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THE PREHISTORY OF NORTHERN  
NORTH AMERICA AS SEEN  
FROM THE YUKON

*By*

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to Kachemak Bay I, especially if we interpret this stage as "Pacific Eskimo I." Because of the reliance upon chipped stone; use of open, not closed, socket harpoon heads; breeding of Eskimo dogs, and other features, Kachemak Bay I may also be described as exhibiting a generalized, old-fashioned Eskimo character. In what way it is related to other ancient Eskimo cultures is still difficult to say. It represents something as different from Old Bering Sea as the latter is from Dorset. It is hard to estimate its age, but I should imagine that it was established along the shores of the Gulf of Alaska before the Christian era, and that it lasted until about A.D. 500.

In southern Cook Inlet it was succeeded by Kachemak Bay II, a stage which is really only transitional to Kachemak Bay III. Kachemak Bay II lasted from A.D. 500 to 1000, and Kachemak Bay III from A.D. 1000 to 1700.<sup>47</sup> The latter can be divided into Sub-III, developed, and late. The basic pattern of Kachemak Bay III, with local modifications, is represented by archaeological finds in Prince William Sound, Kodiak Island, the Alaska Peninsula, and the Aleutian Islands.<sup>48</sup> Probably Kachemak Bay II was also present in these areas. The Third Stage is characterized not only by the development of local types but by the introduction of foreign traits. Some of these came from the Asiatic side of the North Pacific, brought by a circum-Pacific culture drift; others have come from the Northwest Coast and link Kachemak Bay III with the "intermediate" southern Northwest Coast culture.<sup>49</sup> The physical type associated with the various Kachemak Bay III cultures was like the long-headed type found in ancient Coast Salish sites.<sup>50</sup> Hrdlička describes these "Pre-Koniags," as he calls them, as "neither true Eskimo nor Aleut." "These were an oblong- and medium high-headed type, occasionally somewhat eskimoid, but more commonly Indian-like. Their latest strains [on the Aleutian Islands] admixed more or less

with the broad- and low-headed Aleut." On Kodiak Island, also, they were replaced about 400 years ago by the "Aleut," or Koniag. In his last publications, Hrdlička distinguishes between the two early, long-headed groups, "Pre-Aleut" and "Pre-Koniag," but admits a close relationship between the round-headed Aleuts and Koniags.

During Kachemak Bay III there was doubtless diffusion of southwestern Alaskan traits to both Asiatic and Indian recipients. The end of this period in Cook Inlet and Prince William Sound is marked by trade in copper obtained from the interior Athabaskans, perhaps also from sources within Eskimo territory. On Cook Inlet, the Eskimo were actually driven out of Kachemak Bay by the invading Tanaina. There is also evidence that small amounts of iron, and blue glass beads of what I call the "Cook" type were obtained by the Pacific Eskimo prior to the arrival of the Russians.

During all this development there are surprisingly few evidences of cultural exchange between the Aleut-Pacific Eskimo and the Western Eskimo farther north in Alaska. Metal-cut lines, which appear in Kachemak Bay II, indicate Punuk (probably Early Punuk) influences; the compass-drawn dot-and-circle of the Third Period was derived from mature Punuk art. Barbed slate blades and labrets, on the other hand, were traveling from south to north, and appear sporadically in protohistoric sites in northern Alaska. In modern times the labret spread to the mouth of the Mackenzie.

The modern Pacific Eskimo and Aleut cultures, after A.D. 1700, belong to the period of Russian expansion, and are also characterized by strong influence from the developed northern Northwest Coast culture.

Many or most of the traits assigned to the partially hypothetical "Pacific Eskimo I" are not confined to southwestern Alaska. They are distributed from western North America—not only from the Northwest Coast and northern plateaus, but some even from California—to the Asiatic shores of the North Pacific, and beyond. They are probably Ice-hunting traits, like those which link the northern Eskimo with the northern Eurasian peoples, but they tend to lie in a belt farther to the south, although the line between the two systems of links is often hazy. We should probably attempt, therefore, to distinguish between an Arctic aspect of the Ice-hunting horizon and what I shall call the

<sup>47</sup> *Op. cit.*, pp. 122-129.

