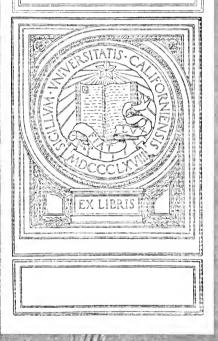


#### UNIVERSITY OF CALIFORNIA AT LOS ANGELES



## TRIBES OF THE COLUMBIA VALLEY AND THE COAST OF WASHINGTON AND OREGON

BY

#### ALBERT BUELL LEWIS

Submitted in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy in the Faculty of Philosophy, Columbia University

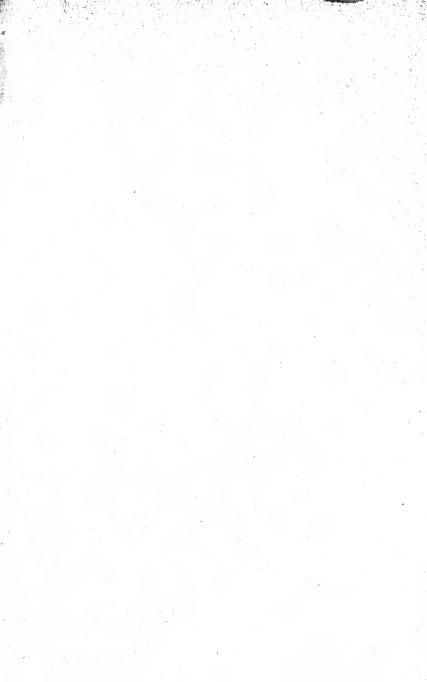
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## TRIBES OF THE COLUMBIA VALLEY AND THE COAST OF WASHINGTON AND OREGON

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#### INTRODUCTION

The Columbia River valley, ever since the graphic description of that region by Lewis and Clark, has been recognized as one of the most, if not the most, important line of communication between the native Indian population of the Pacific coast and the tribes of the interior portion of the continent. area has also occupied a prominent position in certain theories regarding the origin and movements of peoples and cultures, of which that of Lewis H. Morgan is probably the best known. Nevertheless the native population of the region has never been thoroughly studied nor described, the most systematic work being that of Horatio Hale, which was limited largely to linguistics, and of George Gibbs. From the entire area of Oregon and Washington there are only a few collections, and most of these are modern, and represent a culture so influenced by changed conditions as to be of little value in an endeavor to understand and describe the original conditions. The object of this study is to try to bring together the more important facts known regarding the natives of this area, group them according to culture areas, and see if they throw any light on possible movements of peoples and cultures.

The most important general works referring to the natives of this region, in addition to those above mentioned, are the journals of Lewis and Clark, the early fur-trade literature, the narratives of the Wilkes Expedition, and of the Pacific Railway Surveys. Certain early travels, such as those by Kane, Lord, and Douglas, contain a number of items of importance. Vancouver's *Voyages* also contain a few references.

The reports of the Commissioner of Indian Affairs contain very little (except the Report for 1854, which contains the report of Gov. Isaac Stevens), and the same is true of the literature dealing with the early missionary work and settlement of the country. There are a few publications treating of limited areas and special topics, such as those of Swan, Eells, Gatschet, J. O. Dorsey, Boas, and Farrand.

It is not the intention to give in this general discussion all the references concerning any particular topic, nor to touch on all the facts known regarding these peoples, but only those which are to some extent at least susceptible of comparative study.

#### CULTURE AREAS

The culture of this region, especially along the coast, occupies an intermediate position between the more definite or extreme types of California and of the Northwest Pacific slope, and having few unique features of its own, is often spoken of as a mixture of the two. While it is undoubtedly true that many elements have been borrowed, it would seem better to regard the culture as in general of local development, influenced, modified, and in a sense directed not only by the physical environment, but also by neighboring cultures. To separate these elements, however, seems well-nigh impossible, with the exception of those more recently borrowed. These will be more fully indicated later. That certain tribes have immigrated into the region within relatively modern times seems clear from their linguistic affiliations; nevertheless the time of that migration was sufficiently far removed for their culture to have become so completely assimilated to that of their neighbors that, with our present knowledge, at least, their original culture cannot be detected. As we know very little of most of these tribes, it is possible that the assimilation is not so complete as now appears.

In the grouping of these peoples into certain culture areas, it must of course be recognized that the limits are not sharply marked, and that the cultures shade into each other more or less gradually. In some cases the boundary is fairly definite,

as between the tribes east and west of the Cascade range; in other cases it is so indefinite that the assigning of it to any particular location is to a large extent arbitrary, as is the case in locating the division line between the coast tribes of Washington and those of British Columbia. In some cases the difference would seem to be due principally to geographical conditions, making intercourse between the tribes difficult. In other cases it may be due to the character of the people at that particular time, as was probably the case with the Kalapuya of the Willamette valley. Recent movements of tribes to a different locality might also lead to the same result. The difference. which, however, is not very great, of the Makah of Cape Flattery from their immediate neighbors is probably due to this cause. It would be interesting to know, in such a case, how long it would take for the varying degrees of assimilation and acculturation to be brought about.

Within the territory of Oregon, Washington, and Idaho we may distinguish two principal culture areas, with from one to three minor areas. The latter, however, are but little known, and further information is necessary before they can be definitely classified. Of the two principal areas, one, that of the interior plateau culture, extends considerably beyond the region here under discussion; the other extends along the coast from about the mouth of Umpqua river northward to Puget sound and east to the Cascade mountains, not including, however, the valleys of Willamette and upper Umpqua rivers. While the Puget sound tribes are somewhat different from those on the Columbia, as will be brought out later in the discussion, for convenience they will all be treated together.

#### NORTHWESTERN OREGON AND WESTERN WASHINGTON

Tribes.—The culture of this area is typically represented by that of the Chinook of the lower Columbia, the best known tribe of the region, and may be called Columbian. Within this area there are a considerable number of tribes belonging to several linguistic stocks. These include the Salish tribes of the Washington coast and Puget sound region, with the Tilla-

mook of Oregon, the Chimakuan Indians of Washington, the Chinookan and Yakonan linguistic stocks, and the Athapascan Kwalhioqua and Tlatskanai who lived in the coast range north and south of Columbia river. Of these latter almost nothing is known, but they seem to have resembled their neighbors. The culture of the Makah of Cape Flattery was practically identical with that of the Nootka, and has affected to some extent that of the neighboring tribes to the south.

Head-deformation.—The tribes of this region were especially bound together by one notable custom — that of flattening the heads of their children by pressure on the occipital and frontal regions, thus producing a broad, wedge-shaped cranium.2 This practice also extended into neighboring areas, but there it was less in amount and usually limited to the women. Within the Columbian area the practice was universal, and no one could hope for social recognition whose head was normal in shape. It was a distinguishing characteristic, which marked these people off from all their neighbors, and all slaves were forbidden this privilege. All the "flatheads" regarded themselves as in a way one people, while those who did not flatten the head were fit only for slaves. Intermarriages between the various tribes were very common, being especially desired by and prevalent among the upper class.3 Among the Chinook and their immediate neighbors individuals whose heads were flattened were rarely if ever kept as slaves, and while these tribes frequently made war upon each other in a more or less formal way,4 their prisoners were not enslaved.<sup>5</sup> Slaves were obtained from outside tribes, usually by purchase, though with certain tribes, such as the Tillamook 6 to the south and the Makah 7 to the north.

<sup>&</sup>lt;sup>1</sup> Hale, p. 204; Boas, (a) 1895, p. 588.

<sup>&</sup>lt;sup>2</sup> For the distribution of this custom see Silas B. Smith, p. 255; Hale, p. 198; Gibbs, (b) pp. 211-2. The method is described by Swan, (a) pp. 167-8; Scouler, (b) pp. 304-5; compare also Boas, (a) 1890, pp. 647-8.

<sup>&</sup>lt;sup>3</sup> Gibbs, (b) p. 197; Farrand, (b) p. 242; Eells, (a) pp. 655-6.

<sup>&</sup>lt;sup>4</sup>Henry-Thompson, p. 855; Franchère, pp. 151-3; Cox, pp. 154-5; Gibbs, (b) pp. 190-1.

<sup>&</sup>lt;sup>5</sup>For slavery among the Chinook and their neighbors, see Swan, (a) p. 166; Kane, p. 182; Ross, (a) p. 92; Franchère, p. 241; Silas B. Smith, p. 257.

<sup>6</sup> Lee and Frost, p. 103.

<sup>7</sup> Scouler, (a) p. 195.

slave-hunting raids seem to have been quite common. The tribes around Puget sound and the Yakonan Indians on the coast of Oregon, sometimes, as in case of poor people who were in debt, enslaved members of their own tribe. This would seem to indicate that the rigid distinction made by the Chinook weakened toward the outskirts of the area, and that the lower Columbia was not only about the geographical center, but possibly also the place of origin of this particular method of head-deformation. It must be remembered that while certain tribes of British Columbia also deformed the head, the method was somewhat different from that practiced by the Chinook. <sup>2</sup>

This custom seems to have been a particular bond of union among the tribes of this region, and by means of the common practice of intermarriage among these tribes to have led to a certain similarity in physical type as well as in culture.<sup>3</sup>

The limits of this peculiar custom to the south seem to have been more definite than to the north, where it gradually changed to the methods practiced by the coast Salish of British Columbia. Among the Makah the flattening of the head was common, but was not practiced by all nor regarded as essential to social standing. 4

Social Organization. — Information concerning the social organization is scanty and fragmentary. An hereditary nobility was everywhere present. There was probably also a middle class in the Puget sound region, where the giving of potlatches was prevalent.<sup>5</sup> On Columbia river and southward there is no indication of such a middle class, and it was possible for a

<sup>&</sup>lt;sup>1</sup> Gibbs, (b) pp. 188-9; Farrand, (b) p. 242.

<sup>&</sup>lt;sup>2</sup>Boas, (a) 1890, p. 647.

See Silas B. Smith, pp. 255-6. Many of the early writers remark on the general similarity of these tribes, but their treatment of the physical characteristics is somewhat vague and contradictory. The investigation of Boas  $(a_1, 1891, pp. 424-449; \delta)$  tend to show that the tribes living on Columbia river were taller than those to the north and south, and that their nose was narrower and higher, in these respects approaching the interior tribes. In general it may be said that the variation in physical type along the coast was less marked and more gradual than that between the coast region and the interior.

<sup>4</sup> Swan, (b) p. 3.

<sup>&</sup>lt;sup>5</sup> Compare Boas, (a) 1890, p. 570.

common man of wealth and standing to attain the rank of nobility or chief under certain conditions.\(^1\) All ranks could keep slaves. There is no indication of a totemic or clan system. The village, frequently, if not usually, of individuals more or less related, seems to have been the social unit, though some chiefs united under their sway a number of villages. Otherwise the villages, even of the same tribe, were comparatively independent. Descent was in the paternal line. The chieftainship was nominally, at least, hereditary, and the chiefs possessed considerable power. The social organization, however, was relatively simple, and the complex conditions brought about by the clan organization and secret societies of the northern coast tribes were entirely lacking.\(^2\)

The potlatch was practiced as far south as the Columbia,<sup>3</sup> but it does not seem to have been of much importance in that region, as none of the early writers mention the custom at all. Among the Puget sound tribes <sup>4</sup> it was quite common and of considerable importance; and here also we find a few secret societies with their masks and paraphernalia. The development of these societies, however, is slight compared with that among the Kwakiutl and other northern tribes, from whom they seem to have spread by way of the Nootka to some of the Puget sound tribes.<sup>5</sup>

Material Culture. — The material culture and manner of life of the coast tribes of Oregon and Washington correspond in general to their geographical surroundings. Agriculture was unknown. The dog was the only domestic animal. They depended on the natural products of the land and sea to supply their food and clothing. Having at hand an abundance of soft wood, such as the cedar, easily split and worked, we find them

 $<sup>^{1}</sup>$  Farrand, (b) p. 242; also information obtained from Mr Edward Sapir regarding the Wishram, a division of the Upper Chinook.

<sup>&</sup>lt;sup>2</sup> The references to these points are largely incidental. See especially Farrand, ( $\delta$ ) pp. 242-3; Ross, (a) p. 88; Cox, p. 154; Franchère, p. 250; Gibbs, ( $\delta$ ) pp. 184- $\delta$ .

<sup>&</sup>lt;sup>3</sup> Boas, (d) pp. 268-9.

<sup>&</sup>lt;sup>4</sup> Eells, (a) pp. 657-69; (b); Gibbs, (b) p. 205.

<sup>&</sup>lt;sup>5</sup> Boas, (a) 1890, p. 578.

building houses of split and hewn planks, digging out huge wooden canoes, and carving bowls and household utensils of the same material. In all this they differed but little from their more northerly neighbors, who inhabited the same sort of region, yet in the working out of the details is seen the strong influence of local and inherited custom.

Food. — The sea furnished the chief means of sustenance 1 to those living along the coast. Game, especially the elk, and roots and berries were also important. Everywhere except among the Makah salmon was the staple food. Other fish, as halibut, sturgeon, cod, as well as shell-fish, were important locally. The Makah and their immediate neighbors, the Ouileute, captured the whale; other tribes used only those that drifted ashore. Among the more interior tribes, fish, especially salmon, were still one of the principal foods, but roots, berries, and game occupied a more prominent position. Nuts and acorns also were eaten.<sup>2</sup> A number of different kinds of roots were used, the most important being camas, wapatoo (which was found especially in the lower Willamette valley), and the root of the common fern. This diversity of food materials caused the Indians to wander about considerably. according to the season, hunting berries or game in the mountains, gathering roots in the plains and swamps, and catching and curing fish at their favorite fishing places along the coast and rivers. Though the limits of the tribal territories were fairly definite and well known, the privilege of hunting, fishing, or gathering roots and berries seems to have been open to all friendly neighbors.

