was at the side of the roof, sometimes at ground level but generally by way of a tunnel provided with steps. The floor was covered with grass and mats. (Ray 1942:177-178)

This semisubterranean structure was sometimes erected over a square pit, in which case the roof assumed a square shape at the ground level. Otherwise its construction was identical to that of the circular type, including the tunnel entrance. (Ray 1942:177-178)

Chelan use of these winter dwellings is substantially confirmed by Teit (1928:114):

> The underground house or semi-underground earth-covered lodge was used by nearly all the Columbia Salish [presumably including the Chelan] in the winter-time, because it was considered warm and very economical of firewood. It seems that they were constructed in the same way as among the Thompson, only the great majority had the entrance on one side, generally the south or sunny side, or the side towards the river or the water. Ascent and descent were by a short ladder or notched log. A few had entrance only through the smoke-hole, and a long ladder like the common kind among the Thompson.

It seems that these were used chiefly in the north among the Wenatchi. This final statement is ambiguous, inasmuch as Teit employs "Wenatchi" both for the Methow, Chelan, Entiat, and Wenatchi as a group and for the Wenatchi proper. Because of his locational qualifier—"in the north"—I assume that in this instance the term is used in the broader sense and that the statement applies to—particularly to—the Chelan and Methow.

All but one of the traditional Chelan winter villages in the Lake Chelan area listed by Ray (see below) are specifically described as having included semisubterranean dwellings. For the three Chelan villages along the Columbia explicitly designated as winter communities no data regarding house form are recorded; this is, however, probably nothing more than a field inquiry oversight, the bulk of the information on these Columbia River settlements having been collected in the 1930s before the Lake Chelan data were acquired.

As a mobile shelter, the Wenatchi made use of the conical mat lodge, about 14 feet in diameter (Ray 1942:179).

A flat-topped structure with a roof of willow matting served as a temporary shelter (Ray 1942:179). Presumably it was erected at warm weather fishing sites, if we can extrapolate from the pattern among the Sanpoil-Nespelem (Ray 1932:34-35), Southern Okanogan (Post and Commons in Spier 1938:41), and other nearby groups.

Among the Chelan cattails and tules saw service in "house-building" (Ray 1974a:421). Presumably this was at least in the mats used as structure covers and in various ways as interior furnishings, but these details are not reported.

Concerning the objects within the Wenatchi dwellng to take care of daily chores and to make life comfortable, we have only the following scraps of information.

Drying racks were hung the house framework (Ray 1942;180), but whether to dry food, wet objects like clothing, or something still different is not reported.

Pillows were bags, sometimes of buckskin, filled with grass or grouse feathers, Blankets were made of mountain goat wool, rolled into cordage on the thigh, and woved with a spindle on a simple fixed loom. Other blankets were fashioned of strips of rabbit skin, but the fabrication process is not described. (Ray 1942:163-164, 179)

Sweat Lodge

The Wenatchi sweat lodge was of the "Plains type." A frame of willow branches, hemispherical in shape, was constructed over a circular pit about 1 foot deep. This frame was covered with mats or grass and then completely with earth. A square entrance and closed with a hanging mat. The floor was grass-covered except for a round pit to receive the hot rocks, when the lodge was in use, at the right side of the entrance or in the center in large lodges. Outside was the fire pit in which the rocks were heated.

The lodge was occupied by one person at a time, Ray reports. Still, it seems that this cannot have been invariably true, for, as stated above, there were larger lodges among the Wenatchi—those with the fire rock pit in their center—which must surely have been used by more than one person at the same time. In use, water was thrown on the rocks to generate the hot steam. While sweating, a person prayed to the sweat lodge, addressing it as "grandfather" and regarding it sometimes as a deity, and sang his sweat house songs. One could swear at any time during the day, but invariably visited the lodge before hunting or gambling. A period if sweating was always followed by a cold plunge, for which reason the lodge was always located near fresh water.

Women never used the men's sweat lodges, but had their own structures built identically to those of the men.

All sweating structures were owned by the entire camp or village and were communally used for curing and purification, as well as a means of maintaining body cleanliness. (Ray 1942:170, 180-182)

Mud baths of some sort were also used by the Wenatchi (Ray 1942:182).

Parturition and Menstrual Shelters

In both summer and winter, Wenatchi women gave birth in structures erected for this specific purpose (Ray 1942:193). Though not described in the ethnographic literature, they were presumably shelters of some sort, located in a semi-secluded area close to the village or camp.

A special hut was also constructed away from the community for a girl at the time of her first menses. Menstrual structures were also sometimes used during subsequent periods in preference to seclusion within the family dwelling. (Ray 1942:202, 206)

Residental and Task Sites

A roster of traditional Chelan villages and camps was secured from native informants by Ray (1974a:420-423), apparently in the late 1940s. This supplements and greatly extends the brief list obtained by him in the early 1930s (Ray 1936:141-142). In the mid-1800s George Gibbs (1860) compiled a limited settlement inventory, unfortunately not available to me. From this register, however, Ray extracts a few ethnographic data to add to his own field settlement records.

To my knowledge, no integrated descriptions of the various biogeoclimatic features considered desirable by the Chelan in selecting their winter village and summer camp sites—as opposed to their short occupancy task-oriented sites—is to be found in the ethnographic literature. Nevertheless, from the rather casual and certainly incomplete comments of Ray's informants concerning the merits and disadvantages of certain of the residential localities listed in his roster, it is possible to arrive at some of these features. How they would have been ranked by the Chelan in terms of their individual importance is, unfortunately, uncertain.

(a) Criteria for winter villages:

- A level surface.
- A south-facing exposure for warmth.
- Pretection from cold winds that blew up the lake in winter.
- An open point or headland. (This appears to be in some conflict with the preceding.)
- A nearby beach that collected large amounts of driftwood which "originated in the heavily wooded areas up the lake." From these sources came firewood without having to cut it up and carry it far.
- Grazing areas for horses.
- Early snow melting in the spring, allowing favorable spring hunting to replenish food stores depleted during the winter.

(b) Criteria for summer camps:

- Nearby hunting areas for large game and small animals.
- Fishing sites in the vicinity.
- Productive root grounds, berry patches, and sunflower areas nearby.
- Nearby sources of various technological materials: e.g., cattails and tules for baskets, matting, etc.
- Large open meadows where horses could graze and athletic contests could take place.

In the list reproduced below, Chelan villages and camps on the Columbia River are excluded as probably too distant from the Park Complex and too oriented toward the river and its vicinity to be of material relevance.

However, the 13 settlements known to Ray to have been situated on the Lake Chelan shores are all included and their data summarized in the list below. It is reasonable to suggest that people from all of these made use to a greater or lesser extent of the subsistence and other resources of the upper end of the lake and its bordering mountains, the area within the limits of Lake Chelan National Recreation Area. In fact, even the most distant of these villages—that at the foot of the lake (1 below)—was no more than about 46 lake miles from where the Park line now crosses the lake.

Ray (1974a:419) refers to a map on which he locates these settlement sites in his Indian Claims Commission document; unfortunately this map was not printed in 1974 with his descriptive report. Further, only one Lake Chelan village is located on his earlier native villages and groupings map (Ray 1936:119 Figure 5); this is the first village in the list below. I have attempted, however, to place Ray's camps and villages as accurately as possible from his locational data (Figure 4-3).

It should be noted that the locations provided by Ray in terms of highways, town sites, and other cultural features of Western life are as of the 1950s, when Ray conducted his village field research among the Chelan. And further, that by "summer settlement" or "summer camp" in the following camp and village series I mean a population group that occupied a particular site during the summer or, by extension, some other part or even all of the warmer seasons.

The 13 ethnographically reported Lake Chelan communities are the following. Further details regarding some of them can be found in Ray's (1936:141-142; 1974a:420-423) roster.

1. yɛnmusi'tsa
   (a) At lower end of Lake Chelan. Shown on Ray's (1936:119 Figure 5) site map to have been located on the lake shore just south of the outlet through Chelan River.
   (b) winter village: one of the largest of the Chelan with many semisubterranean dwellings. Population c. 100 persons.
   (c) Summer camp: larger population than in winter; a popular sports area because of large and open meadows.
   (d) Horses were pastured in vicinity. Some fish—but no salmon—and smaller game were taken here. An important mountain goat hunting base according to Ray's (1936:141) early data, a fact, however, not repeated in his 1974 summary.

2. ?
   (a) On open point extending out into lake, 3/10 mile NW of junction of highway 10C, on N side of Lake Chelan, and Gold Creek road.
   (b) Small winter village consisting of a few semisubterranean dwellings.

3. stcho'pas (Gibbs' name)
   (a) On open headland on N side of Lake Chelan, 7/10 mile NW of junction of highway 10C and Gold Creek road. Gibbs appears to list this same village.
   (b) Large winter village with many semisubterranean dwellings, the remains of which were largely under water in late 1940s owing to elevation of lake level in 1928. Population c. 100 persons.
   (c) Large summer camp. Ray implies population about same as in winter.

4. ?
   (a) On N side of Lake Chelan at lower end of town of Manson.
   (b) Small winter village of three or four semisubterranean dwellings.

5. qɛ'sɛ'm
   (a) On neck of peninsula known as Wapato Point, adjacent to town of Manson.
   (b) Winter village of dozens of underground dwellings, some quite large. Population was considerable. Well protected from cold winds which blew up the lake in winter and well provided with beach driftwood for firewood.
   (c) Summer camp.
   (d) Nearby grazing areas for horses, small root grounds, and a hunting area for small game and some deer and bear.

6. naqwa'st, "deep lake"
   (a) At Wapato Lake on NE side of Lake Chelan.
   (c) Summer settlement of c. 50 persons.
   (d) Tules and cattails profuse, gathered for basketry, matting, and dwelling-building. Muskrats were trapped and other small game taken.

7. pi`pi'ku'lu
   (a) On Willow Point on N side of lake.

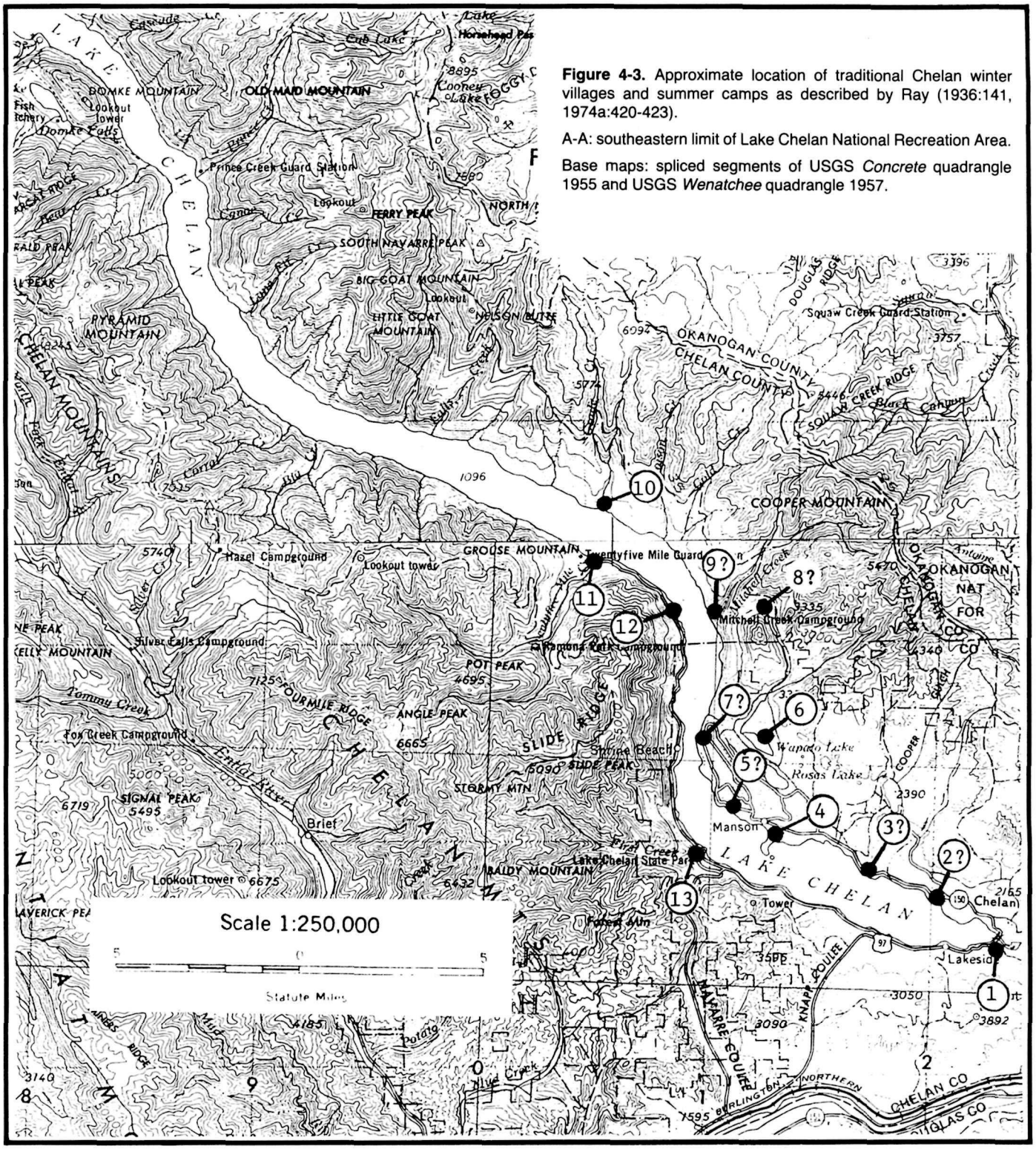


Figure 4-3. Approximate location of traditional Chelan winter villages and summer camps as described by Ray (1936:141, 1974a:420-423).

A-A: southeastern limit of Lake Chelan National Recreation Area.

Base maps: spliced segments of USGS *Concrete* quadrangle 1955 and USGS *Wenatchee* quadrangle 1957.

(b) Very large winter village with many semisubterranean dwellings. Population probably reached c. 500 persons.
(c) Very large summer settlement.
(d) Advantages similar to those of village 5 above. Also sunflowers and berries grew profusely nearby.

8. qatq̓a′t
(a) At Dry Lakes NW of Willow Point.
(c) Small summer settlement averaging c. 40 people.

9. qwatcα′n
(a) At Green's Landing on N side of Lake Chelan.
(b) Winter village with semisubterranean dwellings. Population c. 60 to 80 persons.
(c) Summer settlement.

10. loqtcι′n
(a) Mouth of Grade Creek, N side of Lake Chelan.
(c) Several dwellings occupied through spring, summer, and autumn; average population c. 40-60 persons.
(d) A popular location for spring hunting since the snow melted early here and driftwood was abundant. The small area of level land occupied by the settlement was all underwater in the later 1940s.

11. squatnaɬi′lu (=Gibbs' "skwutnatliilwhu")
(a) At mouth of Twentyfive Mile Creek, S side of Lake Chelan, the largest stream flowing into lower half of lake on either side. Gibbs mistakenly locates this camp on N side of lake.
(c) Summer settlement with varying population.
(d) Base for excellent hunting in adjacent mountains.

12. loq̓*ϵ′nq (* indicates a handwritten phonetic character that I cannot read)
(a) Below a granite slide on S side of Lake Chelan, opposite Green's Landing.
(c) Small summer hunting and gathering camp.

13. ?
(a) At mouth of First Creek on Indian Point, a peninsula occupied by a state park.
(b) Only winter village on S side of Lake Chelan, this north slope being generally too cold in winter. Population c. 50 persons.
(c) Summer settlement. Population c. 50 people.

To the above settlement roster may be appended a few notes of particular interest:

- In 1880 the military established its Camp Chelan on the lake shore "just where the lake narrows into the creek [Chelan River], on a beautiful bunch-grass-covered plateau on the north bank." Though dwellings, a sawmill, and other facilities were constructed there, the post was abandoned prior to October of 1881, an action taken primarily because of the "terrible road getting down to the [Columbia] river from the Great Plain on the east, . . ; the crossing of the [Columbia] river where there was quite a swift current; and the ascent of the hill to the lake. (Symons 1882:40; see also Byrd in Durham 1972:1 fn. 4, 3, 5 fn. 10, 17). In 1899 the Chelan townsite was laid out where the Camp had been located (Byrd in Durham 1972:1 fn. 4). It would be of interest to discover why the Chelan chose the *south* side of the outlet for their winter quarters (village 1 above), assuming that Ray has it correctly plotted, not the north side selected by the first Whites for their settlements.
- When, prior to 1886, the Indians were given an opportunity to secure allotments of one section each on the lake, thirteen families—called Wapato Indians in the early literature from Joe (or Jack) Wapato, their headman—they chose to settle in the area described by Durham (1972:9) thus:

> Ten or 12 miles from its mouth the lake boldly bends to the north, and laying in the elbow thus encircled upon the north shore of the lake, and extending from a point nearly opposite Chelan to the shore of the lake after it bends northward, lies the extensive lands of the Wapato Indians, . . . [T]hey have managed to acquire the cream of the lands upon the north shore of the lake."

Evidently this area included the sites of the aboriginal villages 2-5 and perhaps 6 in the preceding listing. Durham's envious characterization of the qualities of this piece of land tells us something about the Chelan selection of village locations. So also does the fact that, if village 1 (just outside the area described by Durham) and camp 6 are included in the tabulation, then about one-half of the ethnographically reported, aboriginal Chelan settlements on the lake were located on this small segment of the lake borders and approximately one-half of the Chelan population at the lake occupied these communities (Smith 1983:320).

These allotment Indians appear to have been of mixed Chelan and Entiat affiliation. At least Byrd (in

Durham 1972:9 fn. 19, 10, 11 fns. 20 and 21) describes these thirteen families as a "group of Okanogan Indians . . . [and] a more or less separate settled faming branch of the Chelan-Entiat Indians." And he adds that Joe Wapato, the chief of this "Chelan (Entiat) branch of the Okanogan Indians," was born "in the Entiat Valley" about 1826.

- Some of the properties of the area at the entrance of First Creek that made it suitable for Chelan village and camp location 13 are suggested by the fact that on the low bench by the creek mouth J. W. Stevenson, from Ohio, settled about 1888. By 1892 he had a thriving farm of 160 acres, irrigated from the creek, in fine vegetables and fruit trees. (Brett in Stone 1983:62)

From these settlement data it is apparent that, so far as the informants of Ray (and evidently of Gibbs also) were concerned, no Chelan winter villages or even summer camps of any extended use were located on the shores of Lake Chelan above the winter villages on Grade Creek on the north side (village 10 above) and on Twentyfive Mile Creek on the south side (village 11 above). Thus the nearest ethnographically established communities to the southern limits of the Lake Chelan National Recreation Area were about 28 miles down the lake. From this point downward to the lake foot, especially along the north shore, winter and summer settlements clustered rather thickly.

Settlement population estimates are, of course, nothing more than memory approximations, doubtless more important for suggesting the relative size of communities than their actual average occupant numbers. But working with these rough figures, we find that the population of the winter villages totals about 1,185 persons. Thus in the third quarter of the nineteenth century a substantial number of Chelan considered the Lake Chelan region their homeland, perhaps five times as many as wintered along the Columbia River (Smith 1983:319-320).

In contrast to the winter population of approximately 1,185 people, the "summer" population around the lake shores during the 1850 period computes, from Ray's (1974a:420-423) individual community estimates, to about 990 persons. Assuming that a difference of this magnitude is fundamentally real, what happened to the Lake Chelan village folk when the snow left the ground and the country opened up? As noted in the subsistence section above, they surely scattered into the hills around the lake—presumably to some extent even its upper regions—to hunt game and secure early roots and other seasonal vegetable resources. In summer, some clearly occupied the summer camps reported in the above roster. But others (like some from the village of yɛnmusi'tsà [1 above] to which Ray [1936:141] makes specific reference) went down to the Columbia to fish for salmon; yet not many could have moved in this direction—unless there was largely countervailing movement of river folk up to the lake—for the summer population of the Chelan settlements on the Columbia seems to have been only about 230 persons, about five more than in the winter villages. Still others presumably continued in small groups to utilize the stream and mountain subsistence resources of the lake slopes away from the established summer communities, not excluding the resources far up the lake. Fall evidently saw the same kind of population dispersion that characterized the spring season, then to exploit the food sources available at that period.

In short, though the evidence is largely circumstantial, resting on relevant comparative ethnographic data for better-known nearby Plateau tribes, it appears that, at least during the last 150 years, the Park region was unoccupied by Chelan in winter but surely was utilized to some unknown extent as subsistence grounds during the warmer seasons. Quite possibly, if appropriate sites exist along the lake shores above Grade and Twenty-five Mile Creeks, winter villages were maintained at some of these localities in earlier times and an even greater exploitation of the food and other resources of the upper lake flanks occurred. For it can hardly be doubted that the Chelan population in, say, 1850 was smaller by some significant measure than in the precontact and perhaps even early postcontact times. The terrible epidemics of smallpox and other Western diseases that are widely reported in the early historic documents of the Northwest (beginning with the journals of Lewis and Clark [e.g., Thwaites 1969 4:241]) and in the ethnographic studies of the Plateau and contiguous regions (see, e.g., Teit 1928:97-98; Ray 1932:21-22; Walters in Spier 1938:73-74) attest to their devastating effects on the native groups of the area.

Whatever the case for winter villages, there were certainly a number of localities along the lake, even at and near the upper end where the rocky cliffs generally rise steeply from the lake side, where temporary, warmer season camps could be made. About 1890 Isaac Tillinghast (in Stone 1983:50-51, 54-57) reported that outdoorsmen were then accustomed to take the steamer from the foot of Lake Chelan to the lake head, with their boats towed behind, and then rowed "their way back, about ten miles per day, camping along the shore, usually at the mouth of some one of the numerous creeks which are frequently found coming down from the mountains." He himself encamped for several days at the mouth of Fish Creek, living on deer and grouse killed in the area and on large trout taken in the lake. This must have been in the immediate vicinity of where J. R. Moore settled in 1889 or 1890 on what came to be known as Moore's Point (Byrd in Durham 1972:13, 18 fn. 34; see community of "Moore" on USGS *Concrete* quadrangle 1955). In the late 1890s Lyman (1899:198) stated that Railroad Creek was then one of the finest locations on the lake for hunting, fishing, and camping. If in his

day Whites pitched camp in the immediate creek vicinity and found game and fish resources nearby, it can be considered a certainty that the traditional Chelan had done likewise.

Village and Camp Arrangement

Little is known concerning the typical physical arrangement of the Wenatchi village and camp and the spatial positioning of their structural components. The ethnographic data reveal only that the long, mat-covered winter dwellings were constructed in a line with one end of each house facing the prevailing wind. And that special birthing and menstrual shelters were positioned in secluded areas outside but near the villages and camps. (Ray 1942:176, 193, 202, 206).

Relevant information is wholly lacking for the Chelan.

Domestic and Tamed Animals

Domestic animals were limited among the Wenatchi to native dogs, which were numerous. They are said to have been large and to have had heavy hair. Beyond the fact that they were named and were sometimes used in hunting ground hogs, we know little about how they were cared for and used. They were not eaten, as, in fact, they were not so far as is known among any tribes of the American Columbian Plateau. (Ray 1942:123-124)

Horses reached the Wenatchi about the middle of the eighteenth century or possibly a trifle earlier (Haines 1938:430). Two localities in Chelan territory are reported, on informant testimony, as having been horse grazing areas: one at the large village near the outlet of Lake Chelan and the other at Wapato Point on the north shore of the lake near the town of Manson (villages 1 and 5 in my Chelan village/camp listing; see above) (Ray 1974a:421). The first of Ray's two localities is evidently that described by Symons (1882:40): ". . . just where the lake [Chelan] narrows into the creek [Chelan River] . . . [is] a beautiful bunch-grass-covered plateau on the north bank, stretching back about a mile to the rocky and timbered hills." It was on this surface, as reported above, that the military constructed Camp Chelan in 1880.

Certain of the wild animals of the Wenatchi area were sometimes kept as pets. Specifically reported are bears while young, raccoons, and birds, these last kept inside the dwelling. (Ray 1942:124)

Travel, Transportation, and Intertribal Relations

In fully traditional times goods in Wenatchi territory were transported on foot or with the aid of canoes.

Objects were carried in squares of deerskin or matting, in conical rawhide bags with wooden hoops, and possibly lashed to a snowshoe as a pack frame. When burdens were borne on the back, packstraps were put to use. Some were of buckskin with a fur headpiece and others were twined of small tules or Indian hemp. These straps were worn around the head or the chest depending on the circumstance, and were used by both men and women. (Ray 1942:147-148)

The Wenatchi canoe was a pine or cedar dugout, a watercraft extensively used by the tribe; the bark canoe was not in use. The tree from which the craft was to be fashioned was felled by burning and then hollowed out by burning with hot rocks and chiseling. The shape of the canoe is not described. Within the tribe some men were specialist canoe makers who sold the products of their labors. The canoe was propelled by paddles and poles. Paddles were fashioned of a single piece of cedar and shaped with a long handle with a plain, unenlarged butt and a pointed blade. They were sometimes oiled and occasionally charred. Where circumstances dictated, the canoe was pushed ahead with a small fir pole with a charred point. Canoes were rid of unwanted water with a paddle or with a flat, coiled basket or hafted alder bark bailer. Stones answered the purpose of an anchor. (Ray 1942:154-158)

Dugout canoes were also a Chelan watercraft to judge from what is known of their distribution in the central western Plateau—among the Klikitat, Tenino, Umatilla, Kittitas, Wenatchi, Southern Okanagan, and Sanpoil-Nespelem (Teit 1928:120; Ray 1936:118-119; 1942:154; Post and Commons in Spier 1938:56)—and from the following data fragment.

- In the summer of 1879 Symons (1882:39-40) was paddled up Lake Chelan by the old Chelan chief and his son, who, I gather, were then living at the principal village of the tribe, situated on the Columbia River about one mile upstream from the Chelan River mouth. The trip, which took him up the lake for a distance of about 24 miles, was made in a Chelan dugout canoe.

Evidently canoes were of limited winter use on Lake Chelan—at least in some winters and in some sections of the lake. In a discussion of early dam-building efforts in the area, it is incidentally observed that in January, 1893, "the lake . . . [was] frozen over a foot thick above Wapato Point for six miles for over a month" (Byrd in Durham 1972:2 fn. 6).

Rafts of logs lashed together with willow bindings were used by the Wenatchi on lakes (Ray 1942:156).

Wenatchi snowshoes consisted of a maple frame bent into what is described as a "comet shape." The netting, woven with a loop mesh, was of willow withe, Indian hemp, or deer rawhide. Oval shaped snowshoes were used only by children. Toboggans were employed in winter for hauling loads. (Ray 1942:158-159)

Trails

Markings of some sort were placed by the Wenatchi along trails (Ray 1942:190), presumably to identify the route, although this is not explicitly stated. Possibly some signs were intended to convey to following groups immediately relevant, specific information: e.g., the direction taken, the presence of friends nearby, the location of meat hung-up closeby for their use, the occurrence of a recent death, or some such news. Such marks were widely used in the Plateau.

Trails between the Chelan country and the territories of their neighbors are on occasion alluded to in the ethnographic and historical literature, but usually only in terms so general that their courses cannot be followed in detail. Barring those that led from the left bank of the Columbia more or less eastward into the Basin area—like that or those to Badger Mountain—four principal trail patterns out of the Chelan homeland can be discerned.

(1) A trail ran from the Chelan River mouth north along the west side of the Columbia to the Methow Valley and south following the Columbia to the Entiat and Wenatchi countries.

- This was the path followed by Alexander Ross (1956:21-31) on horseback in April, 1814, en route from the confluence of the Okanogan to the Kittitas area of the upper Yakima Valley. He returned northward by this same route. (See ethnohistorical section above.)
- In April, 1827, Edward Ermatinger (1912:74), in a Hudson's Bay brigade, passed up the Columbia River (see earlier section). The group's single boat was inadequate to transport the full party, forcing some members to walk along the Columbia riverside. On the fourth, they trekked upstream to the brigade's evening camp "a league" above the Chelan River confluence, finding during the day "a good deal of snow on the hills." The following day these walkers continued up the trail to Fort Okanagan. Assuming the camp of the fourth was on the west side of the Columbia as Ermatinger's Chelan River statement implies, the foot travelers surely proceeded up this right bank trail. In any event, they certainly walked through the entire Chelan country along a river path.
- The northern segment of this trail, from just upstream from the Chelan River entrance, was traveled, also on horseback, by John Work in August, 1828 (see above).
- It was likewise the route taken in late September of 1853 by the McClellan party of the Stevens (1855) railroad survey, when it rode up the Columbia from the Wenatchee country to the Okanogan. This group, however, leaving the riverbank route, ascended what I believe to have been Knapp Coulee to Lake Chelan and then, after following the lake shore for a short distance, passed in a generally easterly or northeasterly direction back to the Columbia Valley.