<sup>48</sup> Prince William Sound (Birket-Smith and de Laguna, field notes, 1933), Kodiak Island (Specimens in NMD, AMNH; Hrdlička, 1932; 1935; 1936; 1944), Alaska Peninsula (Weyer, 1930), Aleutian Islands (Dall, 1877b; 1878; Jochelson, 1925; Weyer, 1929; Hrdlička, 1937; 1938; 1939; 1945).

<sup>49</sup> de Laguna, 1934, pp. 215-217; Birket-Smith and de Laguna, 1938, pp. 519 ff.; de Laguna, 1940, p. 73.

<sup>50</sup> Hrdlička, 1935, p. 52; 1936, p. 52; 1937, p. 62; 1938, pp. 92; 1941, p. 412; 1944; 1945.

Line ending in a Y with central prong, or tree figure: modern knife (Pl. XVII, 8).

Rows of ovals between bordering lines: awl made from tube, New Grayling (Pl. XIV, 26).

Band of oblique crosshatching: birch bark box, Anvik Point (Pl. XVI, 3).

These elements are combined into the simplest designs. The most complicated patterns are those found on the bodkin or awl from Yukon Willow Creek (Pl. XIV, 22, Fig. 25, 5) and on the modern skinning knife (Pl. XVII, 8), and these designs consist simply of encircling or longitudinal lines.

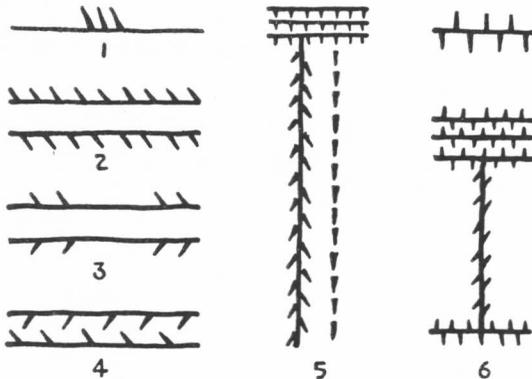


FIG. 25.—Geometric Engravings. (Not drawn to scale.) The numbers in brackets indicate the maps on which the proveniences are found. The numbers in parentheses indicate the museum specimen numbers; the accession number is 35-21.

1. Line with slanting spurs, on fragment of bone, House 33, Old Fish Camp [9]. (-117 e).
2. Bordering lines with oblique spurs on netting shuttle Anvik Point [14]. Pl. XVI, 13. (-284).
3. Parallel lines with paired oblique spurs, on bone scraper fragment, House 12, Old Fish Camp [9]. (-55).
4. Pair of lines with alternating internal oblique spurs, on bone awl, House 12, Old Fish Camp [9]. Pl. XIV, 23.
5. Spurred lines, longitudinal row of dots, lines with alternating oblique spurs on both sides, on bone awl or bodkin, House 6, Yukon Willow Creek [9]. Pl. XIV, 22. (-135).
6. Lines with alternating spurs on both sides, on bird bone tube, House 6, Yukon Willow Creek [9]. Pl. XIV, 41. (-136).

#### TRADED OBJECTS

In the course of our explorations we found a number of objects which the natives had obtained from Russian, Hudson's Bay Company, or American traders. These included various types of beads, an iron ax head, iron knife blades, rings and bracelets, a copper spoon, and dentalium shells. Small, colored glass beads are still used by the Tena for decorating moccasins and mittens and I have named these the "Glacier Island type"

after an island in Prince William Sound, where I found them associated with two Eskimo burials. The larger sky-blue glass beads I have named the "Cook type" because the Prince William Sound Eskimo already possessed some at the time of Captain Cook's discovery of the Sound. They may have been traded to the Tena prior to actual contact with the Russians, just as they seem to have reached Prince William Sound before the first white men.<sup>27</sup> (See Pl. XXVI, 16.)

