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POTTERY FROM NUNIVAK ISLAND, ALASKA

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Nunivak Island, located approximately forty miles off the western coast of Alaska between the mouths of the Yukon and Kuskokwim rivers, is archaeologically unknown. Collins (1928) visited the island in 1927 but did not carry out extensive excavations. During the summer of 1952, the writer conducted an archaeological survey of the island for the purpose of locating at least one large site for future extensive excavation.[1] A total of eighteen sites was observed and seven were tested extensively. The sites tested (see Fig. 1) were all similar, consisting of numerous house pits associated with midden deposit that at no site appeared to be more than six feet in depth. Testing determined the fact that all the sites belonged to the contact or immediately precontact period. For that reason, it has been possible to consider all the cultural material as a single unit. Preservation in the Nunivak sites was poor so that pottery constituted by far the greatest amount of cultural debris collected. As a result, it is possible to work out a preliminary analysis of historic and prehistoric cooking pots and lamps from the island. In this paper the Nunivaks sherds will be considered with particular reference to their relationship with pottery from the Bristol Bay-Norton Sound region as well as with similar pottery finds from further north.

Although the manufacture of pottery is no longer practiced on Nunivak, many of the older people at Mekoryuk still remember the process. In 1940 Dr. Margaret Lantis obtained descriptions of pottery making from two of the older women in the village.[2] They stated that the clay was first rubbed to make it soft and then coarse sand and grass were mixed with it. The pot bottom was constructed first from a single piece of clay and then a coil of clay was placed around the edge of the bottom, pressed to it and smoothed with the hands. Next, another coil was placed on top of the previous one and pressed out to the proper thickness and smoothness. It should be pointed out that these were not continuous spiral coils; each row was a separate piece of clay. After the initial building up of the pot had been accomplished, more clay was put on the inside and outside and patted with the hands. No paddle or smoother was used during this stage of the operation. This clay slip was of the same consistency as the clay coils. Before the vessels were

[1]The archaeological survey of Nunivak Island was sponsored by the Arctic Institute of North America with funds from the United States Government and by the University of Alaska. The writer wishes to express his thanks to Mr. and Mrs. Robert Gibson, Alaska Native Service teachers at Mekoryuk, for their cooperation during the field season. The writer also wishes to express his appreciation to Mr. Wendell Oswalt who read the manuscript and offered many valuable suggestions. The photographs in this paper were taken by Mr. Wilbur Libby and Mr. Richard Smith. Figure 1 was drawn by Mr. Clark Brott and Figure 2 by Mrs. Harold Leinbach.

[2]The writer wishes to thank Dr. Lantis for permission to use her material on the manufacture of pottery.

fired, they were sometimes painted with a solution of burned fish eggs. For firing, a large fire was built and allowed to burn until coals were formed. Then the pot was placed on the fire and covered with willow branches. One of the old women was unable to tell Dr. Lantis the length of the firing time but the other said that a pot was set to burn when the tide went out, and fired all the time while the tide came in and went out again. As a pot began to cool, it was oiled with seal-oil which turned it black.

DESCRIPTION

Cooking pots found at the Nunivak sites are of two shapes: Type 1, represented by 17 large sherds and one fragmentary pot, is flat-bottomed with sides that flare evenly and constrict near the neck with an additional outward flare at the rim (Fig. 2, 11, 12). In cross-section the lips of these sherds are round (8 sherds), flat and sloping inward (1), flat (8), and flat and sloping outward (1). There is a suspension hole in two sherds and the fragmentary pot contains a pair of mending holes. Twelve of these sherds are undecorated, two have a single incised line around the constricted area of the neck, while three have one or two ridges in the same area. Type 2 is represented by one large undecorated sherd. It is flat-bottomed with straight or perhaps slightly flaring sides and the lip is flat in cross-section (Fig. 2, 6).