The most detailed early descriptions of this riverside trail are provided by George McClellan (in Stevens 1855:196) and two of his staff, J. K. Duncan (in Stevens 1855:212-213) and especially J. F. Minter (in Stevens 1855:382-383), when they followed the Columbia northward in 1853, as noted in the preceding paragraph. Coalescing these three accounts and deriving rough topographic details from the 1881 field sketch map of Symons (1882:map 14) and the USGS *Wenatchee* (1957) and USGS *Ritzville* (1853) quadrangles for the trail segments immediately above and below the Chelan River mouth, around which the survey team detoured, one emerges with the following picture.

- Upstream from the Chelan River confluence, the trail led along a level terrace, climbed to a very high, bunch-grass plateau, and then descended by a steep sandy slope to the Columbia bottom, which it followed for about eight miles to the Methow River. Evidently there were no notable trail hindrances on this route.
- The trail to the south was substantially more troublesome. For much of the distance from the Chelan mouth to Knapp Coulee, the maps suggest, it hugged the river with precipitous cliffs on the right. From the mouth of a ravine which I equate with Knapp Coulee, however, the McClellan party provides topographic details, which I summarize in reverse order, since these travelers came up the Columbia. From this coulee to the Entiat River the trial ran along relatively level terraces, at times very close to the water and now and again interrupted by mountain spurs, where the path became very narrow, tortuous and dangerous. One of these spurs was just downstream from the coulee; the other, a particularly threatening elevated mass where the party lost four mules, two killed and two seriously injured, was about three miles above the confluence of the Entiat River. From the Entiat to the Wenatchee, the trail was again generally on a level terrace, broken by occasional rocky spurs, one near the Wenatchee River being especially hazardous.

To how great an extent this north-south riverbank trail was used by the Chelan in prehorse days when heading upriver to visit Methow and Southern Okanogan and when journeying southward to the Entiat and Wenatchi country is unknown: parties may well have gone largely by canoe particularly when heading southward, in preference to undertaking the trip on foot. It may be presumed that at least after the horse was acquired, this land trail saw more extensive use.

Similarly, how often this riverside route was followed in preequine times by groups to the north of the Chelan—again primarily the Methow and Southern Okanagan—when descending the Columbia to the Chelan River and perhaps also the lower Lake Chelan areas or when passing through the Chelan sector to the Entiat and Wenatchi regions downriver is unclear. The same may be said of the Entiat and Wenatchi when heading north on the river bank. For what it is worth, however, we are told that long ago the Middle Columbia Salish had few canoes (Teit 1928:120) and the same for the Southern Okanagan (Post and Commons in Spier 1938:56). Whether this represents a reduction in canoe use following the appearance of the horse or is equally descriptive of the preequine period is not certain. But if approximately correct, it can only signify that much of what north-south movement occurred along the Columbia was by foot. To the degree that these journeys involved the Chelan territory, this river bank trail must have been the one followed.

(2) At least one and probably more trails led northeasterly from Lake Chelan across the Methow Mountains to the upper and middle Methow Valley.

- One of these old Indian trails was followed—or attempted to be followed—by Alexander Ross (1956:36-42) in August, 1814, when making his futile attempt to discover a route from the Okanogan Valley to Puget Sound. As mentioned above, his path was so winding and difficult that, in spite of his efforts to describe it in detail, it cannot be traced with certainty after leaving the lower Methow River line. Most who have tried to identify his path, it appears, have him ascending the Twisp River, crossing the watershed via Twisp Pass, and so, with great travail, reaching the upper Stehekin region. While his Okanagan guide described the route as that used frequently in the past by Okanagan in traveling to the Skagit country, he was plainly not familiar with its precise course. There is also the suggestion that in recent years it had fallen into disuse and so had already become in Ross' day poorly marked, assisting his guide in going astray.
- In late September and early October, 1853, McClellan (in Stevens 1855:197), Minter (in Stevens 1855:383-384), and others in a party left Fort Okanagan to explore a possible Methow River railroad route, having been informed by the fort personnel that "there was a good foot trail leading up . . . [the Methow] valley and over to the sound." No mention is made of guides, although it appears that they must have had some Indian assistance. According to the McClellan-Minter accounts, the party went over very high hills, first sandy and bunch-grass covered and then pine forested, to the Methow at a point about four miles below the Twisp mouth. It ascended this short section of the Methow and turned up the Twisp for about 11.5 miles to a point where "the stream forked, the north fork rising a few miles farther on in a high, bare ridge of granitic mountains; the south fork, Nahai-el-ix-on, coming down a narrow and precipitous ravine." Riding up this ravine, the party discovered that the route soon became impassable for animals, forcing it to proceed on foot, an effort that was soon abandoned. "The trail," McClellan remarks, "is said to pass from this ravine, over a very difficult country, to the stream emptying into the head of Lake Chelan, then to cross very steep and lofty mountains at the head of the stream, and finally to reach the Skagitt river on the western slope." In view of this remark, which has the appearance of being guide-derived, it is a shame that I cannot yet identify the "Nahai-el-ix-on."

  For this ravine side stream there seem to be two plausible identifications:

  (a) Minter underestimated his distance of 11.5 miles and his party actually ascended the Twisp some 14 miles to the mouth of War Creek and then proceeded up that stream, as Pierce appears to have 30 years later (see next item). McClellan's statement that the Nahai-el-ix-on gave access to the river [surely the Stehekin] at the upper end of Lake Chelan and with the mountain pass at its head suggests a lateral creek at least as far up the Twisp as War Creek. That this Nahai-el-ix-on or South Fork was, in fact, War Creek—a possibility occurring to me on the basis of a close reading of McClellan's field record—seems to be accepted by Beckey (1981:280 fn. 25) as an established fact. McClellan appears to have found his cross-montane trail more difficult in its lowest reaches than Pierce later did his War Creek transit. Perhaps during the intervening three decades the route improved to some degree. On the other hand, McClellan was obviously one who went up into the mountains reluctantly, remained there the shortest time possible, avoided snow at every opportunity, and in general magnified the difficulties of his travel (cf. Overmeyer 1941:36 fn. 129, 57, 59, 60).

  (b) McClellan misidentified this major forking of the Twisp. Believing himself higher in the Twisp drainage than in fact he was, he broke away from the river at about 11.5 miles at or in the neighborhood of Eagle Creek. If this was the case, he would have found, had he managed to follow his Eagle Creek route over

what seems to be relatively gentle higher slopes to an open, 7,000 foot saddle in the Sawtooth Range, that his path did not lead to the Stehekin. Rather it descended the comparatively gradual inclines of the North Fork of Fish Creek to Lake Chelan some 7 miles below its head, in the neighborhood of the community of Moore (USGS *Concrete* quadrangle 1955). Perhaps there would have been serious problems with such a route beyond McClellan's turning point that are not apparent from my topographic maps (e.g., like a dense forest cover or flinty stones that damage horses' feet), but Pierce's trail was likewise not without its difficulties (see below). At the moment a Fish Creek-Eagle Creek path, to reverse the travel direction and place it in a Chelan perspective, seems like a possible Lake Chelan-Methow Valley trail, although leaving the lake shore somewhat below the Stehekin mouth and hence perhaps a rather uncommon point of departure for Chelan heading northeast to the Methow. If this was in fact McClellan's trail, both the extreme difficulties he experienced in horse travel and the apparent non-Stehekin destination of the route (not McClellan's intended objective) raise questions about the trail knowledge of McClellan's assumed Indian guide.

- In August, 1882, Lt. Henry Pierce (1973:13-18, map; Stone 1983; 12-17) traveled from the Okanogan Valley over the mountains to Lake Chelan. Because he was guided along the latter part of his journey by a Chelan Indian and because he describes his route as an old Indian trail, the path followed by his party is of particular interest.

  As I plot his line of progress from his careful descriptive statements and his fine sketch map and match these data against those of the USGS *Concrete* (1955) and *Okanogan* (1954) quadrangles, he ascended the small creek—his Kate Creek but unnamed on the *Okanogan* quadrangle—that reaches the Okanogan River near Malott. Riding over his Morrow Pass, he reached Downing (Chiliwist) Creek and, following "a well-worn trail westward," crossed the mountains to Baldwin (Benson) Creek. Along a route "free from obstructions, broad, well-defined, and shorter" than anticipated, he proceeded along the north side of this stream to near its confluence with the Methow River, there cutting off across the hills to the mouth of Backus (Beaver) Creek. Here he was visited by a Chelan woman and three men of the tribe. To take the place of the Okanogan guide who had led him thus far, he engaged the services of one of these Chelan men to point the way to Lake Chelan.

  Moving up the Methow to the Twisp, a distance of some 5 miles by his estimate, and then, by "a good trail," up the north side of the latter, he reached a point where the Twisp divided into a North Fork (still the Twisp today) and a West Fork, which I identify with War Creek on the basis of his map and approximate mileage data. Here the western fork path deteriorated at once into:

  > an exceedingly obscure, difficult trail, over recent windfalls, huge moss- grown logs, masses of broken rocks from the adjacent cliffs, through marshes and jungles of trailing alders . . . [of seventeen miles] to near the summit of a high divide. Without the Indian our journey would have been scarcely possible. . . . The tents were pitched [for the night] near the crest of the divide, . . . The last mile of our march was by a badly defined zigzag path up a steep, grassy declivity, where the animals found great trouble in securing a foothold. (Pierce 1973:16-17)

  Here, at the source of the West Fork, the trail was lost. Nevertheless, he crossed two divides close upon one another and then descended the steep mountain on a serpentine path, some 9 miles long, "along the back of a narrow, rugged spur," which must have been in the Boulder Creek area, and then down an almost perpendicular slope, knee-deep in a mixture of ashes and sharp rock fragments and "constantly threatened by bowlders tumbling from above." He reached the Stehekin just above its mouth. The continuation of Pierce's travels up the Stehekin to the crest of the Cascades is summarized in section (4) below.

  On Pierce's testimony and considering the Chelan guide under whose direction he moved, this must have been a major Chelan trail from the upper end of Lake Chelan to the middle Methow and, beyond, to the Okanogan country. Surely the higher segment of the route was less obscure to the guide than to Pierce: high altitude paths in this area are characteristically ill-defined. Evidently also its difficulties to which Pierce alludes failed to prevent Chelan movement over it. That the Chelan guide and the three women with him were encountered on the Methow River just below the Twisp confluence suggests—but far from proves— that this group had themselves come over this same trail from Lake Chelan.

  It is of particular comparative interest that Pierce—like McClellan earlier—makes no mention of the traditional Methow villages and camps which Ray (1974b:map facing 450) reports to have existed in the Methow-Twisp area and even on the lower Twisp itself upriver to the War Creek sector. Evidently such Methow as survived into the early 1880s were no longer occupying this segment of their aboriginal country which was earlier important to their tribal life, any more than the Chelan, with the exception of the small "John Wapato" group, were still in the 1880s in their ethnographically known villages around the southern shores of Lake Chelan.

- When the mining potential of the Stehekin Valley was discovered and the news spread, miners came into the upper Lake Chelan country and then the Stehekin area "with pack animals via the Methow Valley" (Byrd in Durham 1972:23 fn. 51). The pass or passes over the Sawtooth Ridge followed by these men are not identified in my source, but it may be assumed that one or more of the old Indian routes were made use of.

(3) Routes must have led in a southwesterly direction from the Lake Chelan country over the Chelan Mountains to the Entiat Valley and on to the Wenatchee region. Yet for these I as yet have no data, ethnographic or historical.

(4) Trails ran over the Cascades, linking the Lake Chelan region and the Skagit River area. Evidently these were widely used in traditional times both by the Chelan and their nearby Plateau groups heading westward and by the Skagit and perhaps, to some extent, their neighboring tribes in journeying to the Plateau. The following are traditional instances of and general statements concerning such cross-mountain treks between the Chelan country and the Skagit by groups other than the Chelan, data that fail to specify the passes traversed:

- The second husband of the grandmother of one of Collins' (1974a:85) Upper Skagit informants in the 1940s had an Entiat cousin with two wives. When visiting in Skagit country, this man died. "The distance and traveling conditions were such that the two widows could not travel alone over the Cascades to their Plateau home." So the second husband married these two women as cowives of the informant's grandmother. Because between the upper part of the Entiat drainage and the Cascades crests lies a complex tangle of forests and very high mountains (USGS *Wenatchee* quadrangle 1957) with no obvious through routes, it appears probable that Entiat cross-mountain treks were undertaken either via the Railroad Creek to Suiattle Pass route (see below) or via the Upper Chelan area.
- The term "Stehekin," according to Byrd (in Durham 1972:16 fn. 30) who fails to cite his source, is said to be a Skagit word signifying roughly "the way we crossed through (the mountains)," and was a generic term for various cross-Cascades routes. Whether this derivation and translation rests on solid linguistic evidence or on folk etymology and is therefore of questionable validity, I do not yet know. A cursory review of Hess' (1976) massive Skagit dictionary has not been helpful on this point. But assuming a substantially accurate etymology, the term testifies to trails from Chelan over the Cascades to the upper Skagit sector.
- The grandfather of one of Collins' (1974a:152) Upper Skagit informants had learned a song at Lake Chelan. While the point is not made by Collins, one may assume that this occurred on a cross- mountain visit.

Evidently several trails led over the Cascades from Lake Chelan to the Skagit source streams. These appear to have included at least the following:

(a) A trail that crossed the mountains through Rainy Pass. I have not seen the approach from Lake Chelan outlined nor the descent from the saddle. But I presume that the path led from the upper Stehekin River up Bridge Creek to the mountain break and then down the Porcupine, Granite, and Ruby Creeks to the Skagit River at what is now the lower end of Ross Lake. For reasons cited in the Cascade Pass section below, Byrd (in Durham 1972:16 fn. 30) believes that this route was less frequently followed from the Lake Chelan region than the Ross and Suiattle Pass trails (see below).

(b) The trail via the Stehekin headwaters, Cascade Pass, and the North Fork of the Cascade River to the Cascade River proper and then to the Skagit. Whether the aboriginal route ran up the southwest side of the Stehekin or the northeast or varied from side to side depending on conditions, which may have shifted from season to season and year to year, I do not know. Perhaps there were well-used paths up both flanks of the river, at least in some localities. According to Byrd (in Durham 1972:9 fn. 18, 22 fn. 49), in the early 1890s the principal trail "began at the [Stehekin] mouth . . . near the Indian paintings and continued up the south side" for about 6.5 miles where it crossed to the north bank. Earlier, however, it had run from the lake up the north side, but this road became too difficult to travel above Rainbow Falls owing to large rock slides created by the river altering its course to the north flank of the valley.

The following either involved or appear to have involved this particular trail.

- In a tradition recorded by Collins (1974a:13-14) from an Upper Skagit informant, several persons, after a misunderstanding concerning a duck, fled "from Methow, from the eastern end of Lake Chelan," and traveled west to the head of Cascade River. Whether this tradition has any historical validity is irrelevant: it obviously reports as a non-central element travel over a very real trail. Also whether the group departed from the Methow River (and was Methow in affiliation) or from Lake Chelan (and was a Chelan party)—Collins appears not to be aware of the difference—is likewise of little significance here. What is of interest is the indication that a traditional intertribal route ran up Lake Chelan and the Stehekin Valley and then over a mountain break—seemingly Cascade Pass—to the headwaters of Cascade River.
- According to the Southern Okanagan (Walters in Spier 1938:78), the Chelan were friendly with the Skagit and made "annual visits across the mountains by way of Cascade Pass."

- In late August, 1882, after climbing over the Sawtooths from the Methow country (see section [2] above), Lt. Pierce (1973:18-22; Stone 1983:17-21) leading a small party and a pack train, crossed the Cascades watershed via Cascade Pass. According to Byrd (in Durham 1972:16 fn. 30), Pierce was one of the first Whites known to have made this Cascade Pass journey.

  The left side of the Stehekin about a mile above its mouth proved to be "a dense jungle of cottonwoods, willows, firs, and underbrush" with lagoons "of rush grass, ferns, and other marshy vegetation." Presumably still guided by the Chelan man whom he had recruited on the Methow though this is not made explicit, he left this "jungle" and moved up this northeastern side of the river along "a most imperfect trail" through dense underbrush, fallen trees, thickets, rock masses, and watery sloughs. He crossed a number of small streams and passed in sight of Rainbow Falls. As he approached Agnes Creek, still following the same river bank, the trail began to become indistinct, a condition that grew continually worse above the creek "by reason of rocky spaces and dense undergrowth where it hugged the stream." His night's camp of August 23 was made near "the junction of Backus and Symon's Forks," i.e., where Bridge Creek enters the Stehekin. The following day he forded Bridge Creek, characterizing it as "a strong, turbulent stream," the crossing of which "would be dangerous, if not impossible," earlier or later in the season. "Just above the ford" on Backus Creek, he writes, "was a rude bridge of drift-logs, joined with strips of cedar-bark, and ballasted with stones, built by the Indians, and doubtless often used by them instead of risking the formidable current." During this day's march of 12 miles up Symon's Fork (Stehekin River), Pierce moved along "a wretched foot-path," toiling and floundering through "almost impenetrable underbrush and swampy areas" as the trail grew constantly more troublesome. Fallen logs and other obstructions forced him at times to take to the creek bed. At the foot of the final ascent of the Cascades, he made an "indifferent camp" without grass for his animals. The path up to the pass was a "tiresome, zigzag trail," on which he met an old White miner, descending, who informed him that "the ascent [above] was impossible for packs" and that he had lost his best horse to the cliffs, its body joining "two others probably lost by Indians." The boggy, slippery slope caused several of Pierce's own mules to roll over with their cargoes some distance below his camp of this night, close under the summit. Two miserable days later (August 27) Pierce reached the mountain crest, but only after sending back most of his party and the animals whose progress had been blocked below. The final approach to the mountain saddle proved to be "comparatively easy" and the pass itself, in "a snow bank one-fourth of a mile in width," was discovered to be low.

  Pierce's descent to the west is summarized in the Skagit section of this report.

Obviously this careful account and accompanying excellent sketch map describe well and in detail the traditional Chelan trail from Lake Chelan to Cascade Pass as it existed in late summer of 1882 and as seen from the perspective of an Army officer, aided (and encumbered) by a support party and pack train. Of special interest is the bridge over Bridge Creek near its mouth. As Pierce observes, it would seem almost certainly to have been an Indian—presumably Chelan—bridge, partly because of its construction details, though modeled, I suspect, after White-built bridges seen outside of Chelan country perhaps in the Skagit River system, and partly because in Pierce's time there were still very few Westerners traveling this trail. It seems to imply a considerable amount of Indian travel over this route, while the conditions of the trail itself, as described so vividly by Pierce, might argue for relatively little Indian journeying at the time. The truth, I suggest, is, at least in part, that Indians customarily made do with a trail that Whites, with their pack trains, regarded as marginal to impassable.

- Seemingly Cascade Pass was negotiable on foot even when snow lay on the ground, though whether in full winter is another matter. During the ore boom in the Stehekin Valley in the early 1890s, some miners, wearing snowshoes, are said to have crossed over the mountains via this break in the high range. (Byrd in Durham 1972:23 fn. 51)

Because Byrd (in Durham 1972:16 fn. 30) in the early 1970s knew of no prehistoric artifact discoveries in the Stehekin Valley above High Bridge but "quite a few" there and downriver and also on the two cross-montane paths mentioned immediately below, he concluded that Cascade Pass, like Rainy Pass, though used in prehistoric times, was probably not the most important trail. (For more data, see Ross and Suiattle Pass entries immediately below.)

(c) A trail through Ross Pass. This ran up Stehekin River and then branched off up Agnes Creek, the South Fork of Agnes, and Spruce Creek to the mountain saddle. Thence down Sulphur Creek and the Suiattle River to the Sauk and at last the Skagit. (Cf. Byrd in Durham 1972:16 fn. 30). This is reported to have been much the shortest route from Lake Chelan to Puget Sound, and to have been the route recommended by "the 1870 railroad reconnaissance party of D. C. Linsley." In Byrd's (in Durham 1972:16 fn. 30) opinion, Ross Pass was apparently of greater importance in the prehistoric period than either Cascade Pass or Rainy Pass. This conclusion rests on the fact that, to his knowledge in the early 1970s, unlike the Stehekin Valley upstream

from High Bridge, "quite a few" Indian artifacts had been found in the immediate vicinity of the Bridge and "in the natural campground area just down valley from there, and some had been found along the Agnes Creek trail approach to Ross and Suiattle Passes." Whether more recent archaeological investigation of the upper Stehekin area has altered this picture, I do not know.

(d) A route through Suiattle Pass. There were evidently two approaches to this mountain crest crossing, one from the middle Stehekin River area and the other directly from Lake Chelan. The former was identical to that to Ross Pass, except that it followed the South Fork of Agnes Creek to its source below Suiattle Pass instead of turning off on Spruce Creek. The latter path ran from the west side of Lake Chelan up Railroad Creek to its headwaters at Suiattle Pass (cf. Byrd in Durham 1972:16 fn. 30). On the west face of the Cascades it apparently descended the Miners Creek Valley to the Suiattle River and on downstream as the route from Ross Pass. For reasons noted above, Byrd believes this "road" to have been, together with that through Ross Pass, a considerably more frequently used trail in prehistoric days than the more northern Rainy and Cascades routes.

In considering the extent to which these intertribal mountain routes were used in aboriginal times, the major population reductions suffered by the Plateau and coastal tribes—undoubtedly affecting the Chelan on the east and the Skagit on the west—must be remembered. Cross-montane travel must have been diminished, quite possibly greatly so. There were far fewer people to make the treks and to desire the products of other areas. Some level of social disorganization must have attended the loss of whole families and the disappearance of entire villages, elsewhere in the Northwest of virtually entire bands and tribes. About 1835 "only nine survivors remained of the Okanogan trading Indians" at Fort Okanagan and by 1883 "all that remained of the once fairly dense Indian population of the upper Methow Valley were the heaps of human bones in the open mass graves. No living Indian remained in the valley." (Byrd in Durham 1972:16 fn. 30) An understanding of the importance of limiting intergroup contacts to avoid contagion must have further discouraged travel and social intercourse. Data exist from other sectors of the Plateau that attest to the degree to which intertribal routes fell into disuse in the immediate precontact and early postcontact periods (see comments appended to my summary above of Alexander Ross' effort to cross the Cascades in 1814; also Smith [1986] for the Kalispel).

In addition to the above trails that, having their initial segments within Chelan territory, continued beyond to knit the Chelan into a larger geographical network of neighboring tribes, other trails must have existed in some numbers wholly within the Chelan boundaries: e.g., to take people to other Chelan communities on the lake shore, up the lake and flanking mountains to hunting regions, and to root and berry grounds. Perhaps most of those were relatively short, either because they followed the lake shore over comparatively level areas until they came to a precipitous lakeside cliff where a mountain spur reached the water, or they led from the lake shore up into the mountains nearby. The forbidding physical characteristics of the lake shores, especially in their middle and upper sectors, are briefly described in the following early comments:

- In 1853 McClellan (in Stevens 1855:196) described the lake as "shut in by high mountains, which leave no passage along its margin."
- In 1879 Symons (1882:40), who with a Colonel Merriam and two Chelan Indians paddled some 24 miles up the lake, observed: "The shores are in places exceedingly steep, the granite walls rising smooth and shiny, without a tree or blade of grass, for a thousand feet or more from the water's edge. . . . Merriam afterward went further up the lake, . . . At the extreme upper end he found solid vertical walls of rock, . . ."

Save under unusual conditions, it appears probable that, as with Symons' 1879 up-the-lake journey, canoe travel was less onerous and more convenient than foot travel along the lake margins. This hypothesis is supported by a remark made to George McClellan in 1883 by an Indian—Louis or Quiltanee, a Spokan according to McClellan—when they were on the Columbia River in the Chelan area: ". . . after paddling to the [upper] end of the lake [Chelan] the Indians used a 'steep & bad foot-trail' to the summit [of the Cascades] and . . . ½ days travelling more brings them to the Scatchet River'" (quoted by Overmeier [1941:41] from McClellan's unpublished journal; see also Beckey [1981:280 fn. 25] who spells the Indian name "Quiltanese"). Given the awesome topographic characteristics of much of the lake shore, it seems probable that canoes were significantly more important to the Chelan than to the Southern Okanagan and to the other Middle Columbia Salish tribes.

Beyond these putative lake trails, several routes tied the lake sector of Chelan country to its Columbia River area. Upriver from the head of Chelan River there were at least two paths:

- Leaving the lake side just north of the lake outlet, Minter (in Stevens [1855:383]) of the 1853 McClellan party writes, a trail passed "over a high, rolling country, and . . . [descended] a very steep hill into the Columbia valley, [a total distance of about 3 miles]. This descent is not rocky." This same path, it appears, is shown by Symons (1882:map 14) as running from the head of Chelan River in a generally northeasterly direction to the Columbia where it makes its sharp bend just upstream from Beebe (USGS *Ritzville* quadrangle 1953).
- A second route, according to Symons (1882:map 14) led almost due east from the north side of the lake outlet

to reach the Columbia roughly a mile downriver from Beebe. Here in the early 1880s was an important river crossing to the road that ran up the east bank of the river via McNeil Canyon.

On the southern side of Chelan River, at least two short trails linked Lake Chelan and with Columbia Valley:

- Breaking away from the lake shore just below the Chelan River source, this route circled the back side of the mountain on which the lookout tower is shown on the USGS *Wenatchee* quadrangle (1957) to strike the Columbia approximately a mile upstream from the sharp river bend in T.26N, R.22E.
- A separate route seems to be that followed by the McClellan party in 1853. Departing from the lake south of the head of Chelan River, this trail descended a valley to a steep ravine and then moved down this ravine to the Columbia (Minter in Stevens 1855:383). This route, reported to have been approximately 3.75 miles long, seem to have been down Knapp Coulee; the estimated mileage is too low for the valley to have been that of Navarre Coulee and the point of departure from the lakeside is much too near the lake outlet.

Why did the McClellan party make this detour up the southern trail to the lake, which in his unpublished Journal he terms the "Apq" (Overmeyer 1941:41 fn. 150), and then down the northern route back to the Columbia Valley? Doubtless they desired to inspect the lake shores as a possible railroad right-of-way into the Cascades to some pass over the mountains. But it may likewise be because they wished to avoid those traveling difficulties that appear to lie along the river between the Chelan River mouth and Knapp Coulee (see above). In this context it appears significant that the present highway (US 97) similarly by-passes this riverside segment by also swinging up to Lake Chelan.

Trade

Formal media of exchange were not part of the Wenatchi culture base. On the other hand, informal media were recognized: i.e., clamshell beads and occasionally dentalia. Typical measurements of strings of these objects were a fathom, half-fathom, and necklace. (Ray 1942:190)

As everywhere in the Plateau for which Ray (1942:190) reports data, the Wenatchi numerical system was of the decimal type.

To some extent the Chelan participated in trade with members of other tribes. The data in this regard are, however, very slender.

(a) Evidently no important intertribal rendezvous center existed within Chelan country: no localities like the fine fisheries of Kettle Falls and of the Wenatchee River mouth, both of which attracted during the salmon season large numbers of people from other tribes (Ray 1932:116), or like the highly productive root grounds in the Calispell Valley (Teit 1930:341; Smith 1936-1938) and in the Kittitas Valley (Ross 1956:22). Moreover, all of these areas provided camping sites for large groups. Nor was there in Chelan county any crossing or forking of important trails or other travel routes—like that at the mouth of the Okanogan River—which would have brought travelers in numbers into and out of their territory. It is not surprising, then, that we appear to have no data—e.g., general ethnographic or historical statements or case-like examples— to bring to bear on this question. Nevertheless, it is known that parties from tribes near the Chelan passed up and down the Columbia through Chelan country. For example, small parties of Sanpoil-Nespelem went downriver in their canoes in June to the Wenatchi fishery already referred to (Ray 1932:116), obviously moving through the Chelan area. The same may be said of the "small parties travelling up and down the river that . . . [were] responsible for the existence of . . . [the intertribal trading center at the Okanogan River mouth]. It formed a natural meeting point and a base of operations for those from the valley of the Okanogan and those from the upper Columbia" (Ray 1932:116). All travelers that approached this river center from down the Columbia—save for the Methow upstream from the Chelan and the more northern Columbia bands that lived across the Columbia just south of the Okanagan—surely used the water route in prehorse times through Chelan country. Because the Chelan were at peace with all these nearby peoples, it must be supposed that the travelers, on occasion, stopped, at least overnight, at Chelan river villages or camps, such as those enumerated by Ray (1936:141-142; 1974a:420-423). Yet, however reasonable in light of central Plateau cultural patterns, this remains conjectural.