The provenience of these traded objects is listed below:

Old Station: one Cook type bead.

Old Lowden: one grave contained three dentalium shells, small black and white Glacier Island type beads, two cylindrical opaque red glass beads, one cylindrical dark blue glass bead, knife or scraper made of strap iron riveted to a decorated wooden handle; another grave contained small white and black glass beads, one larger white glass bead; from the beach below the graves, one white Glacier Island type bead, one long cylindrical dark blue glass bead, one round red glass bead with a white center.

House 4, Kateel: white Glacier Island type beads, small light blue glass beads, small red glass beads with opaque centers, one large bright blue bead, one Cook type bead.

Kashim, Kateel: one large amber-colored bead, one large dark blue glass bead, small white Glacier Island type beads, small red beads with opaque centers, one iron finger ring.

Terentief's Trading Post, below Koyukuk: one Cook type bead.

House 33, Old Fish Camp: one Cook type bead.

Paul Esmailka's place: one small white bead.

"Inland Bend": one iron ax head.

House 6, Yukon Willow Creek: two blue Glacier Island type beads.

Burial at Anvik Point: two very large blue beads, one small white bead.

Anvik Point: collection purchased from natives contained a broken copper spoon.

Woman's grave, Anvik River: three iron bracelets, small blue and white Glacier Island type beads, one larger round white glass bead, one round dark blue glass bead, one very large blue glass bead, one faceted blue glass bead,

<sup>27</sup> Cf. "The Archaeology of Prince William Sound, Alaska," in preparation with Kaj Birket-Smith.

small handle for iron ulo blade (Pl. XIV, 29).

House 7, site opposite Hologochaket: one scrap of iron, one small blue glass bead.

Bonasila (old beach level of Terrace 1): one iron ring, one bright blue glass bead.

The only traded objects of any particular interest are the dentalium shells, which must have come originally from Washington or Oregon. They were highly prized by the Indians of the Northwest Coast, the Pacific Eskimo and Aleut, Tanaina of Cook Inlet, Kutchin, and even by the Eskimo as far away as Bering Strait and the mouth of the Mackenzie.<sup>28</sup> That these shells were traded to the Tena in very early times is suggested by the role they play in the Koyukuk myth explaining the origin of the three clans found among the Tena on the Yukon above Blackburn, on the Koyukuk and on the Tanana. According to this story, as told us by Andrew Pilot, one of the three groups, represented by a marten-man, acquired the name of "From-out-of-the-water people" because the leader had come over a long stretch of water and could prove his claim by exhibiting a string of dentalium shells. The leader of the second group, a black bear-man, acquired the name of "Copper people" for his clan because he had come from underground and had a piece of native copper as proof. The leader of the third group, a caribou-man, seems simply to have said he came from the north, and his clan were called "Caribou people" without any exhibition of proof.

Dall illustrates a nose ornament made of six dentalium shells and two beads, strung to-

gether to form a rigid pin which was thrust through a hole in the septum. He reports that at Tanana both men and women wore such ornaments, while at Koyukuk they were worn only by men.<sup>29</sup> Whymper says that dentalium shell nose ornaments were worn only by the men among the upper Tena (referring to the Koyukuk group?), but that among the lower Tena they were worn by both sexes.<sup>30</sup> A woman from Nulato described a bib made of four lines of dentalium shells, alternately strung with beads, which the women used to wear. The ornament was attached to a collar or neckband and reached the middle of the breast, where it was finished off with a tassel of wolverine skin. The women also used to wear ear ornaments of dentalium shell. Jetté reports that the Indians wore strings of beads hanging from the nose and ears.