The methods of capturing fish and game practiced by the natives of this region were in general similar to those of their

<sup>&</sup>lt;sup>1</sup> The best general discussion of food, with the methods of obtaining and preparing it, is given by Gibbs, (b) pp. 193-7. For the Makah see Swan, (b) pp. 19-30; for Indians of Puget sound, Eells, (a) pp. 621-2;  $(\epsilon)$ , 1887, pp. 215-8; Wilkes, Iv, p. 418; for coast tribes Swan, (a) pp. 82-91. The Journals of Lewis and Clark, as well as the reports of other travelers, contain numerous references to the food of natives of the regions through which they passed.

<sup>&</sup>lt;sup>2</sup> Lewis and Clark, III, pp. 167, 173, 185; IV, p. 262; Boas, (h) p. 143; Lee and Frost, p. 181.

neighbors.¹ Game was killed with bow and arrows or caught in traps, snares, dead falls, or pits. Birds were shot with arrows or sometimes caught in nets stretched on poles. Fish were caught in large seines, or, if small and numerous, in scoop-nets, while the fish-rake was in common use on the sound.² They were also speared, caught on hooks, and gigged. On the rivers fish traps and weirs were used when possible, and fish were speared or caught in scoop-nets at the rapids and falls. The falls and cascades of the Columbia and the falls of the Willamette were especially noted as Indian fishing places.³ The common digging stick, usually with a horn handle, was used for collecting roots.⁴

As regards apparatus and implements used in catching fish and game, the descriptions are too vague and scattering, and the specimens preserved too few to allow of any successful classification or comparison of types; but the general style was much the same throughout the area.

There seems to have been nothing distinctive in the method of preparing their food, aside from the numerous local taboos which had to be observed. Fish and game were usually boiled in baskets, boxes, or wooden troughs or bowls by means of hot stones. Roasting on spits by an open fire was also common. Roots were commonly baked by being placed in a pit over hot stones, on which water was thrown to cause steam, and then covered with grass and earth. Fish and game were sometimes cooked in much the same way.<sup>5</sup> Among the Upper Chinook acorns were also baked in the native "oven" with hot stones and then buried in deep pits near water, where they were left to soak for some time before being used.<sup>6</sup> Fish, roots, and berries were dried and preserved for future use. The method of drying fish varied with the kind and the locality. At the falls and

In addition to references on foods, see Lewis and Clark, III, pp. 346-7; Eells, (a) pp. 633-5; Lord, vol. I.

<sup>&</sup>lt;sup>2</sup> Wilkes, IV, p. 418; Eells, (a) p. 633.

<sup>3</sup> Wilkes, IV, pp. 345, 380, 384.

<sup>4</sup> Lewis and Clark, IV, p. 9.

<sup>&</sup>lt;sup>5</sup> Ibid., IV, p. 132; Kane, p. 186.

<sup>6</sup> Lee and Frost, p. 181.

rapids of the Columbia great quantities of salmon were dried and pounded fine and then packed into baskets lined with fish-skin for preservation. Clark 1 says that each basket contained ninety to one hundred pounds, and that about thirty thousand pounds were annually prepared by the natives from a little above the falls to the Cascades inclusive. This dried salmon formed an extensive article of trade, both with the coast and the interior tribes.

Shelter. - During their summer peregrinations the natives lived in rush or bark lodges,2 but in winter they inhabited permanent rectangular houses, built of timber and split planks,3 These were sometimes as much as eighty to one hundred feet long by thirty to forty feet wide, and accommodated several families.4 The floor was usually sunken three to five feet below the surface. While they differed somewhat in detail, they may be regarded as of the same general type as the wooden house found throughout all the heavily timbered region along the Northwest coast. The houses were sometimes square, but frequently much longer than wide, in which case they were often divided by partitions into two or more rooms.<sup>5</sup> The position and arrangement of the sleeping bunks or platforms, the places for storing provisions, the nature of the fireplace, doorway, smoke-hole, etc., varied somewhat from place to place. There was sometimes a second lower platform a few inches high in front of the main sleeping platform. The latter was from two to four feet above the floor, the space underneath being used for storing provisions and various articles. houses were lined, especially in the winter, with rush mats. Mats were also placed on the platforms and ground for sleeping and sitting upon. Among the Chinook and neighboring tribes the houses had gable roofs, rather steep, which among the

<sup>1</sup> Lewis and Clark, III, p. 148.

<sup>&</sup>lt;sup>2</sup> Ibid., IV, p. 223; Kane, p. 187.

<sup>&</sup>lt;sup>3</sup> Lewis and Clark, III, pp. 154, 183, 208, 358; IV, pp. 222, 255, 259; Henry-Thompson, p. 804; Ross, (a) p. 98; Franchère, p. 247; Swan, (a) pp. 110-11, (b) pp. 4-7; Eells, (a) p. 624; Stevens, p. 243; Gibbs, (b) pp. 214-5.

Franchère, p. 247.

<sup>&</sup>lt;sup>5</sup>Lewis and Clark, III, p. 326; IV, p. 240; Parker, p. 179.

Upper Chinook were usually covered with bark, but on the coast with boards. The planks forming the walls of the house were placed perpendicularly. On Puget sound the roof was flatter, and the walls of overlapping boards placed horizontally. Here the shed-roof seems to have been the prevailing type, the houses being the same as those of the Nootka and Coast Salish of British Columbia.<sup>2</sup> In this region they also frequently built extra large house for potlatches, festivals, and special occasions. Gibbs mentions one 520 feet long, 60 feet wide, 15 feet high in front and 10 feet in the rear. Such special houses were occasionally built as far south as Shoalwater bay.

The entrance 4 to the dwelling house was merely a round or oval opening, two or three feet high and a foot or two above the ground, and was covered by a piece of board suspended loosely above the opening on the inside. In the larger houses there were usually two or more entrances, and when the houses were partitioned there was one for each division. The plank through which the opening passed was often painted or carved to represent an animal or human face or figure.5 The timbers supporting the roof were also frequently carved and painted, the human figure being commonly represented.<sup>6</sup> Sweat-houses of the same type as those found in the interior were occasionally used by the Indians on Puget sound 7 and probably on the Columbia, but were not found along the coast. Their myths contain references to a larger kind of sweat-house heated directly by means of a fire or hot stones.8 which seems to be similar to the Californian type.9

Household Utensils. - With household utensils 10 the people

<sup>1</sup> Lewis and Clark, III, p. 154; IV, p. 255, 259.

<sup>&</sup>lt;sup>2</sup>Gibbs, (b) pp. 174, 215; compare Boas, (a) 1890, pp. 563-5.

<sup>3 (</sup>b) p. 215.

Lewis and Clark, III, p. 154; Swan, (a) p. 111.

<sup>&</sup>lt;sup>5</sup> Lewis and Clark, IV, p. 198; Vancouver, II, p. 77.

<sup>6</sup> Lewis and Clark, IV, pp. 198, 215; Gibbs, (b) p. 215.

<sup>&</sup>lt;sup>7</sup> Swan, (a) p. 180.

<sup>8</sup> Farrand and Kahnweiler, p. 104; Boas, (d) p. 58.

<sup>9</sup> Compare Kroeber, (a) p. 86.

<sup>10</sup> Lewis and Clark, 111, pp. 353-4; Gibbs, (δ) p. 220; Eells, (α) pp. 626-9; (ε) 1886, pp. 40-1; Swan, (α) pp. 161-4; (δ) pp. 42-3.

of this region were fairly well supplied. They had wooden bowls and troughs of various sizes, used for cooking and other purposes; wooden spoons, often with carved handles; spits for roasting meat and fish; watertight baskets from the size of a small cup up to several gallons' capacity, used for cooking, serving food, etc.; bags and less tightly constructed baskets of cedar-bark, rush, or grass, used for storing provisions; and mats of various sizes. Bowls made out of the horn of the mountain sheep and spoons of mountain-sheep or mountain-goat horn were more or less common throughout the region.\(^1\) Some of these were obtained by trade from the north, while others were of local manufacture, as is shown by the style of decoration, which is similar to that found on the wooden bowls and spoons of this region, and quite different from the art of the northern tribes.

Boxes made out of boards, in much the same way as among the more northerly Indians, were manufactured by the natives around Puget sound. Henry<sup>2</sup> says that the Chinook in 1814 had wooden boxes with covers, some of which they made themselves, but does not tell how they were made. This is clearly an introduced article, and it is not likely that the Chinook in earlier days ever made boxes of this character.

For cooking purposes wooden bowls and boxes were used along the coast, while farther east toward the mountains baskets were more commonly used for this purpose. In the coastal region twined baskets only were made, while nearer the Cascade range coiled ware is also common.<sup>3</sup> In this region we find the peculiar imbricated coiled basketry, which is limited to the region immediately east and west of the Cascades in Washington and southern British Columbia. In Washington, especially the southern part, the round form predominates, while to the north the rectangular form, often with a lid, becomes

 $<sup>^1</sup>$  Kane, p. 185 ; Eells, (c) 1886, p. 40 ; Gibbs, (b) p. 220 ; Swan, (a) p. 163 ; Lewis and Clark, 111, p. 273.

<sup>&</sup>lt;sup>2</sup> Henry-Thompson, p. 789.

<sup>&</sup>lt;sup>3</sup> For basketry see Mason, especially pp. 416-40; Swan, (b) p. 46; Eells, (a) p. 627. For explanation of the various types of baskets see Mason, pp. 221-59.

more common. As these forms are less suitable for coiled ware than the round, it would seem that the origin was probably in the southern part of this area, and that the more northerly tribes, while adopting the technique, modified the form to correspond to that of their wooden boxes or birch-bark baskets.1 the coiled baskets being used largely for the same purposes. The adoption of this coiled ware by some of the most northerly tribes using it is known to be quite recent. Coiled ware was made in Oregon, but imbrication does not seem to have ever been practiced south of the Columbia.<sup>2</sup> The finest type of imbricated ware is said to have been made in the Cowlitz valley. As the earliest baskets known from that region are subsequent to the invasion of the valley by the Klikitat,3 who were later also called Cowlitz, it might seem questionable whether this is due to Salish or Shahaptian influence. This particular type of basket, in fact, is commonly called Klikitat. The Klikitat, however, are probably later arrivals in this region. The baskets made by the Klikitat are also said to be coarser than the Salish ware.4 It has been suggested that the making of coiled baskets may have been introduced at the time of the Athapascan migration.<sup>5</sup> However that may be, it would seem that the technique of imbrication has originated among the tribes living along the Cascades in Washington, whence it, together with the making of coiled ware, spread to the Salish tribes on the north.

Twined ware is found throughout the whole area, both in bags and baskets of different kinds. Owing to lack of material, the distribution of the different methods of applying the ornamental designs is doubtful. Probably several were used in the same area, as it is known that they made a great variety of bags and baskets. On the modern twined baskets and wallets of the Upper Chinook, the design is frequently formed by the

<sup>1</sup> Suggested by Boas.

<sup>&</sup>lt;sup>2</sup> Mason, p. 428.

<sup>&</sup>lt;sup>3</sup> The Klikitat are a Shahaptian tribe; the true Cowlitz were Salish.

<sup>4</sup> Mason, p. 428.

<sup>&</sup>lt;sup>5</sup> Boas in Teit, (a) p. 309.

wrapped twined method, two strands of different colors being used. Sometimes the design is applied by wrapping the colored element around both the twined elements. False embroidery also is used. All three of the above methods, according to Eells, were used by the Puget sound Indians. These, together with the Makah, also made checkerwork and twilled baskets out of cedar-bark strips, similar to those used by the Indians to the north. Such baskets were used chiefly for storing provisions.<sup>2</sup> Twined baskets with crossed warp were also made by many of the tribes.

Mats were of considerable importance because of their great variety of uses, such as for temporary lodgings, lining and covering of canoes, lining of houses, for beds, for the serving of food, etc. The common sewed rush mat of the interior was used throughout all this area, except among the Makah, who make checkerwork mats of strips of cedar-bark. Checkerwork mats are also made by other tribes on Puget sound.

Transportation. — As travel and transportation among the Indians of this region were largely by water, canoes formed an important part of their property. These varied very greatly in form and size, according to the purpose for which they were designed. The Chinook had five or six names for as many different varieties. Probably some of these were made by other tribes, as canoes formed an important article of trade. The so-called "Chinook canoe," for example, was usually made on Vancouver island, and is in fact a form earlier used by the Nootka, as described in 1778 by Cook. It is one of the most common types on Puget sound. This type of canoe, while

<sup>&</sup>lt;sup>1</sup> Mason, p. 421.

<sup>&</sup>lt;sup>2</sup> Eells, (a) p. 627.

 $<sup>^3</sup>$  Gibbs,  $(\delta)$  p. 220; Eells, (a) pp. 626–7; Willoughby, Chas., p. 268; Franchère, p. 245. The method of manufacture is described in some detail by Swan, (a) pp. 161–2.

<sup>&</sup>lt;sup>4</sup>Swan, (b) p. 45. <sup>5</sup>Eells, (a) p. 626.

<sup>&</sup>lt;sup>6</sup> Boas, information.

<sup>&</sup>lt;sup>7</sup> Swan, (b) p. 31.