(b) On the other hand, there are a few ethnographic notes reporting Chelan trade with other tribal peoples outside the Chelan borders, demonstrating that in this way the group was tied into the intertribal bartering network that linked the tribes of the central and southern Plateau and even brought them into direct or indirect contact with coastal groups.

- Each summer Chelan in some numbers traveled to Kettle Falls, on the border between Colville and Lakes territory. Because of visitors from many tribes, this gave the Chelan fine opportunities for trading

parfleches and bison robes from the Spokan and tanned buckskins and dried roots from the Sanpoil. In return, the Chelan traded shells and beads of coastal origin. (Ray 1932:116)

- At the Wenatchee River mouth, where an early summer weir was constructed, members of various tribal groups gathered to gamble and trade. There the Chelan met families from the Sanpoil, Columbia, Yakima, and other Plateau groups, even some parties from coastal tribes. Here the Chelan could secure buckskins, dried camas and bitterroots, hanks of hemp cord, and baskets from the Sanpoil visitors, and clamshell beads, dentalia, dried salmon and salmon eggs, and dried huckleberries from members of other tribes. (Ray 1932:116)
- Small trading parties from several neighboring tribes often encountered one another at the confluence of the Okanogan and exchanged news and traded as they passed up and down the river (Ray 1932:116). Although I know of no ethnographic data that detail Chelan participation in these activities, it would be unreasonable to suppose that they did not, given the proximity of their country to that locality and Ray's testimony (see above) that they journeyed to Kettle Falls to trade, a trip that carried their canoes by the Okanogan mouth.

Intertribal Relations

Concerning the relations of the Chelan with other Plateau tribes there are very few specific data. Because they were so similar culturally and linguistically to the Methow upriver, to the Entiat and Wenatchi down the Columbia below them, and even to a slightly lesser degree to the Columbia on the east side of the big river, and because, as far as is known, their relations with these neighboring peoples were invariably amicable (Teit 1928:123; Walters in Spier 1938:74), it must be presumed that the Chelan frequently saw and more or less closely interacted with persons of these groups. As already stated, Chelan families met parties from other tribes in early summer at the Wenatchi tribal fishery and intertribal center at the mouth of the Wenatchee River (Ray 1932:116).

While Chelan social links were probably chiefly with their fellow Middle Columbia Salishans, they nevertheless encountered people from other Interior Salish-speaking groups. They engaged in "a great deal of trade and intercourse with the Spokane" and even intermarried with them to some slight extent (Teit 1928:110). As noted above, during the salmon season some Chelan parties journeyed to the great fishery at Kettle Falls to share in the daily distribution of salmon (Ray 1932:116) and surely to trade and participate in the social activities of the occasion.

Little intermarriage appears to have taken place with "Palous, Wallawalla, and Nez Perce, none with the Tenino, Tyighpam, and Upper Chinook [three tribal entities on the lower Columbia], and, at least in later times, none with Klikitat" (Teit 1928:110).

"In earlier times," Teit (1928:110) reports, "there was also a good deal of intercourse" between the Middle Columbia Salishan peoples and Coast Salish groups. The Chelan evidently sometimes traveled through the Cascades into Upper Skagit country.

- An Upper Skagit tradition (already noted above) purports to relate a special case that may have involved a Chelan group and that is said to have occurred in the nineteenth century (Collins 1974a:13-14). A small party, following a "duck quarrel," broke away and journeyed "from Methow, the eastern end of Lake Chelan" to the source of the Cascade River. There they found in "August and September . . . spring salmon spawning in the creeks." They remained to catch and smoke these fish. An Upper Skagit man, who "understood Eastern Washington language," came by in a canoe and invited the group to settle at *bəsq̓íx^{w}ix^{w}* (village 7 in the Skagit settlement list) and one of the party to marry a village woman. Collins (1974a:13-14) speculates that this marriage union was encouraged by the fact that the two men, tracing their genealogies, found relatives at least by marriage as common ancestors. This account calls for two comments:

(a) Geography was not Collins' forte, as other data likewise demonstrate. Here it is an open question where the misunderstanding and so the start of the journey of the disaffected occurred. If in the Methow area, the people involved were surely Methow; if at Lake Chelan, they were certainly Chelan. Because the account may have some historical substance and the group in question may have been of Chelan affinity, this Skagit tradition is reported here.

(b) The term "spring salmon" is used by Collins (1974a:45) for the King, spring, or chinook salmon. According to Wydoski and Whitney (1979:59), "the principal spawning months [of these fish in the coastal streams of Washington] are July through September. Fish from the early run [in late May and early June] are referred to as spring chinook and spawn in late summer." In the Fraser River just to the north, they ran from May through September (Schalk 1977:220). So Collins' spawning of "spring salmon" in August or September is not off the mark, save to the extent that the term, for which she bears no responsibility, is misleading.

Ray's (1942:224-228) inquiries concerning warfare as a Wenatchi practice led essentially to uniform

negative responses, except for the comment that prisoners were occasionally taken and slaves also. This suggests that hostilities were not quite as infrequent as his other data would indicate.

Social Structure

Formalized social classes were entirely lacking among the Wenatchi. There were, however, among the general populace loose distinctions based on wealth. And there were a few slaves. These were owned principally by rich men, who acquired them by purchase, not by capture. They were permitted to marry other slaves and their children were considered to be free. (Ray 1942:228-229)

Property

Among the Wenatchi the village claimed the rights to fishing sites in its neighborhood and to some degree to their hunting land. Large weirs were community property and the fish taken in them were distributed communally. Root and berry grounds, goat-hunting localities, and house sites were not owned by individuals, but whether they were considered village owned, as opposed to areas claimed at the tribal level, Ray's data do not reveal. In the case of smaller weir sites, people held title to these by right of use alone. Individuals, however, owned pitfalls, deadfalls, snares, and traps. (Ray 1942:231)

The formal potlatch and ceremonial gift exchange of coastal groups was unknown among the Wenatchi. Gift giving occurred, however, in a more loosely structured context where it was always secondary to the ceremonial objectives. (Ray 1942:231)

Cycle of Life

Birth

The prenatal period in Wenatchi society was one in which both the mother and father were expected to modify their behavior in various ways to effect an uncomplicated delivery and improve the health of the infant. The mother, for instance, slept on one side to avoid twins. To insure an easy or at least normal delivery, she bathed frequently, exercised vigorously if this was her first child, and took care not to turn her back on anyone. For the child's welfare, she avoided looking at anything crippled, "clumsy," suffering, or dead, as well as at young animals and herons. She consumed no trout lest the infant cry excessively. On the other hand, she ate meadowlark eggs to aid in the development of her child's speech. For the sake of the child, her husband, for his part, was forbidden to hunt for a period; if he broke this tabu, he was expected to rub his bow and arrows with rotten wood. For the sake of both his wife and child, he choked no game and snared no animals. (Ray 1942:191-193)

In immediate preparation for the birth process, otter skins were removed from the house lest the child be afflicted with convulsions. The husband was not permitted to travel, for this would cause a storm. The mother was secluded in a special parturition hut in both summer and winter. A midwife—a relative—or more than one if the birth was foreseen as a difficult one was arranged for; she assisted in the delivery preparations by stroking and sprinkling the woman and predicting the sex of the unborn child. Similarly, a shaman was arranged for in case the birth turned out to be hard. (Ray 1942:193-194)

In delivering, the woman grasped an upright post or stick and held a blanket in her mouth to stifle her cries. In the face of complications, the shaman was called upon to diagnose the problem and presumably either take measures to counteract it or recommend such, although Ray's data are silent on this point. During the parturition, the woman drank herb tea concocted from the "thornbrush" (which I take to mean the hawthorn [*Crataegus*]). The infant was born onto a mat spread on the ground. (Ray 1942:194)

The afterbirth among the Wenatchi was carefully buried by a woman in a far distant badger hole. The mother's abdomen was bound, her breasts were steamed, and her milk "doctored" in some manner. For some time she remained near the fire. The infant was bathed in warm water in a special shallow woven basket and rubbed with herbs or vegetable coloring material. After one day it was nursed and given broth and tea brewed from "rosewood bark" or cherry bark. An orphan was given to a wet nurse. (Ray 1942:195-196, 202)

For some time after the birth, the mother was confined to the parturition hut. After seven days she was permitted to sit up and after 30 days began to work again. Unlike many nearby tribes if Ray's Wenatchi informant was correct, food and activity restrictions on the mother were not numerous, but for ten days she ate no fresh berries. The father, however, could not hunt or fish for some days following the birth. Because of his "weakness" in the Wenatchi view, cohabitation was denied him for two or three months. Both mother and father were released from their restrictions by bathing. (Ray 1942:197-198)

Abortion was practiced by the Wenatchi, using cottonwood ashes or pine needles as abortifacients (Ray 1942:202).

Infancy and Childhood

For 30 days the Wenatchi infant was placed in a bag cradle or wrapped in a blanket at night and from time to time temporarily during the day. At the end of this month, it was wrapped in a fur blanket and padded with fur and feathers and put in a cradleboard. This was a flat back-board of cottonwood, trapezoidal in shape with the greater width at the top. A small trapezoidal handle projected from the top of the board. Attached to the front to hold the infant was a buckskin bag, bound in place by thongs slipped through perforations in the board. A folding buckskin hood, supported by a willow hoop, shielded the infant's face. Quillwork decorated this skin bag. A buckskin flap provided drainage for male infants. Sometimes the naval string was tied on the cradle at the edge of the board and sometimes simply discarded and burned. The board was furnished with straps so that it could be borne on the mother's back. Although it was kept when outgrown, a new cradle was fashioned for each child. (Ray 1942:199-201).

The infant was bathed, probably in a basket. Twins were the subject of special beliefs and practices, though these were apparently not well developed among the Wenatchi. It was believed for example, that if one twin died, the other was sure to follow; that twins probably possessed supernature power—from the same spirit—by virtue of their twin status; and that twins of opposite sexes were sometimes the product of incestuous unions.

Very little is known concerning childhood among the Wenatchi. Children were expected, under penalty of whipping, to engage in morning plunges to develop their hardihood. The first teeth were placed in feces and buried. In regard to toys we are told only that slings—not a weapon among the Wenatchi—were such, used by children in their contests. Games played by children are described elsewhere in this chapter. At some time before puberty, the ears of boys were pierced. (Ray 1942:153, 171, 207)

Naming

An Wenatchi infant was given a family name by its grandfather, an event that was accompanied by a feast and distribution of gifts. At some time later in life, another family name was given to a person by paternal or maternal relatives, or, on rare occasions, was purchased; these names were assumed during the winter dance. In addition, family names were at times self-assumed and legitimized with a feast. Family names of deceased kinsmen were taken only after the mourning period; others were the names of parents or more distant relatives who chose to pass them on while they were still living. (Ray 1942:223-224)

Puberty

The arrival of puberty was given ceremonial recognition among the Wenatchi. The girl was isolated in both summer and winter in a special menstrual hut away from the village or camp. During the period of isolation she was under the care of her mother and an old woman proctor. She observed a complete fast for five days, the entire period of her seclusion. Her movements were severely restricted: she was allowed to leave her hut only late in the evening when she sometimes searched for a spiritual helper. If, while away from the hut, she chanced to see anyone, that person might be harmed. She used a one-prong wooden head scratcher, the use of her fingers for this purpose being strictly tabued. Her eyebrows were trimmed. Her period of scrupulous isolation was terminated by her bathing in a river or lake before returning to the village or camp. (Ray 1942:202-205)

During subsequent menstrual periods, the girl or woman was isolated for five days in a menstrual hut or a screened corner of the house. She ate in this secluded space, where she might spend her time in making baskets. She had, however, to avoid all persons, especially males, since any sight of her in this condition "contaminated" them. Consequently, she ventured out of her hut or confining corner only when others were asleep or absent. At the end of this period of seclusion, she purified herself by bathing or sweating in the sweat lodge. While his wife was confined for this reason, a man was apparently not subject to activity restrictions: at least he fished and hunted as usual. (Ray 1942:206)

For boys the change in status was less well marked. When their voice changed, they observed a five-day period of ceremonial activity. They were sent out on vision quests, engaged in periods of strenuous exercise coupled with intense vision seeking, sweat in the sweat lodge, rubbed their body with roots and mud, used the head scratcher, and apparently were sometimes tattooed. (Ray 1942:206-207)

Marriage

From puberty to marriage some girls were restricted in their activities to prevent them from meeting suitors. In this courtship context young men played love songs on their flutes and sought supernatural assistance through prayers to the sweat lodge and to bears that they had killed. There was also some use of love magic, though whether by only one or both sexes is uncertain. The precise materials employed in these magical

actions are not described, but by some means the substances were rubbed on the object of the person's affection. If the magic failed in its mission, insanity or death or suicide or promiscuity was the result—evidently on the part of the instigator of the magic, though this point is not made explicit in the data. (Ray 1942:207-208)

In determining marriage partners, the wishes of the boy and girl were considered to some slight extent. The typical scenario involved the boy making his decision known to his father who, in turn, informed his mother, but apparently the girl and her family sometimes initiated the arrangements. An intermediary or the parents themselves went to the girl's family—or to that of the boy if the girl had made the first formal move—to discuss the proposition. Gifts were given and others were promised. The date of the marriage ceremony was set by the girl's parents in the normal course of events. (Ray 1942:208-209)

The marriage ceremony took place in the dwelling of the girl. Relatives and friends were present, those of the boy bringing the promised gifts. The boy and girl were likewise in attendance. Sometimes the village or camp headman made a speech. A feast, furnished by the boy's family or occasionally by the girl's family, took place. The ceremony was sometimes followed by a return visit on the part of the bride's family, one that took place seven days later. Again, the bride and groom were present. Return gifts equivalent in value to those they had received were brought and a feast supplied by the hosts was held. (Ray 1942:209-210)

The initial residence of the couple was with the family or at least in the village/camp of the girl. Their final residence was with the groom's relatives. For the few years further reciprocal visits were carried out annually. (Ray 1942:210-211)

Child betrothal, accompanied by good-will gifts, occurred among the Wenatchi, but this was an infrequent practice. Elopement likewise took place; if consummated, it was allowed and legitimized by gifts and feasts. If a girl was discovered to have been unchaste, her parents could, if they chose, force the marriage. Occasionally a girl was given to a shaman in payment for some service performed to become, if I read Ray aright, the wife of the shaman's son.. (Ray 1942:211-212)

A second marriage was accompanied by a ceremony less elaborate than for the first union. The levirate—marriage of a widow with one of her deceased husband's brothers—was observed following the customary mourning period, with permission of the husband's family, and involved additional gifts between the families. Apparently, however, a levirate remarriage was to some extent discretionary to both the woman and the man. Similarly, the sororate—marriage of a man with one of his deceased wife's sisters— was also a Wenatchi practice. This, too, occurred after the mourning period and was cemented by the exchange of presents between the parents. Seemingly, the sororate was, in fact, obligatory on the woman—Ray's data seem somewhat contradictory—with violation of the custom being punished by the man. Polygyny, including simultaneous marriage with two or more sisters, was permitted and practiced by prominent men. Marriage among the Wenatchi was allowed between distant kin. (Ray 1942:212-213)

Divorce among the Wenatchi could be instigated by either the husband or the wife; barrenness, incompatibility, and mistreatment were regarded as adequate grounds. Children—both sons and daughters—remained with the mother. (Ray 1942:214)

Adultery on the part of the woman resulted at times in the killing of her paramour. (Ray 1942:214)

Death

As death approached, a person sometimes "confessed" to several old men, a custom which the Wenatchi assert was a pre-White custom. Whether women likewise "confessed" to old men is left unclear by Ray. The corpse was allowed to remain within the dwelling, placed away from the wall and surrounded by rose branches, until the burial ceremony. Children were allowed within the house. From time to time during the morning hours, those in attendance wept, in some instances using special "weeping songs," washing their faces following each weeping session. Words and actions of the deceased were recounted by those in attendance, who, however, at times broke for a smoke. During the night, "watchers" maintained a vigil near the body. The body was washed inside the dwelling, dressed in new clothing, wrapped in an extended position, with arms at the sides and hands open, in new tule matting or sometimes in a deer hide, and tightly bound. (Ray 1942:214-216)

The interment occurred in one to three days under the charge of a relative. A grave was prepared near the village or camp by relatives and friends, the latter sometimes paid for their services. It was dug into the ground, riverbanks being a favorite location, or arranged in rocks, talus slopes, or rockshelters. The corpse in its wrappings was removed from the dwelling head first and carried to the burial site. The pallbearers, relatives and friends who occasionally received payment, were followed by other relatives and friends. A shaman, acting as ritualist, invariably accompanied the procession which formed a circle around the grave. A speech, eulogizing the dead person, was made by an old man. The grave was exorcised by the shaman. The body was placed in the grave on its back with the head oriented toward the east. Valuables were positioned with the body. While the shaman stood at the head of the grave, the corpse was ceremonially covered with earth. The mourners made a counterclockwise circuit, each throwing into the grave from its foot a handful of earth picked up on the northern side. When the grave had been filled in to form a rounded mound, the site was marked by several split sticks

placed vertically in the ground. The burial was occasionally followed by speeches of consolation. (Ray 1942:215-218).

Shamans, suicides, and twins among the Wenatchi received the same form of burial as other people (Ray 1942:219).

A postburial feast was held immediately following the interment, the mourners being the guests. For it, a large quantity of food had been prepared by relatives of the deceased. Much of the dead person's property was distributed by the nearest blood kinsman, a woman's personal property going to her daughters. Clothing, however, was burned or buried and useless property was likewise destroyed. (Ray 1942:219-220)

Because of their involvement in the burial, the chief mourners and all who had touched the corpse underwent a period of purification. This lasted sometimes as long as 10 days for the former group and about five days for others. The purification process called for sweating in the sweat lodge, bathing, and drinking a decoction or infusion derived from the rosebush. The dwelling of the deceased, if of the "permanent" type, was exorcised by a shaman who burned rosebushes and, singing, called on his spirit power for assistance. Moreover, the structure was vacated temporarily. The purification went beyond this point, however, for the dwelling into which the family moved and its surroundings were also exorcised. (Ray 1942:220-221)

The chief mourners grieved for two years. The husband of a dead woman could not hunt or fish during this period; the wife of a deceased man was not permitted to gather berries or dig roots for three or four months. A surviving wife painted her face. Spouses of both sexes cut their hair to shoulder length and left it uncombed; the cut fragments of hair were saved but how they were disposed of is not reported by Ray. During the mourning months, mourners wore old clothing and no ornaments, ate no fresh meat or fresh roots and fruit and, indeed, avoided all fresh foods, and engaged in no singing. In addition, the chief mourners slept on fur-bough bedding. The name of the dead person and words phonetically similar were not used by others within the hearing of the mourners. It was considered unpropitious to dream of the dead, a threat which had to be counteracted by bathing and sweating. (Ray 1942:221-222)

Political Organization

The Wenatchi were entirely without a political structure that embraced their entire group. Indeed, each village was politically autonomous. There were, however, named nonpolitical units within the tribe, each consisting of more than one village and thus comprising what might be termed bands.

The affairs of each village were directed by community leaders— "chiefs" or headmen—usually two in number but more in a large village. Of these two, one was recognized as the higher in rank, generally the wealthiest man in the community, and was known by a definite title. The other served as an assistant or secondary chief. Although among Plateau tribes in general the chief was widely served by a "spokesman," who, as in public meetings, repeated his words in a loud and commanding voice, the Wenatchi appear not to have had this official. The powers and duties of the chief and assistant chief are not spelled out in the literature, but it is possible that the chief could actually command his followers and even appropriate from his villagers whatever he wanted. (Ray 1942:229-230)

Each village possessed its advisory assembly, of which the women of the community were members. (Ray 1942:229)

Concerning offenses against property and the person we have very little information for traditional Wenatchi society. We are told only that a murderer fled his community temporarily, sometimes traveling only at night, a fact which implies that pursuing parties bent on revenge were not unknown. Ultimately his obligation was settled by a payment of property to the aggrieved family, the amount depending on the extent of his own possessions. (Ray 1942:230)

Religious Beliefs and Practices

Each adult among the Wenatchi possessed a soul that animated the body and was sometimes visible to shamans but to them alone (Ray 1942:232).

The ghost, whose proper place was in the land of the dead, was held on earth because the corpse had somehow been improperly treated and sometimes suffered for this reason. It was evidently thought to vary from invisibility to visibility at least to shamans. Feared, it lingered in certain localities and tormented living people, as by throwing water on them. Ghosts were repulsed by the living with branches of rose bushes. Regarding the Wenatchi view of the land of the dead no information is available. (Ray 1942:232-233)

Guardian Spirits

According to the Wenatchi conception of the supernatural world, virtually every living and even inanimate thing was capable of becoming a special spirit helper—"guardian spirit"—of a living person. While true of any

animal, certain animals were much more common as guardian spirits than others: these included snakes, the spider web, flies, grasshoppers, and ducks. Others, however, were the most powerful, specifically the grizzly bear (considered a dangerous spirit), wolf, spider, and eagle. The rabbit, and, interestingly to us, the rattlesnake were thought to be consistently weak spirits. Inanimate objects also became supernatural helpers—rocks, lakes, mountains—but these were uncommon. Unusual also were plants and trees. More frequent were the spirits of natural phenomena: the Chinook wind, thunder, fire, and snow. Finally, heavenly bodies, fabricated objects, and mythological characters (particularly dwarfs) likewise on occasion developed guardian spirit relationships with specific individuals. Most spirits were considered to be generic in the sense that they possessed the property of serving as guardians simultaneously to more than one person. (Ray 1942:234, 239)

Any spirit was thought to be able to convey any type of power to a person: there was no one-to-one relationship between spirit and particular power. Among the specific powers granted to ordinary people were those of controlling the weather and of locating drowned persons and to shamans, in addition to shamanistic skills per se, was clairvoyant power. (Ray 1942:234-235)

Virtually all boys and some girls from the age of eight were sent out alone during the summer to attempt to acquire a guardian spirit; even slaves were permitted the search. They were sent out by a shaman, paid for his service, to a specific destination, sometimes with an object to leave at the locality so it could later be checked if thought desirable. A destination in the mountains was a favorite locality, but some body of water or general spirit locale was also occasionally given to the child as his objective. These vigils were limited to a single night, but were repeated as considered necessary. (Ray 1942:235-237)

The child on these quests was not instructed or expected to seek a specific spirit. It was told to remain alert while awake—it was permitted to sleep from time to time—and to engage in certain specific acts such as pushing boulders. The constructing of rock piles, a common task in the southern Plateau, was not a Wenatchi custom. If the quest was successful, the spirit appeared to the child in a vision—not a dream—in human guise and explained the nature of the power being conferred and gave the child a special song and sometimes a particular dance. As the spirit disappeared, it assumed its true animal form. Sometimes an old man dispatched his own guardian spirit to appear before the child to become the latter's guardian helper. (Ray 1942:236-238)

Upon his return to the village or camp, the child, if successful, was expected to sleep many hours. Customarily he informed no one of his spirit acquisition. Without being told, the shaman, however, recognized that the quest had been successful. On the other hand, if the power that had been obtained was strong shamanistic power, its acquisition might be revealed. In the usual course of events, however, the spirit's identity was not made known until years later at a midwinter dance when the person's actions allowed spectators to identify the spirit. And only then was the song that had been given the person during his vision quest and then forgotten remembered by him. (Ray 1942:237-238)

Sometimes—but infrequently—a spirit came to a person unsought as his tutelary. It appeared only when the person was alone. At times the circumstances were such that the person was compelled to accept the spirit as his guardian. (Ray 1942:238)

The guardian spirit was thought to "die" with its owner, perhaps returning to its original locale. Shamanistic spirits, to the contrary, occasionally became "spirit ghosts" on the death of its shaman owner. Spirits of this genesis were unusual in that they demanded to be recognized as a guardian spirit by appearing in a dream to a living relative of the dead person, entering the person, and causing serious illness if refused. In such cases, a shaman might be summoned to effect a cure for a huge fee. At the request of the person being occupied by the spirit, the shaman might extract and dispose of the spirit-ghost by some means not detailed by Ray, might withdraw the spirit and spirit song and then return them to the person now "under control," or might, in lieu of his fee, take the spirit as his own. (Ray 1942:238-240)

Shamanism

The Wenatchi shaman acquired his power in precisely the same manner as one who received lay supernatural helpers: the same kind of vision and the same spirits. However, he usually obtained more spirit assistants than laymen. And because of his special and important powers, he was distinguished from lay persons by a special term and by his particular functions. The midwinter spirit initiation dance in which the shaman's spirit returned to him was identical to that performed by the laymen. More men than women became shamans, but female shamans were considered as powerful as the males. (Ray 1942:240)

Shamanistic powers were thought to be transferable, resulting in illness in both shamans involved. Recovery, which was believed to be always slow, was achieved by removing the migrant spirit from its new "possessor" and returning it to its former and proper "owner," using the usual techniques of spirit recovery and replacement. (Ray 1942:248)

Shamans occasionally possessed specifically malignant powers, but in general their powers could be used, at the will of the shaman himself, for good or evil. Normally beneficient shamans sometimes employed

their powers in irresponsible ways for personal gain or revenge. At times they received special powers for special functions. (Ray 1942:240)

Of the several roles played by Wenatchi shamans, curing by supernatural intervention was certainly one of the most important, although spirit-assisted curing was not their exclusive domain: laymen could cure diseases related in some manner to their own spirits. Shamans began to practice formally only when they were quite mature. For their first few curing cases, shamans were not paid; they had first to acquire a positive reputation. Once established, however, they received compensation for their curing services, the amount in each instance being determined by a kind of bargaining before they began the cure. The size of the fee depended on the nature of the case. The amount agreed upon was received whether or not a cure was affected; in fact, gifts or partial payments were sometimes made when the curing treatment began. (Ray 1942:240-241)

Beyond this important curing function, the shaman on occasion, as an uncompensated community service, supervised weir fishing and was expected to sponsor the winter guardian spirit dance from time to time. Malignant shamans were compelled to treat their victims and, if their evils were sufficiently great, were killed without recourse. (Ray 1942:241)

Wenatchi shamans, to some degree, tested their powers and immunities against those of other shamans. At least one occasion when this sometimes occurred was during the midwinter spirit ceremonial. The procedures followed are not described by Ray (1942:248-251).

Shamans were accorded certain signs of deference. Laymen, for example, were not allowed to pass in front of them. And they were at times permitted to dance first in the winter guardian spirit dance. (Ray 1942:241, 250)

Illness Causation

The Wenatchi recognized five causes of illness: those resulting from spirit intrusion, from the entrance of a foreign, illness-causing object, from an action of one's guardian spirit, from the departure of the soul, and from what might be termed "natural causes." The curing of these five illness types is considered separately in the paragraphs that follow.