Dall describes a jacket of a Koyukuk Indian.<sup>31</sup> On the inside it was painted with red ochre, on the outside decorated with strings of beads. The combination trousers and boots were stitched with a pattern of large black and white beads. The jackets of both men and women were ornamented with beads, replacing the earlier porcupine quill work. Strings of beads seven feet long, and valued at two marten skins were used as money by the Yukon Indians. The colors valued were red, black, white, dark blue, and amber. The only colors used on clothing at that time (1867) were black, white, and brick red.

<sup>28</sup> Dall, 1877, p. 95.

<sup>29</sup> Whymper, 1869, pp. 204 f.

<sup>31</sup> Dall, 1877, pp. 82 ff.

<sup>28</sup> de Laguna, 1934, p. 113; Osgood, 1936, Pl. 2; Birket-Smith and de Laguna, 1938, p. 395.

larger barbs near the point, and 10 very small barbs or notches below (Pl. XXVI, 27). There is a longitudinal line on each side. One point has eight small barbs on the outer, convexly curved edge (Pl. XXVI, 29); the remaining three specimens are barbed on the inner, concave edge. Two of these have five small barbs (Pl. XXVI, 30, and 31, R); the last has three barbs, slightly more detached than those on the others (Pl. XXVI, 28, R).

## NETS

Half of an antler netting shuttle was obtained at Fox Creek (Pl. XXV, 8).

Two weights for nets also come from the same site. One of these was made by notching the ends of a fragment of mammoth leg bone, 17.3 cm long (Pl. XXV, 5). The notches, of course, lack the dark patination found on the surface of the bone. The second netweight is made of a section of antler with a hole drilled through one end; the other end has been broken off.

MISCELLANEOUS WORKED WOOD  
AND ANTLER, ETC.

In exploring the cut bank at Fox Creek, we found the end of a wooden bar, rectangular in section, with a hole or slot near the end (Pl. XXV, 4). It is evidently part of the same type of object that was found at the Old Fish Camp and at New Grayling (Pl. XVI, 2).

At Fox Creek, Mr. Ray found a narrow slab of walrus (?) ivory with two longitudinal cuts in it, as if an attempt had been made to saw it into narrow strips.

In Mr. Ray's collection there is a small antler spoon, with a narrow, straight handle (Pl. XXVI, 11, R.) The bowl, which is broken, is very shallow and seems to have been narrow.

An undecorated bird bone tube was obtained at Ghost Creek (Pl. XXVI, 12).

## ORNAMENTAL BONE STRIPS AND EDGING

Five specimens found at Fox Creek are of a type not encountered in our work farther up the Yukon.

One of these seems to have been a piece of a bone edging for a shovel blade (Pl. XXV, 6). It has a curved blunt edge, with holes along

the inner, concave edge for pegging or lashing to the end of a wooden shovel. It is 5.6 cm wide.

The remaining specimens are more difficult to identify although the most plausible explanation is that they were intended to be pegged to wooden objects as decoration. Two of these are antler strips: one has four large holes down the middle (Pl. XXVI, 35); the second, three large holes and a smaller one (Pl. XXVI, 32). A third specimen is of ivory (?), flat on one side and slightly ridged on the other. There is a medial groove down the ridged side, in which seven small holes have been drilled (Pl. XXVI, 33). The last specimen is of antler, rectangular in outline, flat on one side and slightly rounded on the other. Near each end are nine small holes, and down the middle are four larger ones, evidently drilled afterwards, since one of the larger holes breaks into a smaller one (Pl. XXVI, 34).

## ORNAMENTS

From Fox Creek we obtained a white limestone inset for a wooden dish (Pl. XXVI, 17), like that found on the Yukon above Holy Cross (Pl. XIV, 45). It is oval in outline with pointed ends, roughly faceted on the outer surface, and flat on the side to be glued to the wood.

An oval object of mammoth ivory from Fox Creek, with a hole near one end, is probably a buckle (Pl. XXVI, 18, R). It is 5.2 cm long, and was probably 3.8 cm wide when complete.