Pots with rounded bottoms are absent from this collection while two complete flat vessel bottoms and 48 flat-bottomed sherds were recovered (Fig. 2, 1-3). Since the entire collection of Nunivak sherds did not contain a single round-bottomed fragment, the vessel types listed above have been considered as flat-bottomed.

There are 149 lip sherds that are too small to allow a reconstruction of the vessel shape. In cross-section the lip sherds are rounded (97) (Fig. 2, 11), flat (46) (Fig. 2, 6), flat and outward sloping (29) (Fig. 2, 4), flat and inward sloping (10) (Fig. 2, 5), ∧ shaped with an outward bulge (9) (Fig. 2, 9), flat and inward sloping with a pronounced collar (1) (Fig. 2, 7), flat and outward sloping with two incised lines on the top of the lip and then ∧ shaped with a slight outward bulge (1) (Fig. 2, 8). Ninteen lip fragments have a suspension hole near the rim and six other sherds also have holes but whether they are for suspension or mending cannot be determined.

Of the 750 potsherds in the Nunivak collection, 96 have some form of surface treatment. The types of decoration in order of frequency are check stamped (39), a pointed ridge on the outer side of the sherd near the rim (32), dots (9), lines and dots (5), lines (4), knotted grass matting impression on the bottom sherds (4), constricted bands (3).

The check stamped sherds from Nunivak are of two general types. Type 1 (8 sherds) is characterized by large checks, 4 to 6 mm. wide. Some of these (3) have rectangular checks and all have comparatively wide bands separating the checks (Pl. 1, 3, 6, 11). Type 2 (31 sherds) have small checks, 2 to 4 mm. in width with six sherds having the rectangular rather than square shape. Type 2 checks are separated by very narrow bands (Pls. 1, 7, 10, 12, 13). The Type 1 sherds average 9 mm. in thickness with the thickest being 10 mm. and the thinnest 8 mm. Those of Type 2 average 5 mm. with the thickest sherd measuring 8 mm. and the thinnest 3 mm. Except for thickness and the size of the check stamped design, there is no other way to differentiate these two types. The temper is the same in both types but tends to be finer and more evenly distributed throughout the ware than in those of the rest of the collection. All but two of thirteen check stamped rim sherds have lips that are flat in cross-section and although most of these sherds are small, none show any degree of convexity. This would seem to to suggest that pots with check stamped decoration tend to be associated with the type 2 vessel shape.

Sherds with a pointed ridge on the side are uniform in appearance and were probably made by pinching the clay surface together in an even band around the pot (Pl. 1, 1). A variation on this type of decoration is two ridges