<sup>8</sup> II, p. 327.

<sup>&</sup>lt;sup>9</sup> Boas, (a) 1889, p. 817; Gibbs, (a) p. 430.

common on the Columbia in later times,1 does not seem to correspond to any of the types described by Lewis and Clark,2 and the name given to it by the Chinook is of Salish origin.3 Many of the various kind of canoes, especially the large war canoes, rapidly went out of use after the coming of the whites, and the descriptions are too meager to admit of very accurate comparison. The war or traveling canoes were the largest, being 40 to 50 feet long, with projecting bow and stern, often ornamented with paintings and carved human or animal figures.4 Smaller canoes of several varieties were used on the interior waters,5 and these were frequently made with a broad shovelnosed bow for convenience in poling.6 A large, wide, shovelnosed canoe was also used on Puget sound for transportation.7 All these canoes were made out of the trunk of a single tree, usually cedar. In the larger canoes the projecting bow and stern were of separate pieces, mortised in and fastened with cords. The gunwale was sometimes raised by an additional piece of wood or plank. The method of manufacture seems to have been everywhere much the same. The trees were cut down with stone axes or chisels, and the extra wood split off by means of wedges. The canoe 8 was first roughly shaped on the outside and then hollowed out by means of adzes or chisels. Swan 9 says fire was formerly used for this purpose. The Makah 10 used hatchets of stone and chisels of mussel-shell. Eells 11 savs the Puget sound tribes formerly burnt out their canoes and finished them with hand adzes of stone.

The paddles used varied somewhat from tribe to tribe, in addi-

<sup>1</sup> Gibbs, (b) p. 216.

<sup>&</sup>lt;sup>2</sup>Lewis and Clark, IV, pp. 31, 35.

<sup>&</sup>lt;sup>3</sup> Boas, information.

<sup>&</sup>lt;sup>4</sup>Ibid., III, p. 197; IV, p. 32; Franchère, p. 246.

<sup>&</sup>lt;sup>5</sup> Lewis and Clark, IV, p. 234; Gibbs, (b) p. 216.

<sup>&</sup>lt;sup>6</sup> Swan, (a) p. 80.

<sup>7</sup> Gibbs, (a) p. 430.

<sup>&</sup>lt;sup>8</sup> For method of making see Swan, (a) pp. 80-2; (b) pp. 35-7; Gibbs, (b) p. 218; Lewis and Clark, 1V, p. 32.

<sup>9 (</sup>a) p. 81.

<sup>10</sup> Swan, (b) p. 36.

<sup>11 (</sup>a) p. 641.

tion to the fact that the man's paddle, woman's paddle, and steering paddle were all different. The paddle of the Chinook, Tillamook, and some neighboring tribes was notched or hollowed out at the end. This seems to have been used on the rivers generally, and was especially adapted to shallow water or where punting became necessary. The deep-water paddle of the Coast Salish and the Makah had a long, slender point, while the common paddle of the Puget sound tribes was more abruptly pointed.

Clothing and Ornaments. — The clothing 5 used by the natives of this area was relatively simple. The men either wore nothing at all or merely a robe or blanket thrown over the back and fastened across the chest with a string. The women wore a sort of petticoat made of twisted strings of cedar-bark or grass, occasionally of wool, fastened to a cord or band around the waist and falling to the knees. In addition to this they usually wore a robe, smaller than that worn by the men, over the back. Among the Yakonan a similar fringed garment was worn around the shoulders. A hat, usually woven of cedar-bark and grass, was frequently worn, especially in wet weather, when it was also customary to throw a mat over the shoulders for further protection.

The hats of the Chinook and neighboring tribes <sup>7</sup> seem in the early days to have been largely of the type commonly known as Nootkan and recently described from old specimens by C. C. Willoughby. They were closely woven of cedar-bark and grass with some fine cedar-root, so as to be water-tight, and were of a conical shape, surmounted by a pointed knob some two to four inches in diameter. They were ornamented

Lewis and Clark, III, p. 326; Franchère, p. 246.

<sup>&</sup>lt;sup>2</sup> Swan, (a) p. 80. <sup>3</sup> Swan, (b) p. 21.

<sup>\*</sup> Eells, (a) p. 642.

<sup>&</sup>lt;sup>5</sup> Lewis and Clark, IV, p. 184; Gass, pp. 170, 204; Gibbs, (b) p. 219; Swan, (a) p. 155; (b) pp. 15–17; Eells (a), p. 630; Scouler, (a) p. 201; Ross, (a) pp. 89–91; Franchère, p. 242; Galiano, p. 30.

<sup>&</sup>lt;sup>6</sup> Hines, p. 107.

<sup>7</sup> Lewis and Clark, III, p. 296; IV, p. 23; Ross, (a) p. 89.

with interwoven designs representing whaling scenes, animals such as dogs and deer, or purely geometrical figures. Comparison of the early accounts of the Nootka with those of the Chinook seems to show that these hats were more prevalent among the latter than among the former. The Nootka usually wore another type of hat, shaped like a truncated cone and painted red or with designs. Jewitt says that the knobbed hat with interwoven designs in black and white, representing whale fishing, was worn only by the chief. Galiano notes that the designs always represent whale fishing, and that the hats of the common people lacked the design and the knob on top. As we know that the privilege of catching whales among the Nootka was limited to certain chiefs,2 and jealously guarded by them, the use of this type of hat was probably limited in a similar manner. The only hat worn among the Makah, according to Swan,3 was a somewhat rounded, slightly pointed hat woven of spruce roots and painted, frequently with designs; but Galiano's atlas contains a figure of the Makah chief wearing a typical "Nootka" hat with the whale-fishing design. This limitation of its use among the Nootka, together with the excellent technique and method of applying the ornamentation, which was overlaid, seems to point to a more southerly origin, probably the Salish or Chinookan tribes of the Washington coast. Hats or caps do not seem to have been much used by the Salish of Puget sound,4 though Kane 5 says that in 1846, caps, made of grass of different colors, were much used by the women among the Nisqually. These may have been similar to those worn by the women among the interior tribes.

The robes and blankets used in this area were usually made of the skins of various animals, or woven (twined?) from the wool of the mountain goat. While these were more common northward, woolen robes were also made on the Columbia.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup>Cook, 11, p. 304; Jewitt, pp. 67-8; Galiano, p. 127.

<sup>&</sup>lt;sup>2</sup> Boas, (a) 1890, p. 585.

<sup>3 (</sup>b) p. 45.

<sup>4</sup> Eells, (a) p. 630.

<sup>5</sup> P. 207

<sup>6</sup> Lewis and Clark, IV, pp. 96, 185.

The Makah, Clallam, Songish, Lummi, and probably some other tribes of the Puget sound region also made blankets from the hair of a certain variety of dog, which they raised for that purpose. This hair was usually mixed with the down of the wild goose or duck before being made into thread. The Makah also made twined blankets and capes of the bark of the yellow cedar,<sup>2</sup> similar to those of the Nootka. Throughout this area robes were frequently made of strips of the skin of various animals, such as the beaver, raccoon, sea-otter, etc., and also of strips of the skins of wild fowl. These strips were either twisted or simply allowed to dry; in the latter case they curled so as to bring the fur out, and were then woven or twined into blankets.3 The strips of bird-skin were sometimes wrapped round a string to give them additional strength. This method seems to have been the same as that commonly used throughout the interior and in California, the fur strands being woven together by a double-twined weft of string.4 Among the Chinook this kind of robe was worn principally by the women,5 who also in cold weather sometimes made use of a sort of jacket of skins, dressed with the hair, fastened behind but not covering the arms.6

While the early descriptions are not very full, such seems to have been the general character of the clothing worn over the greater part of this area, especially along the coast. Farther inland there were certain modifications due to influence from the interior. Moccasins were sometimes worn, also shirts, leggings, and dresses of buckskin, especially where the tribes came in contact with those of the interior, as at The Dalles. On the Columbia from the mouth of the Willamette up, we also find that the woman's cedar-bark petticoat is replaced by the buckskin breech-clout of the interior.

<sup>&</sup>lt;sup>1</sup> Vancouver, 1, pp. 230, 266; Kane, p. 210; Eells, (a) p. 630; Scouler, (a) p. 196; Stevens, p. 243; Boas, (a) 1890, pp. 566-7.]

<sup>&</sup>lt;sup>2</sup> Swan, (b) p. 44; Stevens, p. 241.

<sup>3</sup> Lewis and Clark, IV, p. 190; Kane, p. 184; Swan, (b) p. 44.

<sup>4</sup> Compare Teit, (a) p. 190; Dixon, p. 148.

<sup>&</sup>lt;sup>5</sup> Lewis and Clark, IV, p. 185.

<sup>&</sup>lt;sup>6</sup> Ibid., p. 190.

<sup>7</sup> Ibid., pp. 280, 284.

<sup>8</sup> Ibid., pp. 214, 224.

The method of wearing the hair varied considerably from place to place and also with age and sex. On the coast the men seem generally to have worn their hair loose. Lewis and Clark found that near the mouth of the Columbia the hair of both sexes was carefully parted in the middle and worn loose and flowing, while above the mouth of the Willamette the hair was braided, or in the case of men twined with thongs of skin, into two queues, similar to the style of the interior. <sup>2</sup>

Tattooing <sup>3</sup> occurs to but a slight extent among these tribes, and is usually limited to a few lines or dots on the arms or legs, apparently according to individual fancy. It is more prevalent among the women than the men. The face is rarely, if ever, marked

Ornaments were commonly worn by both sexes, but especially by the women. 4 Nose and ear ornaments, necklaces, etc., were worn, though it is doubtful if nose ornaments were used by the tribes of Puget sound.5 Most of these were made of shells, dentalia being the most valued. These form, in fact, one of their most valued possessions, and also serve as a circulating medium. Among the Chinook collars of bear's claws were sometimes worn by the men and ornaments of elk teeth by the women. Feather ornaments were also common among the Chinook. Broughton, the first to mention the Chinook, says of them in 1792: "The natives differed in nothing very materially from those we had visited during the summer [on Puget sound], but in the decoration of their persons. In this respect they surpassed all the other tribes, with paints of different colors, feathers and other ornaments." 6 Their myths mention feather head-ornaments. 7 also the use of the heads of red-headed woodpeckers 8 in decorating their bows. The use

<sup>&</sup>lt;sup>1</sup> Swan, (a) p. 154; (b) p. 17.

<sup>&</sup>lt;sup>2</sup> Ibid., pp. 184, 214, 269, 284.

<sup>&</sup>lt;sup>3</sup> Ibid., III, p. 241; IV, pp. 186, 269; Swan, (a) p. 112; (b) p. 18.

Owing to the rapid introduction of articles of trade, there is not much information regarding native ornaments. See Lewis and Clark, IV, p. 187; Swan, (a) p. 159; (b) p. 47; Eells, (a) p. 631.

<sup>&</sup>lt;sup>5</sup> Vancouver (II, p. 232) says he saw none, and Eells makes no mention of any.

Vancouver, II, p. 77.

<sup>&</sup>lt;sup>7</sup> Boas, (h) p. 52. <sup>8</sup> Boas, (d) p. 80.

of feather ornaments, especially the woodpecker heads, suggests a connection with the culture of northern California, where such feather ornaments were used to a large extent and woodpecker scalps regarded as a valuable possession.<sup>1</sup>

Weapons and Armor. — The weapons 2 seem to have been originally limited to the bow and arrow, and a war-club of wood, bone, or stone. The sinew-backed bow of the interior was common over most of the area.3 The arrows were tipped with wood, bone, or stone, though stone points were rare north of the Columbia.4 Lewis and Clark 5 say that the Chinook frequently used stone arrowpoints. A few years later these had been entirely replaced by iron. It is interesting to note here that one of the archeological finds of the Columbia valley, both above and below The Dalles, has been the discovery of great numbers of stone arrowpoints, remarkable for their small size and excellent workmanship. Stone arrowpoints are less frequently found about Puget sound, and are still rarer farther north.6 The Chinook arrow also frequently had a foreshaft 4 to 5 inches long.<sup>7</sup> War-clubs made of the bone of the whale, usually with carved handles and decorated sides, were common on the coast, especially among the Makah, who were whale hunters. Such clubs were also occasionally traded to tribes farther inland, as specimens have been found on the Columbia and on Puget sound. No mention by the early writers of the use of stone clubs by the natives of this region has been seen, though Cook 8 mentions them as having been used by the Nootka. Four different types have been reported from archeological sites.9 Whether these different types of stone clubs, some of which may have been ceremonial, were made or used by the historical inhabitants of this region, it is impossible to say, but it would

<sup>&</sup>lt;sup>1</sup> Dixon, p. 149; Kroeber, (a) p. 88.

<sup>&</sup>lt;sup>2</sup> Gibbs, (b) p. 192; Cox, pp. 154-5; Boas, (h) p. 27.

<sup>&</sup>lt;sup>3</sup> Lewis and Clark, III, p. 346; Henry-Thompson, p. 808; Vancouver, 1, p. 153.

<sup>&</sup>lt;sup>4</sup> Swan, (b) p. 48, 49 note; Eells, (a) p. 633.

<sup>5</sup> III, p. 347.

<sup>&</sup>lt;sup>6</sup> H. I. Smith, (a) p. 564.

Lewis and Clark, III, p. 347; Henry-Thompson, p. 808; Schoolcraft, III, p. 34.

<sup>8</sup> II, p. 324.