At the same site we found two pendants. One is probably made from the canine tooth of a fox, and has a groove about the root for suspension (Pl. XXVI, 19). The second is a bear canine with a hole drilled from one side of the root into the nerve cavity through which a sinew could have been threaded for attachment (Pl. XXVI, 21).

That the Fox Creek site was inhabited in recent times is shown by the finding of two trade beads. One is a sky blue glass bead of the Cook type, the second is a rectangular green porcelain bead, decorated with three oblique black lines and with white and yellow spots (Pl. XXVI, 16). According to the natives, the latter type was brought by the Russians.

ancient AINU cultures, while the one-piece comb belonged to the Old Bering Sea, Thule, Northwest Coast cultures, and their derivatives. This suggests again the division between the northern Ice-hunting and North Pacific (with Dorset) horizons, with the northern one-piece comb later supplanting the cruder composite comb in most of the North Pacific area. However, we must not overlook the possibility of independent invention of parallel forms. In any case, the Tena, like some of the interior people farther south, possess both types.

Pendants from the Yukon were of two types: shaped bone (Pl. XIV, 37) and animal tooth (Pl. XXVI, 19, 21). Both shaped and tooth pendants belong to the Punuk culture, but are absent from the Old Bering Sea.<sup>790</sup> With this exception they are found all over the Eskimo area, and in all Eskimo cultures, though the shapes have varied from place to place and from period to period.<sup>791</sup> They are of such wide distribution throughout all the areas that we have been considering that it does not seem necessary to comment further.

Buckles were also found on the Yukon. The small flat Tena buckle or amulet for the pack line, with central hole and dot design (Pl. XIV, 33) is similar in proportions to a specimen figured by Nelson from the lower Yukon Eskimo.<sup>792</sup> The decoration of the latter consists of lines with alternating internal spurs and of tree figures, both elements which appear in Tena art. Dot designs, like those on our specimen, are typical of the Eskimo and will be discussed in the section on "Art."

A buckle with two (?) holes, found at Fox Creek (Pl. XXVI, 18) is rather similar to a specimen from Prince William Sound.<sup>793</sup> Buttons are obviously related to the types of buckles under discussion and these are a common Eskimo type, being one of the few articles of personal adornment that was found in the Old Bering Sea culture.<sup>794</sup>

It will be remembered that a number of unworked incisors from the lower jaw of the rein-

deer or caribou were found in a woman's grave at Anvik River. These were probably decorations on a woman's belt. Nelson describes such belts, on which have been sewn overlapping sections of caribou mandible containing the incisors. The buckle is a bear tooth or plate of carved ivory. These belts were worn by Eskimo women from the Kuskokwim to the Arctic.<sup>795</sup> Jacobsen purchased a specimen at Anvik.<sup>796</sup>

Dentalium shells were received by the Tena through intertribal trade in prehistoric times. They were highly prized as ornaments. They came originally from Washington or Oregon, and were traded into the interior, south to northern California, and north to the Kutchin, the Eskimo about Bering Strait (via the coast?), and the Eskimo of the Mackenzie Delta (via the Kutchin?).<sup>797</sup> It would seem as if they reached the Kutchin and Tena via the Chilkat Tlingit, who passed them on to the Atna and upper Tanana tribes, or to the southwestern Alaskan Eskimo, the Tanaina of Cook Inlet, and the bands at the Nenana-Susitna height of land. Dentalium shells undoubtedly became more common on the Yukon in historic times, for Whympier reports that they were sold by both American trading companies on the Yukon in the 1860's.<sup>798</sup> Jacobsen mentions trade in shells and beads with the Hudson's Bay Company posts at Fort Yukon and Fort Selkirk, and with the Alaska Commercial Company's stores on the lower Yukon.<sup>799</sup>

All of these various tribes used dentalium shells as ornaments for the nose, ear, neck, or hair, or for decorating clothing. For the Tena styles in dentalium shell ornaments see Chapter VI, "Introduction" and "Traded Objects."