The intrusive spirit, which was invisible, was either sent by a malignant shaman specifically to enter the person or a "lost" spirit that accidently entered the person and brought about the illness. Its entrance at times caused delirium and even insanity. It could be removed either by the shaman who had sent it or by a more powerful shaman. Once removed by the procedure described below, it might be released unharmed, be blown back to its owner, or be destroyed. In this latter process, it was sometimes "cut in two," as it was held in the shaman's hands, by one of the shaman's assistants. Blood was seen to drip out, the spirit was heard to cry out, and its owner soon died. Or the spirit was thrown into the fire. Or sometimes thrown into water, causing its owner soon to drown. Or buried, with the result that the sender died the same day. (Ray 1942:245-246)

The intrusive-object illness was apparently always caused by a hostile shaman. How it was disposed of once removed from the patient is not described in the ethnographic accounts. Possibly the procedure differed immaterially from that followed with an intrusive spirit. (Ray 1942:246)

Several types of guardian spirit illnesses were recognized among the Wenatchi:

(a) *Spirit loss.* A person's spirit—his supernatural helper—might wander and be lost through being buried accidently with a corpse or by being stolen by an evilly-disposed shaman who desired to add the spirit to his own guardian spirit family. If not retrieved and restored to the person by a more powerful shaman, the person died. (Ray 1942:246)

(b) *Spirit return.* This variety of illness relating to one's own guardian spirit was that produced by the return of the spirit when the person reached the age of 20 years or older, after having been "forgotten" since it was acquired in the vision as a child. It returned to the person in a dream, somehow associated with his hearing a special song—perhaps his guardian spirit song though this is unclear from Ray's notes. He became ill and the illness was diagnosed by a shaman as of this etiology. The spirit had to be removed by the shaman, who "listened" for the new song and then returned it to the ill person. With his guardian spirit tamed, the person now sang his song with his friends, probably for a day or more, and then again in the forthcoming midwinter dance initiation. Occasionally the person experienced spirit sickness on a few following winters, but with his now firmer relationship with his spirit helper he managed to overcome his illness without the ministrations of a shaman. (Ray 1942:246-247)

(c) *Spirit hostility.* When a person acquired a spirit-ghost, his own supernatural helper sometimes "fought" with this newly secured supernatural causing illness and even occasionally death. (Ray 1942:247).

The loss of a person's soul among the Wenatchi—as also among several nearby tribes—was considered untreatable both by shamans and through herbal and other home medications and so inevitably to result in death. Among groups slightly farther to the north, however, it was regarded as treatable and curable by shamans through a ritual journey of recovery to the land of the dead. (Ray 1942:247-248)

Natural illnesses were ailments and health problems that were free of supernatural causation. Such, for example, were tuberculosis and withering-desiccation. Since they fell outside the domain of the shamans, they were cured or at least treated by "household remedies." (Ray 1942:247)

Curing Procedures

Among the Wenatchi the shaman's assistance was solicited by a kinsman of the ill person who brought gifts to the shaman and promised others. The call was sometimes refused in prospect of a larger fee offer later. On the other hand, a shaman at times volunteered his services. On occasion, more than one shaman, all compensated, worked on the same case, either independently or in collaboration. (Ray 1942:242, 248)

Once an attempt at a cure was agreed upon, the shaman visited the sick person immediately at the latter's dwelling. Present were the patient's friends and relatives, who urged the shaman to affect a cure. The curing process began without delay. Sitting beside the patient, the shaman washed his hands in water brought for this purpose and smoked, sometimes speaking to the spirits meanwhile. He selected assistants, including a spokesman. The initial step in the actual curing treatment consisted of the diagnosis, a correct one being essential for a successful treatment. While he sang, the shaman placed his hands on the ill person's body and by the feel was able to identify the cause of the illness, sometimes naming a hostile shaman who was responsible, and sometimes predicting the success or failure of the treatment. (Ray 1942:242-243)

The Wenatchi shaman continued this procedure by singing, accompanied by the audience, which also drummed on a plank or occasionally log drum with short sticks held horizontally, and by dancing. He sprinkled the patient with water on which he had first blown, and he rubbed and massaged him. Passing his hands up and down over the sick man's body, he removed the "sickness" through the head or feet, sometimes only part by part. With the "sickness" in his hands, he found it so difficult to control this dangerous, foreign substance that his associates were forced to grasp his hands and force them to and into the water that had been provided, thus taming the power. Occasionally blood was drawn from the patient, it was thought, in this hands-on procedure (Ray 1942:243-244)

An alternative curing process involved the shaman sucking the intrusive spirit or object from the ill person, his lips actually touching the person—not with the use of a tube as among some Plateau tribes. While held by his assistants, he beat himself to eject the "sickness" from his mouth to his hands. At this point, owing to the supernatural potency of the "sickness" in the blood, he lost control of himself and became temporarily unconscious. Recovering, he, aided by his assistants, plunged his hands into water to calm or at least control the intrusive spirit or supernatural object. The disposition of the illness-causing agent is described above.

Abnormal physical states among the Wenatchi that were regarded as having a natural, non-spiritual causation—e.g., wounds, bone fractures, aches, colds—were treated with what must have been a large number of purely physical cures (cf. Steedman 1930:455-477 for the Thompson Indians). Concerning these, however, little is said in the ethnographic literature: only that many roots were used by the Wenatchi for their medicinal properties (Ray 1942:131). Our meager knowledge in these matters is partly the consequence of the secrecy that surrounded the native pharmacopoeia in at least much of the traditional Plateau. Knowledge of the curative properties of a great variety of plant and other substances, their proper preparation and application, and the particular ailments for which they were specifics was considered valuable personal and family property, not to be freely shared with others.

Religious Ceremonies

In Wenatchi country the most important religious ceremonial was the winter spirit dance when guardian spirits returned for the first time to certain persons, the "novices." These dances occurred through the various villages of the tribe during a two-month period roughly coincident with the winter solstice, taking place, however, for only five days in each community. Though essentially alike, the dances were sponsored in a variety of ways: by a shaman with assistants and a spokesman, by a layman at the command of his guardian spirit, or by other individuals with a shaman in charge. (Ray 1942:248-249)

The dance was held in a large ordinary dwelling, not in a specially built structure. A fir pole, sometimes with its upper limbs intact, was erected by a shaman in the center of the lodge before the ceremony began. An elevated horizontal pole or rope was prepared for presents to be given and later distributed. And a shaman swept the floor ritually. (Ray 1942:249)

The novice to be initiated took his place near the center pole and danced in its vicinity, encircled by the audience dancing in a counterclockwise circle. Although a time when a person strengthened his bonds with his tutelary and so an important period in his life, it was likewise a period of some danger to him. For example, the shaman might, if he chose and was evilly inclined, steal the novice's spirit and substitute for it a weaker spirit of his own. If this occurred, the novice's own spirit could only be recovered for him by a shaman with greater powers than those of the thieving shaman. The novice's shaman was well paid for his assistance. Each winter

for the next four years the novice had to repeat this ceremony before his relationship with his "helper" became firmly cemented. This initiation performance was followed by spirit dances on the part of others of the group. (Ray 1942:249-250)

In this more general spirit dancing, each person with a guardian spirit participated, singing his individual songs and performing his own dances. He was allowed one turn a night, unless the gathering was small in which instance he was permitted additional turns. In these individual performances shamans were sometimes given precedence. The person leading at the moment positioned himself near the center pole, wearing a headdress and clothing ornaments symbolic of his supernatural guardian and carrying symbolic objects. Each sex sat on its own side of the dwelling. (Ray 1942:250)

Another important part of this midwinter ceremony was the shamanistic performances. One involved a shaman having a vision of a spirit approaching the dance, that of a man who was himself nearing the dance lodge. After a conference of the shamans in attendance, the spirit was enticed with beckoning arm motions to proceed at once to the dance dwelling. If the spirit of a malignant shaman, it was stripped of its power; or it was "washed" and kept; or it was returned to its "owner" when he arrived. The disposition accorded a particular spirit was actually at the option of the dancers. (Ray 1942:250-251)

Other shamanistic performances involved a testing of the powers of two shamans, one stealing the spirit of the other; or the capturing of a spirit that might be ritually presented by the shaman to his son or sold to another shaman; or the performance of slight of hand tricks. These tricks took the form of swallowing fire or boiling water or of handling red-hot rocks. Another trick consisted of thrusting a stick lightly into the ground, offering a reward for its removal, and then, with all others failing to pull it out, removing it with ease. (Ray 1942:251)

A special dance—a weather dance led by those with weather power—also accompanied the winter spirit ceremonial. While the routine was identical to that of the guardian spirit dance, this performance was intended to bring the warm Chinook wind. (Ray 1942:252)

It has been mentioned that, as a part of the preparation for the midwinter dance, a horizontal pole or rope was placed within the dance house for gifts. These were contributed by both the shamans and the ordinary dancers while each person danced, a contribution being considered more or less compulsory. On the final morning of the dance, these gifts were distributed usually by the leading shaman's assistant or, less commonly, by the officiating shaman himself. The actual carrying of the objects to the recipients, however, was attended to by two aides. Gifts were presented to all dancers and to the children present, the best objects to the most skillful dancers. This distribution was followed by a short dance. (Ray 1942:252-253)

Magic

Both inimical and innocuous, positive magic was practiced by the Wenatchi, though the data are most meager.

Hostile magic was employed to cause illness in others, a power, unassociated with the guardian spirit world, which anyone could exercise. It was carried out by securing bits of clothing of the person to be harmed and then, presumably, destroying them in some manner not described by Ray. Or by throwing some object, not directly associated with the person to be damaged, on a refuse heap or a grave, causing him "sympathetically" to wither or rot away as the object itself disintegrated. (Ray 1942:254)

Love magic was also known and made use of by the Wenatchi, but details are lacking. (Ray 1942:254)

Miscellaneous Beliefs

The Wenatchi believed that awesome serpents inhabited lakes and that strange horned snakes made furrows in the ground with their horns, trails that could not be crossed under penalty of experiencing painful swelling. They avoided portentous localities in lakes lest they be harmed. And they were convinced that there were "still spots in the river," but whether these were considered dangerous or merely odd is not stated in Ray's data. (Ray 1942:255-256)

Diversions

Here are summarized such meager information as is available for the Wenatchi and Chelan on their arts, athletic and other games, and smoking patterns. None were wholly devoid of associations with the practical aspects of life and entirely without religious and ceremonial significance. Yet all clearly possessed a salient pleasurable content that must be recognized.

The Arts

Although hard data are scanty, the arts—visual arts, the dance, and music—as esthetic expressions

devoid of association with objects of practical utility and activities with purposeful goals received little attention among the Wenatchi, a characteristic of Plateau cultures in general. In this context, it is not difficult to comprehend why no separate section in Ray's (1942) cultural element study, from which most of the Wenatchi data are derived, is devoted to the arts. Such information from his report as is noted below appears scattered through his publication.

Graphic and plastic artistic representations were uncommon in Wenatchi life even as accompaniments of utilitarian objects and of behavioral patterns with purposeful goals. Wooden spoons, mortars, bows, paddles, and combs were unornamented and so were stone pestles (Ray 1942:141, 142, 143, 149, 157, 170). Arrows, however, were painted, sometimes for decoration (Ray 1942:150). Coiled baskets were adorned with imbricated designs, contrived with buffalo grass, bear grass, cedar bark, or cherry bark (Ray 1942:159, 160): in imbrication the pattern is created on the exterior surface of the basket by laying a colored strip along the outside of the coil, by tucking a fold of it under each sewing stitch as this is taken, and then by bringing its loose end over the stitch, to be folded under the next stitch and so on (Figure 2-4). Alder, Oregon grape roots, and mud were used as imbrication dyes (Ray 1942:160). Most clothing—e.g., buckskin shirts, capes, and leggings—were neither painted nor ornamented with appliqué patterns, perhaps not even with shells or porcupine quills (Ray 1942:165, 166, 167). Skin gowns were an exception, for some received appliqué ornamentation of some kind (Ray 1972:165). This is not the place to discuss at length the complex issue of the motivation underlying such "art" work as is mentioned above, largely because such discussion is unproductive without crucial informant-derived ethnographic data. But it would be rash to assume that Wenatchi women—at least some women on some occasions—failed to derive some measure of esthetic satisfaction in weaving a basket and, in particular, in ornamenting a basket or an article of clothing. Or a man similarly in fashioning a fish net or harpoon point, even considering that these objects, to our eyes, were without obvious "artistic" components.

Shells were suspended from the ears as ornaments; bead necklaces and shell and bone bracelets were worn by Wenatchi women (Ray 1942:171, 172, 173). On occasion, the face was decorated with paint, but the patterns in favor are not described (Ray 1942:172). Whether the Wenatchi tattooed is unclear (Ray 1942:171, 207), but if this was practiced, the designs were surely nothing more than simple geometric patterns.

The only examples of the visual arts for the Chelan for which I have evidence are the representations at four pictograph sites.

- The best known and most fully described is that "directly across the lake from the dock at Stehikin, on the north end of Lake Chelan" (Cain 1950:15). These, on the rock cliffs, were first reported, it would seem, by Symons, who implies that they were first discovered by Merriam about 1880:

> At the extreme upper end [of the lake] he found solid vertical walls of rock, and on these, several hundred feet above the water's edge, were a large number of hieroglyphics written on a horizontal line, evidently by people in boats when the waters were at this higher level. Above the first line were others at varying altitudes, but always in a horizontal line. The present Chelan Indians could tell nothing about them, but said that they must have been made by people who lived there long before they came there to reside. (Symons 1882:40)

Later accounts of these figures by others reveal that their elevation above the lake surface is notably exaggerated in Symons' second-person description. On the basis of his field research of 1945, Cain (1950:1, 15) outlines the principal characteristics of the designs thus:

> The figures are painted on the smooth granite surface of a high cliff running directly into the lake. The escarpment is perpendicular . . . [so the artists must have worked] from a canoe or raft. . . . [When a dam was built at the lower end of Chelan River,] the lake level [rose] over twenty feet, to inundate some of the pictographs. (A few may still be seen under the water, down to a depth of five feet or so. . . .)
>
> [A row] of eight figures representing fish, human, and anthropomorphic figures is six feet above the present [1945] lake level, while the series of eight vertical bands . . . is now fifteen feet above water level. Thus the topmost figures were at least thirty-five feet above the lake level before the erection of the dam in 1921.

Among these designs Cain (1950:15 Figure 14) recognized mountain goats, bighorn sheep, and humans. Assuming his sketches are reasonably accurate, I have no trouble with these identifications, but his "fish" and "anthropomorphic" figures appear less certain.

Problems inherent in identifying pictograph—and petroglyph—designs are not inconsiderable. These same cliff representations were observed in 1891 by Durham (1972:24) who writes that they were "in red, brown and blue paint— figures of war parties with bows and spears, of horses and wild goats, and other great

animals resembling buffalo." Examining Cain's sketches, Byrd (in Durham 1972:24 fn. 52) discerns the goats and sheep, but is doubtful about "the other great animals," and sees—no more than I from the published drawings—the armed warriors, weapons, horses, and bison. He notes that, while "the colors were 80 years fresher and plainer" than in 1971 when he himself viewed the cliff, still with the lake level 21 feet lower than in the 1970s, one wonders how well Durham could have seen the designs. Byrd himself detected what appeared "to be one or two higher rows of paintings so completely faded and washed out as to be indecipherable," and wonders whether these could have been clearer in the 1890s and the figures to which Durham alludes.

- Many pictographs existed at one time at Meadow Creek on the northeast side of Lake Chelan opposite the mouth of Railroad Creek (Byrd in Durham 1972:9 fn. 16, 16 fn. 30).
- Many pictographs were once visible near Domke Falls on the southwest side of Lake Chelan (Byrd in Durham 1972:16 fn. 30).
- "About half-way up the lake," where Christy Ranch was located in the late 1890s, were what Lyman (1899:195) describes as the first of the painted rocks as one ascended the lake. This ranch was evidently just downlake from Goat Mountain (see Lyman 1899:198) and so presumably on the northeastern side of the lake. The pictographs, executed in red on the smooth white walls that projected here and there into the water, included, according to Lyman's eye, men, tents, goats, bear, and other animals. Except that they had already been partially destroyed by gunners firing from the lake surface, they were "wonderfully well preserved" when he viewed them, in spite of wave action in high water, the beating of rain, and frost action. According to Lyman, the Chelan knew "nothing of their origin," information which, while quite possibly accurate, one may suspect he received from non-Indian sources.

Data on primarily secular dancing among the Wenatchi are entirely lacking and details for even the dancing with strong religious or ceremonial overtones are scanty. Dancing, however, was an element in the shamanistic curing process, the curer himself performing. It was especially important in the midwinter guardian spirit ceremonial. In this ritual the novice, while being "reintroduced" to his spirit helper, danced in a straight line, as the audience danced in a counterclockwise circle around that person. Older people who were being revisited by their tutelaries danced individually as they sang their spirit songs. During this ceremony, dances were also led by persons with "weather power" with the aim of bringing milder weather. The sun dance of the Plains Indians failed to reach the Wenatchi. (Ray 1942:243, 248, 250, 252, 253)

Wenatchi musical instruments were very simple: only one, in fact, was clearly multitonal. The drum, used in the curing rites of shamans and in other ceremonial contexts, was a log or plank placed on the floor, not the hand-held drum with a hide head. The rattle was fashioned of deer hoofs; it served to accompany dances and was thought to symbolize the guardian spirits. The tubular whistle, known among nearby tribes, was said by Ray's informant not to have been a Wenatchi device. The tribe, however, had a six-hole, end-blown, deer-bone flute that was played by men in courting and that, being heavy, likewise answered as a club on occasion. (Ray 1942:185-187, 243, 248)

Games

The Wenatchi enjoyed a number of adult games of athletic skill. Shinny was played in the spring with a hardwood ball covered with buckskin; both men and women played but separately. Arrows were shot at rolling hoops, and poles were thrown at wrapped fiber hoops rolled down a bare strip of ground; both were wagering games. Wrestling, tug-of-war pulling on a hair rope, wagering canoe and foot races, horse races, and dodging games were also the custom. (Ray 1942:182-185)

Games of dexterity were also played by adults. Among these were ball-and-pin and ring-and-pin games, played in winter to pass the time. Both ball and ring were of fiber; the pin was a salmon vertebra. The objective was to toss the ball or ring and then pierce it in the air with the pin. These were played as contests, the loser's fingers being struck smartly as a penalty. (Ray 1942:183)

Games of chance included one, played by women, in which four dice of beaver teeth were tossed onto a buckskin or occasionally a blanket (Ray 1942:183-184).

Wenatchi children played a game with duck feather shuttlecocks in which wagering was a feature. To pass the time they spun tops made of bark with a wooden pin. Children were sometimes asked by their elders in winter to swing bullroarers of cedar or a deer rib to bring the warm Chinook wind: these were flattish pieces, with a stout string attached to one end, swung around the head to produce a mild roaring sound. They also played hide and seek. (Ray 1942:184-185)

Games were played both by people of the same village and also in intervillage contests. Wagers were made only in the latter instance. Women as well as men gambled. (Ray 1942:185)

Smoking

Kinnikinnick—botanical identity unspecified—was smoked by the Wenatchi, perhaps occasionally mixed with true native tobacco. It was pulverized in a mortar with a pestle in preparation for smoking, which, typically, took place at bedtime and in the company of visitors or friends and involved taking only a few puffs.

Pipes were of three varieties. Two were tubular: one was of the same diameter end-to-end and generally of stone though sometimes of wood; the other, also generally of stone but occasionally of wood, was "trumpet-shaped," i.e., tubular for its greater length but enlarged conically close to the tobacco end. The third type was the elbow pipe. This generally had a soapstone bowl, either disk-shaped (Figure 4-4 A) or W-shaped (Figure 4-4 B) and was ornamented by being painted, carved or incised. Some elbow pipes, however, had a wooden bowl set crosswise of the stem and others were fashioned of deer antler with its natural curve. (Ray 1942:187-188)

Pipes were kept in tubular bags of buckskin or the skin of a small animal (Ray 1942:188).

Cognitive Culture

Here are assembled a few notes concerning Wenatchi cognitive patterns that seem too unrelated to matters discussed in the previous sections to be placed with them. They, for example, have no obvious, primary, and particular associations with hunting or fishing, material culture, phases in the cycle of life, or religious beliefs and ceremonial life.

The Wenatchi calendar was lunar in nature, each month beginning with the new moon and each year consisting of 12 moons though some periodic adjustments were required. The moons were named descriptively. The year was considered to begin when the salmon disappeared and the snow began to fall. The solstices were recognized and a few constellations were named. In some way not indicated by Ray, the position of the moon served to indicate time to the Wenatchi. The light and dark areas of the moon's surface were thought to depict a frog, an interpretation shared by several neighboring groups. (Ray 1942:189)

Apparently the Wenatchi recognized terminologically only two of the cardinal directions, those of sunrise and sunset (Ray 1942:189).

A knotted string was used by the Wenatchi as a mnemonic (Ray 1942:190).

Use of the Park Complex

The entire Lake Chelan National Recreation Area and that part of the North Cascades National Park extending east of the Cascades crest into the upper Stehekin drainage fell within the aboriginal boundaries of the Chelan. To the tribe this entire region must have been in the nature of "back country," for it was geographically rather removed from their traditional population centers and presumably, therefore, to a lesser but still uncertain extent distant from their principal activity focus. Both their winter and warm season communities were concentrated along the Columbia River and especially around the lower section of Lake Chelan, the nearest settlement being their camp at Grade Creek, some 27 miles below the lake-crossing boundary of the Recreation Area. Accordingly, one must conclude on energy-minimization grounds that the tribe made its greatest utilization of the terrain around the southeastern shores of the lake and of the nearby mountains.

Nevertheless, the area within the Park Complex was surely not without importance to the Chelan. As abundantly demonstrated above, the ethnographic and ethnohistorical data relating to every aspect of the traditional Chelan life-mode and to every segment of their native country are singularly meager. This is particularly the case for the group's utilization of the uppermost lake shores and feeder creeks, the Stehekin stream network, and the flanking mountains within today's Recreation Area and Park perimeters. Yet by sifting out from the preceding pages such information as is plainly or probably relevant, a tentative picture of Chelan use of this northwestern sector emerges. The following summary, necessarily highly provisional and obviously scandalously incomplete, considers Chelan use of the subsistence, occupation site, trail, and other resources of that sector. But it should be understood that, unless otherwise qualified, the data apply also to the small stream and high mountain area within the Chelan homeland immediately to the south of the borders of the Park Complex.

Subsistence Use

In late prehistoric and early postcontact times, the principal Chelan use of the Park Complex area seems to have been as a subsistence resource region. There is nothing to suggest that any other tribal groups claimed and made use of the country in their customary food quest, though their parties certainly lived off the land to some degree when traveling through it on the intertribal trails (see below).

To this point no data have been found that specifically describe even in general terms the ways in which the Chelan turned the natural resources of the area of the Park Complex to their economic advantage. Neverthe-

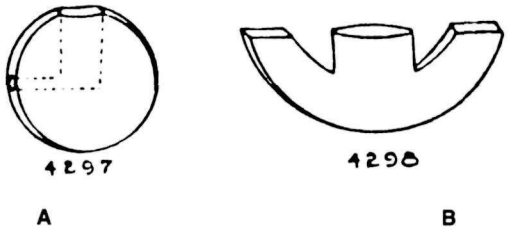


Figure 4-4. Two types of tobacco pipe bowls. A. Disk-shaped. B. W-shaped. (Ray 1942: culture elements #4297, 4298)

less, all of the few animals identified in the hunting section above as occurring in Chelan territory—deer, bighorn sheep, mountain goat, black bear, grizzly bear, cougar, lynx, muskrat, and marmot—are supported as indigenous fauna of the Chelan segment of the Park Complex in the zoological distribution plottings of Dalquest (1948; see below). Moreover, every animal reported ethnographically to have been hunted by the Wenatchi—deer, elk, antelope, bighorn sheep, mountain goat, brown (black) bear, grizzly bear, rabbit, raccoon, beaver, and ground hog (yellow-bellied marmot [Dalquest 1948:263-265])—with the exception of the antelope and the unimportant rabbit, raccoon, and ground hog—occurred in the mountains around the upper segment of Lake Chelan and in the Stehekin drainage. Accordingly, it is reasonable to assume that Chelan hunting parties visited, from time to time, this uplake and high river country on a seasonal basis in search of these animals. The various hunting techniques reported for the Wenatchi would have been equally effective in the Recreation Area and Park Complex area.

On the other hand, the highest elevations of the mountainous areas offered very little in the way of hunting opportunities. Above the 7,000 foot level, a lack of vegetation (other than lichen and mosses), the rigorous, cold climate, and extensive rock outcrops and talus slopes discouraged "most large animals from occupying the higher terrain. Smaller animals such as marmots, squirrels, mice and pica, as well as hawks and some other birds, find adequate protection and food to survive the austere habitat" (Beckey 1981:279 fn. 21). But these were surely unimportant game for the Chelan. It seems curious that mountain goats are not specifically remarked upon as a high-mountain large animal, for its "habitat is the bare-rock cliffs and rock-strewn slopes of the Arctic-alpine and Hudsonian life-zones" (Dalquest 1948:407). But it may be doubted that even goats were widely pursued by Chelan hunters in these towering elevations above tree-line, except when parties chanced to be high up for other reasons, because of the difficulties of attaining these areas and getting the game back to lower camps.

It seems probable that the fish varieties—bull trout (Dolly Varden), cutthroat trout, "rainbow trout"—identified in the early historical documents as available in the lower and middle segments of Lake Chelan and the small feeder streams of this area were likewise to be caught farther uplake and in the Stehekin country within the boundaries of the Park Complex. And, while this is less certain, that most, if not all, of the edible plant products—in particular roots and especially berries—native to the lower lake country grew as well in suitable locations around the upper lake peripheries, at least at lesser altitudes in the lower Stehekin Valley, and on the lower mountain slopes. It seems unlikely, on the other hand, that all food plants found in the Columbia River segment of Chelan territory were also available in the Park Complex, but most of these were probably also either nonoccurring or very rare in the middle and lower reaches of the lake.

In considering the aboriginal use of the Recreation Area and adjacent Park land, the question, then, seems not to be what animals, fish, and plant resources useful as Chelan foods were native to the Lake Chelan and Stehekin drainage sections of the Park Complex, for evidently essentially all found downlake were available. It is rather the extent to which, owing to their remoteness from the Chelan population centers and to the particularly rugged and difficult mountainous terrain, the products of the area could have been "harvested" with an energy expenditure commensurate with the food return. Other things equal, it seems probable, for example, that in the routine food quest the resources of lower elevations were sought before those of higher altitudes, that terrain easier of access, especially along the lake shores and well-used trails, were visited by subsistence-searching parties before that more difficult to reach and more distant from traveling routes, and that productive regions nearer the population clusters were more widely and consistently exploited than areas more remote. If these propositions come close to the truth, the uplake and Stehekin country was, in general, less well scoured for game, fish, and plant products than the downstream country.

Nevertheless, because of periodic overhunting, particularly with the larger population in pre-epidemic days, or because of abnormal bioclimatic conditions or natural cyclic patterns, resources doubtless varied in abun-

dance from year to year and decade to decade in those tribal areas closer to the villages and camps, forcing the subsistence quest to extend into the less accessible regions from time to time. It is unrealistic to regard out-of-hand most segments of the upper Lake Chelan and Stehekin drainage as having been beyond the exploitative reach of the Chelan in their food supply questing, even from parties with their base villages and camps in the lower lake region as reported for the 1850s.

Still although the region offered hunters and trappers no mammalian forms not also occurring in the middle and lower Lake Chelan area, if the data of Table 4-1 are accurate, it is possible that it may have nourished some plants, perhaps, for example, some of medicinal or special technological values, not found downlake or occurring there only at higher and so less reachable altitudes.

Village/Camp Use

There are no ethnographic or ethnohistorical data indicating Chelan winter settlements in these upper lake, Stehekin Valley, and neighboring mountain areas. The nearest winter village remembered in the 1930s was at Green's Landing (between Wapato Lake and Grade Creek) and the closest warm season camp was at Grade Creek, both only a few miles above the southern end of the lake. These informant-recalled communities, however, are as of the mid-1800s. One may well wonder whether, a century earlier, in times antecedent to the first of the terrible epidemics, both winter villages and warmer month camps may not have existed uplake of these 1850 sites and even in the lower Stehekin Valley. The existence of the pictograph localities at and near the inlet of the lake, with both faint and relatively fresh representations, suggest Chelan residential sites—at least camps in the open season when rock art would almost certainly have been executed—not far distant in comparatively late precontact and perhaps early postcontact times.

It would be expected that as the illness struck and the Chelan population decreased, such northwestern-most occupation localities as may have existed would have been the first to be abandoned, the survivors concentrating in those more favorable areas downlake and on the Columbia River. For evidently these latter sectors *were* considered generally superior as residential sites by the Chelan, since these were the locations still occupied in the 1850s.