<sup>&</sup>lt;sup>9</sup> H. I. Smith, (a) p. 565, (b) p. 175.

seem possible that they were. Wooden clubs, some with carved handles, were found on the Columbia by Lewis and Clark, but at that time (1805) iron clubs or swords were common.\(^1\) Even in 1792 Vancouver\(^2\) found copper "swords" and "a kind of battle-axe made of iron" in use on the lower Columbia. Lewis and Clark also found in very common use among the Chinook a double-ended knife or dagger, evidently of iron, though they do not say so directly.\(^3\) This is exactly the same type as that used by the Tlingit and other northern tribes, and may have been obtained directly from trading vessels at the mouth of the Columbia. The copper "sword" mentioned by Vancouver, however, as well as the iron battle-axes, must have come to the region by native traffic. The Upper Chinook, at least in the thirties, made use of the interior and plains type of war-club—a stone covered with hide and fastened to the end of a short wooden handle.\(^4\)

Two kinds of armor <sup>5</sup> were used by the Chinook: one consisted of a sort of shirt or tunic of elk-hide, said to have been arrow-proof; the other was a kind of cuirass or vest made of sticks or strips of hard wood twined together. Shields seem to have been used occasionally. <sup>6</sup> Eells <sup>7</sup> says that the only armor he had heard of around Puget sound was of elk-skin, but it is probable that both types were known throughout the region, as their use is widespread among the interior and coast tribes from California to Alaska. <sup>8</sup>

Burial. — The methods of burial or disposal of the dead practiced throughout this area were much the same in general, though differing somewhat in detail among the different tribes.<sup>9</sup>

<sup>1</sup> Lewis and Clark, III, p. 326; IV, pp. 215, 222.

<sup>2</sup> II, p. 61.

<sup>3</sup> Lewis and Clark, IV, p. 23.

<sup>4</sup> Lee and Frost, p. 178.

<sup>&</sup>lt;sup>5</sup> Franchère, p. 253; Cox, pp. 154-5; Ross, (a) p. 89.

<sup>6</sup> Boas, (h) p. 27.

<sup>7 (</sup>a) p. 633.

<sup>8</sup> See Hough.

<sup>&</sup>lt;sup>9</sup> A good general description is given by Gibbs, (b) pp. 200-5. Other descriptions applying to particular places are found in Lewis and Clark, III, pp. 260, 324; Swan, (a) p. 186; Kane, pp. 202-3; Farrand, (b) p. 241; Vancouver, 1, pp. 255-6; II, p. 54; Swan, (b) pp. 83-6; Eells, (a) pp. 669-72; Wilkes, IV, p. 479.

The method also varied with wealth and rank, little pains being taken with poor people, while the bodies of slaves were merely thrown out into the woods or left wherever it was convenient. Along the coast and on Puget sound the bodies of the more important members of the community were wrapped in mats and skins and placed in canoes (occasionally only in a box, sometimes in a box placed in a canoe), in and around which were deposited quantities of their former possessions, broken or "killed" according to the usual custom. Slaves were sometimes sacrificed. South of the Columbia the canoes were usually left on the ground,1 while among the Lower Chinook and their neighbors to the north they were more commonly raised on a sort of scaffold made of poles or timbers and a second canoe inverted over the first. Among the Makah and the Puget sound tribes the boxes or canoes were commonly placed in trees. Burial in the earth does not seem to have been practiced, though sometimes the bones were gathered and buried in a box.2

On the Columbia river, above the mouth of the Willamette, a different method was practiced.<sup>3</sup> Here the dead, wrapped in mats and skins as usual, were laid in covered wooden "vaults" or burial houses. These were square, or nearly so, with sides and roof of planks, and were usually built on the surface of the ground. In them the bodies were laid with their heads to the west, sometimes piled up to a depth of three or four feet. Carved wooden images were frequently set up around the vaults, and the planks were often carved and painted to represent men or various animals.

Beliefs. — Our knowledge concerning the mourning customs, the beliefs concerning the future world and souls of the dead, the treatment of and belief concerning disease, the acquiring of guardian spirits and practice of shamanism, etc., is very fragmentary, but aside from minor details they seem to have been much the same in this area as in neighboring regions.

<sup>1</sup> Lewis and Clark, III, p. 323; Farrand, p. 241.

<sup>&</sup>lt;sup>2</sup> Swan, (a) p. 186.

<sup>3</sup> Lewis and Clark, III, pp. 175, 178; IV, pp. 224, 270; Cox, p. 75.]

<sup>4</sup> Boas, (c); Farrand, (b) pp. 240-1.

<sup>&</sup>lt;sup>5</sup> There are a number of scattered and incidental references to native practices in

Art. — The art of this region was by no means so highly developed as that farther north, and was, in part at least, of a different character. It found expression chiefly in carving, painting, and in decorative designs on bowls and baskets. carving and painting of their canoes, house fronts and posts,2 grave vaults and images, have already been referred to. These all seem to have been realistic in character. In describing the interior of a Chinook house at the Cascades, Henry says: "The front planks of the beds are carved and painted in various styles. At the end of each range are some broad upright planks, on which figures are rudely carved, somewhat resembling fluted pillars. At the foot of the chief's bed are planted in the ground at equal distances four figures of human heads, about two feet high, adorned with a kind of crown, and rudely carved and painted. Beside these figures are erected in the ground two large, flat, painted stones. On the side of each partition, facing the fireplace, are carved and painted on the planks uncouth figures of eagles, tortoises, and other animals, some of them four feet long. The colors used are white, red, black and green; the sculpture, in some instances, is not bad." 3

The Indians around Puget sound do not seem to have made such extensive use of carved and painted figures in early times, but painting and especially carving were very common among the Nootka and probably along the Washington coast. The painting of the houses, however, does not seem to have been so common, nor do they seem to have used on their canoes carved images such as were in general use among the Chinook. Whether the images formerly used on the prow of the Tlingit or Haida canoe were of the same character or not is a question.

On Puget sound the house posts were frequently carved and images were occasionally made. The purpose and meaning of these images is doubtful. Among the Chinook they sometimes,

the early writers. For native beliefs there is little besides the collections of myths and texts.

<sup>1</sup> Lewis and Clark, III, pp. 165, 195, 197; IV, pp. 31, 36.

<sup>&</sup>lt;sup>2</sup> Ibid., III, pp. 166, 169.

<sup>3</sup> Henry-Thompson, p. 804.

<sup>4</sup> Cook, 11, p. 326.

at least, represented the guardian spirit or supernatural helper. Mention is made of such an image in one of their tales. Images of this sort, however, represented the supernatural helper of a group rather than the individual guardian spirit, as they were made in human form and all in much the same manner, being partly of carved wood and partly of cedar bark. Gibbs says: "Among the Tsinūk and Tsihalis, the tamahno-ūs board of the owner was placed near him [when buried]. The Puget Sound Indians do not make these tamahnō-us boards, but they sometimes constructed effigies of their chiefs, resembling the person as nearly as possible, dressed in his usual costume, and wearing the articles of which he was fond." That the carved house posts had some meaning is probable, but just what this was is not evident.

No mention has been found by any early writer of the stone images found so frequently along Columbia river. Henry's mention of flat, painted stones, set up in the house in addition to the wooden images, is interesting, and it is possible that the stone images were for the same purpose. Whether they were made by the Chinook or some earlier inhabitants of the region cannot be determined, but it does not seem necessary to suppose that the Chinook were incapable of making them.

The handles of bowls and spoons, both of wood and horn, were frequently carved to represent various animal forms in whole or in part. Some bowls show a human face, rudely carved in relief on each side. Incised designs on wooden and horn vessels and spoons were also common. These seem to have been chiefly geometrical, to judge from the specimens from the coast of Washington and from the Chinook, and consist largely of concentric circles and rectangles, zigzag lines, and rows of small triangles. One specimen in the American Museum of Natural

<sup>&</sup>lt;sup>1</sup> Boas, (h) p. 201.

<sup>2</sup> Gibbs, (b) p. 203.

<sup>&</sup>lt;sup>3</sup> Compare Boas, (a) 1890, p. 564.

Several such spoons, both of wood and of horn, are in the American Museum of Natural History. Figures are given in Swan, (b) p. 42; Schoolcraft, III, pl. 35. See also Eells, (c) 1886, p. 40.

History shows a human face incised on each end. Swan <sup>1</sup> gives an illustration of a similar specimen. The style of vessel and ornamentation there figured seem peculiar to this region. The latter may be similar to the frieze work mentioned by Cook <sup>2</sup> as so common among the Nootka.

The basketry designs are both geometrical and realistic. Animal designs, more or less conventionalized, appear to be native to the region, as they occur on the oldest baskets and are also said to have been very common on hats, as before mentioned. On the Salish baskets these are more commonly found in a row just below the margin. On Chinook baskets they frequently cover the whole surface, or are intermingled with other designs. Some, such as the flying bird or butterfly, are very much conventionalized and may consist merely of two triangles united at their apexes. It does not seem at all certain in the light of recent investigations that such geometrical forms have been derived from realistic representations.<sup>3</sup> The triangle is one of the most common of all geometrical designs in this region, as in many other places, and is here also interpreted as an arrowpoint.4 Some of the designs seem strongly suggestive of California influences, such as that on an old Quinault basket figured by Farrand,5 which would seem to be nothing but the familiar quail-tip design of northern California. designs on Chinook twined baskets are almost identical with those on California baskets. It is difficult to distinguish the patterns belonging to the eastern part of this region and those of the western Shahaptian, owing to lack of material and imperfect knowledge regarding the origin of the baskets concerned. This is especially true of the imbricated coiled ware, which is common to both these peoples, all specimens of which are popularly called Klikitat, regardless of origin. The southern coiled baskets in general, however, seem to show a greater resemblance in their patterns to those of northern California than

<sup>1 (</sup>b) p. 43.

<sup>&</sup>lt;sup>2</sup> II, p. 326.

<sup>&</sup>lt;sup>3</sup> Compare Farrand, (a) pp. 393-4, 399.

<sup>4</sup> Chinook interpretations were obtained from Mr Edward Sapir.

<sup>5 (</sup>a) pl. xxiii, fig. 9.

is the case with twined baskets. The arrangement of the design, which is commonly spiral or diagonal, is also similar to that of northeastern California.1 This is perhaps less true of baskets of known Salish origin than those of Shahaptian make. Chinook twined baskets and bags the arrangement of the design is very frequently, if not usually, vertical, though a horizontal arrangement in bands is also very common. A vertical or zigzag arrangement is very common on Quinault and Salish baskets, and while here the spiral arrangement also occurs, the patterns are usually smaller and the surface more completely covered than is the case with the Klikitat baskets. All the designs of this region are radically different from most of the modern work of the Nootka, whose designs seem to have been copied from the Tlingit. Of painted designs and figures, as originally executed, we know practically nothing. The Makah paint their hats, bowls, etc., in much the same manner as the Nootka. Garments also were sometimes painted.<sup>2</sup> Decoration of their canoes and wooden bowls with rows of the operculum of a species of Turbinidæ (Pachypoma gibberosum) was very common, both on the Columbia and northward.3 Bv early writers these were sometimes mistaken for teeth.

#### Southwestern Oregon

The southwestern part of Oregon belongs to a culture area intermediate between the Columbian and that of northwestern California. Its characteristics, however, are very imperfectly known. This area was occupied chiefly by Athapascan tribes, together with the Takilman and probably the Kusan stocks. Here the head was not flattened. Descent was paternal and the village seems to have been the social unit. The village was usually small and probably consisted of those related by blood, so that marriage with members of other villages would be the rule.

<sup>&</sup>lt;sup>1</sup> Compare Kroeber, (b) pp. 148, 152.

<sup>&</sup>lt;sup>2</sup> Boas, (g) p. 139.

<sup>3</sup> Lewis and Clark, IV, p. 199; Henry-Thompson, p. 789.

See J. O. Dorsey.

As suggested by Dr A. L. Kroeber, it is unlikely that there was any clan organization. Mr Thomas Smith, the oldest settler in the Umpqua valley, says 2 that he never saw more than three houses together. David Douglas, who visited the Umpqua valley in 1826, found on the upper Umpqua "two lodges and about twenty-five souls, mostly women, the wives of Centrenose, who is chief of the tribe inhabiting the upper part of the Umpqua river." 3 He mentions no larger villages. Mr Smith says their houses were about twelve by fifteen or twenty feet, constructed of light cedar planks, which they were in the habit of moving from place to place up and down the river, as they seldom staved in one place more than three months. Parrish describes the houses of the coast Athapascans as follows: "Their houses are constructed by excavating a hole in the ground twelve or sixteen feet square and four or five feet deep, inside of which puncheons or split stuff are set upright, six or eight feet high; upon the top of these, boards or thatch are placed for the roof. In the gable end a round hole is made, sufficiently large for the entrance of one person; then descent is made by passing down a pole upon which notches are cut, which serve for steps." 4 Sweat-houses are mentioned but not described. Smith says he never saw a sweat-house in Umpqua valley, but possibly he had in mind the small interior type of sweat-house, with which he was familiar, as it was very common among the Kalapuya.

Salmon was the staple food, especially on the coast. Camas and roots of various kinds, acorns, pine nuts, and berries were also of great importance, particularly for those farther inland. Tobacco was the only cultivated plant.

According to Mr Smith their principal household utensils were baskets, and pestle and mortar for grinding roots and acorns. Shells were used for spoons. Wells 5 says that the Indians of Coos bay used wickerwork cradles. The canoes of

<sup>&</sup>lt;sup>1</sup> (a) p. 87.

<sup>&</sup>lt;sup>2</sup> Letter to writer.