Pale blue glass beads of the "Cook type" (Pl. XXVI, 16) were found at a number of historic Tena and "Eskimo" sites, and also at House 33, Old Fish Camp, which did not yield any other foreign manufactured articles. It is interesting that Osgood mentions blue beads as one type of traded article which reached the Kutchin before the white men penetrated their country. He believes that these beads came from

<sup>790</sup> Collins, 1937 a, p. 305, Pl. 82.

<sup>791</sup> de Laguna, 1934, p. 203.

<sup>792</sup> E. W. Nelson, 1899, Pl. XXVII, 19.

<sup>793</sup> Birket-Smith and de Laguna, field notes, 1933. Probably related to the Kachemak Bay III type with one hole (de Laguna, 1934, Pl. 50, 32-38).

<sup>794</sup> Collins, 1937 a, p. 305.

<sup>795</sup> E. W. Nelson, 1899, p. 59.

<sup>796</sup> Jacobsen, 1884, fig. on p. 217.

<sup>797</sup> Spier, 1930, pp. 214 ff.; Osgood, 1936, p. 47, Fig. 6, 7; de Laguna, 1934, p. 113 and note 21.

<sup>798</sup> Whympier, 1869, p. 204.

<sup>799</sup> Jacobsen, 1884, p. 200.

were, of course, other independent centers of cremation in the New World.

(9) Mummification. We are less certain than in the case of cremation that this was practiced by the Tena. It is, in any case, an element of the drift, and is practiced by the Ainu, Aleut-Pacific Eskimo and some Northwest Coast Indians.

(10) Grass mats for shrouds. These are reported from the Ainu, Norton Sound-Bristol Bay and Aleut-Pacific Eskimo, and the Tena, but may have a wider distribution.

(11) Adz-like hunting or war pick. The adz-like double- or single-bladed pick of the Tena, Chugach and northern Northwest Coast Indians represents a specialization which took place on the Northwest Coast, when the primitive club-pick of the Ice-hunting horizon was transformed under the stimulus of the Asiatic battle-ax and ax-pick on the one hand, and under the influence of the developing Northwest Coast splitting adz on the other. The Asiatic types in question can be traced back to the war-axes of the Siberian and Chinese Neolithic. Other Northwest Coast types are coordinate with the Tena adz-like hunting pick in development but did not spread to the Tena. The hunting pick was later carried back to Japan.

(12) Stone saw. This seems to have been carried from the Neolithic of Mongolia and Manchuria to Japan, the Ainu, the Aleut-Pacific Eskimo of the Kachemak Bay III horizon and to the southern Northwest Coast, with extensions onto the Plateau. Other methods for sawing stone used by the Alaskan Eskimo may be older, or may be adapted from the stone saw. There was probably also an independent Middle American (?) center for the stone saw, with diffusion to the Southwest and California.

(13) Some features found on daggers, especially the spirals on the handles of the Athabaskan-Northwest Coast native copper daggers, are so similar to features on the Ordos bronze daggers as to suggest diffusion from Asia.

(14) Paddle-shaped wooden shovel. This implement is used by the Tena, Chugach and some Athabaskans, and while related to or influenced by the digging stick of the Northwest Coast and Plateau, it is probably of Asiatic origin, since it seems to have reached Japan from southeastern Asia.

(15) High stand for the lamp. This is used by the lower Tena, the Bristol Bay-Norton

Sound Eskimo and Koryak, and may be related to the hole-and-stick stands of the Ainu. The hole for suspending the hunter's lamp (Aleut, but not Tena) is certainly related to the hole used with the stick-stand on Ainu and Kamchadal lamps.

(16) Pottery complex. This involves cooking pots with a situla shape, and smooth surface ornamented with designs of incised dots and lines and applied ribbons and knobs of clay, and has been traced back through Kamchadal-Ainu pottery to that of Neolithic Mongolia and Neolithic China.