On the other hand, if the data and speculations of the previous subsistence section are essentially sound, temporary food quest and other task-oriented camps must surely have been occupied by the Chelan in favorable locations within the Park Complex, both on and off the primary trails, as bases for seasonal resource exploitation. Unarguably, very short-term traveling camps must have been numerous along the important intertribal routes used both by Chelan parties journeying to the Methow or Skagit territory and by groups of nearby peoples—Methow, Skagit, and others—entering Chelan territory to visit and trade with the Chelan or merely passing through Chelan country with the principal aim of meeting with neighbors of the Chelan. Presumably at least some of these same sites, owing to their favorable properties along generally hard trails in difficult back country, were likewise in occasional, longer-term use by Chelan when exploiting, perhaps for days at a time, neighborhood subsistence and other resources.

A very partial listing of mammalian types, primarily game animals, native to Chelan territory, as reported in the ethnographic and early historical records, has been included in the hunting section above. It is helpful at this point in assessing the relative importance of the Recreation Area and Park country east of the Cascades to examine a more comprehensive roster of indigenous mammals, extracted from an exhaustive and detailed distribution study prepared from a zoological perspective. Table 4-1 lists those mammals plotted by Dalquest (1948), on his many distribution maps for the State of Washington, so as to indicate their native presence in the country considered ethnographically the Chelan homeland. Several small forms—e.g., shrews, bats, mice, and rats—not known to have been generally secured and utilized as food or used in other ways by Plateau peoples are excluded from this tabulation as irrelevant. Genus and species identifications of the listed mammals can be found in Dalquest (1948) as referenced in the table.

In some cases different species occurred in different sectors of the Chelan country. This situation is illustrated by *Marmota flaviventris avara* along the Columbia and around the lowest portion of Lake Chelan and *M. caligata cascadensis* in the upper part of the lake and the Stehekin region (Dalquest 1948:266). In one instance one species (red squirrel) is plotted to show it on the northeast side of Lake Chelan and of Stehekin River while a different one (Douglas squirrel) is placed on the southwestern side of the lake and of Stehekin River (Dalquest 1948:289). Other distributional differences at a grosser level within Chelan territory are reported in the table. Where Dalquest provides for mammalian types no distribution maps but offers broad descriptive statements, his data often appear too general and impressionistic to permit certain conclusions regarding their presence or absence in the Chelan home country, much less conclusions concerning their occurrence or otherwise in each of the four subareas into which I have subdivided the Chelan region: e.g., porcupines are said to have been not uncommon in "the more open areas on the Cascade Mountains, especially on the eastern slopes" (Dalquest 1948:374). These very broadly painted data are not incorporated into Table 4-1. Unfortunately only such general statements are made for certain of the larger and more important game animals: i.e.,

Table 4-1. Mammalian Distribution within Aboriginal Chelan Territory.

Animal Form	Chelan Country below Park Complex		Chelan Country within Park Complex	
	Columbia River	Lake Chelan below Riddle Creek	Lake Chelan above Riddle Creek and Lower Stehekin Valley	Middle and Upper Stehekin Valley
Black bear (175)[a]	x	x	x	x
Grizzly bear (177)		x	x	x
Western marten (185)		x	x	x
Fisher (188)		x	x	x
Wolverine (204)		x	x	x
Raccoon (181)	x	x		
Ermine (192)	x	x	x	x
Long-tailed weasel (196)	x	x	x	x
Badger (221)	x	x		
Red fox (225)	x	x	x	x
Coyote (230)	x	x	x	x
Wolf (232)	x	x	x	x
Cougar (236)		x	x	x
Canadian lynx (240)		x	x	x
Bobcat (243)	x	x	x	x
Yellow pine chipmunk (256)	x	x	x	x
Townsend chipmunk (261)		x	x	x
Yellow-bellied marmot (266)	x	x		
Hoary marmot (266)		x	x	x
Washington ground squirrel (268)	x			
Golden mantled ground squirrel (280)	x	x	x	x
Western gray squirrel (284)	x	x		
Red squirrel (289)	x	x	x	x
Douglas Squirrel (289)		x	x	x
Flying squirrel (294)		x	x	x
Pocket gopher (308)	x	x	x	
Beaver (321)	x	x	x	x
Mountain beaver (368)		x	x	x
Muskrat (362)	x	x		
Pica (378)		x	x	x
Snowshoe hare (383)		x	x	x
Black-tailed jack rabbit (386)	x			
Nuttall cottontail (388)	x			

[a]Numbers within parentheses are page references to Dalquest (1948).

various deer species. These rather sweeping descriptive comments suggest, however, that at least mule deer, bighorn sheep, mountain goats, and probably elk occurred in Chelan country (Dalquest 1948:391-393, 399-400, 405, 407); for the sheep and goats abundant independent ethnohistorical and ethnographic testimony exists as noted above. Dalquest's (1948:403, 404) data appear to rule out both caribou and moose as Chelan country mammals, confirming Ray's (1942:116) ethnographic findings for the Wenatchi country.

The data of Table 4-1 reveal several facts of importance in the present village/camp context:

(a) The aboriginal Chelan homeland was rich in mammals customarily secured by Plateau Indians for food and skins and as sources of materials used technologically.
(b) Of the four subareas plotted, the largest number of mammalian forms were native to the lower and middle Lake Chelan area. Of the 33 forms tallied, only three relatively insignificant animals (Washington ground squirrel, jack rabbit, and cottontail) were not to be found in this region, though all three occurred along the Columbia River.
(c) The upper Lake Chelan-lower Stehekin area and the middle and upper Stehekin drainage sector were virtually identical in the mammals they harbored, so far as the information of the table reveals. Only the pocket gopher was found in the former region and not in the latter. The Lake Chelan National Recreational Area and that segment of the North Cascades National Park that lay east of the Cascades were in effect homogeneous in their mammalian life.
(d) The lower-middle Lake Chelan sector southwest of the Park borders was only minimally richer in mammalian types than the Park Complex. Only five mammals of those surveyed in Table 4-1—raccoon, badger, yellow-bellied marmot, Western gray squirrel, and muskrat—lived in the former area and not the latter, none important as food animals.
(e) Every animal in the tabulation that was found north of Riddle Creek in the Park Complex also occurred downlake. Apparently under normal circumstances there was no great incentive for the Chelan in hunting to journey up into the difficult high Stehekin country, for all mammals there could be hunted and trapped closer to their occupation centers.
(f) The Columbia River sector had the smallest number of resident mammalian types: 20 from the total of 33. While we do not know the relative abundance of animals of each species found in two or more subareas, these data suggest that the appeal of the Columbia River sector to those Chelan residents along its banks (about one-fourth or one-fifth as many as lived at Lake Chelan in the 1850 period) was not the range of animals obtainable closeby, though rabbits and cottontails in their vicinity and presumably antelope on the nearby prairies east of the Columbia were unique to their sector of Chelan territory and probably were not without their importance in their diet. Rather the advantages of the river stretch lay in the anadromous fish that could be taken in traditional times only along this major stream, however small their numbers within the Chelan borders. Probably, also edible roots existed in somewhat greater variety and abundance along the Columbia's banks, terraces, and sidehills than in the Lake Chelan and Stehekin sectors, though for this I as yet have no hard evidence. In any event, these comparative mammalian distribution data may help to explain why the traditional Chelan population concentration was not along the Columbia River but in the Lake Chelan region.

The information of the preceding six entries (a-f) fail to demonstrate why the remaining three-quarters or four-fifths of the tribe resided in the middle of the nineteenth century around the lower and lower-middle shores of Lake Chelan, well below the borders of today's Park Complex. Because the mammalian forms of the lower and middle lake country and that of the Park region were very nearly identical, something other than these minimal differences must explain the concentration of villages and camps in the former area. The reason would appear to lie, at least in part, in the topography of the immediate lake shore. The essential shore features were recorded by Dowling (in Stone 1983:36-37) in 1889 when he rode up the lake in the "Belle of Chelan":

> For the first ten miles or so [above the lake outlet] the timber was scattering and the shores bounded by low, bunch-grass hills. These gradually merged into steep, mountain slopes, and these in turn to abrupt and almost perpendicular walls of rock. From the tops of these towering bluffs a fine growth of timber rose from either shore to a height of from 4,000 to 5,000 feet. . . . The few spots on the shores of the lake large enough for ranching on a small scale have already been taken up and cabins built, but they are few and far between.

The few level areas to which Dowling alludes must certainly have been sites of hunting and other task-oriented camps as well as traveling camps, even if they were not at times the location of more permanent winter villages in pre-epidemic days.

The data outlined above in (a)-(f) also suggest the probability that the uppermost about five miles of Lake Chelan (the segment above Riddle Creek) and the Stehekin Valley immediately above the lake were used by

Chelan hunting and trapping parties mainly as a backup source of game and technologically useful animals when for some reason the mammalian population in the lower elevations around the lake became limited. The pursuit of game at the head of the lake and in the lower Stehekin drainage was probably less energy demanding, even though additional canoe and land travel was required, than in the high, steep mountains fronting all but the lower reaches of the lake.

Trail Use

The upper Lake Chelan area above Riddle Creek served, with canoe watercraft, as a lacustrine highway to the various points on the northwestern terminus of the lake—like the mouths of small lake-feeder creeks—of which the Chelan made subsistence and other use, and particularly to the mouth of the Stehekin River. In addition, as previously observed, various land trails, following the creek valleys or interstream ridges, left these lake shores leading over the Sawtooth Ridge east and northeast to the Methow headwaters, and in northerly and northwesterly directions over the Cascades. The most important of these routes within the Park Complex ran up the Stehekin Valley to cross the divide to the Skagit country. These paths were also followed on occasion by Plateau neighbors of the Chelan heading west and by coastal peoples, primarily the Skagit it seems, journeying to the east. These trails and their branching small side paths, it must be assumed as already observed, also provided the Chelan access to the resources, subsistence and otherwise, of the high areas laced by the Stehekin river network.

Other Uses

The ethnographic and early ethnohistorical information concerning the Chelan and their aboriginal lifeways is so very scanty that nothing of substance can be said regarding additional uses of the Park Complex within the Chelan tribal borders. One can only hazard the speculation that to some unknown degree the region served as the source of materials of technological importance: of horns, antlers, and mammal bones; of skins of marmots for robes and of other small animals for clothing trimming; of mountain goat wool for woven robes; perhaps of workable stone and textile fibers like beargrass; possibly of medicinal plants and mineral paints; and the like.

EPILOGUE:

A LOOK TO THE FUTURE

The four chapters that precede summarize the available information relating to the traditional cultural patterns of the four Indian groups that regarded segments of the North Cascades National Park and the Ross Lake and Lake Chelan National Recreation Areas as within their "tribal" borders. Because of the particular interests of this present study, each chapter concludes with a section in which are brought together whatever data have been found that relate to the tribes' utilization of the mountainous sectors of their traditional tribal territory. Plainly all four exploited to a substantial degree the natural resources of these elevated regions.

In some considerable measure each of these four groups was culturally unique. The Upper Skagit were a western "foothills" tribe on the middle Skagit River with linguistic and cultural affiliations to the coastally oriented Puget Sound tribelets to the west and south. The Chilliwack were a back-country people on a tributary of the Fraser River west of the Cascades crest with their principal dialectal and cultural ties to nearby Fraser Valley groups and with a highly dilute Northwest Coast life style. The Lower Thompson were a main Fraser River tribal division in the heart of the Cascade Mountains, tied in language and basic lifeways to their Upper Thompson kinsmen on the eastern slopes of the Cascades and in the adjacent Fraser Plateau, yet with extraordinarily productive salmon fisheries and revealing clear life-patterning influences from their strongly riverine and weakly coast-oriented downriver neighbors. The Chelan, on the other hand, were a Columbia River and especially lake and mountain Plateau people, related in speech and culture most closely to the tribes immediately north and south of them in the Columbia Valley. Owing to these environmental and cultural contrasts, the four groups seem to provide an ideal, small and so workable sample of distinct tribal traditions, on the two faces of a major mountain mass, for an examination of certain questions of special theoretical interest.

These issues focus in particular upon:

(1) The essential features of the *biogeoclimatic mountain environments* of the four tribes and the degree to which they were substantially similar or different in terms of the general cultural requirements of the Indian tribes of the Pacific Northwest.

(2) The *nature of the use* made by each tribe in subsistence and other ways of their respective high terrain homeland and the life patterns, interpreted most broadly, followed by each when in its mountainous environment, and the ways in which among the four tribes these were substantially similar or significantly different.

(3) The ways in which *environmental factors* appear, on the one hand, to have made cultural similarities possible and, on the other, seem to explain differences in the mountain adaptations of these four tribes both in their resource use patterns and in their total life mode while resident in the higher elevations.

(4) The ways in which tribal *cultural backgrounds, orientations, and interests* seem to explain similarities and differences in the mountain utilization of the four tribes and, more generally, their higher elevation lifeways: the Upper Skagit and Chilliwack with their somewhat different coastal tilt, the Lower Thompson with their coastal-tinged but basic Plateau affiliation, and the Chelan with their out-and-out Plateau cultural life style.

Before this study was undertaken, it was recognized that the data descriptive of the high-country use by each of the four tribes and of their mountain life more generally were nowhere assembled into cohesive statements and subjected to thoughtful analyses. Yet it was hoped that the published, highly scattered ethnographic and ethnohistorical materials relevant to the subject would prove sufficiently rich and precise to allow at least a preliminary description and comparison of the four groups in the preceding four areas of research. Unfortunately, the available information was discovered to be both remarkably scanty and deficient in detail. Why in their field research ethnographers in the Pacific Northwest have been remiss in inquiring into how high-altitude land masses have contributed to the traditional material, social, and religious existence of native American groups need not be speculated upon here: the situation is hardly worse than it is for the remainder of western North America. It became apparent, at any rate, that even a first-cut endeavor to approach the above four central questions in relation to the North Cascades Complex and adjacent regions should be postponed until a period of limited field study could be undertaken with members of the four tribes who might be able to contribute meaningful, relevant data.

Because total-culture ethnographic summaries of the four tribes that traditionally claimed country within the perimeters of today's North Cascades Complex were required as major segments of this present study, too little time was available for two areas of further inquiry that might well contribute appreciably to the comprehensiveness and completeness of this report:

(a) The brief, aforementioned period of field work with the more elderly and best informed members of the four tribes, designed specifically to secure additional information regarding their traditional tribal life in the more elevated sectors of their territory. Present plans call for this to be soon carried out. If meaningful fresh and focused data are secured, these new findings will be integrated with the mountain cultural information in the preceding four chapters as a supplement to this present study.
(b) A further, systematic canvassing of peripheral and ephemeral data sources, both published and archival, for information relating to the traditional high-altitude lifeways of the four tribes. While not a segment of this present project, it is hoped that at some later time this necessarily slow research program can be undertaken and that the resulting extending information can be integrated with profit into the mountain cultural data of the preceding chapters and the projected supplementary summary.

With a full complement of the available data as compiled for this present literature survey and as broadened and deepened through the additional research specified under (a) and (b) immediately above, it is reasonable to hope that the more theoretical analyses specified under the four-pronged approach above may become possible. If this is the case, we shall then understand more fully not only the traditional hunting, fishing, and plant gathering life mode of the Upper Skagit, Chilliwack, Lower Thompson, and Chelan in the mountainous sectors of their Park and neighboring home territory, an intriguing and hitherto neglected segment of their total lifeways during the protohistoric and early postcontact period. We should also comprehend some of the natural and cultural factors that influenced the shape of their individual tribal life patterns. Further, this understanding would possess a much wider geographical relevance: it would contribute in some measure to our current meager knowledge of Native American cultural adaptation to the high elevation regions of all mid-latitude Western North America.

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1957 *British Columbia Road Map and Campsite Locations.*

Beckey, Fred
1981 *Cascade Alpine Guide: Climbing and High Routes, Rainy Pass to Fraser River.* The Mountaineers, Seattle.

A masterful, detailed guide—much based on personal experience—to the mountains of the North Cascades country, including the Lake Chelan, Skagit River, and Chilliwack River areas, describing in text, diagrams, maps, and photographs hundreds of trails and climbing routes. Each of the three sections into which the region is divided includes a compressed but highly informative summary of the geography (with climatic and biotic data), geology, and history of the country and a bibliography of selected references. Most of the volume is devoted to precise and exhaustive information on countless individual ranges, mountains, peaks, ridges, pinnacles, buttes, glaciers, and the like to provide hikers and climbers with an incomparable vade mecum.

Boas, Franz
1890 First General Report on the Indians of British Columbia. In Fifth Report of the Committee . . . [to Investigate] the Physical Characters, Languages, and Industrial and Social Conditions of the North-Western Tribes of . . . Canada. In *Report of the 59th Meeting of the British Association for the Advancement of Science,* Newcastle-upon-Tyne, 1889, pp. 801-893.

Except for a few, brief comments on the Interior Salish and Kutenai, the ethnographic section of this report is devoted exclusively to the coastal tribes of British Columbia, especially the more northern ones. The physical anthropological portion also focuses largely on the more northern coastal groups; a short series of measurements is given for seven Upper Thompson skulls. The linguistic section includes a summary for Kutenai as well as summaries for Tlingit, Haida, and Tsimshian.

Boas, Franz
1892 Physical Characteristics of the Tribes of the North Pacific Coast. In Third Report on the Indians of British Columbia. In Seventh Report of the Committee . . . to Investigate the Physical Characters . . . of the North-Western Tribes of . . . Canada. *Report of the 61st Meeting of the British Association for the Advancement of Science*, Cardiff, 1891, pp. 424-449.

A summary of the results of Boas' anthropometric research among the native population from northern coastal British Columbia south to northern California and inland along the eastern face of the Cascades. The principal data include a short series of 16 measurements and a set of five indices. The basic information for each person measured, identified as to tribal affiliation, is presented in tabular form. Other tables compare these mensurational and index data for the different tribal constellations. The significance of the findings in terms of eleven regional biotypes is briefly discussed.

Boas, Franz
1894 The Indian Tribes of the Lower Fraser River. In On the North-Western Tribes of Canada. Ninth Report of the Committee. . . . *Report of the 64th Meeting of the British Association for the Advancement of Science*, Oxford, 1894, pp. 454-463.

A short, generalized ethnographic summary of the Halkomelem tribes of the lower Fraser from the Tait to those at the Fraser mouth, based on field work among the Chehalis in the summer of 1890. The principal villages are located and intertribal relationships are outlined. Described in particular are their life patterns relating to hunting and fishing, marriage and death, and religion. A few notes regarding the Chilliwack specifically are included.

Boas, Franz
1895 Fifth Report on the Indians of British Columbia. In The North-Western Tribes of Canada. Tenth Report of the Committee. . . . In *Report of the 65th Meeting of the British Association for the Advancement of Science*, Ipswich, 1895, pp. 524-551.

A second report presenting anthropometric data collected by Boas and his associates among the tribes of southern British Columbia and the Nass River and Kwakiutl of the coastal region. The most detailed information covers, for both sexes, head length and width, facial height and breadth, and nasal height and breadth. The significance of these data and of other measurements and observations of lesser importance in regional terms is discussed. Many tables record his field measurements, allowing further analyses by others who may wish to undertake supplemental studies.

Boas, Franz
1898 Introduction. In *Traditions of the Thompson River Indians of British Columbia*, by James A. Teit, pp. 1-18. American Folk-Lore Society, Memoir 6.

An analytic and comparative commentary on certain aspects of the Upper Thompson myths collected by Teit in the 1890s. Certain developmental, evolutionary, and diffusional theories regarding the prehistoric growth of these myths are presented. These data are preceded by a brief summary of the traditional lifeways of the tribe as background for a fuller understanding of the cultural content of the myths. The mythic corpus of Teit is followed by an extensive body of explanatory and comparative notes and a set of abstracts of the individual myths, the first prepared by Teit and Boas and the second by Boas alone.

Boas, Franz
1900 Art; Conclusion. In *The Thompson Indians of British Columbia*, by James A. Teit, pp. 376-390. American Museum of Natural History, Memoir 2.

A brief survey of the decorative art, music, and dance of the Thompson Indians and an attempt to see the Thompson in relation to the Salishan groups as a whole largely in culture history terms.

Boas, Franz (editor)
1975 *Ethnographic Album of the North Pacific Coasts of America and Asia*. Jesup North Pacific Expedition. AMS Press, New York. Originally published 1900, American Museum of Natural History, New York.

A small portfolio of face and shoulders photographs of Thompson, Shuswap, and Lillooet men and women to illustrate the range of physical types. Also nine photographs of Thompson-Nicola countryside and of dwelling and sweat house structures. All were taken by Harlan Smith during the Jesup Expedition in the 1890s. They are introduced by two pages of background and explanatory notes.

Boas, Franz and Herman Haeberlin
1927 Sound Shifts in Salishan Dialects. *International Journal of American Linguistics* 4:117-136.

A pioneering study of phonetic similarities and differences in cognate terms in Salishan coastal and interior languages and dialects, and an analysis of the patterned consonental and vocalic sound changes that have occurred through time.

British Columbia (Province)
1974 *Beautiful British Columbia: Road Map, Campground & Angling Guide*.
1983 *Tourism British Columbia Road Map*.
1984 *Road Map and Parks Guide*.

Brown, William C.
1914 Old Fort Okanogan and the Okanogan Trail. *Oregon Historical Quarterly* 15:1-38.

An early, informative summary of the history of the fort, its role in the evolution of the Northwest and Hudson's Bay Company fur trade in the Okanogan Valley area, and its important function as a major supply-distribution and fur-collection center for the widely dispersed fur trading posts in the northern and eastern Plateau.

Cain, H. Thomas
1950 *Petroglyphs of Central Washington.* University of Washington Press, Seattle.

A comprehensive survey of the pictographs and petroglyphs of Washington from the Snake River mouth up the Columbia and its principal tributaries to the Grand Coulee area. Each site is located and its representations described. The figures are analyzed in terms of major and minor design elements and the spatial distribution of these elements within the geographical area investigated is discussed and charted.

Chapman, J. D. and D. B. Turner (editors)
1956 *British Columbia Atlas of Resources.* British Columbia Natural Resources Conference, 1956.

A useful data synthesis and plotting of resource distribution within the province. Since, however, its orientation is toward our contemporary Western culture and its resource requirements, it must be consulted with caution where precontact and early postcontact conditions regarding the bioenvironment are the issue. Its map of salmon spawning streams, for example, shows the Columbia as such only as far upriver as Grand Coulee Dam.

Clark, Lewis J.
1973 *Wild Flowers of British Columbia.* Gray's Publishing Limited, Sidney, British Columbia.

Unlike the Clark volume of 1976, this earlier one focuses entirely on the plants of the province and their distribution within the area. Nevertheless, the habitat data for the province are identical or nearly so for every plant of concern in this study. Where trivial differences occur, it is uncertain whether the information of this volume is being corrected in the 1976 publication or merely being slightly contracted or extended.

Clark, Lewis J.
1976 *Wild Flowers of the Pacific Northwest from Alaska to Northern California.* Edited by John G. Trelawny. Gray's Publishing Limited, Sidney, British Columbia.

Although far less technical and much less complete than the Hitchcock and Cronquist (1981) encyclopedic treatment, this magnificent, oversized volume of 604 pages covers a much broader geographic area, summarizes the essential data for a large number of genera and species adequately and understandably, and provides splendid color illustrations for many hundreds of varieties. Altogether a superb volume for a technically half-informed but curious amateur.

Codere, H.
1948 The Swai'xwe Myth of the Middle Fraser River: The Integration of Two Northwest Coast Cultural Ideas. *Journal of American Folklore* 61:1-18.

Analyzing three versions of the Swai'xwe myth accounting for the origin of the Swai'xwe mask, Codere contends that the Middle Fraser variant differs from and combines the "crest idea" of the Kwakiutl well north of the Fraser and the "power idea" of the Salishan peoples of southern Puget Sound. This is believed to support the thesis of a particular Middle Fraser Culture distinct from the cultural configurations of the surrounding coastal and near-coastal groups. These interpretations of the myths have been properly attacked by Suttles (1957:161-162) as resting on arbitrary misreadings of the published data and so as not favoring the existence in an earlier period of a unique Middle Fraser cultural mode.

Codere, Helen
1949 The Harrison Lake Physical Type. In *Indians of the Urban Northwest*, edited by Marian W. Smith, pp. 175-183. Columbia University Press, N.Y.

A reexamination of Boas' 1891 very limited anthropometric and observational data concerning his Harrison Lake Type. It is concluded that this unquestionably unique physical type, characterized by very short stature and other bio-traits, was also the basic type of the Chilliwack and other Middle Fraser groups. Interestingly, the Harrison Lake people do not overtly recognize their small stature: apparently it is with them an insignificant and irrelevant fact of life. This stature disinterest may be the consequence of seeing personal importance in the light of guardian spirit power strength or of inherited position and privileges, but this is yet unknown.

Collins, June McCormick
1949 John Fornsby: The Personal Document of a Coast Salish Indian. In *Indians of the Urban Northwest*, edited by Marian W. Smith, pp. 287-341. Columbia University Press, New York.

Fornsby's account of many episodes of his life, interspersed with myths and folktales as he thought relevant, recorded by Collins in the 1940s, edited, and rearranged roughly chronologically. Generalizations are relatively few, since Fornsby found these difficult.

Fornsby was born in 1855 in an Upper Skagit village near Lyman. However, his orientation was primarily downriver and with the salt-water people, and his account deals almost exclusively with the coastal area and its people. The few references to the Upper Skagit and their country are incorporated in the Upper Skagit section of this present report.

Collins, June McCormick

1974a *Valley of the Spirits, the Upper Skagit Indians of Western Washington.* American Ethnological Society, Monograph 56. University of Washington Press.

The basic general ethnography for the Upper Skagit. Although some subsistence and settlement data are provided, the emphasis is upon social structure, religion, and life cycle patterns. Early history and post-White changes in the traditional life style are also summarized. The material of this volume is extensively used in my summary of the traditional Upper Skagit lifeways.

Collins, June McCormick

1974b A study of Religious Change among the Skagit Indians, Western Washington. In *Coast Salish and Western Washington Indians* 4:619-759. Garland Publishing Inc., New York.

An analysis and explanation of the rejection of Roman Catholicism by many Skagit and the gradual acceptance of the Shaker cult in its place. The thesis is that Shakerism corresponded closely in many respects to the traditional guardian spirit religion and incorporated ethical elements that had become important to the Skagit.

Collins, June McCormick

1974c Aboriginal Habits [Habitat] of Upper Skagit, Suiattle-Sauk, Skykomish and Snoqualmie, Petitioner's Exhibit No. 1, Docket Nos. 92 and 93. In *Coastal Salish and Western Washington Indians* 5:facing 760. Garland Publishing, Inc., N.Y.

This map plots the aboriginal territory of the Upper Skagit and Suiattle-Sauk, the location of their village sites, and the location of their major subsistence areas.

Collins, June McCormick

1977 The Upper Skagit Indians and the Skagit River. In *Of Man, Time, and a River: the Skagit River, How should it be Used?* edited by Roland L. De Lorme, pp. 1-5. Occasional Paper 10, Center for Pacific Northwest Studies, Western Washington State College. Bellingham, Washington.

For the most part this is a very brief, popular summary of some of the information in Collins 1974a, but with special attention to the relation of traditional Upper Skagit life to the Skagit River.

Commission Findings

1974 The Confederated Tribes of the Colville Reservation, et al. . . . Docket No. 181. In *Interior Salish and Eastern Washington Indians* IV, pp. 437-474. Garland Publishing Inc., New York.

The Findings of Fact section contains ethnographic and historical data, developed in the course of the court testimony, on the Lakes, Colville, Sanpoil, Nespelem, Okanagan, and Methow. The Chelan are not considered.

Cox, Ross

1957 *The Columbia River.* Edited by Edgar I. Stewart and Jane R. Stewart. University of Oklahoma Press, Norman. Originally published as *Adventures on the Columbia River* 1831, Henry Colburn and Richard Bentley, London.

An account of Cox's 1812-1817 period in the Plateau fur trade, with observations regarding the various Indian groups which he met and with which he traded. Includes a unique chapter describing in detail the dress, habits, typical personality traits, etc., of the Canadian voyageur, half-breed, and Iroquois Indian, all common trade company employees at his time. A useful document but the narrative sections must be evaluated with care, since, as the Stewarts caution, Cox wrote largely from memory, failed on occasion to distinguish between heresay and personal knowledge, confused date sequences, and tended to romanticize and exaggerate his own role in events.

Curtis, Edward S.
1911 Salishan Tribes of the Interior. In *The North American Indian* 7:43-114, 162-166, 179-189. Norwood.