<sup>&</sup>lt;sup>3</sup> Douglas, 1904, p. 354.

<sup>4</sup> Report of the Commissioner of Indian Affairs for 1854, p. 290.

<sup>&</sup>lt;sup>5</sup> Harper's Magazine, XIII, p. 602.

this region were rude dugouts. According to Vancouver "their shape much resembled that of a butcher's tray, and seemed very unfit for a sea voyage or any distant expedition." <sup>1</sup>

Their dress consisted chiefly of skins. That of the Upper Umpqua tribe is thus described by Douglas: "The garb of the Umptqua tribe of Indians, of whom Centrenose (a native name) is the chief, consists of a shirt and trousers made of the undressed skins of a small deer. The richer individuals decorate this garb with shells, principally marine ones, thus showing their proximity to the sea. The females wear a petticoat made of the tissue of Thuia occidentalis, like that which is used by the Chinook Indians, and above it a kind of gown of dressed leather like the shirts of the men, but with wider sleeves." 2 was the first white man to visit this region. He penetrated south to near the headwaters of the Umpqua, where he met eight Indians, "all of them painted with red earth, and with bows, arrows, bone-tipped spears, and flint knives." They "sat down to smoke, but presently I perceived one of them string his bow, and another sharpen his flint knife with a pair of wooden pincers and suspend it on the wrist of his right hand." These actions Douglas regarded as a sign of hostility, and he soon left them and returned northward. Tattooing 3 was practiced, the women especially being tattooed on the chin and lower part of the face. Wells 4 says that the dead were formerly burned. but at that time (1855) were doubled up and buried in the ground, the grave covered with stones, and the person's property piled around. The excavations of Schumacher show a similar method of burial. Smith says that the only burial he saw was that of a chief who was placed in a sitting posture in the ground.

The above information, while scanty, would seem to show a closer connection of this culture with that of northwestern California than with that of the Columbia. This is seen in the

<sup>&</sup>lt;sup>1</sup> Vancouver, I, p. 204.

<sup>&</sup>lt;sup>2</sup> Douglas, 1904, p. 354.

<sup>3</sup> Letter from Mr Thomas Smith; Farrand, (b) p. 240.

<sup>4</sup> Harper's Magazine, XIII, p. 602.

lack of deformation of the head, the facial tattooing of the women, the style of dress, the type of canoe, the use of wickerwork cradles and flint knives, and the method of burial, though the last is still more closely related to that practiced in the interior.

#### WILLAMETTE VALLEY

In Willamette valley we find a single stock, the Kalapooian, whose culture, also known very imperfectly, seems to have occupied an intermediate position between the coast and interior types. There was also considerable variation between the different tribes or bands of this stock; those at the north nearest Columbia river flattened the head and living in wooden houses,<sup>1</sup> while those farther south did not flatten the head, and were of a roving disposition, their only dwelling, when they took the trouble to make one, being of bark or mats.2 They were in general an indolent and peaceful people, living chiefly on camas and other roots, occasionally hunting deer, of which they were very fond, and also frequently using grasshoppers and other insects as food.3 The small, low sweat-house of the interior was in common use. Bows and arrows were their principal weapons. Their dress consisted largely of deer-skins, a basket hat being sometimes worn in addition. According to Henry, who visited the valley in 1814, they showed no inclination to trade, caring for little else besides some blue beads, and could not be induced to capture beaver, which were very numerous in their country, for the purpose of selling their skins.

The Kalapuya buried their dead in the earth.<sup>4</sup> One writer describes the process as follows: "When the grave was dug they placed slabs on the bottom and sides, and when they had lowered the wrapped body down, placed another over, resting on the side ones, and filled in the earth." <sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Silas B. Smith, p. 255; Gatschet, (b) p. 213; Henry-Thompson, p. 812.

<sup>&</sup>lt;sup>2</sup> Henry-Thompson, p. 814; Letter from Mr Thomas Smith.

<sup>&</sup>lt;sup>3</sup> Henry-Thompson, pp. 812, 814, 817; Douglas, 1905, p. 78; Wilkes, v, p. 223.

Gatschet, (a) pt. 1, p. 86.

<sup>&</sup>lt;sup>5</sup> American Antiquarian, IV (1882), pp. 331.

#### Southern Oregon

In southern Oregon is found another linguistic stock, the Lutuamian, comprising the Klamath and the Modoc, whose cultural position is somewhat in doubt, but who seem in this respect to occupy a rather intermediate position between the tribes of northern California and those of the interior plateau region. Though considerable material has been collected from this group at different times, not much has thus far been published, and no attempt will here be made to characterize the culture of this particular region.

#### THE INTERIOR

East of the Cascade mountains the region is occupied by tribes having that type of culture commonly designated as plateau or interior. Within the area under discussion were a number of interior Salish tribes, the Shahaptian and Waiilatpuan stocks, and some Shoshonean tribes. The earlier, or what may be called the original (using the word in a relative sense merely), type of the culture of this region has been much complicated by the introduction of the horse, which took place shortly before the region first became known to the whites. This led to a considerable change in the life of the natives, and to a rapid introduction of certain cultural elements, especially those associated with the horse and with the new mode of life which the animal made possible. These probably came with the horse from the region to the southeast, and show a great similarity to the plains type of culture. How much the plains culture had influenced the plateau type before the introduction of the horse is a question. Another difficulty in the way of any general discussion at present is that this region has never been carefully studied. The only detailed study of any tribe in the whole plateau area is that by Teit on the Thompson Indians of British Columbia.

Social Organization. - It would seem, however, that the

 $<sup>^1</sup>$  Gatschet, (a) ; Coville ; G. A. Dorsey, (a) ; Abbott in Pac. R. R. Rep., vi, p. 69.

early culture throughout this area was of a very simple and undeveloped character, which probably accounts for the rapidity with which eastern types were appropriated when once introduced. The social organization 1 was very loose and the chiefs had but little power. The chieftainship was nominally hereditary, but actually depended on the personal qualifications of the individual, the tribe recognizing as leaders only those who had wealth and ability. There were no classes as on the Prisoners of war were commonly held as slaves,2 but they were usually well treated and frequently adopted into the Slavery seems to have been an incident of war, rather than a recognized institution as in the Columbian area. Prisoners were sometimes subjected to torture, but were seldom put to death by this means, as was common farther east, even among the Flatheads.3 The taking of scalps and the scalpdance was practiced by many of the tribes,4 probably by all of them. As it seems to have been an established custom among the Klamath and some Californian tribes, it does not seem likely that this custom was of recent introduction. The flattening of the head was practiced to a limited extent by tribes living along Columbia river above the Chinook, but was limited almost entirely to the women and gradually died out toward the east.5 Aside from regarding it as a mark of beauty, there was no social import attached to the custom.

Food and Manner of Life. — The tribes of this region were more nomadic <sup>6</sup> than those of the coast, and frequently split up into small groups. The extent of their wanderings and the size of the separate bands depended largely on their habitat and the nature of their food supply, which differed with the character of

<sup>&</sup>lt;sup>1</sup> Ross, (a) pp. 292-3; Hale, p. 207; Gibbs, (a) p. 412.

<sup>&</sup>lt;sup>2</sup> Ross, (a) p. 320; (b) 1, p. 309.

<sup>3</sup> Cox, p. 119.

<sup>&</sup>lt;sup>4</sup> By the Yakima (Ross, b, 1, p. 28); Nez Percés (Wilkes, IV, p. 465; Ross, b, 1, p. 310); Klamath (Gatschet, a, p. 16).

<sup>&</sup>lt;sup>5</sup>Lewis and Clark, 111, pp. 125, 137; IV, p. 324; Hale, p. 213; Mrs Whitman, 1891, pp. 91, 95.

<sup>&</sup>lt;sup>6</sup> For a description of a typical yearly round, with nature of occupation and food for each season, see Hale, pp. 205-6; Ross, (a) pp. 314-6.

the country. Practically all the tribes of this region, with the exception of some of the Shoshoni, depended to a greater or less extent on salmon, which was the principal food of those living on the Columbia.1 The preparation of dried and pounded salmon near The Dalles, which has already been mentioned, was common to both the Shahaptian and the Chinookan tribes. Roots were also important, especially camas, 2 and formed the staple food among some tribes. Berries, lichens, and bark were also used,3 especially by the tribes near the mountains. Game of various kinds, particularly deer, was extensively hunted and formed an important article of food with most of the tribes, besides being of value on account of the skins, which were used for clothing. Some localities were much better supplied with food materials of various kinds than others. and as a consequence the natives of these regions were much better off and much more choice in their selection. Poorer and weaker tribes were kept out of these regions and forced to put up with what they could get in less favored localities. 4 The Shoshoni of the more arid regions lived largely on grasshoppers and other insects, with a few rabbits, grouse, and deer, and do not seem to have been averse to eating almost any kind of animals that came their way.5 All of the Shoshoni country was not so destitute, however, and certain groups, such as those living in southern Idaho, were well supplied with the necessaries of life. Salmon were caught in the rivers, roots were abundant in the valleys, and the country abounded in game, including the buffalo. The inhabitants of this region presented an appearance very different, according to the early descriptions, from the "Digger" Shoshoni of the desert.6 Ross divides

<sup>&</sup>lt;sup>1</sup> Hale, p. 213; Kane, p. 272.

<sup>&</sup>lt;sup>9</sup> For methods of preparation, which were much the same among all the tribes, see Lewis and Clark, v, pp. 126-7; De Smet, II, p. 488.

<sup>3</sup> Lewis and Clark, v, p. 4; Douglas, 1904, p. 340; Wilkes, IV, pp. 427, 434, 436, 447, 465.

<sup>4</sup> Hale, p. 210.

<sup>&</sup>lt;sup>5</sup> De Smet, III, pp. 1032-3; Thompson in Report of Commissioner of Indian Affairs for 1854, p. 283; Ross, (b) I, p. 270.

<sup>6</sup> Lewis and Clark, III, pp. 1-10, 19-21.

<sup>7 (</sup>b) I, pp. 249-51.

the Snakes into three divisions, which seem to have been alike in practically everything except material condition and method of living, and, according to his descriptions, in character. It is not unlikely that the general mean and thievish disposition of the less favored bands was due largely to their poverty, and this in turn to their habitat and mode of life. Whether the latter was due to their being prevented from occupying and enjoying the advantages of more favored regions, or to inherited customs and habit, is a question, but it would seem quite probable that the former was the principal cause. This may have had a cumulative effect, however, by continued action on several generations. When visited by Lewis and Clark and by Ross, the more well-to-do Shoshoni were already generously supplied with horses, and this no doubt had much to do with their condition: vet before the introduction of the horse there must have been considerable difference between the tribes living in different surroundings. Possibly to this very difference is due the ready adoption of the horse by some and not by others, though the fitness of their country for the keeping and raising of horses was doubtless also important, and was probably the chief reason for the difference. Later the material prosperity of the Snakes of this region was much reduced, due largely to continued attacks and depredations by the Blackfeet. Some of the tribes along Columbia river seem also to have been very poor and ill-supplied with material comforts, their condition apparently corresponding to the poverty of the region which they occupied. as suggested by Hale.

Some of the tribes were skilful hunters. When hunting with bows and arrows, decoys or disguises of deer and wolf skin were frequently used, so as to enable the hunter to approach more closely without being discovered.<sup>2</sup> Traps and snares of various kinds were common. Game was also surrounded and driven in by a large number of hunters, or was run down with horses,<sup>3</sup> a favorite method where possible and one that doubtless enabled

<sup>&</sup>lt;sup>1</sup> Cox, p. 229; Hale, p. 210.

<sup>&</sup>lt;sup>2</sup> Ross, (a) p. 297; Lewis and Clark, v, pp. 38, 40.

<sup>&</sup>lt;sup>3</sup>Ross, (a) p. 316; De Smet, III, p. 1026; Lewis and Clark, IV, p. 371.

them to be more successful than before horses were acquired. Fish were caught with seines, dipnets, spears, and hooks, while fish-weirs and traps were not at all uncommon.<sup>1</sup> There is not sufficient material, however, for a comparative study of methods and implements. Food was usually boiled in baskets with hot stones, or, especially in the case of roots, baked over hot stones.<sup>2</sup> Fish, berries, and roots were dried and preserved for future use.

During the early part of the nineteenth century the Indians of the Columbia valley, especially the Shahaptian tribes and the Cayuse, were in the habit of making annual excursions to the plains of the Missouri to hunt buffalo.3 From fear of the Blackfeet they usually went in large bands, and frequently joined forces with the Flatheads, who were in the habit of hunting in the same region. The Shoshoni tribes of southern Idaho also hunted the buffalo on the Missouri, but when first known to the whites they had been driven out of that region, which they had occupied in earlier times, by the Blackfeet, and visited it only for hunting purposes. When Lewis and Clark first met the Shoshoni they were on their way to the plains for that purpose.4 The buffalo did not penetrate far into the mountains, but they were common in southern Idaho in the Shoshoni country,5 though here, also, the raids of the Blackfeet soon made themselves felt. These raids do not seem to have begun until after the Blackfeet got horses. The buffalo occasionally ranged as far west as eastern Oregon in the Snake country,6 but do not seem to have reached the Columbia valley, though it is possible that a few stragglers found their way into the upper Columbia by way of the northern passes.<sup>7</sup> It is not likely, however, that they formed any considerable part of the food of the natives of that region

 $<sup>^{1}</sup>$  Ross, (a) pp. 314-5; (b) I, p. 269; Wilkes, IV, p. 444; Lewis and Clark, III, pp. 6-9; IV, p. 335; V, pp. 22, 47.