(17) Styles of coiled baskets and trays. Some of the stylistic features of the lower Tena coiled basketry are shared by the Bristol Bay-Norton Sound Eskimo, Koryak, Ainu and Kamchadal, and they suggest influences that may have spread with the circum-Pacific culture drift.

(18) Use of coal for black paint. This is known from the lower Tena, northern Northwest Coast Indians, and the Koryak.

(19) Blue glass beads of the Cook type. These may have been an article of pre-Russian trade from Asia, but we cannot be certain until a comparison of Alaskan specimens has been made with those found on Asiatic sites.

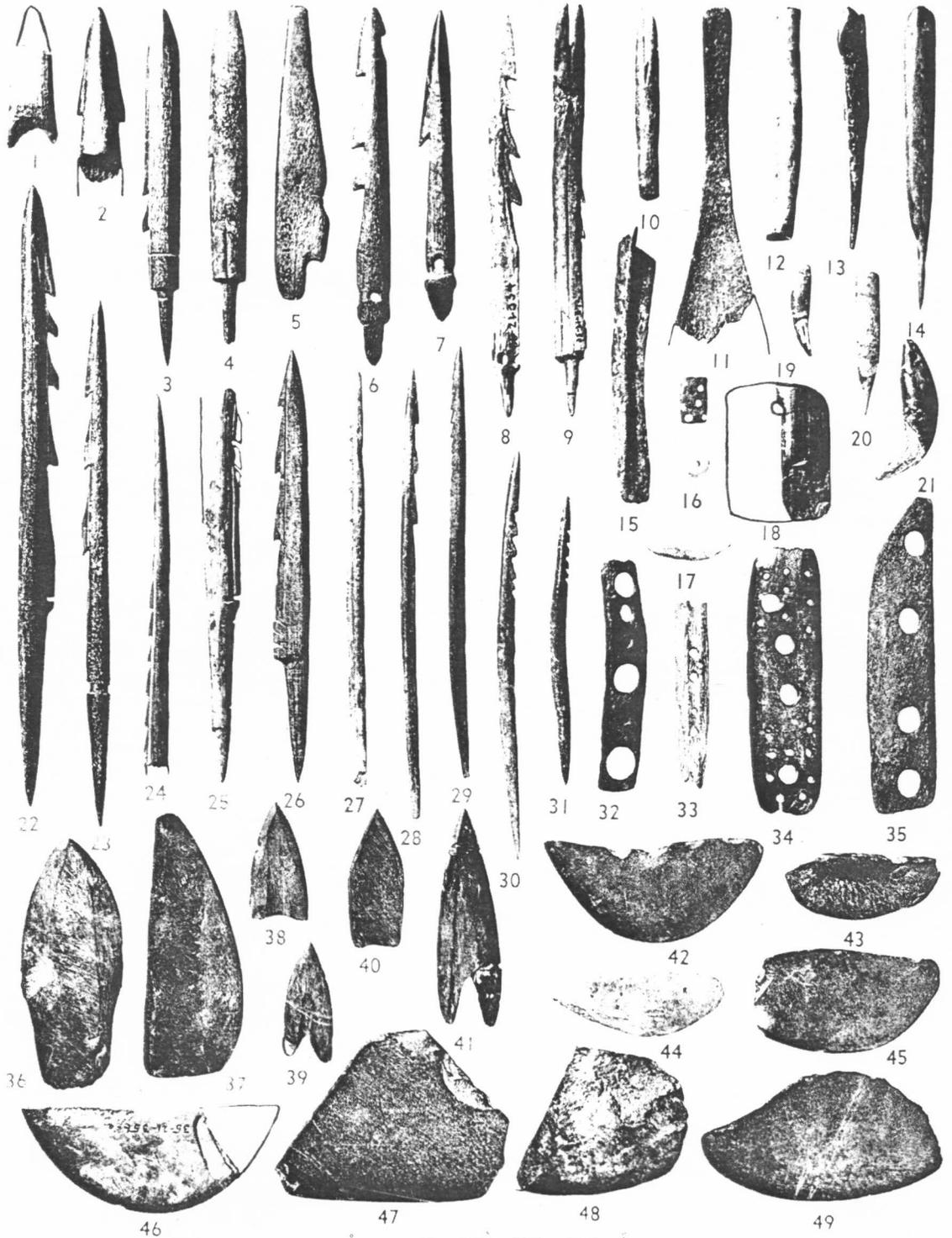
Since the Tena lay on the edge of the territory affected by the circum-Pacific drift they failed to get many of the most important and typical traits. (I have already mentioned the stone hand rest for the drill, cf. List 2, Trait 8.)