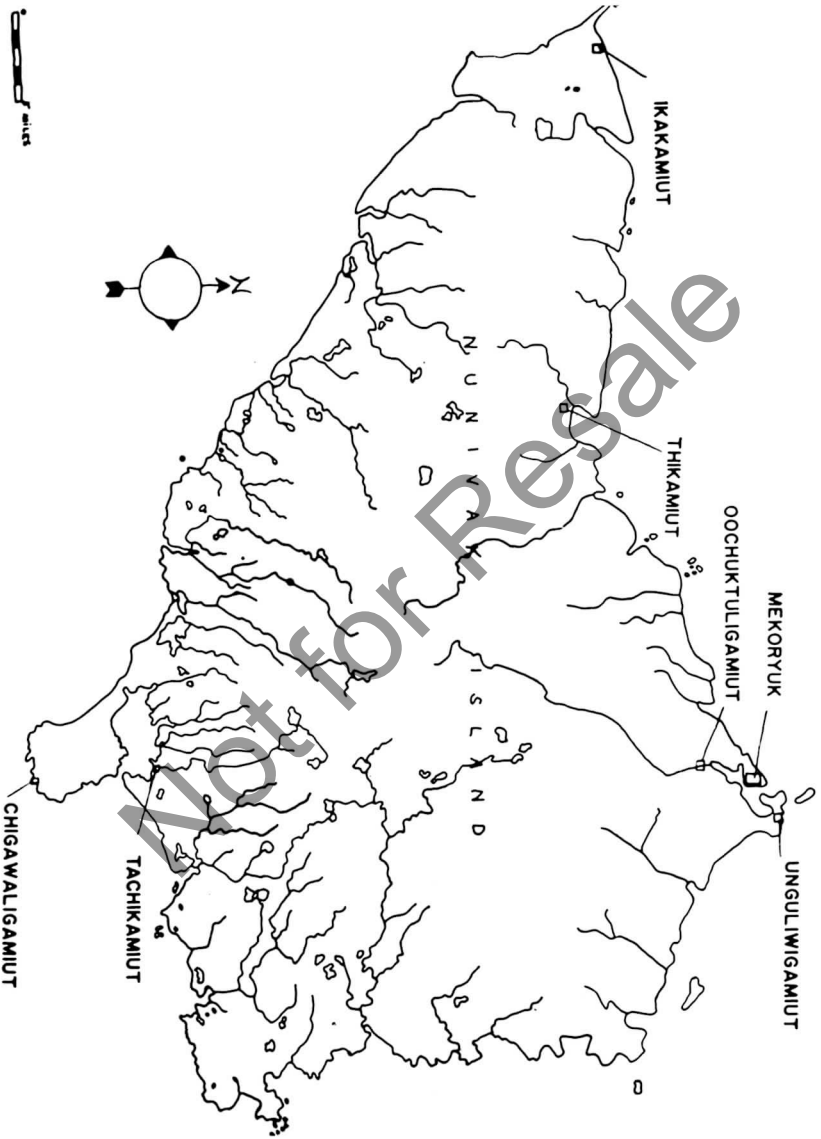

Fig. 1: Map of Nunivak Island, Alaska

with a depressed area in between (3 sherds) (Pl. 2, 1). In all cases the ridge is about 3 mm. thick. The nineteen rim sherds with this type of decoration show that the ridges are consistently located at the point where the vessels begin to constrict toward the rim and are thus always associated with the type 1 vessel shape.

Seven of the sherds decorated with dots have a single row of them just below the lip (Pl. 2, 8). On one sherd this is repeated further down the vessel side at a point just below the neck constriction (Pl. 2, 9). Another has a row of dots just below the neck constriction but none near the lip (Pl. 2, 11). Seven of these sherds have ridges modelled on the inside near the rim. These vary in number from three to five (Fig. 2, 8-9; Pl. 2, 2). Six sherds have lips that are ∧ shaped with an outward bulge just below the lip (Fig. 2, 9). A variation of this is a lip which has a flat inner half and is then ∧ shaped with a slight outward bulge (Fig. 2, 8).

Sherds with the line and dot combination (Yukon Line-Dot Type[3]) usually (3 out of 5 sherds) have a single line of varying width below the lip with a row of dots just below the line (Pl. 2, 5). On one sherd the design is repeated further down but the line is omitted (Pl. 2, 7). A single sherd is quite different in that a row of split dots occurs beneath the line. These appear to have been made by impressing a narrow stick on the edge in such a way as to give an oblong vertical impression rather than a round one (Pl. 2, 4). Two of these sherds have three ridges modelled on the inner surface near the rim while three have ∧ shaped lips with an outward bulge beneath the lip. A variation of this occurs on one sherd which has a flat, outward sloping lip with two narrow grooves (Fig. 2, 10).

Four sherds are decorated with a single narrow incised line (Yukon Lined Type) that runs around the vessel just below the lip (Pl. 2, 3). In three of the four sherds this line is associated with the area of neck constriction.

The four bottom sherds showing grass matting impressions are from one site and may be from a single pot (Pl. 1, 4-5). The knots and twisted strands of grass are plainly visible in these sherds; the impressions may have resulted from setting a freshly made pot on a grass mat to dry.

Sherds with constricted bands all have a single band, about 1 cm. wide and slightly higher in the center than on either side, running around the vessel just below the rim (Pl. 1, 2).