<sup>&</sup>lt;sup>2</sup> Ross, (a) p. 317; Lewis and Clark, III, p. 124; V, p. 130.

<sup>&</sup>lt;sup>3</sup> Franchère, p. 268; Ross, (b) 1, p. 305; Kane, p. 285; Wilkes, IV, p. 465; Hale, p. 212; Gibbs, (a) p. 408.

<sup>4</sup> Lewis and Clark, II, p. 378.

<sup>&</sup>lt;sup>5</sup> Ross, (b) I, p. 252.

<sup>6</sup> Allen, pp. 118-125.

<sup>7</sup> Gibbs, (a) p. 415; Cox, p. 228.

until after the advent of the horse. At the time of Lewis and Clark's visit the Nez Percés seem to have made little use of the buffalo. While the statement is made 1 that in the spring they crossed the mountains to get buffalo robes and meat, they do not speak of buffalo meat among the articles of food used by the Nez Percés, and buffalo robes were certainly not so common as later. Only one buffalo-skin lodge is mentioned. the manner of life, food, etc., of the Indians farther down the river, such as the Wallawalla, are described, no mention is made of their ever crossing the mountains; nor do they seem to have had any great number of horses, such as is ascribed to them by later travelers. On the Columbia near the mouth of the Yakima there were numerous Indians who were visited by Clark in 1805, but he says that while he saw a few horses the natives appeared to make but little use of them. If these were the Yakima Indians, there must have been quite a change in their manner of life in the next few years.2 All this would tend to show that the horse, while common in the Columbia valley at that time, was not yet very numerous nor had at that time very seriously modified the earlier customs of the natives. Considering that the advance of the horse northward would probably be as rapid as its natural multiplication would allow (these tribes being usually at peace with one another), this corresponds very well with the time of the introduction of the horse among the Lower Thompson Indians (toward the close of the eighteenth century), as given by Teit.3 They did not become common among the Thompson Indians, however, till 40 or 50 years later. The introduction of the horse enabled the Columbia valley Indians to become more successful hunters, and particularly to extend their hunting trips to more distant regions and return with great quantities of dried meat, skins, etc., which without pack animals would have been impossible. It would hence seem very doubtful if the Shahaptian tribes hunted the buffalo before they acquired horses.

<sup>1</sup> Lewis and Clark, III, p. 106.

<sup>&</sup>lt;sup>2</sup> Compare Ross, (b) 1, p. 19.

<sup>3 (</sup>a) p. 257.

Shelter. — Corresponding to their general nomadic habits, the mat lodge formed the principal dwelling of the tribes of this region, and many seemed to have had no other kind. These mat lodges 1 were occasionally circular, but usually rectangular, sometimes more than 150 feet long, and 12 to 15 feet wide. There were no partitions, and a whole village of 40 or 50 families might dwell in a single lodge.2 The sides usually sloped in like the roof of a house, almost meeting at the top, but leaving an opening along the ridge for the exit of smoke. According to Ross<sup>3</sup> the winter houses of the Okinagan were built in the same way, but sunk slightly in the ground and covered with grass and earth. Sometimes the sides of the lodge were perpendicular and the roof flat.4 The Shahaptians along Snake river frequently used a framework of split timber, somewhat like rails, to form the sides and the top; 5 these also served as a sort of scaffolding for drying fish. There seems to be no good reason for associating this with the type of wooden house used on the coast. While the underground winter house,6 with entrance through the roof, was probably known throughout the region, references to its occurrence are very few. Such a house was seen by Lewis and Clark 7 on the north side of the Columbia near the mouth of White Salmon river, but uninhabited at that time (1805). The Chinook, so far as we know, never erected such houses. Possibly this was of Shahaptian make, but for reasons to be discussed more fully later, it would seem more likely to have been Salish. So far as described it does not differ from the winter house of the Thompson Indians. The pit of an underground house, according to Clark,8 was found among the Nez Percés. Gibbs 9 mentions what were probably similar pits on

<sup>&</sup>lt;sup>1</sup> Lewis and Clark, III, pp. 104, 122, 126; IV, pp. 358-9, 361; V, p. 18; Cox, p. 84; Ross, (a) p. 313; Gass, p. 212; Gibbs, (a) p. 407; Gairdner, p. 253; Lee and Frost, p. 190.

<sup>&</sup>lt;sup>2</sup> Lewis and Clark, v, p. 18.

<sup>3 (</sup>a) pp. 313-4.

Lewis and Clark, III, p. 126.

<sup>&</sup>lt;sup>5</sup> Ibid., III, pp. 108, 112, 115; v, p. 100; Gass, p. 212; Wilkes, IV, p. 462.

<sup>&</sup>lt;sup>6</sup> For a description of this type see Teit, (a) pp. 192-5.

<sup>7</sup> Lewis and Clark, IV, p. 280.

<sup>8</sup> Ibid., v, p. 35.

<sup>9(</sup>a) p. 409.

the lower Yakima, and Smith 1 also found house-pits in Yakima valley. Kane<sup>2</sup> describes a somewhat similar house used by the Wallawalla, but much ruder. We also know that such houses were used by the Klamath.3 It is possible that the introduction of the buffalo-skin lodge had something to do with the apparent scarcity of the underground dwelling in historic times. Lewis and Clark 4 in 1806 mention but one buffalo-skin lodge among the Nez Percés, and that was apparently reserved for special occasions. A few years later the buffalo-skin lodge had practically supplanted the mat lodge among the Nez Percés, and was in more or less common use among all the interior Salish and Shahaptian tribes, especially those who were in the habit of crossing the mountains to hunt buffalo. It is also possible that the Shahaptian tribes were not in the habit of using such houses, and that the house-pit mentioned by Lewis and Clark indicates something of a different character. The mountain Snakes, according to Ross,5 never used underground houses.

Household Utensils. — The household utensils were few, baskets and bags being the most important. Pottery was not made except among the Shoshoni. Spoons of wood or horn were in general use, and also wooden dishes and bowls. Parflèches were later common among many of the tribes, but were probably introduced. Mats, of course, were of great importance. Elk-horn wedges or chisels were used for splitting wood, as were also stone hammers, sometimes carved. It is not certain what sort of implements were used for grinding and pounding roots, dried fish, etc., but from the presence of the numerous stone mortars that have been found along the Columbia, it is possible that these were used for that purpose. While stopping at one of the Nez Percés villages, Lewis wrote:

<sup>1 (</sup>d) p. 552.

<sup>1. 2/2</sup> 

<sup>&</sup>lt;sup>3</sup> Gatschet, (a) pt. 1, pp. 117, 124; Abbott in Pacific R. R. Rep., VI, p. 69.

<sup>4</sup> v, p. 16.

<sup>5 (</sup>b) II, p. 117.

<sup>6</sup> Lewis and Clark, III, p. 19; Ross, (b) I, p. 273.

<sup>7</sup> Lewis and Clark, III, p. 124.

"The noise of their women pounding roots reminds me of a nail factory." <sup>1</sup>

The imbricated coiled ware made by the western Shahaptian and Salish tribes has already been referred to. All these tribes also made various kinds of twined ware. "The soft hat in wrapped twined work and most of all the twined wallet overlaid predominate with the Shahaptian, but the Salish have a wide range of technique." False embroidery is also very common on Shahaptian bags. The Shoshoni make twined ware of various kinds, but also use coiled work, especially in their water-bottles.

Canoes. — The canoes of this region were mostly rude dugouts. Some of the more northerly Salish tribes used bark canoes, and some of the eastern Salish, as the Flatheads, had no canoes at all. The Shoshoni, even where living largely by fishing, were also without canoes, using rafts of reeds for crossing rivers and for similar purposes. 5

Clothing and Ornaments. — The clothing worn by the natives of the larger part of this area in historic times is of the same general character as that of more easterly tribes, consisting of shirts, leggings, and moccasins for the men, and a somewhat longer shirt or dress with leggings and moccasins for the women. These were usually of dressed buckskin, and extensively ornamented with fringes, beads, and porcupine quills. Various sorts of ornaments were worn, such as bear-claws, elk-teeth, feathers, etc., eagle feathers being particularly valued. Marine shells, obtained by trade, were found over all the region. The men frequently wore, especially when hunting, caps of skin, while the women sometimes wore a sort of basket-hat or rimless cap, which among the Shahaptian tribe is usually of wrapped twined weave. Robes of skins, in later times frequently of buffalo

<sup>1</sup> Lewis and Clark, v, p. 16.

<sup>&</sup>lt;sup>9</sup> Mason, p. 488.

<sup>3</sup> Pacific R. R. Rep., I, p. 296.

<sup>4</sup> Gibbs, (a) p. 415.

<sup>&</sup>lt;sup>5</sup> Ross, (b) I, p. 274.

<sup>6</sup> Lewis and Clark, v, p. 119.

skins, were commonly worn in addition to the above.1 The dress above described is that of the more prosperous hunting and horse-raising tribes. The advantage of the horse in hunting has already been referred to, and it seems very evident that this dress was in part, at least, of recent introduction. Lewis and Clark repeatedly speak of the similarity of much of the clothing worn by Indians along the Columbia to that of the Shoshoni. These Shoshoni were those living on Lemhi and Salmon rivers of Idaho. They were accustomed 2 to hunt buffalo on the plains of the Missouri, and complained that their enemies, the Minitari and the Pakees, or Blackfeet, drove them into the mountains, but that if they only had guns, as their enemies had, they could then live in the buffalo country on meat just as they did. The clothing and equipment of these Shoshoni were much the same as the plain's type, and it is quite probable that they had formerly lived farther east. Of the different articles of clothing worn by the Nez Percés, Lewis says: "These are formed of various skins and are in all respects like those particularly described of the Shoshones." 3 Along the Columbia the similarity was not so complete; but even as far down as the Upper Chinook many articles described as similar to those of the Shoshoni were found.<sup>5</sup> All of these, however, they declare were obtained by trade from other tribes and from those "who sometimes visit the Missouri." 6 There are certain indications that this extensive introduction of eastern clothing took place about the time of Lewis and Clark's visit. When passing down the Columbia in 1805 they found the women wearing quite a different dress, consisting merely of a breech-clout of buckskin with occasionally the addition of a small robe of skins,<sup>7</sup> This is

<sup>&</sup>lt;sup>1</sup> For clothing see Lewis and Clark, III, pp. 1-6, 10 (Shoshoni), 105; v, pp. 29-31 (Nez Percés); Ross, (a) pp. 296-7 (Okinagan), 127 (Wallawalla); Ross, (b) 1, p. 306 (Cayuse, Nez Percés).

<sup>&</sup>lt;sup>2</sup> II, Lewis and Clark, p. 383.

<sup>3</sup> Ibid., v, p. 30.

<sup>4</sup> Ibid., III, p. 125; IV, p. 317.

<sup>&</sup>lt;sup>5</sup> Ibid., IV, pp. 239, 284, 289.

<sup>&</sup>lt;sup>6</sup> Ibid., IV, p. 303.

<sup>&</sup>lt;sup>7</sup> Ibid., 111, pp. 125, 137, 143.

exactly the same dress as that worn by the Chinook women above the mouth of the Willamette. When these explorers returned up the Columbia the following year, they found the Indians, particularly the women, much better dressed, and in the eastern or Shoshonean style.<sup>2</sup> A few years later Cox<sup>3</sup> mentioned the older type of dress as found only among a few miserable fishing tribes along the Columbia above the mouth of the Yakima. As before suggested, it is quite likely that the mode of life of these tribes had much to do with their style of dress, and that the tribes depending largely on the hunt would be better supplied with skins for clothing than those subsisting chiefly on fish. It is also evident that in most of this region the scanty vegetation makes clothing from plant material difficult, if not practically out of the question. Moccasins and leggings were probably more or less common over all the area. Robes of twined strips of rabbit and other skins were common. more northerly tribes also made blankets or robes of the wool of the mountain goat.4 That the dress of this region even in earlier times, however, resembled to a certain extent that of the plains, is made probable by the finding of a costumed human figure in the upper Yakima valley. The style of dress shown by this figure strongly suggests the plains type.5

Weapons and Armor. — For weapons 6 they had bows and arrows, spears or lances, knives, and clubs. The bows were of wood or horn, backed with sinew. The horn bows were made of one or of several pieces of horn glued together, and were probably more common among the Shoshoni. Flint or obsidian was used extensively for arrowpoints and knives. The war-club consisted of a stone encased in rawhide and fastened to a short handle. This is the same as that used by the eastern Indians and was

<sup>&</sup>lt;sup>1</sup> See p. 167.

<sup>&</sup>lt;sup>2</sup> Lewis and Clark, IV, pp. 322, 337.

<sup>3</sup> P. 229

<sup>4</sup> Franchère, p. 284; Mason, pp. 412, 437.

<sup>&</sup>lt;sup>5</sup> H. I. Smith, (c); (d) pp. 552-3.

<sup>6</sup> Lewis and Clark, II, p. 373; III, pp. 19-21; Ross, (a) p. 318.

Lewis and Clark, III, p. 20; Schoolcraft, I, p. 212; Henry-Thompson, p. 713.

<sup>8</sup> Lewis and Clark, III, pp. 19, 127.

probably introduced. The hatchet or tomahawk does not seem to have been used in early times. As elk- or antelope-skin armor was used by the Shoshoni, by the northern Salish, and by the coast and California tribes, it was probably used to some extent throughout this area. Round skin shields, painted and ornamented with feathers, were also used. These may have been of eastern origin.