A survey of the traditional culture and Indian-White history of these native groups, based on data collected in 1907 and the following year or two by W. E. Myers, Curtis' field assistant. Useful summaries but poorly balanced: some groups receive extensive attention and others very little; some topics are well considered while others are very superficially treated. Excellent photography, but the subjects are not always as traditional as they might seem. What little Chelan information is presented is merged with other Interior Salishan data in this present report.

Dalquest, Walter W.
1948 *Mammals of Washington.* University of Kansas Publications, Museum of Natural History, 2:1-444.

A basic, comprehensive reference volume on the mammals of Washington both east and west of the Cascades. Detailed for each form are its physical characteristics, measurements, and areal distribution within the State. For a great many species extensive notes on behavioral characteristics and photographs of typical specimens are included.

DEMR (Department of Energy, Mines and Resources), Surveys and Mapping Branch, Canada.
1969 *Vancouver* NM-9/10, Internation Map of the World. 1:1,000,000. Edition 1.
1970 *Hope* quadrangle, 92H, Edition 2. 1:250,000.
1973 *British Columbia.* 1:2,000,000.
1975 *Skagit River* quadrangle, 92 H/3, Edition 3. 1:50,000.
1980 *Chilliwack* quadrangle, 92 H/4, Edition 7. 1:50,000.
1984 *National Topographic System Maps of Canada*, Index 2.

Diebold, A. Richard, Jr.
1960 Determining the Centers of Dispersal of Language Groups. *International Journal of American Linguistics* 26:1-10.

A detailed summary of Dyen's method for inferring from language distributions language centers of development and subsequent migrations, and an attempt to apply this methodology to the Mayan and Salishan language families. Swadesh's 1960 subgroupings of Salishan are accepted as the basis for the Salishan reconstruction.

Douglas, David
1972 *The Oregon Journals of David Douglas, . . . 1825, 1826 & 1827.* 2 vols. Edited by David Lavender. Oregon Book Society, Ashland.

In March and April Douglas canoed up the Columbia from The Dalles to Fort Colvile. Thence he traveled overland to the Spokane River and back, collecting plants en route. In June he returned down the Columbia by boat to Walla Walla, from which base he mounted a collecting trip to the Blue Mountains and Wallowas. This was followed by a late July-early August journey up the Snake to Nez Perce country and then overland to the Spokane River and Kettle Falls. From Colville he rode on horseback back to the Spokane River and down the Columbia to Fort Okanagan. There he secured a canoe and traveled down the Columbia to The Dalles and out of the Plateau. A substantial amount of miscellaneous ethnographic and natural history data is incorporated into these narratives, though nothing relating directly to the Chelan.

Duff, Wilson
1952 *The Upper Stalo Indians of the Fraser Valley, British Columbia.* Anthropology in British Columbia, Memoir No. 1. British Columbia Provincial Museum, Victoria, B.C.

A general ethnography of the Halkomelem-speaking groups that aboriginally held the country along the Fraser River from the Sumas Lake area upstream to the lower end of Fraser Canyon just above Yale, B.C. The study is a compilation of Duff's informants' data, collected in 1949 and 1950 and concerned principally with the upriver Tait tribelet and to a lesser degree with the Chilliwack. These informant data are merged with information extracted from earlier fragmentary ethnographies and uncovered in the early historical accounts of the area. There are many gaps in the data, as Duff acknowledges. Moreover, the study is difficult to use, because it is often unclear how much of general Upper Stalo statements and data relating to the Tait group are known to be descriptive of the traditional Chilliwack cultural situation. Still this study is the best and fullest ethnography available both for the Upper Stalo as a whole and for the Chilliwack in particular.

Duff, Wilson
1964 *The Indian History of British Columbia.* The Impact of the White Man, vol. I, Anthropology in British Columbia, Memoir No. 5. Provincial Museum of British Columbia, Victoria, B.C.

Following a summary of the major ethnic "divisions," language groupings, and tribes and bands of the province, Duff turns his attention to the demographic and especially cultural impact of Whites on the native groups. Postcontact times are divided into the fur trade (1774-1849), colonial (1849-1871), and postcolonial periods. For the first of these time levels, special notice is directed to trade, changes in the native potlatch and art, and the influence of guns. The colonial period is disposed of in two pages. The third period falls beyond the interest scope of this study. As might be expected, the coast and its native peoples receive particular emphasis.

D[urham], N. W.
1972 [Lake Chelan in the 1890s: 1891 Steamboat Trip to Stehekin on Lake Chelan's First Steamer.] Edited and annotated by Robert Byrd. The World Publishing Co., Wenatchee, Washington.

A slender volume republishing a newspaper account of a pleasure trip in May, 1891, apparently authored by Durham. To this narrative the editor has appended many explanatory notes and a collection of early photographs of the area. The nature and extent of his editing are unclear.

Dyen, Isadore
1962 The Lexicostatistically Determined Relationship of a Language Group. *International Journal of American Linguistics* 28:153-161.

An effort to introduce further mathematical rigor into Swadesh's lexicostatistical methodology and its use in subdividing language families into component units of comparable magnitude. The procedure is applied to the Salishan languages following Swadesh's lead and employing his data base.

Eells, Myron
1985 *The Indians of Puget Sound: the Notebooks of Myron Eells.* Edited by George Pierre Castile. University of Washington Press, Seattle.

A useful description of the traditional culture of the Indians of northern Puget Sound and of the culture change then in progress by a missionary who lived among the Twana beginning in 1874. The data were compiled by Eells in notebook form and brought to their final version in 1894. The total range of native life is covered, in varying degrees of depth, from material culture to art and religion. The work has clear biases and misunderstandings as one would expect of one laboring for culture change and religious conversion, and the interpretations are not always sound and without prejudice. But it includes a good deal of informative ethnography and culture change data and many fine material culture plates.

Elmendorf, William W.
1952 Soul loss illness in Western North America. In Indian Tribes of Aboriginal America, *Selected Papers of the XXIXth International Congress of Americanists*, edited by Sol Tax, pp. 104-114. University of Chicago Press, Chicago.

This study (1) defines the areas of occurrence and absence of the soul loss concept in western North America; (2) analyzes the soul loss data for component traits and groupings of traits; (3) examines the distribution of these traits and their associations with each other and with other features of native culture; and (4) considers these findings as they bear on the theory of unitary origin of the concept, on the theory of Asiatic origin of North American soul loss, and on the possible courses of development of soul loss theories and practices in Western North America.

The theory of curable soul loss disease was everywhere present, so far as available data indicate, among the tribes of the Northwest Coast and the northern (but not central and southern) Plateau areas. Though ethnographic data are lacking, it is presumed to have occurred in the Middle Fraser.

Elmendorf, William W.
1961a Skokomish and Other Coast Salish Tales. *Research Studies* 29:1-37, 84-117, 119-150. Washington State University.

A collection of 38 tales gathered in 1939-1940. Most are of Skokomish origin, although a few are from nearby tribes (Klallam, Snoqualmie). One takes place at the Skagit River mouth and Skagit Indians are

involved, but it is described as a Skokomish myth. The tales are introduced by a description of Elmendorf's informants, and by fine sections on style and provenience and a classification of the myths into types, a discussion of the tale characters, and a short but excellent analysis of the ethnographic content of the myths. Two appendices provide a list of characters appearing in the corpus and a useful index to the ethnographic content of the tales.

Elmendorf, William W.
1961b System Change in Salish Kinship Terminologies, *Southwestern Journal of Anthropology* 17:365-382.

It is hypothesized that the Proto-Salish language community possessed a single kinship system and terminology which, through time, changed to yield the two distinctly different Salish systems of the postcontact period: one among the coastal Salish from Bella Coola to Tillamook and the other among Interior Salish groups. The question addressed from both ethnological and linguistic perspectives is whether, given certain comparative evidence from recent Salish societies, the nature and direction of these changes can be inferred. To test this question the grandparent/grandchild and uncle-aunt/nephew-niece term sets are examined under three different, mutually exclusive explanatory hypotheses. It is concluded that the Interior groups have retained most closely the prototype, from which the Bella Coola, Coast Salish, and Tillamook have diverged most sharply.

Elmendorf, William W.
1962a Lexical Innovation and Persistence in Four Salish Dialects, *International Journal of American Linguistics* 28:85-96.

An analysis of the lexical relations of Musqueam and Cowichan, two Halkomelem dialects of southern Vancouver Island, with Songish and Twana, two Salish languages of northwest Washington, to carry our understanding of Salish internal relationships beyond Swadesh's sweeping study of 1950. The Salish subgroups represented in the four tribes are defined and the different degrees of lexical innovation among these are determined. Swadesh's figures on lexical persistence through time are tested and found to fail to accord with the lexical retention or replacement data for these four Salish tribes.

Elmendorf, William W.
1962b Lexical Relation Models as a Possible Check on Lexicostatistic Inferences. *American Anthropologist* 64:760-770.

A test of the Swadesh hypotheses that equivalent lexical relationships, measured by lexicostatistic techniques, indicate equivalent rates of change. The empirical and logical bases of this proposition are examined; the possibility that a particular set of synchronic lexical relations does not necessarily imply one and only one diachronic process is tested by reference to a set of theoretical models among three related Salish languages; and the evidence is brought forward that indicate the applicability of one particular model.

Elmendorf, William W.
1963 Linguistic and Geographic Relations in the Northern Plateau Area. *Southwestern Journal of Anthropology* 21:63-78.

A refined, thoughtful, seminal examination of Swadesh's 1950 lexicostatistical data concerning the Interior Salish speech groups to determine their implications for the culture history of these groups. The linguistic and geographic relations of these groups are investigated; a relative chronology of their gradual separation is proposed; the sequences of their probable territorial movements in specific directions are catalogued; and the likely linkage of these separations and movements with the changing environment is described. A valuable ethnolinguistic study for Plateau prehistory.

Elmendorf, William W., and Wayne Suttles
1960 Pattern and Change in Halkomelem Salish Dialects. *Anthropological Linguistics* 2 (7):1-32.

An excellent technical treatment of certain aspects of the Halkomelem language including internal dialect divisions and the phonologic and morphologic differences between three representative dialects: Chilliwack, Musqueam, and Cowichan. Certain lexicostatistic propositions are tested with important conclusions regarding differences in rate of linguistic change among semantic classes.

Ermatinger, Edward
1912 Edward Ermatinger's York Factory Express Journal, . . . of Journeys made between Fort Vancouver and Hudson Bay in the Years 1827-1828. *Royal Society of Canada, Transactions*, 3rd Series, 6:67-132.

Ermatinger's day-by-day account of his boat journey of March-April, 1827, from Fort Vancouver to Fort Colvile and the Boat Encampment and then on snowshoes over Athabasca Pass. Also his journal of his return in October, 1827, over the mountain defile and down the Columbia to Vancouver. On both occasions he rode the river through Chelan country. Likewise his boat travel of late March and April, 1828, up the Columbia from Fort Vancouver to the Boat Encampment, once more passing through Chelan territory.

Franklin, Jerry F., and C. T. Dyrness
1973 *Natural Vegetation of Oregon and Washington*, USDA Forest Service General Technical Report PNW-8.

A splendid study in depth of the various environmental and plant regions of the two states. The 15 physiographic provinces and particularly the major vegetational areas of both the forested and the steppe regions are described in detail with many diagrams, tables, and superbly informative illustrations. A landmark compilation and synthesis of bioenvironmental data, highly useful as a reference source.

Franchere, Gabriel
1854 *Narrative of a Voyage to the Northwest Coast of America in the Years 1811, 1812, 1813, and 1814.* Translated and edited by J. V. Huntington. Redfield, N.Y. Originally published as *Relation d'un Voyage a la Côte du Nord-Ouest*. . . 1820, edited by Michel Bibaud, published by Pasteur, Montreal.

The first French edition took gross liberties with Francheres's Ms. Apparently this 1854 English translation follows the Ms. much more closely. An account of Franchere's four years as an Astorian, including his sea journey to the mouth of the Columbia River. An excellent contemporary record of fur traders' activities in the Plateau and the establishing of the posts at the mouth of the Okanogan and on the Spokane. Useful in checking material presented by Cox, Ross, and other early nineteenth century trade personnel.

Fraser, Simon
1889 Journal of a Voyage from the Rocky Mountains to the Pacific Coast, 1808. In R.A. Masson, Récits de Voyages, Lettres et Rapports inédits Relatifs au Nord-Ouest Canadien, Première Série, vol. 1, no. 3: 155-221. In L. R. Masson, *Les Bourgeois de la Compagnie du Nord-Ouest*. A. Coté et Cie, Québec.

The first printing of Fraser's journal of exploration of the Fraser Valley. His record has been rather extensively edited by Masson, mostly through minor wording changes and expansions to make it more clear or more literary. In general, none of the original sense has been lost. In carefully comparing this version with Lamb's edition, however, I noted in the Upper Stalo sections a few substantive differences: e.g., "proceed on foot with our baggage" (Masson's, p. 192) vs. "proceed on foot without our baggage" (Lamb's, p. 98) where the context makes it plain that Masson's is correct; "pine trees" (Masson's, p. 194) vs. "fine trees" (Lamb's, p. 100), in which case the correct version is uncertain. Other differences of this class are noted in the text of this present report. Curiously, Masson blacked out some sentences and sentence parts in Fraser's original field account so heavily that Lamb was unable to read the words: one wonders what information Masson chose to conceal. This version should be read side-by-side with Lamb's by anyone concerned with historical details.

Fraser, Simon
1960 *The Letters and Journals of Simon Fraser, 1806-1808*. Edited by W. Kaye Lamb. Macmillan Company of Canada, Toronto.

Edited versions of several of Fraser's journals, that of 1808 reporting his descent from Fort George to the Gulf and return being of special interest to this present study. His travels through the Lower Thompson and Upper Stalo (including Chilliwack) country are described in cursory fashion but with some perceptive Indian details. Unfortunately, few precise geographic facts are provided, making very difficult the precise locating of many of his observations. While no great problem for the Lower Thompson area, it becomes such in the Upper Stalo country. For this reason only the most certain Upper Stalo data are incorporated into this present report.

In this publication Fraser's "transcripts have been considerably revised" to make Fraser's "meaning clear." Capitalization and punctuation, for example, have been altered to render the text "more intelligible and more readable." Different spellings of the names of the French-Canadian voyageurs and of the names of Indian tribes have been standardized. All this is really too bad. Editorial clarifications should be offered—and welcomed—in

my judgment only when achieved by techniques that do not destroy the original manuscript in any manner. Otherwise, as in this case, the reader is wholly at the mercy of the editor.

Gibbs, George
1855a *Indian Tribes of the Territory of Washington.* In I. I. Stevens 1855, pp. 402-436.

An informative description of the tribes between the Cascades and the Rockies as Gibbs, a member of Steven's party, saw and learned about them in the early 1850s. Particular attention is given to those groups along his route from the Klickitat and Yakima country to that of the Wenatchi, Southern Okanagan, and Colville and on east. Discussed are tribal locations, population estimates, and certain segments of material and social culture. Appended are demographic tables from earlier sources and sections on trading posts, missionary activities, and the treaty situation. The Chelan are mentioned only in passing and as a part of the Pisquouse (Wenatchi) group (p. 412). Basic data on the coastal groups from the lower Columbia to the Canadian line are also provided.

Gibbs, George
1855b *Reconnaissance of the Country Lying upon Shoalwater Bay and Puget Sound.* In I. I. Stevens 1855, pp. 465-473.

A summary of what was known in 1854 of the geography of the areas noted in the title, much of it the result of the survey referred to.

Gibbs, George
1860 *Sketch of the Country between the Skagit and Okinakane and Columbia Rivers.* National Archives Record Group 76.

Said to include a listing of Chelan villages and camps. Its ethnographic content beyond this point is unknown to me. (See Ray 1974:419 fn.)

Gibbs, George
1877 *Tribes of Western Washington and Northwestern Oregon.* Contributions to North American Ethnology 1:163-241. Department of the Interior, Washington.

A general ethnographic overview of the Indian groups between the Cascades and the Pacific from the lower Columbia to the Canadian line. Minimal attention is given to the inland groups against the Cascades. Most of the data are in the form of brief summaries of cultural categories with occasional references to specific groups by way of illustration: e.g., subsistence, material culture, property, slavery, warfare, diseases and curing, gambling, feasts, and cycle of life.

Glover, Richard (editor)
1962 *David Thompson's Narrative, 1784-1812.* The Champlain Society, Toronto.

Written by Thompson many years after his activities as a field fur trader, using his journals and his recollections of things and events as his guide. The volume summarizes in narrative style his rich trading experiences in Canada east of the Rockies, in the upper Missouri country, and in the intermontane plateau region west of the Divide. It provides much explanatory and generally descriptive material not to be found in his printed day-by-day records and covers time periods for which his daily journals remain unpublished. In some instances these narrative data differ somewhat from the facts as reported in his on-the-spot records. In such cases I routinely follow these latter records, unless convincing reasons exist to the contrary.

Green Trails
n.d. Marblemount, *Wa-No 47.* 15 minute series.

One of a series of maps showing roads and trails in the North Cascades Park complex. These cultural features, derived from U.S. Park Service data and of particular interest in this present study since they suggest possible old Indian trail routes, are superimposed on USGS base maps.

n.d. Mt. Challenger, Wa-No 15. 15 minute series.

n.d. Ross Lake, Wa-No 16. 15 minute series.

Haeberlin, Hermann
1924 Mythology of Puget Sound. *Journal of American Folk-Lore* 37:371-438.

Myths collected in English by Haeberlin and prepared posthumously for publication by Gunther from his field notes. The collection includes a group of transformer tales and another relating to five Wolf brothers. A set of tales has Fox as an important personage, taking the place of the Plateau Coyote. Of the 41 tales, 13 are credited to the Skagit; the remainder are reported to have been Snoqualmie, Snohomish, or Skykomish.

Haeberlin, Hermann and Erna Gunther
1930 *The Indians of Puget Sound.* University of Washington Publications in Anthropology, 4:1-84.

A general ethnographic survey of the Indian tribes of the Puget Sound area with special attention to the Snohomish, Snoqualmie, and Nisqually. Some data are included on neighboring groups, including the Skagit. This field information was collected in 1916-1917 by Haeberlin and slightly revised and extended by Gunther in preparing Haeberlin's original report for this republication.

Haines, Francis
1938 The Northward Spread of Horses among the Plains Indians. *American Anthropologist* 40:429-437.

A detailed study, coupling ethnographic and historical information, of the diffusion of the horse northward from the Sante Fe area in the Southwest. While the emphasis in on the Plains data, a few final paragraphs are devoted to its spread through the Great Basin into the Plateau.

Heizer, Robert F.
1942 A Decorated Mortar in Columbia Valley Art Style. *American Anthropologist* 44:534-537.

A brief discussion of the artistic aspects of a prehistoric ornamented basalt mortar found on the lower Columbia River. Design parallels are noted with Northwest Coast art, but these characteristics are distant enough to point to a local, specialized Columbia Valley style, which Heizer believes is in part ancestral to that of the Northwest Coast.

Henry, Joseph Kaye
1915 *Flora of Southern British Columbia and Vancouver Island.* W. J. Gage and Co., Toronto.

Useful because of its special geographical focus and particularly in providing early twentieth century taxonomic nomenclature roughly contemporaneous with the botanical binomials used by early ethnographers reporting ethnobotanical data. Many taxonomic plant names, like those of other western botanists of early years, are "obvious misidentifications based on eastern North American floras" (Taylor and MacBryde 1977:xvi). Plant distribution information is very limited.

Herzog, George
1949 Salish Music. In *Indians of the Urban Northwest*, edited by Marian W. Smith, pp. 93-109. Columbia University Press, N.Y.

A review of the music of the British Columbia Plateau, the middle and lower Fraser, and the nearby Northwest Coast areas, based on published data available in the late 1940s. The data corpus includes ten melodies from the Chilliwack and eight from the Lower Thompson, all recorded by Frances Densmore in 1926. From information at Herzog's disposal generalizations are made concerning the music of the Fraser country and these are compared with the characteristics of American Indian music over a much wider geographical area, with particular attention to the music of the classic groups of the Coast farther north. Certain technical traits of Salish music are detailed.

Hess, Tom
1976 *Dictionary of Puget Salish.* University of Washington Press, Seattle.

An impressively large and well analyzed collection of lexical information on Puget Sound Salish (Skagit and closely related dialects) gathered from native informants between 1962 and 1974 by a fully professional linguist.

Hilbert, Vi
1985 *Haboo: Native American Stories from Puget Sound.* University of Washington Press, Seattle.

English translations of 33 traditional myths of the Skagit and other Lushootseed-speaking groups of Puget Sound. Most were collected by Hilbert, a linguistically-trained Skagit and a native speaker of the language; others were developed from tapes or written texts recorded earlier by others. The terse oral myths as told in the past and to Hilbert have been expanded considerably with "additions appropriate to English prose and essential for the Western reader's understanding," background material taken for granted by old-time native listeners. Twenty-seven of the myths were told by Upper Skagit or part-Upper Skagit raconteurs; two were told by Sauk-Suiattle persons.

Hill-Tout, Charles

1900 Notes on the N'tlaka'pamuQ of British Columbia, a Branch of the great Salish Stock of North America. In *Report of the 69th Meeting of the British Association for the Advancement of Science*, Dover, 1899, pp. 500-584. Edited by Ralph Maud and republished as "Notes on the Ntlakapamuq . . ." in *The Salish People* (1978) 1:41-130, Talonbooks, Vancouver.

A general summary of the Thompson Indians. The ethnographic section briefly discusses their subsistence base: certain areas of material culture (utensils, canoes, weapons, sweathouses, clothing, tattooing, and painting); birth, naming, marriage, and mortuary customs; social organization; and various aspects of religion (guardian spirit quest, shamanism, taboos, and magical practices). Short sections deal with the archaeology of the Thompson country, the physical anthropology of the people, and their language, analyzed after the Latin model popular in Hill-Tout's period. An English-to-Thompson vocabulary is provided. The final 50 pages are devoted to Thompson mythology in English translation.

Hill-Tout, Charles

1903 Ethnological Studies of the Mainland Halkome'lEm, a Division of the Salish of British Columbia. In *Ethnological Survey of Canada—Report of the Committee*, Report of the British Association for the Advancement of Science, 72nd Meeting, Belfast, 1902, pp. 355-490.

A summary of Hill-Tout's several periods of cultural and linguistic research among the various tribelets of the lower Fraser. Included in the Chilliwack section are data relating to demography, dwellings, social organization, shamanism, the cycle of life, and mythology. Some 32 pages are devoted to language analysis and a vocabulary listing.

Hill-Tout, Charles

1904 (See Hill-Tout 1978c.)

Hill-Tout, Charles

1978a The Tcilqeuk. In *The Salish People*, vol. III, *The Mainland Halkomelem*. Edited by Ralph Maud. Talonbooks, Vancouver, B.C. Originally published 1903 in Ethnological Studies of the Mainland Halkome'lEm, a Division of the Salish of British Columbia (q.v.).

The text of the 1903 report remains virtually unchanged—though lengthy paragraphs have been divided—except in two notable respects. First, Hill-Tout's phonetics are simplified: e.g., Q and E become "q" and "e" respectively; glottal and stress marks are dropped; macron, cedilla, dieresis, and circumflex are lost. As a consequence, native sound distinctions are blurred through the merging of two separate sounds into a single English letter. In some çases, the results are misleading. On the basis of Hill-Tout's phonological descriptions, ç should be represented by the English "th" (θ), not a "c" and his c should be converted to "sh" (š), not left as a "c." His Q has nothing in common with the English "q" but represents something like "wh" (x^w). Native terms for population groupings, localities, and cultural items are converted to contemporary equivalents or simple English letter sequences: e.g., Sūwā'le to "Soowahlie"; Tcil'Qē'uk to Chilliwack; N'tlaka'pamuQ to "Thompson [the tribe]." A few explanatory notes have been added. Second, essentially all of the linguistic data have been eliminated: most of the descriptive material and all of the illustrative data and vocabulary.

Hill-Tout, Charles

1978b Report on the Ethnology of the Okanaken [Okanagan] of British Columbia, an Interior Division of the Salish Stock. In *The Salish People*, vol. I, *The Thompson and the Okanagan*, pp. 131-163. Edited by Ralph Maud. Talonbooks, Vancouver, B.C. Originally published 1911 in the *Journal of the Royal Anthropological Institute* 41:130-161.

A superficial summary of research among the Northern Okanagan, probably in 1905-1906. Facts are meager and his anthropological theories are sometimes wildly improbable: e.g., Proto-Salishan was genetically

related to Malayo-Polynesian and brought to the West Coast by an obscure transpacific movement. Most of the paper is directed to Northern Okanagan mythology. The editor has "normalized Hill-Tout's phonetic spelling to the nearest English [letter] equivalent" by the simple but absurd expedient of omitting all diacriticals with highly misleading results. (For more on this, see commentary with Hill-Tout 1978a.) What few references to North Cascades Park groups are included are to be found in this present report.

Hill-Tout, Charles

1978c Ethnological Report on the Stseelis [Chehalis] and Skaulits [Scowlitz] Tribes of the Halkomelem Division of the Salish of British Columbia. In *The Salish People*, vol. III, *The Mainland Halkomelem*, pp. 95-148. Edited by Ralph Maud. Talonbooks, Vancouver, B.C. Originally published 1904 in the *Journal of the Royal Anthropological Institute* 34:311-376.

A short ethnographic survey, based on Hill-Tout's field research, of the traditional culture of the Chehalis of the Harrison River and of the Scowlitz of the nearby Fraser. As narrated in a Chehalis tradition, the tribe is considered by Hill-Tout to have been formed in the remote past through the joining of a Halkomelem group and an interior mountain people. Brief descriptive sections are devoted to utensils, dress, and dwellings; social structure and hereditary totems; the life cycle; religious beliefs, shamanism, and dances; and concepts of the cardinal points, winds, and divisions of the year. Much of the report consists of a body of myths and traditions. The entire study is marred by a naiveté and superficiality, even considering its early date, and in some areas by a viewing of the lifeways of these two groups from an ill-balanced Northwest Coast perspective.

Hitchcock, C. Leo and Arthur Cronquist

1981 *Flora of the Pacific Northwest.* 5th printing. University of Washington Press.

The standard manual of northwestern flora. While a one volume condensation of the enormous five volume work of the authors and others, *Vascular Plants of the Pacific Northwest*, it is still an extraordinarily detailed and complete compendium of botanical data.

Hodge, Frederick Webb (editor)

1910 *Handbook of American Indians North of Mexico.* Bureau of American Ethnology, Bulletin 30, part 2.

1912 *Handbook of American Indians North of Mexico.* Bureau of American Ethnology, Bulletin 30, part 1. Originally published 1907.

A two-volume compendium of native Indian groupings north of the Mexican border—e.g., confederations, tribes, bands, important villages—noted historically or ethnographically, of important Indian leaders in both native and Euroamerican contexts, and of foods, artifact types, and other Indian data, with brief descriptive summaries for each item. Literature references are furnished for each entry, providing an especially useful lead to early and no largely forgotten data sources.

Hymes, D.H.

1960 Lexicostatistics So Far. *Current Anthropology* 1:3-44

A broad description and balanced appraisal of the theory, methods, and applications of lexicostatistics, the statistical analysis of language phenomena for historical inference. Particular attention is given by Hymes to glottochronology, one important component of the field and one which has received much praise and much criticism: i.e., the study of rate of change in basic vocabulary and the use of carefully derived formulas especially in estimating time depth and other relationships of languages within a family. An excellent encompassing survey of the field for its time by a first class ethnolinguist with a great breadth of knowledge and an innovative turn of mind.

Imperial Oil Limited (Esso)

1958 *British Columbia* [Highway Map].

Indian Claims Commission

1974 The Upper Skagit Tribe of Indians v. the United States of America. In *Coastal Salish and Western Washington Indians* 5:315-343. Garland Publishing, Inc., N.Y.

The findings of fact and decision in this litigation.

Jacobs, Melville
1931 A Sketch of Northern Sahaptin Grammar. *University of Washington Publications in Anthropology* 4:85-292.

An early but basic reference grammar for the Sahaptin dialect group closest geographically to the Chelan and Middle Columbia Salish peoples in general.

Jenness, Diamond
n.d. *The Faith of a Katzie Indian.* Unpublished manuscript, National Museum of Canada, unpaged.