All of the 750 sherds were examined to determine the type of temper used in their manufacture. The temper proved to be predominately inorganic but sherds containing a combination of organic and inorganic tempering agents are also present. The inorganic temper consists of sand, gravel, or pebbles with the coarser material being the most common; grass is the only organic tempering material. The texture of Nunivak pottery is not particularly fine nor is the tempering material distributed uniformly throughout the ware; inorganic tempering protrudes through the surface in the majority of the sherds.

To determine the thickness of the ware, all of the unexfoliated shreds were measured. The thickest was 18 mm., the thinnest 4 mm., and the average was about 8 mm.

Nearly all of the shreds are black or grey-black in color but the range is from black to buff with a few sherds that are reddish brown. The lighter sherds often have a black core. Matson has pointed out that the application of seal oil to a hot vessel immediately after firing would cause the vessel to turn black even though a hot fire had previously burned out all the carbonaceous matter in the clay, allowing it to assume its natural fired color of tan, brown, or red. (Matson, n. d.)

The thirteen lamp sherds are fragments of shallow undecorated, saucer-shaped containers. All are tempered with either gravel or pebbles.

[3]The type names for Alaskan pottery have been worked out by Mr. Wendell Oswalt of the University of Arizona and will be discussed in detail by him in a paper to be published in the near future.

ANALYSIS AND COMPARISON

The Nunivak type 1 vessel shape has a disk-shaped bottom and sides that flare evenly, constrict at the neck and flare again at the mouth. This is the situla-shape and vessels of this type are widely spread from Hotham Inlet south to Kodiak Island. DeLaguna describes a pot having this same general shape from Three Saints Bay in the latter region (1939, pp. 334-43) and Heizer also mentions situla-shaped pottery from Kodiak Island (1949, p. 55). Many of the vessels from along the lower Yukon River and Hooper Bay Village are of this shape (deLaguna, 1947, pp. 226-58; Oswalt, 1952, p. 20) and Larsen reports the type from Platinum South Spit (1950, p. 180). Modern situla-shaped vessels are described by Nelson from St. Michael and Hotham Inlet (Nelson, 1899, p. 201).

Type 2 cooking pots from Nunivak Island are flat bottomed with straight or slightly flaring sides. Vessels of this type are found in