#### *List 6: Northwest Coast Traits*

From the Northwest Coast and adjacent areas the Tena have derived a number of items.

(1) Gable roof with twin ridgepoles. This developed on the northern Northwest Coast from two lean-to's built together in Plateau style. The impetus to building the plank house probably dates from the circum-Pacific culture drift, and the gable roof with twin ridgepoles is younger than the gable roof with a single ridgepole (Eyak and southern Northwest Coast). The roof with two ridgepoles is built by the Chugach, Tanaina, and possibly by the Bristol Bay-Norton Sound Eskimo (for summer houses).

(2) Single-bladed splitting adz with T-shaped handle. This is a relatively recent development on the Northwest Coast from the planing adz. It has been copied by the Pacific Eskimo (late Kachemak Bay III), Eyak, Tanaina, and in-



Specimens from "Eskimo" sites.

PLATE XXVI. Specimens from "Eskimo" sites.  
All specimens from Fox Creek, unless otherwise noted. [14].

1. Harpoon head, antler. (-336).
2. Fragment of detachable (?) barbed head. (-376).
3. Barbed arrowhead, Ghost Creek. (-322).
4. Barbed arrowhead. (-333).
5. Unfinished detachable barbed head. (-335).
6. Detachable barbed head. (-375).
7. Detachable barbed head, Ghost Creek. (-324).
8. Detachable barbed head. (-334).
9. Barbed arrowhead with blade slit. (-372).
10. Unbarbed arrowhead with blade slit (Kachemak Bay type). (-371).
11. Broken antler spoon. (-377).
12. Bird bone tube, Ghost Creek. (-325).
- 13, 14. Bird bone awls. (-337 *b, a*).
15. Combination boot sole creaser and scraper of split bone with longitudinal edge. (-339).
16. Rectangular green porcelain bead and blue bead of the "Cook" type. (-352).
17. Limestone inset for wooden dish. (-345).
18. Buckle (?), mammoth ivory. (-379).
19. Fox (?) canine pendant. (-346 *a*).
20. Bird bone awl or drill point. (-378).
21. Bear canine pendant. (-346 *b*).
22. Barbed arrowhead, antler. (-330).
23. Barbed arrowhead, bone, Ghost Creek. (-323).
24. Slender barbed point, ivory. (-327).
25. Barbed arrowhead, ivory. (-331).
26. Barbed arrowhead, antler. (-332).
- 27-31. Barbed points for multi-pronged leister. (-329, 374, 328 *a, b, 373*).
32. Ornamental antler strip. (-344 *b*).
33. Ornamental ivory strip. (-344 *c*).
- 34, 35. Ornamental antler strips. (-344 *d, a*).
36. Double-edged hornfels blade for lance or knife. (-354).
37. Single-edged hornfels blade for man's knife (or ulo?). (-358).
- 38-41. Triangular slate weapon blades. (-353 *a, b, c* and R -381)
- 42-49. Ulo blades, silicified slate or hornfels. (-356 *b, f, e, d, a, 355, 357 a, 356 c*).