Burial. — The method of disposing of the dead seems to have varied considerably among the tribes and even within the same tribe. Along the Columbia below the mouth of the Snake "vaults" or burial houses much like those found among the Upper Chinook were used.3 A somewhat similar method was observed even among the Nez Percés.4 The latter sometimes also used scaffolds, apparently after the fashion of the plains Indians; but the more common method of disposing of the dead was by burial in the ground, especially on stony hillsides, and covering the graves with stones to keep off the wild animals.<sup>5</sup> This seems to have been the prevailing method throughout the whole region.6 Frequently, at least among the Salish tribes, the body was doubled up and buried in a sitting position, but whether this was always the case cannot be determined from the brief descriptions. Gibbs 7 reports having seen near the mouth of the Okanagan river bodies wrapped in blankets and bound upright to the trunks of trees at some distance above the ground. This suggests the tree burials practiced by the coast Salish, but does not seem to have been the ancient method.

Art. — The art of this region consists chiefly of decorative designs, including the ornamentation of bags, baskets, and hats; porcupine-quill and bead work on clothing, cradles, etc., and painting on moccasins, shields, parflèches, and possibly robes. Plastic art seems to have been rare. The western Shahaptians

<sup>1</sup> Lewis and Clark, III, p. 21.

<sup>&</sup>lt;sup>2</sup> Teit, (a) p. 265.

<sup>3</sup> Lewis and Clark, 111, pp. 139-40.

<sup>4</sup> Ibid, IV., p. 369.

<sup>&</sup>lt;sup>5</sup> Ibid., IV, pp. 366-7, 371; V, p. 99.

<sup>6</sup> Ross, (a) pp. 320-1; Cox, p. 105; Douglas, 1904, p. 339; Gibbs, (a) p. 405.

<sup>7 (</sup>a) p. 413.

possibly did some carving of the handles of bowls and spoons similar to that of the Columbian area. Clark mentions a "malet of stone curioesly carved" which he saw used by the Indians near the mouth of Snake river. No mention has been found of other stone carvings, but this suggests that the stone objects, images, etc., previously mentioned as being frequently found along the Columbia, both above and below The Dalles. were at least not unknown to the Indians of that time. Eells 2 mentions two stone carvings which he describes as horses' heads. If this interpretation be correct, the modern character of the work is evident. It is unfortunate that no figures of these specimens have been given. That the so-called baboon or ape heads, however, are correctly named seems extremely doubtful. Considering the general crudeness of the native art. together with the tendency to represent imaginary and mythical beings, any theories based on such supposed resemblances are extremely hazardous, unless rendered probable by other facts and conditions.

The Klikitat basket designs have already been mentioned, together with the fact that they resemble both in character and arrangement the designs in northeastern California. The pattern arrangement of the hats also is usually zigzag or diagonal. The twined bags made by the western Shahaptians of the same region show considerable variety in design, some being quite complicated. A large number of these are arranged horizontally, sometimes in bands. Many of them show the influence of the plains culture, some designs resembling those commonly painted on parflèches, while other are more like the beaded work on pouches. Owing to lack of material it is impossible to make any comparison with other tribes of this area.

According to the early writers, porcupine quills were much used for decorating articles of clothing. Later beads were used for this purpose. The designs were doubtless originally geometrical, but the modern designs are largely floral. Floral and plant designs in bead work are particularly common among the

<sup>1</sup> Lewis and Clark, III, p. 124.

<sup>2 (</sup>d).

Nez Percés, though some geometrical designs still occur. Part of these geometrical designs may be original, but others, such as the parallel lines on bags and pouches, strongly suggest eastern influence. The floral designs are well illustrated by their cradles and pouches, which are often completely incrusted with beads. Floral designs are also found among the Salish tribes, but to a much less extent. The Nez Percés are said to have woven, in former times, geometrical designs in woolen blankets. Of painting, aside from the designs of parflèches and rawhide bags, which are evidently modern and of recent origin, we know but little. In early times shirts and moccasins are mentioned as having been painted. Some buffalo-skin parflèches from Columbia river are ornamented with designs formed by scraping away the external pigmented layer of the skin, thus exposing the lighter layer underneath and giving the effect of light and shade. This method in early times was practiced by the Sioux, according to their traditions.2

A peculiar method of decorating their buckskin shirts is sometimes resorted to, especially among the Nez Percés. This consists in cutting out small square or irregular pieces, so as to leave the garment punctured all over with holes.<sup>3</sup> Among neighboring tribes this method of decoration is commonly limited to a few inches of the margin, though a similar custom exists among the Lower Kutenai,<sup>4</sup> Cree,<sup>5</sup> and some Athapascan tribes.

## TRADE AND TRIBAL MOVEMENTS

The lines of trade or what might be called trade-routes throughout the region correspond in general to physical or geographical conditions, and follow the lines of easiest intercommunication, with a few minor though interesting exceptions. There was a considerable amount of coasting trade, especially from the mouth of the Columbia northward, carried on chiefly

<sup>&</sup>lt;sup>1</sup> Mason, p. 437.

<sup>&</sup>lt;sup>2</sup> Wissler, p. 259.

<sup>3</sup> Ross, (b) I, p. 306.

<sup>&</sup>lt;sup>4</sup>Chamberlain in Rep. Brit. A. A. S., 1892, p. 569.

<sup>&</sup>lt;sup>5</sup> Boas, information.

by the Chinook and the Makah. South of the Tillamook, along the Oregon coast, there are no records of such traffic, and we have already noted that south of the Columbian area the canoes were not fitted for ocean voyages. While the timber may not have been so favorable for canoe making, the reason must have been psychological rather than physical, as is also indicated by the fact of their somewhat different culture. From the coast inward there was only one trade-route of importance. This led up the Columbia river to The Dalles, where was found the greatest trading center in the whole region, and whither the tribes were wont to come from north and south as well as from the east.<sup>2</sup> Klamath,<sup>3</sup> Cayuse, Nez Percés, Wallawalla, and other Shahaptian and probably Salish tribes were all in the habit of going thither to traffic and exchange their products or possessions for those of other regions. Farther east the Shahaptians in their turn traded with the Shoshoni, from whom they obtained buffalo robes and meat. A favorite center for this trade, at least in later times, was at the Grande Ronde in eastern Oregon.4 Probably this latter center, and a large part of the trade connected with it, arose only after the horse came to occupy an important place in the lives of the natives and to make traveling on the plains easy. In earlier times trade doubtless followed the river more closely. Certain similarities already pointed out between the upper and lower Columbia would suggest this. Trade was not, however, confined to water routes. The Okinagan, for example, crossed the mountains to Puget sound, trading wild hemp for sea-shells, especially dentalia, as well as for other small objects.<sup>5</sup> Such trade, however, involving traveling over long and difficult mountain trails, was of necessity limited to small and valuable articles. The Yakima also in later times crossed the mountains and traded with the Puget sound tribes.6 If trade was carried on by this route in earlier

<sup>&</sup>lt;sup>1</sup> Swan, (b) p. 30.

<sup>&</sup>lt;sup>2</sup> Lewis and Clark, IV, p. 289; Ross, (a) p. 117.

<sup>3</sup> Gatschet, (a) pt. 1, p. 93.

<sup>4</sup> Wilkes, IV, p. 394.

<sup>&</sup>lt;sup>5</sup> Ross, (a) p. 290; (b) I, p. 44.

<sup>6</sup> Gibbs, (a) p. 408.

times its effect seems to have been slight, as archeological investigations in the Yakima valley show little influence of coast culture on that region. It is possible that this also became customary only after the horse was introduced. There was also a considerable amount of trade northward with the Thompson Indians 1 and other tribes of British Columbia. This was carried on chiefly through the Okinagan, but even the Wallawalla, at least in later times, visited that region. West of the Cascades there was a certain amount of trade from Puget sound south to the Columbia. On reaching The Dalles, Lewis and Clark found numerous articles of European manufacture, which came from "white people who come into the inlets to the north," 2 There seems to have been very little trade from the Columbia southward, in spite of the fact that the Willamette valley offered an easy line of communication. Here again psychological factors seem to have prevented what physical features apparently favored. While Lewis and Clark found numerous European articles among the Nez Percés in 1805, only a few years after trade was first opened with the Pacific coast tribes, eight or ten years later the Kalapuva were not only practically destitute of such articles but were disinclined to trade of any kind.3

The difficulty of arriving at a true understanding of early conditions east of the Cascades, because of the presence of the horse in that region in historic times, has been indicated several times already. That the horse had a tremendous influence on the extent of the trading journeys undertaken is undoubted. The Wallawalla and the Cayuse seem to have been accustomed, about 1840 or earlier, to make long trips to the south, sometimes going as far as central California. The possession of the horse also made these tribes more formidable in war and able to carry out more extensive war expeditions, and tended to make them still more nomadic than in earlier times. There has

<sup>&</sup>lt;sup>1</sup> Teit, (a) p. 258.

<sup>&</sup>lt;sup>2</sup> Lewis and Clark, IV, p. 289.

<sup>&</sup>lt;sup>3</sup> Henry-Thompson, p. 817.

<sup>&</sup>lt;sup>4</sup> Swan, (a) pp. 313-4; Kane, pp. 281-2; Palmer, p. 124; Wilkes, IV, p. 397.

doubtless been a considerable shifting of the tribes within the period since the presence of the horse first began to make itself felt, say about 125 or 150 years ago. We know that some of the Shoshonean tribes, who formerly lived east of the Rockies, were pressed south and west by the Blackfeet. It is not at all improbable that these in turn pressed upon the Shahaptian tribes of the Columbia valley. The two were deadly enemies at the time of Lewis and Clark's visit. The Nez Percés were at war with the Shoshoni along Snake river, and the southern bank of the Columbia was found to be uninhabited from near the mouth of the Wallawalla to below The Dalles, 1 because of fear of attacks by the Snakes. Later the Shahaptian tribes acquired horses, became more prosperous, and drove back the Snakes from the neighborhood of the Columbia. It would appear that in the meantime certain Shahaptian tribes also had moved northward and westward and forced back the Salish tribes which at the time of Lewis and Clark's visit were along the north bank of the Columbia and on its tributaries.<sup>2</sup> These tribes were particularly the Klikitat and the Yakima, an assumption supported by the definite assertion of the natives themselves, a number of old men positively assuring Dr Suckley that they had pushed their way into the country formerly occupied by members of the Salish.<sup>3</sup> The Yakima probably lived on the Columbia near the mouth of the river that bears their name, and are in fact so located by Cox, who places them on the north and east side of the Columbia. As late as 1854 the Palus, a tribe living farther east, on Paloose river, regarded themselves as a portion of the Yakima and the head chief of the Yakima as their chief.4 The general similarity of the Wallawalla language to that of the Klikitat and the Yakima, rather than that of the Nez Percés, would also be in accordance with this view. Archeological researches in upper Yakima valley, according to Mr H. I. Smith, 5 shows as great a similarity of the art products

<sup>1</sup> Lewis and Clark, III, pp. 149, 163.

<sup>&</sup>lt;sup>2</sup> Ibid., vI, pp. 115, 119; compare Mooney, pp. 734, 736.

<sup>3</sup> Gibbs, (b) p. 224.

Stevens in Pac. R. R. Rep., XII, pt. I, p. 200.

<sup>5 (</sup>d) pp. 553-4.

of that region to those of the Thompson river region as to those of the Columbia valley below the mouth of the Snake, though it must be added that no very careful researches have thus far been made on the Columbia. This is certainly not contrary to the view of an earlier occupancy of this region by the Salish.

The Klikitat were, according to Gibbs, in all essentials like the Yakima, and were driven from their earlier home by the Cayuse. This must have been farther east and south of where we know them to have lived in historical times, viz: on the southern slopes of Mount Adams and Mount St Helens. Although this region was well wooded, they still lived in mat lodges. Later they pressed still farther west into the Cowlitz valley, sometimes nearly reaching the coast in their wanderings. Thence they turned southward, crossed the Columbia about 1839, and in 1854 we find them not only in Willamette valley but even as far south as the upper Umpqua. They also became quite nomadic in their habit, and considerably given to trade and trading expeditions, till finally they were forced to confine themselves to their earlier home in Washington.

The above discussion would seem to indicate that in earlier times the Salish tribes occupied most of the territory north of the Columbia, while the Shahaptian tribes were probably situated mostly south or east of that river. The fact that there is probably a certain similarity between the Shahaptian and Lutuamian languages also serves to point to an earlier period of contact, which a residence of the Shahaptian tribes in northern Oregon would make possible.

The Columbia valley is another illustration of the fact that trade as a rule follows the line of least physical resistance. War or hostility of peoples does not prevent trade and may, in part, be the cause of it by making the products and possessions of the one people known to the other. The Shahaptians and the Chinook have not always been at peace with each other, the latter being at one time, at least, forced to retreat from The

<sup>&</sup>lt;sup>1</sup> (a) p. 403.

<sup>&</sup>lt;sup>2</sup> Swan, (a) p. 323.

<sup>&</sup>lt;sup>3</sup> Gibbs, (b) p. 170; Stevens, p. 224.

the one the Shahaptians adopted.

The movements and migrations of tribes, on the other hand, do not always follow the line of least physical, i. e., geographical, resistance. As a rule, such lines are well adapted to human habitation, and hence more or less thickly populated, of which the Columbia is a good example. Such a population, of course, resists encroachments by other peoples, and unless such movements are in sufficient force, and of sufficiently savage character, to drive out or destroy the original population, some other route would be easier. One people might absorb another, either peaceably or by conquering them and taking them into the tribe, but such a change would of necessity be slow, and to bring about in this way a change in the language of a particular region, for example, would require considerable time and continued contact of the two peoples.