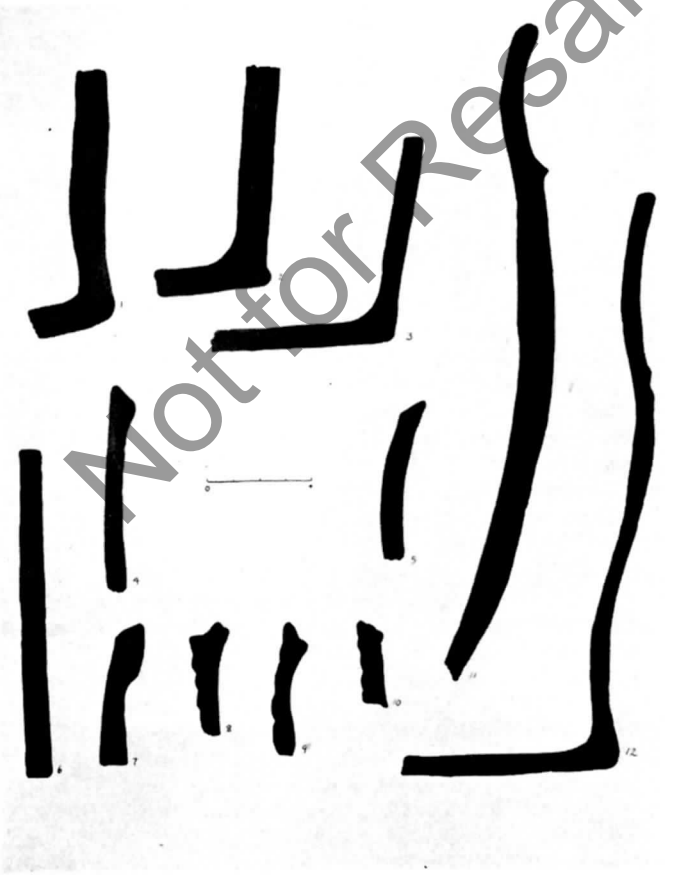

Fig. 2: Nunivak Pottery Profiles

relatively recent sites from Bristol Bay to Norton Sound, along the Kobuk River, at Point Hope, and on St. Lawrence Island (Oswalt, 1952, p. 20; 1953b, p. 11; deLaguna, 1947, Pl. XXII, 6, XXIII, 2; Larsen, 1950, p. 178; Mathiassen, 1930, p. 64; Giddings, 1952, p. 94). However, the shape is also present in an Ipiutak-related site at Chagvan Bay (Larsen, 1950, pp. 180-83) and in Kotzebue houses dating from 1450 to 1550 A.D. (Giddings, 1952, p. 94; VanStone, n. d.).

The most prevalent form of surface treatment on Nunivak pottery is check stamping; it occurs on 39 sherds. Check stamped pottery in Alaska appears to consist of two general types. The first is characterized by large square to rectangular checks (6mm. wide) often impressed on a thick, poorly fired ware. This style of surface treatment has been referred to as Nunivak Check Stamped because it was first described by Collins from sherds found on Nunivak (Collins, 1928, p. 254). Sherds of this type are widely distributed in both time and space being present in late sites at Cape Nome (Collins, 1928, p. 254), in the Old Bering Sea phase on St. Lawrence Island (Collins, 1937, p. 169; Rainey, 1941, p. 536), and in a house dating approximately 1400 A. D. at Kotzebue (VanStone, n. d.). A single check stamped sherd from the Tigara phase at Point Hope appears to belong to this type (Larsen and Rainey, 1948, Pl. 91, 11).

A second type of check stamped pottery is thin, well fired, and characterized by small square to rectangular checks (2 to 4 mm. wide). Sherd treatment of this type, referred to as Norton Check Stamped by Griffin (1953), is the dominant form of surface treatment on pottery from the upper clay levels at Iyatayet on Cape Denbigh (Giddings, 1949, Fig. 4; Griffin, 1953, p. 41). It is also reported at an Ipiutak-related site in Bristol Bay (Larsen, 1950, pp. 181-86). Since all of these sites are relatively early, the occurrence of the Norton Check Stamped design in late prehistoric and early historic sites on Nunivak is of particular interest. A pot of undetermined age from the Alaska Peninsula is covered with checks that fall within the range of the Norton Check Stamped type (see Appendix).

Tolstoy (1953), Griffin (1953), and Collins (1937) have stressed the wide distribution of check stamped pottery throughout eastern Asia.

Sherds with a pointed ridge near the rim, of which there are thirty-two in the Nunivak collection, are very restricted in their distribution, being reported only from Hooper Bay Village (Oswalt, 1952, p. 20).

Nine sherds are decorated with dots, a type of decoration that is reported only for pottery from Hooper Bay Village (Oswalt, 1952, p. 20). Dots combined with lines, which occur on five sherds, are more widely distributed but, with one exception, still confined to late sites in the Bristol Bay-Yukon-Kuskokwim region. The type is reported from Hooper Bay Village (Oswalt, 1952, p. 20-21), from Platinum South Spit (Larsen, 1950, p. 180) and from sites along the lower Yukon River (deLaguna, 1947, pp. 142-49). The one occurrence of this type in northern Alaska is at the Igloo Point site on Seward Peninsula (Oswalt,

1953b, p. 9). Split dots, like those on a single Nunivak sherd, are reported from Hooper Bay Village and the lower Yukon River (Oswalt, 1952, p. 21; deLaguna, 1947, Pl. XXIII, XXIV).