Referred to by Duff 1952:28, 135. Unavailable to me.

Kinkade, M. Dale
1967 On the Identification of the Methows (Salish). *International Journal of American Linguistics* 33:193-197.

A thoughtful and well-documented argument for the linguistic reclassification of Methow with the Okanagan, Sanpoil-Nespelem, Colville, and Lakes as a member of the Okanagan language rather than with the Chelan, Entiat, Wenatchi, and Columbia as a dialect of the Columbia language. This represents a departure from the accepted position of linguists and ethnographers. Historical and ethnographic references to the Methow in a language context are reviewed and fresh field data are offered as they relate to the question. Kinkade concludes that for some now unclear reason the Methow probably "simply changed languages," either in the precontact period as he believes the more likely or after White contact.

Krajina, V. J.
1969 Ecology of Forest Trees in British Columbia. *Ecology of Western North America* 2(1):1-146. Department of Botany, University of British Columbia.

A detailed, technical study of the biogeoclimatic zones of the province. Of particular interest in the context of this present study because it describes the floristic components, particularly the trees, characteristic of these various zones.

Langen, T. C. S.
1984 Four Upper Skagit Versions of "Starchild." *Nineteenth Conference on Salish and Neighboring Languages, Victoria.*

This publication is not available to me.

Lempfrit, Honore-Timothee, O.M.I.
1985 *His Oregon Trail Journal and Letters from the Pacific Northwest, 1848-1853.* Edited by Patricia Meyer. Ye Galleon Press, Fairfield, Washington.

A diary of an overland journey from St. Louis to Fort Vancouver and on to the Mission on the shore of Puget Sound north of Olympia, April 10 to October 18, 1848. This journal is without major relevance to the present report. Published with this document are nine mostly short letters written at "Fort Victoria" on Vancouver Island, describing primarily religious and housekeeping matters. The interest in this volume lies in the single reference to Lempfrit's missioning in the Fort Langley area in 1852.

Lewis, William S. and Jacob A. Meyers
1920 Journal of a Trip from Fort Colvile to Fort Vancouver and Return in 1828. *Washington Historical Quarterly* 11:104-114.

A fragment of a manuscript journal of John Work. This section covers his journey by boat between Forts Colvile and Vancouver from May 20 to June 11 and, on his return, from July 23 to August 15, 1828. For many days, the account consists of no more than very brief diary-like comments. Yet it includes some informative observations on certain of the Indian groups along the Columbia.

Lyman, W. D.
1899 Lake Chelan, the Leman of the West. *Overland Monthly* 33 (195):195-201. Civil War Reconstruction, A.P.S. III, Reel 41, Xerox University Microfilms, Ann Arbor.

A popular account of a trip up the lake about 1898.

Masson, L.R.
1889 Esquisse Historique. In L. R. Masson, *Les Bourgeois de la Compagnie du Nord-Ouest, Récits de Voyages, Lettres et Rapports inédits Relatifs au Nord-Ouest Canadien*, 1:1-154. A Coté et Cie, Quebec.

A brief sketch (in French) by Masson (pp. 97-108) of Fraser's 1808 exploration of the Fraser River, a small part of Masson's general survey of the North West Company and its fur trade. Perhaps sufficient for some readers, it is of little value as a historical statement: events are altered, reordered, and compacted, and entire sequences of days are not even mentioned. Some direct quotes (in English) from Fraser's journal differ from the Lamb edition. Details, including most of Fraser's observations relating to Indians, are omitted. Fraser's entire journey through Upper Stalo country from Spuzzum to the "Stremotch" sector is telescoped into two short paragraphs. A few tributaries and other locations are identified as Fraser passed them, not all, it seems, accurately.

Maud, Ralph
1982 *A Guide to B.C. Indian Myth and Legend: A Short History of Myth-Collecting and a Survey of Published Texts*. Talonbooks, Vancouver, BC.

A survey and evaluation of the ethnographic—especially mythic—contributions of Hill-Tout, Boas, Teit, Chamberlain, Swanton, and Sapir, of several ethnographers associated later with the National Museum of Canada (notably Barbeau, Beynon, Jenness, and McIlwraith), and briefly of a number of other, more recent British Columbia myth collectors. Appended is a useful checklist of ethnographic field trips within British Columbia and the publications resulting from these field experiences.

Mayne, Commander R. C.
1862 *Four Years in British Columbia and Vancouver Island*. John Murray, London.

An account of Mayne's part in demarcating the Canadian-U.S. boundary. It includes many fine, perceptive observations concerning the Fraser River Indians, as well as those on the Coast and in the western Canadian Plateau. A valuable, early eye-witness source of natural history, geographical, and ethnographic information.

Merk, Frederick (editor)
1931 *Fur Trade and Empire, George Simpson's Journal*. Harvard University Press, Cambridge.

Account of Simpson's journey of inspection from York Factory to Fort George at the mouth of the Columbia River and return, together with comments on the Hudson's Bay Company posts, the status of the fur trade west of the Rockies, his plans for reorganizing the trade, and on the Indian groups he met, especially those of the lower Columbia. With his party he descended the Columbia River from the Boat Encampment in 1825 and returned upriver the following year, passing through the Chelan segment of the Columbia on November 2, 1825, and again on April 3, 1826.

Mooney, James
1896 *The Ghost-Dance Religion and the Sioux Outbreak of 1890*. Bureau of American Ethnology, 14th Annual Report, 1892-93, pp. 641-1136.

A massive, broad-ranging study of the dance and related matters in the Southeast, Plains, Plateau, and Coast areas. The study is of special interest in connection with the present report for its section titled "Tribes of the Columbia region." This consists of brief summaries for many Plateau tribes, giving for each where the data were available the various names used for the group, language affiliation, geographic location, a sentence or two by way of general culture statement, a précis of the tribal postcontact history, and recent demographic figures. It includes also a map of the reservations in the United States in 1890 and a tribal distribution map, dated 1894, for the "upper Columbia region in Washington, Oregon and Idaho."

Mooney, James
1928 The aboriginal population of America North of Mexico. *Smithsonian Miscellaneous Collections* 80 (7):1-40.

A pioneering attempt of the early 1900s to assemble population figures from various early sources. It includes a section on "the Columbia Region," in which an effort is made to identify the Lewis and Clark tribal units and to use their informant-derived population approximations, as well as figures reported by later authors. With attention to the depopulation effects of the late precontact and early postcontact epidemics, an attempt is

also made to estimate the population of groups as of 1780. Because of the way in which he lumps tribal units, his data are not useful in the present study.

NARN (*Northwest Anthropological Research Notes*)
1974 Reprint of Report of the Committee for Investigating and Publishing Reports on the Physical Characters, Languages, and Industrial and Social Conditions of the North-Western Tribes of the Dominion of Canada, from the *Report of the Meeting of the British Association for the Advancement of Science, 1886-1889* [1899], 8 (½):1-384.

A convenient source of these early but valuable reports that in the originals are out of reach to many. Included are several by Franz Boas detailing the results of his field studies.

Nelson, Denys
1927 *Fort Langley, 1827-1927: A Century of Settlement in the Valley of the Lower Fraser River.* Art, Historical and Scientific Association, Vancouver, B.C.

A historical summary of the establishment of Fort Langley and its role in the happenings in the Fraser Valley from the Fraser Canyon downstream during the century indicated. Its data are commendably detailed, much of it derived from oral interviews and ephemeral local publications not widely circulated.

Overmeyer, Philip Henry
1941 George McClellan and the Pacific Northwest, *Pacific Northwest Quarterly* 32:3-60.

A summary and review of McClellan's 1853 exploration of the Cascades area with special reference to its passes, as a part of the I.I. Stevens' railroad survey. The historical background of the survey and biographical information on McClellan are provided. Two maps show parts of the routes followed, but neither carries the parties into the North Cascades National Park Region. Overmeyer is critical of McClellan both as an administrator and as a field explorer.

Parker, Samuel
1842 *Journal of an Exploring Tour beyond the Rocky Mountains... in the Years 1835, '36, and '37.* 3rd ed. Ithaca, N.Y.

In diary form, Parker relates his crossing of the Plains and southeastern Idaho, and his descent of the Clearwater, Snake, and Columbia to Astoria. Fort Vancouver is well described. Considerable attention is given to the culture and conditions of the Indians of the lower Columbia and of the southern and central Plateau. His final journey back up the Columbia to Fort Colvile and return to Vancouver is recounted in narrative diary style.

Phillips, Paul Chrisler [and J. W. Smurr]
1961 *The Fur Trade.* 2 vols. University of Oklahoma Press, Norman.

An extensive survey of the fur trade in the United States through its full time-period. Chapters 40-43 and 47 (vol. 2) are especially relevant to its history in the Plateau and to Indian-trader relations in the region. In securing his working data, Phillips visited many libraries and consulted much primary archival material in the U.S., Canada, and western Europe. An informative and useful study. However, to judge from his information relating to the early explorers and traders in the Pacific Northwest, the area with which I am most familiar, he generally accepts uncritically the historical conclusions, the geographical locations of events, and other data of previous historical writers and trader-narrative editors. This procedure leads to enough clear errors of fact and shaky assumptions in matters of anthropological interest to argue for careful specialist use of these volumes.

Pierce, Henry H.
1973 *Report of an Expedition from Fort Colville to Puget Sound, Washington Territory, by Way of Lake Chelan and Skagit River, . . . August and September, 1882.* Reprinted. Ye Galleon Press, Fairfield, Wash. Originally published 1883, Government Printing Office, Washington D.C.

A day-by-day record of his journey. Excellent in its detailed geographic description of the route followed and in its impressive sketch map showing the trail, major streams encountered, and the location of each night's encampment, permitting a close interlocking of the narrative and map. In the Galleon reprint, the original is photocopied (commendable since errors made in resetting in type are avoided) and repaginated (regrettable since the pagination of the original is omitted). The Chelan section and parts involving adjacent Methow and Skagit areas have been retyped and reprinted by Stone (1983:12-24).

Piper, C. V., and R. Kent Beattie
1914 *Flora of Southeastern Washington and Adjacent Idaho.* New Era Printing Co., Lancaster, Pa.

An exhaustive, professional compendium of the varied flora of the southeastern corner of Washington and neighboring Idaho, where Upper Sonoran, Arid Transition, Canadian, and Hudsonian zones all occur. The data are taxonomically ordered and provide botanical terms, common English names, and brief botanical descriptions for the individual families, genera, and species. Geographical distribution and ecological provenience are indicated for each species. An outdated study but valuable for determining the plants recorded and botanically identified in early ethnographic and ethnohistorical studies of the region.

Piper, C. V., and R. Kent Beattie
1915 *The Flora of the Northwest Coast.* New Era Printing Co., Lancaster, Pa.

Discusses in technical detail the flora of the area between the summit of the Cascades and the Pacific Ocean from the 59th parallel south to the headwaters of the Willamette River. Like the Henry volume, this work serves principally to identify plant binomials used by earlier ethnographers but no longer current and to place plants in their geographical location and elevational range.

Ray, Verne F.
1932 *The Sanpoil and Nespelem: Salishan Peoples of Northeastern Washington.* University of Washington Publications in Anthropology, 5:1-237.

The standard, comprehensive ethnography for the central Plateau, compiled from field data secured in the 1928-1930 period. It includes a few references to the Chelan; these are incorporated into the Chelan section of this present report.

Ray, Verne F.
1936 Native Villages and Groupings of the Columbia Basin. *Pacific Northwest Quarterly* 27:99-152.

Brief discussions of the biogeoclimatic characteristics of the Basin and mountains immediately to the east and of the linguistic relationships, cultural subdivisions, and political structures of the native groups. Difficulties in arriving at precise tribal boundaries are noted. The final half of the study presents a catalog of the traditional villages and village locations of many of the groups, including a brief Chelan list, based on his own field investigations.

Ray, Verne F.
1939 *Cultural Relations in the Plateau of Northwestern America.* Publications of the Frederik Webb Hodge Anniversity Publication Fund, vol. III. pp. 1-154. The Southwest Museum, Los Angeles.

A broad, pioneering, comparative study of similarities and variations among the Plateau tribes in a number of cultural domains. Covered are aspects of political organization, social stratification, warfare and pacifism, girl's puberty rites, disposal of the dead, the guardian spirit quest, concepts of disease, the winter spirit dance, and dwellings and watercraft types. Data are drawn largely from Ray's own field research.

Ray, Verne F.
1942 Culture Element Distributions: XXII Plateau. *Anthropological Records* 8 (2):99-262.

A survey of the distribution of thousands of culture traits in a representative sample of 15 native groups in the Plateau, including the Kittitas, Wenatchi, and Sanpoil, all three occupying territory not far from that of the Chelan, and the Lower Thompson of the Fraser Canyon. The data are derived from Ray's field research of the 1930s.

Ray, Verne F.
1974a Ethnohistorical Notes on the Columbia, Chelan, Entiat, and Wenatchee Tribes. In *Interior Salish and Eastern Washington Indians*, vol. 4, pp. 377-435. Garland Publishing, Inc., New York.

Summarizes White-Indian relations for the four tribes, with attention almost entirely to the period after 1850. Appended to this summary is a brief section recounting the early years and describing the character of Chief Moses and, based on his own field research, a valuable roster of traditional villages and their locations for the four tribes.

Ray, Verne F.
1974b Petitioner's Exhibit No. 532, Indian Claims Commission—Docket No. 181, Colville et al. v. U.S. In Commission Findings, *Interior Salish and Eastern Washington Indians* IV; facing 450. Garland Publishing Inc., New York.

Map of tribal boundaries and village/camp locations of the Lakes, Colville, Sanpoil-Nespelem, Southern Okanogan, and Methow. Unfortunately, the descriptive material prepared by Ray to accompany and explain this map, including a key to the numbered settlements marked, has not been published.

Rich, E. E.
1967 *The Fur Trade and the Northwest to 1857*. McClelland and Stewart, Toronto.

An excellent historical summary though little attention is paid to specific data sources and to matters of special anthropological interest. Still, it provides a fine historical framework into which primary narratives and field journals can be fitted.

Chapter 14 summarizes the principal events of the fur period in the Plateau and on the Northwest Coast. The relations among the various fur companies active in the region and among the British, American, and Russian interests are explored. Little attention is paid, however, to the Indian groups of the region: to their relationships with the individual companies and specific traders and to the ways in which the traders' presence influenced their life style.

Rivera, Trinita
1949 Diet of a Food-Gathering People with Chemical Analysis of Salmon and Saskatoons. In *Indians of the Urban Northwest*, edited by Marian W. Smith, pp. 19-36. Columbia University Press, New York.

An early study of two important foods of the Indians of the Washington and British Columbia coast and lower Fraser River. Attention is paid to the nutritional properties not only of fresh foods (in the case of salmon, of different species and of different parts of the fish) but also of foods prepared in different traditional ways for storage (e.g., smoking vs. drying). Smith provides a valuable introduction and concluding section discussing the broader aboriginal subsistence patterns of the area.

Ross, Alexander
1956 *The Fur Hunters of the Far West*. Edited by Kenneth A. Spaulding. University of Oklahoma Press, Norman. Originally published 1855.

Ross' account of his life as a fur trader in the Plateau and northern Great Basin in the period from 1814 to 1825, when he left the Northwest for the last time. The 1855 edition was substantially altered from Ross' manuscript to delete what was considered "prolix, earthy, or potentially offensive to someone." This 1956 edition returns to Ross' original Ms., but omits several final chapters, including data of ethnographic importance.

Ross, Alexander
1966 *Adventures of the First Settlers on the Columbia River*. Reprinted. Readex Microprint. Originally published 1849 as *Adventures of the First Settlers on the Oregon or Columbia River . . . with an Account of Some Indian Tribes on the Coast of the Pacific*, Smith, Elder and Co., London.

A circumstantial account of Ross' journeys, trading posts, and life as a trader with the Pacific Fur Company in 1811-1813, conveying much of the flavor of the very early fur trade and of the Indians the traders encountered. Ascending the Columbia River in August, 1811, Ross and his small party appear to have been the first Whites to have met the Chelan in their own country. The final four chapters describe the lifeways of the Okanagan as Ross observed them during the months he passed in their homeland. A highly informative account in spite of the biases of the time.

Schaeffer, Claude E.
1940 *The Subsistence Quest of the Kutenai: A Study of the Interaction of Culture and Environment*. Ph.D. Dissertation, University of Pennsylvania.

The focus and scope of this study are adequately described by its title. It is of peripheral interest to this present report, but still useful for certain comparative data.

Schalk, Randall F.
1977 The Structure of an Anadromous Fish Resource. In *For Theory Building in Archaeology*, edited by Lewis R. Binford, pp. 207-249. Academic Press, San Francisco.

A detailed, technical survey of the anadromous fish types of the Northwest, their behavioral—especially spawning—characteristics, and their complex relationships with the varying biogeoclimatic environments of the area and the different life patterns of the native peoples of the region. It includes excellent, quantified information on fish productivity among the native groups and the importance of fish storage in the prehistoric development of their lifeways.

Simpson, Sir George
1847 *Narrative of a Journey Round the World, during the Years 1841 and 1842.* 2 vols. Henry Colburn, London.

Only a small part of volume 1 (pp. 119-167) is relevant to Plateau concerns. These pages recount his journey of July, 1841, over the Rockies to the Kootenay headwaters and down that river on horseback to the Bonners Ferry area and across to Lake Pend Oreille. From there he traveled by boat downstream to the Calispell Valley, from which, again astride his horse, he crossed the mountains to Fort Colvile. Finally, in August he canoed at headlong speed down the Columbia to Fort Vancouver. Some useful ethnographic observations are included in this narrative, though no mention is made of the Chelan.

Simpson, Sir George
1931 See Merk 1931.

1947 Part of a Dispatch from George Simpson Esqr . . . to the Governor Committee of the Hudson's Bay Company, London, March 1, 1829. In Part of a Dispatch . . . , edited by E. E. Rich, pp. 1-119. In *The Publications of the Champlain Society, Simpson's 1828 Journey to the Columbia*, vol. 10. Toronto.

A comprehensive overview and evaluation of the state of the Company's affairs in the western region visited by Simpson in his journey of inspection in 1828 and a description of the managerial changes undertaken to improve the efficiency and profitability of the trading operation. Brief mention is made of the Athabaska and Mackenzie River Districts, but the principal attention is devoted to the Company's business in British Columbia and Washington.

Smith, Allan H.
1936-1938 *Kalispel Ethnography.* Ms. field notes, pp. 1-1,716, in possession of the author.

Smith, Allan H.
1983 Ethnohistory 1811-1855; the Native Peoples. In *Cultural Resources of the Rocky Reach of the Columbia River*, Project Report no. 1, vol. 1. Edited by Randall F. Schalk and Robert R. Mierendorf, pp. 25-354. Center for Northwest Anthropology, Washington State University, Pullman.

Two lengthy ethnohistorical and ethnographic chapters relating to the Columbia, Wenatchi, Entiat, and Chelan with particular reference to (a) early historic contact and the ethnographic insights these documents provide, and (b) population estimates, linguistic affiliations, socio-political entities, subsistence resources, food acquisition strategies, and dwellings and secondary structures of these four groups. A limited, tentative culture-historical reconstruction is attempted.

Smith, Allan H.
1984 *Kutenai Indian Subsistence and Settlement Patterns.* Project Report No. 2, Vol. 2 (BF 286 18 08F U 0000), Center for Northwest Anthropology, Washington State University, Pullman, Washington, pp. 1-291.

Of interest in this North Cascades study primarily for its broad survey of Upper Kutenai subsistence, compiled from the ethnographic and historical literature. Because of litigation affecting the Kutenai in progress while this information were being assembled, field research among the group to complement these data proved impossible.

Smith, Allan H.
1985a *Medicinal Plants of the Thompson Indians and Aboriginal Land Use Patterns.* Ms. in possession of author.

A detailed study of traditional Thompson medicinal plants as documented by Teit (1900) and their occurrence in relation to the plant community zones of the plant ecologists. The focus is upon what such ethnobotanical data can tell about land use patterns of native groups, in this case of high altitude regions of the tribal territory.

Smith, Allan H.
1985b *The Traditional Culture of the Nez Perce, 1700-1835.* Ms. in progress in possession of the author.

Smith, Allan H.
1986 Kalispel Ethnography and Ethnohistory. In *Calispell Valley Archaeological Interim Report for 1984 and 1985 Field Seasons*, edited by Alston V. Thoms and Greg C. Burtchard, pp. 139-286. Center for Northwest Anthropology, Contributions in Cultural Resource Management No. 10, Washington State University, Pullman.

A summary of five segments of Kalispel culture and ethnohistory of immediate relevance to the archaeological finds of the Usk project: traditional methods of gathering, preparing, and storing root foods with particular emphasis on the ground oven; dwellings and attendant structures and their spatial arrangements in the village and camp; the effect of epidemics on the Kalispel life mode; the role of the horse after its introduction about 1760-1770; and the influence of the early fur traders and their Euroamerican goods on traditional Kalispel cultural patterns.

Smith, Harlan Ingersoll
1907 *Archaeology of the Gulf of Georgia and Puget Sound*, American Museum of Natural History, Memoir 2, Part 6. E.J. Brill, Leiden.

A summary of the archaeology of the Gulf of Georgia and Puget Sound areas, as known in the early 1900s, with some attention to sites and artifacts of the lower Columbia Valley. Surveyed area by area are the cairns, shell mounds, and petroglyphs and the artifacts discovered in these sites. Treated in separate sections are the stone clubs, stone axes, seated human figures holding a dish, and stone sculptures. A short section, contributed by Franz Boas, deals with the whale-bone clubs of the area between Vancouver Island and the Columbia River and up the Fraser to Kamloops. Included are a few site photographs and many detailed artifact drawings.

Smith, Marian W.
1940 *The Puyallup-Nisqually.* Columbia University Press, N.Y.

A full-scale general ethnography, presenting field data collected in 1935-1936 and covering in detail material, social, and cognitive segments of culture. The basic source of information regarding the traditional lifeways of these two groups.

Smith, Marian W.
1941 The Coast Salish of Puget Sound. *American Anthropologist* 43:197-211.

A brief overview of this cluster of Salishan coastal tribes. Discussed are the nature of group boundaries, village distribution patterns and characteristics, distinctions between "salt water" peoples and "inland" groups, and cultural differences in village structure and social patterns between Puget Sound groups and tribal entities on coastal British Columbia and the Fraser River. The cultural affiliations of the Nooksack, Lummi, and Songish, located geographically between the British Columbia and Puget Sound areas, are examined in relation to the groups to the north and those to the south. Four clusters of Puget Sound tribes are posited—Puyallup-Nisqually and the Central, Northern, and Inland Puget Sound groups—and their individual, distinctive cultural traits are briefly outlined. Lists of the native villages and extended villages are given by name and location for the Sahehwamish, Squakson, Puyallup, Nisqually, Duwamish, Suquamish, Snohomish, Swinhomish, Muckleshoot, Snoqualmie, Skagit, and Samish, in itself a highly useful contribution to the ethnography of the area.

Smith, Marian W.
1943 Columbia Valley Art Style. *American Anthropologist* 45:158-160.

A brief comparison of the decorative art style of a stone mortar, discovered archaeologically on the Columbia River at the mouth of the Deschutes River, with classic Northwest Coast art and with basketry designs of the Salishan groups of the southern Washington coast. Significant parallels are noted.

Smith, Marian W.
1946 Petroglyph Complexes in the History of the Columbia-Fraser Region. *Southwestern Journal of Anthropology* 2:306-322.

A survey of the artistic styles of the few petroglyphs and pictographs known in the 1940s in the middle Fraser, Puget Sound, and The Dalles areas. Considered also are the ornamented ethnographic objects from the region showing design parallels. Three complexes are distinguished, based respectively on (a) a non-religious dot-and-circle motif, (b) semi-realistic representations of animal figures, one subtype with religious meaning and the other without, and (c) anthropomorphic designs, mainly in single outline form, with very strong religious associations. Possible links of these styles with the Northwest Coast and the Oregon-Nevada-Utah area are discussed.

Smith, Marian W.
1947 House Types of the Middle Fraser River. *American Antiquity* 12:255-267.

Ethnographically, plank houses and semisubterranean dwellings have generally been considered to be separated in their distribution by the Cascades and Coast Ranges, the former being characteristic of the Northwest Coast groups west of the mountains and the latter occurring among the Plateau tribes to the east. On the Fraser River, however, Smith contends that this is not the case. Pit houses were found aboriginally as far downstream as Harrison Lake and the upper Chilliwack and upper Nooksack Rivers, all areas west of the mountain heights and with primary coastal cultural affiliations. Smith's archaeological investigations in 1945 near Agassiz in "Harrison" [her term for the easternmost Upper Stalo groups] country [Pilalt territory according to Duff 1952:21, 35] west of the Coast Mountains uncovered evidences of semisubterranean structures of the very early historic period. These excavation findings are briefly reported. The structural characteristics of the Middle Fraser pit habitations are compared with those of the nearby Plateau semisubterranean dwellings. She concludes that the Harrison Lake to Nooksack River distribution was separated from the Plateau occurrence by a Fraser River area in which no such depression dwellings were used aboriginally.

Smith, Marian W.
1950b *Archaeology of the Columbia-Fraser Region.* Memoirs of the Society for American Archaeology No. 6.

A study, based largely on her own 1938 field research concerned with the relationships between the language and culture of the Nooksack and the Chilliwack and with their affinities with closeby coastal peoples and the Fraser River tribes from Yale downstream to below the Harrison River mouth: i.e., her Middle Fraser. Emphasis is on linguistic change in late aboriginal and very early historic times, resulting in language flow and little actual population movement. It is contended that Nooksack was spoken in the Middle Fraser before the appearance of Halkomelem. The protohistoric culture of the area differed in important respects from the life patterns of both the peoples near the Fraser mouth and those groups upriver from Yale. Early historic Nooksack culture represented the last stand of the special Middle Fraser life style, a form that blended both riverine and coastal traits. Both pit dwellings and flaked and ground stone tools were characteristic of the Middle Fraser region. A list of Nooksack and of Chilliwack villages is appended to the descriptive summary.

Smith, Marian W.
1950b *Archaeology of the Columbia-Fraser Region.* Memoirs of the Society for American Archaeology No. 6.

Artifact collections from the Suquamish area and a site near Agassiz (ethnographic Upper Stalo Pilalt country immediately north of Chilliwack territory) are described. Agassiz artifact styles are compared with those reported from the other Columbia-Fraser sites. Archaeological recoveries from the broad Columbia-Fraser region are summarized with attention to their ethnographic associations and possible diffusion routes. Postulated cultural entities termed Late Bone, Early Bone, Eastern Stone, and Coastal Stone are described in terms of their geographic distribution, age, and artifact complements. The prehistory of her Middle Fraser area in relation to the Columbia-Fraser and larger Northwest Coast and Plateau regions is reconstructed as seen by Smith in 1950.

Smith, Marian W.
1952 Culture Area and Culture Depth: with Data from the Northwest Coast. In *Indian Tribes of Aboriginal America, Selected Papers of the XXIXth International Congress of Americanists*, edited by Sol Tax, pp. 80-96. University of Chicago Press, Chicago.

An effort to dissect the Plateau and Northwest Coast ethnographic data through an analysis of trait distribution, and to hypothesize regional culture areas and subareas on a time scale. Discussed is her postu-

lated old, unique interior or inland culture type of the Cascades foothills extending from the Carrier to the Klamath. Also her hypothesized later, derivative, more geographically restricted Middle Fraser culture. Earlier ethnographic attempts to differentiate the basic culture types of the Northwest are reviewed. The cultural position of the Bella Coola is discussed with the conclusion that their basic affiliation was with the Middle Fraser rather than the classic Northwest Coast. The principles underlying the ethnographic reconstructive process in diffusional terms are outlined. Marginal, survival, peripheral, and intermediate area types as well as cultural climaxes and culture areas are defined and the processes resulting in these developments are summarized.

Smith, Marian W.
1955 Continuity in Culture Contact, Examples from Southern British Columbia. *Man* 115:100-105.