In the region under consideration the Klikitat are the only tribe who have changed their location to any considerable extent within historic times. These movements, already described, did not follow trade-routes, but first led west across the mountains north of the Columbia, and then across the river to the south. Lack of a dense population and conditions favoring their manner of life, which at that time was hunting, doubtless caused the choice of this route. It is known from linguistic evidence that there has been considerable shifting of tribes in earlier times, and that one group of tribes, the Athapascan, has doubtless come from much farther north. Whether this movement was peaceable or hostile is not known, but the home of certain tribes, as the Kwalhiogua and Tlatskanai, was not in the most favorable localities, as they occupied a rough and wooded country. Hale 2 speaks of meeting an Umpqua Indian on the Columbia, which he had reached through the Tlatskanai country, and says that "it appeared that a connection of some kind

<sup>&</sup>lt;sup>1</sup> Henry-Thompson, pp. 853, 879.

<sup>&</sup>lt;sup>2</sup> P. 204.

existed between the two tribes." This was doubtless along the mountains, and probably the territory into which these two Athapascan tribes moved was practically unoccupied by others. Thus getting a foothold, they might later have spread and occupied more favored areas, driving out or absorbing the earlier inhabitants. It is possible that this is what took place in southern Oregon. Such movements of tribes or bands, following the line of least resistance, would avoid the most populous regions.

Another problem connected with this region is that regarding the earlier home and distribution of the Salish tribes. The Tillamook, who lived on the Oregon coast south of the Columbia, were separated from the other tribes by the Chinook. They may have crossed Chinookan territory to their present position, or the Salish tribes may formerly have been continuous along the coast, and the Chinook, pressing down the Columbia, have separated the Tillamook from their more northerly neighbors. As there are certain reasons for regarding all the coast Salish as coming originally from the interior, the former supposition may be regarded as the more probable.

Both the Chimakuan and Waiilatpuan stocks consist of two groups separated by intervening tribes. In the case of the Chimakuans it is not impossible that the Salish tribes have been the aggressors, and that the Chimakuans formerly occupied a much larger and continuous area. Of the Waiilatpuans we know but little, and their linguistic position is not at all clear. The Cayuse, as far back as anything is known of them, have been closely associated with the Wallawalla. Their relationship to the Molala, who lived in the Cascade mountains, is still to be investigated. If one band separated from the others, the movement must have been "across country," so to speak.

From the considerable intermixture of small tribes, of different linguistic stocks, as well as what little we know from historical evidence, it would seem that most of these changes have been brought about by the movements of relatively small bands, who pressed into other more or less unoccupied regions, and hence not the most favorable; but there acquiring a foothold they

gradually spread and extended their territory at the expense of their neighbors. 1

The general similarity of physical types along the coast, and their decided difference from the interior types, would indicate that where interior tribes have pressed to the coast the earlier inhabitants have been absorbed rather than destroyed. This would also be supported by the common practice of intermarriage.

# ARCHEOLOGY

The archeology of this region is but imperfectly known. The stone arrowheads, stone mortars and pestles, and carved stone images and animal heads found along the Columbia from the mouth of the Willamette to near the mouth of the Snake have already been referred to, and show that the similarities throughout this region are not of recent origin. Some of the finest and best finished carvings come from above The Dalles, while very few, if any, have been found below the mouth of the Willamette. It would hence appear that this stone work, if it did not originate, at least had its highest development in a region where wood was scarce, and thence probably moved down the river. the lower river wood-carving probably took its place, as the wood here was soft and easily worked with stone and shell tools. The resemblance of the archeological material of Yakima valley to that of Thompson river and its difference from that of the coast region have already been mentioned. Investigations by Mr Harlan I. Smith in the coastal region show that "the southern limit of north Pacific coast culture and the northern limit of important influence from the Columbia seem to coalesce in the region from Shoalwater bay to Seattle." 2 This corresponds in general with the results of our ethnological study.

## MYTHOLOGY

Our knowledge of the mythology of this region is unfortunately very incomplete. Aside from a few scattering tales, the

<sup>&</sup>lt;sup>1</sup> Compare J. O. Dorsey, p. 237.

<sup>&</sup>lt;sup>2</sup> H. I. Smith, (a) p. 565.

only collections are those of Boas and Farrand, which are limited to the Columbian area. The well-organized myth cycles. such as that of the Raven, found among the coast tribes farther north, do not occur in this region, though many of the elements contained in these cycles are found. As shown by Boas, the number of these common elements gradually decreases as we go south, and they frequently occur in different associations. The prominent characters also are different. The transformer is found among all the tribes. By the Puvallup he is called Qone; 2 by the Chihalis, Qonéqone; 2 by the Quinault, Misp'; 3 by the Chinook, Shikla; 4 by the Tillamook, As'aiyahatl; 5 and by the Alsea, Shiō'k.6 Among the interior tribes Covote appears as transformer. Coyote and Shiō'k also appear as tricksters, but in the coastal region north of the Alsea the transformer and trickster stories are ascribed to separate individuals. The Raven occupies a prominent place in the mythology of the coast tribes south to the Quinault, where his place is taken by the Bluejay. Here the Blueiay (who appears as trickster) and the transformer are separate individuals. The same separation is found among the Chinook. Among the Upper Chinook 7 Bluejay occupies a minor position and Coyote becomes common as a trickster besides acting to a certain extent as transformer. The Salmon is one of the important characters of the Chinook, and is said to be a "great chief." The salmon myth of the Upper and Lower Chinook is practically identical. From what little is known of Upper Chinook myths, these seem to include both plateau and coast types and incidents. Covote, for example, seems to be most prominent among the Upper Chinook both as transformer and trickster, but other animals also occur quite frequently in these characters. Eagle is sometimes transformer.

<sup>1 (</sup>f) pp. 329-63.

<sup>&</sup>lt;sup>2</sup> Boas, (i) p. 155.

<sup>3</sup> Farrand and Kahnweiler, p. 81.

<sup>4</sup> Boas, (d) p. 17.

<sup>&</sup>lt;sup>5</sup> Boas, (g) p. 140.

<sup>6</sup> Farrand, (b) p. 246.

<sup>&</sup>lt;sup>7</sup>Information regarding the Upper Chinook was obtained from Mr Edward Sapir.

Weasel seems to correspond to Mink among the Kathlamet <sup>1</sup> and Salish to the north. There is a story of Raccoon very similar to that of the Kathlamet.<sup>2</sup>

No one character occupies a very prominent place among the Lower Chinook, but both transformer and trickster stories are told of several different individuals. Coyote has certain functions of the transformer, such as the introduction of local taboos,<sup>3</sup> but is not at all prominent. This ascription of both transformer and trickster tales to more than one individual, as well as the nature of the elements making the myths, indicates that they have been derived from various sources.

The Chinookan mythologies seem to lack the unity found among the Alsea farther south,4 where the stories are grouped around the transformer Shio'k, who also exhibits the characteristics of a trickster. Boas 5 has shown that many elements of the Chinook myths are found also among the Algonquians and Sioux, and that these have apparently reached the coast by way of Columbia river. This is illustrated by the incident in the deluge story accounting for the way in which earth was first obtained from the bottom of the waters. According to the Algonquians around Lake Superior the muskrat first succeeded in bringing up some mud, out of which the land was made. Among the Kathlamet and Molala near the mouth of the Columbia it is also the muskrat who succeeds in bringing up earth from the bottom of the water. While this story has reached the Pacific coast in two other places, it is only on the Columbia that the muskrat appears as the successful diver.

This story does not seem to have spread along the coast, but other elements common to the Chinookan and eastern myths appear to have done so. Their number, however, diminishes with increasing distance from the Columbia. The importance of the Columbia as a trade route has already been shown, and

<sup>&</sup>lt;sup>1</sup> Compare Boas, (h) pp. 103-17.

<sup>&</sup>lt;sup>2</sup> Ibid., pp. 142-54.

<sup>3</sup> Boas, (d) pp. 101-6.

<sup>&</sup>lt;sup>4</sup> Farrand, (b) p. 245. This difference, if such really exists, is of course only relative. Our knowledge of the mythology of both groups is very incomplete.

<sup>5 (</sup>f) pp. 329-63.

the conclusion seems obvious. The same transmission and borrowing of myth elements also occurs along other trade routes to the Pacific, such as that which led from Athapascan territories to the country of the Bellacoola, and that down the Fraser river.

Unfortunately we do not know sufficient of the Shahaptian and Shoshonean mythology to know just how far it corroborates this conclusion. As these were on the line of trade between the Chinook and the Sioux, a study of their mythology would prove of great interest. Their myths seem to center largely around the Coyote, who is preëminently a trickster, as throughout all the plateau region. Coyote also performs certain functions of the transformer. Whether there are other transformers, as among the Thompson Indians, is not clear.

### CONCLUSION

Bearing in mind the general truth that no culture is independent and that all cultures tend to shade into each other to a greater or lesser extent, the facts here briefly brought together show two definite culture areas, the Columbian and the Plateau. with a comparatively definite boundary between them; and a southwest Oregon type, intermediate in character, yet probably more closely related to that of northwestern California. The Columbian and Nootkan cultures have been shown to be very similar, especially in early times before the peculiar social organization of the more northerly tribes, with its attendant phenomena, had spread so far southward. Indeed the Columbian and Nootkan may more properly be regarded as subdivisions of one general culture area, overlapping and intermingling along the central coast of Washington. The culture of the Puget sound tribes is also somewhat different from that on the Columbia. and is affected by both the northern and interior types. influence of the California culture also made itself felt in the Columbia area, as shown in the feather ornaments and basket designs. The culture of the major portion of the Kalapuya seems so near that of the Plateau region that they may be

regarded as belonging to that area, but as having adopted many elements of the Columbian culture, such as the flattening of the head, living in wooden houses, etc., where they touch the Columbian tribes. The slight extent to which Columbian culture has penetrated the Kalapuyan region is rather remarkable, considering the lack of physical barriers to intercommunication, and shows a much more marked conservatism on their part than was the case with the Shahaptian tribes. While it must not be forgotten that the Kalapuyans did not live on what may be regarded as a through trade route, that physical conditions to the south were not such as to particularly favor trade or travel, and that the region tributary was relatively small, the whole difference cannot be ascribed to the physical conditions, though the continued action of these conditions through generations may have led to such a general attitude.

On the Columbia river, following the line of trade, there is considerable overlapping of coast and interior cultures. seen both in material culture and in mythology, and even the physical type of the tribes on the lower Columbia seems to vary toward the interior type, pointing to an apparent admixture from this direction. The cultural resemblance is shown in the custom of flattening the head, in the basketry, clothing, ornaments, method of wearing the hair, and the method of burial. woman's dress of the Upper Chinook is distinctly interior. burial house, while different from the method used on the coast. has most probably originated in a wooded region, doubtless below The Dalles, and has thence probably spread up the Colum-There may have been other resemblances between these two regions, but unfortunately the eastern culture was already making itself strongly felt above The Dalles when this region first became known, and the earlier type rapidly disappeared. The archeological finds also show a marked similarity throughout the same area, extending from about the mouth of the Willamette to that of the Snake, and indicate that these resemblances are not of recent origin.

Considering the extremely simple social organization common

in all the Plateau region, the differences in material welfare found in various parts seem to have been due largely to physical conditions. It has not seemed possible to work out the minor variations, which were independent of the physical surroundings and due to the play of historic events before the advent of the horse, but it is probable that there was a certain amount of eastern influence on the region before that time. The introduction of the horse led to a decided change in the life of many of the tribes east of the Cascades. From a condition in which. while more or less nomadic, they still depended largely on fish, they came to depend much more on hunting and extended their hunting expeditions into more distant regions. This led to, or at least accelerated, the adoption of many features of the eastern or plains culture, especially those associated with the horse and the buffalo. The original simplicity of their culture doubtless made them all the more ready to accept these changes, which were so decidedly to their advantage. As by these means certain tribes became more prosperous and powerful, other tribes were pressed back, and a shifting of tribal boundaries took place.

Many points regarding the prehistoric tribal movements could probably be decided by archeological investigations, and the need of these is evident. Still more pressing is the necessity for the collecting of the ethnological and linguistic material. The material culture of most tribes has already largely disappeared. In some cases the tribes are almost extinct, and in nearly all it is only the older individuals who know the former practices and beliefs. Even the languages are weakening and passing out of use, so that whatever is done to preserve this material from utter loss cannot be much longer delayed.

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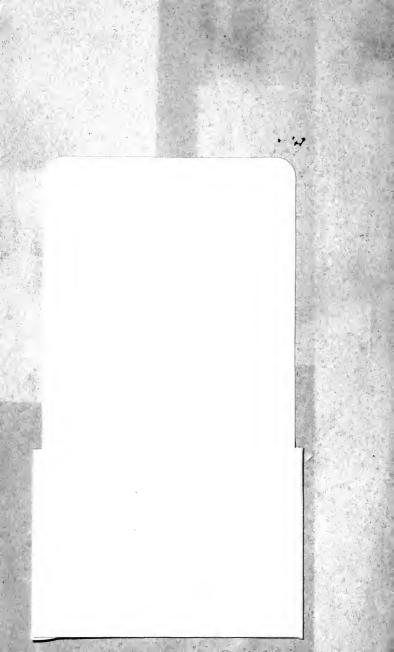
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