Identified are several culture traits that occurred in traditional times among the Salishan tribes of southern coastal British Columbia and northwestern Washington but not farther north on the Coast. Recent postcontact inventions and new applications of old technological processes are discussed, including new fishing gear, home spinning devices, and the making of long, sleek racing dugout canoes. Details of old cedar canoe varieties and their geographical distribution are reported, leading to the conclusion that the Middle Fraser peoples possessed a larger number of these varieties than did the more northern "tribes of the classical Northwest Coast," though fewer types than among the Puget Sound groups. Attention is given to the degree to which certain elements of Middle Fraser Indian life in the 1950s represented deteriorated retentions of the traditional as contrasted with retentions with variations and even improvements.

Smith, Marian W.
1956 The Cultural Development of the Northwest Coast. *Southwestern Journal of Anthropology* 12:272-294.

An extended exposition of her thesis that a "Foothills Culture" once existed from The Dalles region of the Columbia northward along both flanks of the Cascades to the Fraser River in the Lytton, B.C., area, and that a later "Middle Fraser Culture" elaboration on the foothills base appeared on the upper Nooksack River and Fraser River from Yale downstream to Mission. Ethnographic and archaeological data, unfortunately very limited in extent, are assembled to support these hypotheses. Upon this reconstruction, enlarged to include the entire northern Pacific rim and extended back in time to an ancient cultural substratum, is fabricated a more complex series of hypothetical cultural configurations to explain the development of classic Northwest Coast culture. The Upper Skagit, Chilliwack, Lower Thompson, and Chelan are all considered to have been among the groups with the "Foothills Culture"; the Chilliwack to have been one of the much smaller number of tribes with the later "Middle Fraser Culture."

Smith, Marian W. and Dorothy Leadbeater
1949 Salish Coiled Baskets. In *Indians of the Urban Northwest*, edited by Marian W. Smith, pp. 111-132. Columbia University Press, New York.

This report consists of three sections. The first, by Smith, is general in nature, discussing the importance of basketry studies, similarities between Salish and California basketry, attitudes of Fraser drainage Salish weavers toward their design elements, and recent changes in native basket weaving. The second, authored by Leadbeater, describes the procedures she developed for recording in detail the technical characteristics of imbricated coiled basketry and their ornamental designs. The third part, by Smith, analyzes further various aspects of typical design continuity around the total basket and the question of whether apparent design errors are truly thus.

Spier, Leslie
1936 *Tribal Distribution in Washington*. General Series in Anthropology, No. 3. George Banta Publishing Co., Menasha, Wisconsin.

A basic compilation of ethnohistorical and ethnographic data on the various aboriginal tribes of the State by an early, respected ethnographer. A tribal distribution map is included.

Spier, Leslie (editor)
1938 *The Sinkaietk or Southern Okanagon of Washington*. General Series in Anthropology, No. 6. George Banta Publishing Co., Menasha, Wisconsin.

A comprehensive, detailed ethnographic study carried out in 1930 by a graduate-student field party under

the immediate supervision of Spier. The field data were sorted by Spier into general subject categories and the writing of the chapter drafts was assigned to the various field participants. These manuscripts were carefully edited and widely rewritten (with great profit) by Spier, resulting in a final publication uniform in style and with full content coverage. Consequently my credits—e.g., "Walters writes" and "According to Walters' informants"—indicate the author of the original chapter manuscript, who was responsible neither for all of the field notes incorporated into the section nor for the final chapter product. The present tense—the "ethnographic present"—is used in describing the Sinkaietk traditional culture, even though the customs and beliefs had long since disappeared in the 1930s, a style that may be misleading to nonanthropological readers. A few references are made to the Chelan, Skagit, and Thompson; these are noted in this present North Cascades study.

Spinden, Herbert Joseph
1908 *The Nez Perce Indians.* Memoirs of the American Anthropological Association, vol. 2, part 3, pp. 165-274.

A pioneering attempt at a general ethnography of the tribe, based on short periods of field research in 1907 and 1908. Brief attention is given to the history and natural environment of the tribe and to the archaeology of their country as known at the time. The ethnographic section covers the traditional material culture in some detail and the social, political, and religious domains more superficially. Nez Perce culture is largely seen as a peripheral Plains life-mode with historically late, post-horse Plains borrowings. A particular shortcoming of the study is Spinden's mixing of data from various sources without explanation: artifacts apparently discovered archaeologically are mingled with ethnographic specimens; museum items are described with his own informants' data; and data from the Lewis and Clark journals are integrated with his field information often without credit to the explorers. A useful volume, but one that must be used with special care.

Steedman, Elsie Viault (editor)
1930 Ethnobotany of the Thompson Indians of British Columbia. *Bureau of American Ethnology, 45th Annual Report,* 1927-1928, pp. 447-522.

A fine ethnobotanical study of the native plants used in traditional times by the Thompson: a supplement to and refining of the data presented in Teit's (1900) Thompson ethnography. The descriptive data are drawn from Teit's field notes; the botanical identifications are presumably based on an ethnographically notated plant collection made by Teit around the turn of the century. Steedman's introduction summarizes the Thompson scheme of plant nomenclature and other general data relating to their plant gathering and use. The report itself lists the specific plants by use category, each identified by its Thompson name and botanical binomial, and presents Teit's cultural use information. The categories recognized by Steedman are medicines (many), food (many), masticatories, drinks, smoking plants, plants used technologically, dyes and paints, scents, plants used in purification, and others used in special ways and belief contexts.

Stevens, I. I.
1855 *Report of Explorations for a Route for the Pacific Railroad, near the Forty-seventh and Forty-ninth Parallels of North Latitude from St. Paul to Puget Sound.* 36th Cong., 1st Sess., House Exec. Doc. no. 56, XII, Book I.

A splendid collection of field reports of various surveying teams. A landmark in its time.

Standard Oil of California
1962 *Road Map of Washington* [State].

Stern, Bernhard J.
1934 *The Lummi Indians of Northwest Washington.* Columbia University Press, New York.

A relatively brief report of Stern's field findings of 1928-1929. The subsistence quest receives scant attention and, in material culture, only weaving and woodworking and the objects made by these processes are discussed. The report focus is on the cycle of life, social matters (e.g., "festivities," the secret society, conflict), religion, and "legend and lore."

Stone, Carol M. (compiler)
1983 *Stehekin: Glimpses of the Past.* Long House Printcrafters and Publishers, Friday Harbor, Washington.

A very informative collection of articles, some published in various, often obscure early sources and others existing only in manuscript status, relating to the early White history of Lake Chelan and the Stehekin country. These selections are reproduced as written by their authors with brief prefatory remarks but without editorial modification of the articles themselves, for which Stone deserves commendation.

Suttles, Wayne
1951 The Early Diffusion of the Potato among the Coast Salish. *Southwestern Journal of Anthropology* 7:272-288.

An excellent, carefully researched survey of the early years of the white potato among the native groups of Georgia Strait, the lower Fraser, and Puget Sound. Discussed are its introduction through White contact as reconstructed from historical, ethnographic, and linguistic evidence, the role soon played by the potato as a subsistence resource in tribal life, and the cultural background of the groups that facilitated its ready reception and fostered its rapid diffusion.

Suttles, Wayne
1957 The "Middle Fraser" and "Foothills" Cultures: A Criticism. *Southwestern Journal of Anthropology* 13:156-183.

A scholarly, detailed, and valuable critique, largely negative, of Marian Smith's proposed distinctive "Foothills Culture" and later derivative and geographically more restricted "Middle Fraser" culture. Very serious questions are raised concerning her basic assumptions and hypotheses, methodology, control of the basic ethnographic and archaeological data, and conclusions. (For these two culture formulations, see Smith's bibliographic references.)

Suttles, Wayne
1965 Linguistic Means for Anthropological Ends on the Northwest Coast. *The Canadian Journal of Linguistics* 10:156-167.

A perceptive analysis of a large corpus of Musqueam texts collected by Suttles in terms of the kinship terms employed and their usages to illustrate how such linguistic material can contribute to understanding certain inner aspects of the culture of a group not readily uncovered by usual ethnographic field techniques.

Suttles, Wayne
1985 *Native Languages of the Northwest Coast.* Oregon Historical Society Press. Map scale 1:3,000,000; map size ca. 31.5 x 44 inches.

A new synthesis and handsome, clear plotting of language distribution data by one of our most knowledgeable Plateau and Northwest Coast ethnographers and linguists. The entire Pacific coast east to the Rockies is covered from Kodiak Island south to northern California, together with the northwestern corner of the Great Basin. Language boundaries are mapped and major dialect units within them are identified and their general location shown. All boundaries and locations are as of first White contact.

Suttles, Wayne and William W. Elmendorf
1963 Linguistic Evidence for Salish Prehistory. *American Ethnological Society, Proceedings of the 1962 Annual Spring Meeting.* Symposium on Language and Culture.

Swadesh's Salish glottochronological data are reanalyzed to detect chain relationships between languages, yielding the conclusion that the "original divergence of protobranch languages [occurred] in river valleys along the western slopes of the Cascade Mountains, perhaps from the southern end of Puget Sound north to the Fraser River, with the earliest offshoot just east of the Cascades" (p. 45). A few grammatical features appearing in various Salishan languages are examined to suggest relationship links. Possible or probable relationships between Salish and other nearby stocks are proposed and their implications for early Salishan prehistory are suggested. The influence of ecological conditions on the spread of Salish into the Plateau is considered in an innovative and persuasive way.

Swadesh, Morris
1950 Salish Internal Relationships. *International Journal of American Linguistics* 16:157-167.

A very early effort to apply the lexicostatistical approach to the Salishan language family with the aim of separating it into its component language units, of establishing the degree of kinship between these units and

between dialect groups within individual languages on the basis of shared vocabulary items, and of estimating linguistic distance of languages and dialect groups from a reconstructed early Salish vocabulary.

Swadesh, Morris
1952 Salish Phonologic Geography. *Language* 28:232-248.

A study of phonologic similarities and differences among Salishan languages, with particular reference to the genetic and geographic relations of the languages, and to some extent between Salishan and other closeby language stocks. Discussed are phonetic and phonemic elements common among Salishan languages and those distinctive of separate language clusters; the phonemic system of Proto-Salish and the shifts that have occurred through time in the member languages; the approximate timing of these changes; the problem of differentiating linguistic similarities owing to genetic kinship from those resulting from borrowing; and the effects on sound systems of phonetic devices to express concepts (e.g., smallness) and of sound imitative words.

Swanton, John R.
1952 *The Indian Tribes of North America.* Bureau of American Ethnology, Bulletin 145.

An impressive compendium of data on the location, demographics, major subdivisions and villages, and in some cases history of a huge number of American Indian tribes, organized by geographical region: Canada, the United States (by state), the West Indies, Mexico, and Middle America.

Symons, Thomas W.
1882 The Upper Columbia River and the Great Plains of the Columbia. *Senate Exec. Doc.* 186, 47th Cong., 1st Sess.

In the early fall of 1881, Symons carried out a detailed survey of the Columbia River from Kettle Falls to the mouth of the Snake River, mapping the river from his bateau in all its twists, ripples, and bars with special attention to possible navigational hazards at different water levels. He provides excellent information concerning the terraces, cliffs, and other land forms flanking the river and regarding the various Indian groups and early White settlers encountered.

Taylor, Herbert C., Jr.
1963 Aboriginal Populations of the Lower Northwest Coast. *Pacific Northwest Quarterly* 54:158-165.

A study that traces briefly earlier population estimates of coastal tribes from the Kwakiutl south to the lower Columbia, that examines these estimates in light of unpublished Hudson's Bay Company censuses, historical documents, and archaeological surveys, and that suggests more reliable population approximations.

Taylor, Roy L., and Bruce MacBryde
1977 *Vascular Plants of British Columbia, a Descriptive Resource Inventory.* University of British Columbia Press.

This detailed, precise, complete, and carefully researched plant compendium presents the most specific and useful data on subjects of botanical interest in this present study. A particular advantage of this huge resource volume is its record of plant distribution data according to Krajina's twelve biogeoclimatic zones. Another merit is that it includes a multicolored adaptation of Krajina's zonal map, taken from A. L. Farley's Atlas of British Columbia, which permits the various zones to be distinguished from one another with far greater confidence than in the case of Krajina's monochromatic map. Where data differences exist between earlier British Columbia vegetative surveys, the information of this compendium is accepted as the arbiter.

Teit, James
1898 *Traditions of the Thompson River Indians of British Columbia.* American Folk-Lore Society, Memoir 4:1-137.

An extensive body of Upper Thompson myths collected by Teit, including transformer tales (some with Coyote as the central figure); others recounting the origin of animals, astronomical bodies, and meteorological and natural phenomena; and many telling of episodes in the life of animal-human beings of the mythic period. Two Lillooet tales are appended to the Thompson collection. Boas provides an introduction, adds comparative notes to Teit's explanatory notes, and furnishes abstracts for all the myths. Unfortunately, owing to time constraints, it was not possible to extract from this corpus and introduce into the present study the considerable amount of ethnographic data imbedded in this mythic compilation.

Teit, James
1900 The Thompson Indians of British Columbia. *American Museum of Natural History, Memoir* 2 (*Jesup North Pacific Expedition*, vol 1, part 4), edited by Franz Boas, pp. 163-392. New York.

The basic ethnographic study of the Thompson. The data were secured by Teit, a non-anthropologist but intelligent, Boas-trained resident in the Thompson country, in the 1890s. Teit was married to a Thompson woman, spoke the Thompson language fluently and apparently other Salishan languages as well, observed the last vestiges of traditional Thompson material and social culture in practice, and secured enriching ethnographic details, particularly regarding earlier time levels, from Thompson informants. The study suffers somewhat from the kinds of ethnographic subject lacunae and narrow theoretical vision typical of its period, from certain weaknesses in phonetic transcription, and doubtless in unclear ways from the fact that Boas assembled and edited Teit's field information. Nevertheless, this is a splendidly detailed, absolutely essential contribution to our ethnographic knowledge of Canadian Interior Salishan groups.

Teit, James
1912 Mythology of the Thompson Indians. *American Museum of Natural History, Memoir* 12 (*Jesup North Pacific Expedition*, vol. 8, part 2), pp. 197-416. New York.

Teit's second collection of Thompson myths and traditions. Fifty-two were collected from the Lower Thompson: these include (as classified by Boas) coyote, transformer, and origin myths; animal, hero, and ancestor tales; and a few tales of a semi-historical nature, borrowed from coast tribes, or based on European folklore. The second collection in this publication comprises 115 items obtained by Teit from the Upper Thompson of the Nicola Valley and that part of the Fraser Valley occupied by these Upper People. The tales in this second series are classified into essentially the same types as the first set. These oral narratives contain many ethnographic details and insights which could not be incorporated into this present study because of time limitations.

Teit, James A.
1917 Thompson Tales. In Folk-Tales of Salishan and Sahaptin Tribes. *American Folk-Lore Society, Memoir* 11:1-64.

Sixty-six tales of the Thompson Indians, of which 28 recount Coyote escapades. The majority were collected by Teit, between 1906 and 1916; a few were secured by Boas in 1888. Most are from the Upper Thompson Division. The final item represents recollections of the Fraser party's journey through the Thompson country in 1808. A valuable compilation of native oral literature. Owing to time pressures, the ethnographic data to be found in these tales could not be extracted and meshed with the materials of the Thompson chapter of this present report.

Teit, James A. [erroneously given as H.]
1928 *The Middle Columbia Salish.* University of Washington Publications in Anthropology, 2:83-128.

A general but brief ethnographic summary of the Columbia, Wenatchi, Chelan, and Methow, based on incidental notes taken by Teit in 1908 on the Colville Reservation and assembled and edited by Franz Boas. Special emphasis is placed on protohistoric and early historic tribal movements in the region, giving rise to what became a highly controversial contention that Salishan peoples once occupied the Columbia River country downstream to The Dalles. The Chelan are considered a subgroup of the large Wenatchi tribe and are specifically referred to only incidentally. These notes are included in this present study.

Teit, James A.
1930a The Salishan Tribes of the Western Plateaus. Edited by Franz Boas. *Bureau of American Ethnology*, 45th Annual Report, 1927-1928, pp. 23-396.

Ethnographic summaries, based on field inquiry in 1904-1909, of the aboriginal and early historic culture of the Coeur d'Alene, the "Flathead Group" (Spokan, Kalispel, Pend Oreille, Flathead), and the "Okanagon Group" (Lakes, Colville, Sanpoil-Nespelem, Okanagan). A very important data source, though attention is not given equally to these cultural-linguistic units.

Teit, James A.
1930b The Okanagon. In Teit, 1930a:198-294.

A basic culture-wide ethnography of the traditional Okanagan, Sanpoil-Nespelem, Colville, and Lakes lifeways, assembled by Boas from Teit's extensive, very detailed field notes of the first decade of the 1900s. Especially important since it presents much information collected by Teit, under Boas' guidance, from personal observation supplemented by intensive field inquiry. Teit was married to a Thompson woman, spoke the Thompson language (Maud 1982:63), and lived with the last generation to have participated extensively in the precontact native life and to have made use of much of the old material culture. Many of the latter items Teit himself examined and describes, giving this segment of his ethnographic description a richness not found in later, more professional ethnographic accounts. Apparently Teit's Okanagan-specific information was derived from persons of Northern Okanagan affiliation (Spier 1938:3).

Teit, James A.
1930c Tattooing and Face and Body Painting of the Thompson Indians[,] British Columbia. Edited by Franz Boas. *Bureau of American Ethnology, 45th Annual Report*, 1927-1928, pp. 397-439.

A compilation of detailed information collected after the preparation of his *The Thompson Indians* (1900) monograph. Although a few of the elderly still bore tattoo marks when Teit entered their region in the mid-1800s, the practice of tattooing was rapidly abandoned after 1858 when White influence first became strong. The practice of facial and body painting was practically gone in the 1890s. Consequently most of Teit's data were informant-derived. These two studies represent a focused effort to secure all possible information regarding these two traditional cultural expressions.

Teit, James A.
1937 More Thompson Indian Tales. *Journal of American Folk-Lore* 50:173-190.

Seven additional tales collected by Teit, edited by Lucy Kramer. Two are old-style myths involving coyote. One is a tradition of a hunter's buffalo journey to the Plains and of the traitorous actions of his wife. The remaining four, at root, embody elements and events from European folklore but typically modify, extend, and restructure them in various new ways. Even these narratives of European genesis are of ethnographic interest, for in some measure they are recast into a Thompson cultural context.

Texaco
1969 *Washington* [State Highway Map].

Thompson, David
1914 Journal of David Thompson, *Oregon Historical Quarterly* 15:39-63, 104-125.

The daily journal kept by Thompson of the North West Company on his canoe journey of exploration down the Columbia River from Kettle Falls to Astoria in July, 1811. Also his record of his return in July and August via canoe to the Snake River mouth and then on horseback to the confluence of the Palouse River and overland to the Spokane River. The importance of this detailed record for the Chelan section of his present study is that, in passing through the Chelan country on July 6, 1811, Thompson saw no Indians on the river.

Thompson, Laurence C.
1976 The Northwest. In *Native Languages of the Americas*, edited by Thomas A. Sebeok, vol. 1, pp. 359-426. Plenum Press, New York.

Includes a brief general introduction to the language families of the North Pacific area, summarizing their geographical distribution, their possible linkages into larger genetic groupings, and their internal language-level subdivisions. Most of the report is devoted to a valuable, detailed state-of-the-art survey of the Penutian, Wakashan, Chimakuan, Salishan, Kutenai, and Athapaskan families, cataloging the growth of knowledge for each and the specific contributions of individual linguists. A number of areal studies of supra-language-family phenomena are reviewed.

Thompson, Laurence C.
1979 Salishan and the Northwest. In *The Languages of Native America: Historical and Comparative Assessment*, edited by Lyle Campbell and Marianne Mithun, pp. 692-765. University of Texas Press, Austin.

An up-to-date survey of the Salishan language family, both coastal and interior divisions. Discussed are such subjects as comparative phonology, comparative grammar, possible genetic relationships with other Indian language stocks, and research in progress.

Thwaites, Reuben Gold (editor)
1969 *Original Journals of the Lewis and Clark Expedition, 1804-1806.* Reprinted. Arno Press, New York. Originally published 1904-1905 as *The Original Journals of the Lewis and Clark Expedition, 1804-1806.* Dodd, Mead and Co., New York. 8 volumes.

A verbatim transcription of the voluminous field journals of Lewis and Clark and of the briefer records of two members of their expedition. This is a model of what publications of this sort should be. When both expedition leaders kept entries for the same day, both are reproduced in their entirety, even when largely duplicative. Idiosyncratic and variant spellings, unorthodox punctuation, grammatical lapses, field sketches and maps, and the like are all here, without editorial tinkering, though explanatory footnotes are provided. A splendid and indispensable publication for an understanding of the history of the Pacific Northwest and especially the geography, natural history, and ethnography of the Bitterroot, Clearwater, Snake, and lower Columbia Valleys when first seen by Whites. Especially noteworthy is the collection of expedition maps that comprises volume 8.

Turner, Nancy J.
1978 *Food Plants of British Columbia Indians, Part 2: Interior Peoples.* British Columbia Provincial Museum, Handbook No. 36, Victoria.

A carefully prepared compendium of data by a botanist drawn from her own field inquiries and incorporating relevant ethnobotanical information from earlier ethnographic reports. It includes brief introductory summaries of the physical environment, the dietary characteristics of the aboriginal Indian foods, the gathering and preparation of the food plants, their seasonal procession, and the nature of traditional trade in plant foods. Most of the volume is concerned with individual food plants: their technical taxonomic and common name identifications, a botanical description, habitat data, their distribution in British Columbia, and especially the food uses to which the various Indian groups put the plants. The volume is very well illustrated, with many plates in color.

Turner, Nancy J.
1979 *Plants in British Columbia Indian Technology.* British Columbia Provincial Museum, Handbook No. 38, Victoria.

This volume is patterned after the preceding food plant study, but focuses on ways in which indigenous plants were used in the traditional technology of the various Indian tribes of the province. All illustrations are, however, in black-and-white.

Turney-High, Harry Holbert
1937 *The Flathead Indians of Montana.* Memoirs of the American Anthropological Association, no. 48.

A general and not everywhere fully competent ethnographic survey of the Flathead of the Bitterroot Valley, based on field research. Save in a comparative sense, it provides no information of direct relevance to the particular interests of this North Cascades study.

Turney-High, Harry Holbert
1941 *Ethnography of the Kutenai.* Memoirs of the American Anthropological Association, no. 56.

A general survey of the traditional culture of the Kutenai, with special attention to the Upper division. While the only study of Kutenai ethnography of broad coverage, its value is somewhat restricted by the author's limited understanding of native Plateau lifeways. Of interest for a few items of comparative information.

Underhill, Ruth
1945 *Indians of the Pacific Northwest.* Indian Life and Customs, vol. V. United States Office of Indian Affairs, Education Division. Sherman Institute Press, Riverside, California.

A fine, comprehensive, popular summary of the traditional life mode of the coastal groups with occasional references to interior Indian tribes. It includes an unusually rich and informative collection of photographs and museum dioramas and of diagrams and descriptions of material culture objects, the processes of their manufacture, and their uses.

USGS (United States Geological Survey)
1953 (rev. 1965) *Ritzville* quadrangle, NL 11-1. 1-250,000.
1954 (rev. 1963) *Okanogan* quadrangle, NM 11-10. 1-250,000.

1955 (rev. 1962) *Concrete* quadrangle, NM 10-12. 1-250,000.
1957 (rev. 1971) *Wenatchee* quadrangle, NL 10-3. 1-250,000.
1974 *North Cascades National Park*, N4815-W12030/45x75.

Whitney, Stephen R.
1983 *A Field Guide to the Cascades & Olympics*. The Mountaineers, Seattle.

An excellent popular summary of the physical aspects of the Cascades and Olympic areas—geology, climate, and plant and animal distributions. Includes summaries of the ferns, flowering plants, butterflies, fish, amphibians, reptiles, birds, and mammals of these two regions, with black and white drawings of many forms and color reproductions of many plants, butterflies, and birds. For the biozones and their dominant plant forms heavy reliance is placed on the data of Krajina and of Franklin and Dyrness.

Wilkes, Charles
1841 [Tribal Population] Estimate—1841. In I. I. Stevens 1855:p. 435.

A short table estimating the 1841 population of various tribes from the lower Columbia to Juan de Fuca Strait.

Wilson, Charles
1866 Report on the Indian Tribes Inhabiting the Country in the Vicinity of the 49th Parallel of North Latitude. *Transactions of the Ethnological Society of London* 4:275-332.

Includes a section on the Cowichan in general from Vancouver Island to Fort Yale on the Fraser River, with occasional specific reference to the Chilliwack. Admirably detailed for its time, especially from one whose professional interests lay elsewhere, this report, presenting his own first-hand observations as a member of the British Boundary Commission in 1858-1860, provides some considerable information on a wide range of ethnographic subjects. Incorporated into the Chilliwack unit of my study are only such data as are explicitly linked with this tribe and those tribally unidentified data that are consistent with Duff's Chilliwack information and that expand upon it in meaningful ways.

Wilson, Charles
1970 *Mapping the Frontier, Charles Wilson's Diary of the Survey of the 49th Parallel, 1858-1862, while Secretary of the British Boundary Commission*, edited by George F. G. Stanley. Macmillan of Canada, Toronto.

An important journal—not a diary in the strict sense since many days and even weeks are skipped in the record—in terms of understanding the geobioenvironment and traditional culture of the Chilliwack. Not an ethnography but a chronicle of his many weeks in 1858-1860 in the Chilliwack country—on the lower and middle Chilliwack River, at Chilliwack Lake, and in the Cultus Lake region. The information concerning the Chilliwack and their homeland appears largely as occasional, brief comments peripheral to the Commission's principal surveying interest. But keen, low-key, factual, on-the-spot observations and experiences, they are all the more useful.

Winans, William P.
1871 [Report for 1870 on the Indians to the East of the Cascades.] In *Report of the Secretary of the Interior for 1870*, pp. 486-491. Exec. Doc., 3rd Sess., 41st Congress.

A report by the "farmer in charge" on the conditions in 1870 of the Indian groups of Washington east of the Cascades, including recommendations for improvements. The Chelan are lumped with the Entiat and Methow proper as subgroups of the "Mithouie." No observations are made on the Chelan in particular.

Wingert, Paul S.
1949a Coast Salish Painting. In *Indians of the Urban Northwest*, edited by Marian W. Smith, pp. 77-91. Columbia University Press, New York.

Primarily a detailed description and analysis of the unique painted power objects—especially "power boards" and small anthropomorphic figures—of the Puget Sound Salish and of their use in shamanistic spirit-curing ceremonies. Some consideration is given to the descriptive, representational, and monochromatic styles of painting wooden sculptures among the peoples of the Strait of Georgia, Vancouver Island, and the Lower and Middle Fraser areas.

Wingert, Paul S.
1949b *American Indian Sculpture, A Study of the Northwest Coast.* J. J. Augustin, New York.

An impressively intensive study of the wood carving art of the coastal Salishan groups from Vancouver Island and adjacent shores south to the Columbia River and in the Fraser drainage. All known sculptures from the region at the time in museum and other collections are described and many are illustrated. Through the use of published ethnographic information, their cultural contexts are examined in detail, but at a general level for the entire geographical area. Styles are classified and analyzed for figurines, large figures, house posts, post figures, figure reliefs, and masks. Tribal and regional distributions of these styles are described. Summary sections are provided on style centers, major traditions, marginal styles, and historical development. Data for the Upper Stalo specifically are, however, non-existent, save for one footnote: Wingert evidently located no carvings definitely attributable to these groups.

Wingert, Paul S.
1952 *Prehistoric Stone Sculpture of the Pacific Northwest.* Portland Art Museum, Portland, Oregon.

A survey of the precontact stone and bone art of the Columbia Valley from Vantage to the river mouth, divided into three regional styles. Both sculptures associated with utilitarian objects (e.g., bowls, pestles) and those without such apparent connections are described. A shorter section is devoted to the Fraser River and Puget Sound areas. Fine photographs of 42 sculptures are reproduced.

World Aeronautical Chart, Lake Louise (216), 14th edition October 7, 1951. US Air Force edition. 1:1,000,000.

Wydoski, Richard S. and Richard R. Whitney
1979 *Inland Fishes of Washington.* University of Washington Press, Seattle.

An illustrated guide to the riverine and lacustrine fish of Washington. Of relevance to this present study are the short sections describing the major drainages of the region and of Washington in particular, and outlining the general distribution of Washington fishes. Of special interest are the lengthy and detailed life history accounts of the various native and introduced species in the rivers and lakes of the State.

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