Nine of the sherds decorated with dots and line dot combinations have a series of modelled ridges on the inside near the rim. This is a trait reported from a number of Alaskan pottery-bearing sites. A pot from St. Michael described by Nelson (1899, p. 202) has grooves and ridges on both the inside and outside. Pots from the lower Yukon River are described as having inside ridges and grooves (deLaguna, 1947, pp. 142-49) as are sherds from St. Michael and Hooper Bay Village (Oswalt, 195, pp. 21, 28). Lip sherds that are ∧ shaped with an outward bulge beneath the lip are associated at Nunivak exclusively with dot and line-dot decoration. Similar lip treatment occurs at Hooper Bay Village and along the Togiak, Kuskokwim, and lower Yukon rivers (Oswalt, 1952, p. 20; deLaguna, 1947, p. 228.)

Pottery vessels with one or more encircling lines are rather widely distributed, occurring at Hooper Bay Village, along the lower Yukon River, at St. Michael, on St. Lawrence Island, at Cape Nome (Oswalt, 1952, pp. 20-21, 28; deLaguna, 1947, pp. 142-49; Oswalt, 1953b, pp. 6, 10), and on Nunivak Island.

Grass matting impressions on vessel bottoms appear to be restricted to southern Alaska, occurring in the Togiak and Kuskokwim river regions (deLaguna, 1947, p. 228) and at Hooper Bay Village (Oswalt, 1952, p. 20).

Sherds with constricted bands just below the rim, of which there are three in the Nunivak collection, have so far been reported only from Hooper Bay Village (Oswalt, 1952, p. 20).

The thirteen lamp sherds from Nunivak are all fragments of saucer-shaped lamps, a type limited in distribution along the coast of Alaska and shown by deLaguna (1947, p. 233) and Oswalt (1953a, pp. 19-22) to have been derived from the conical bottomed, wide mouthed clay lamp common during the early phases on St. Lawrence Island and at the Ahteut site along the Kobuk River.

The oldest saucer-shaped clay lamps are from the Ekseavik, Onion Portage, and Kotzebue sites (approximately 1400-1450 A. D.) in the Kobuk River region (Giddings, 1952, pp. 121-22; VanStone, n. d.) and the type also occurs in Kotzebue houses dating approximately 1550 A. D. (Giddings, 1952, pp. 94-95). In the Bristol Bay and Norton Sound regions saucer-shaped lamps appear to be late (Larsen, 1950, p. 180, Pls. 13, 18, 19), the oldest known specimens being from Hooper Bay Village where they were found at the bottom of an excavated layer dating approximately 1600 A. D. (Oswalt, 1953a, p. 29).

Very little can be said concerning the method of manufacture of Nunivak pottery except that since most of the sherds have a tendency to exfoliate in layers, the vessels were probably made by the patch modelling method. However, the description of pottery making during recent times, obtained by Lantis and discussed at the beginning of this paper, would seem to indicate a method of manufacture that combined the coiling and patch modelling methods.

Although most Alaskan pottery appears to have been made by

patch modelling, the coiling method is also reported, being described for recent pottery from St. Michael (Nelson, 1899, p. 201) and for one sherd from the Old Bering Sea phase on St. Lawrence Island (Collins, 1937, p. 168).

Inorganic material, predominantly gravel and pebbles, was the dominant type of tempering in the Nunivak pottery collection. Temper is not generally a valid criterion for cross-comparing Alaska pottery and sherds containing only an inorganic tempering agent are reported from many places along the Alaskan coast (deLaguna, 1934, p. 68; Weyer, 1930, p. 263; Collins, 1928, p. 254; 1937, p. 167; Oswalt, 1952, p. 26; 1953b, p. 6).

An interesting fact was observed as a result of comparing surface treatment of Nunivak pottery with the tempering agents. Table I shows that the two types of check stamped ware are tempered primarily with the finer materials while the rest of the decorated sherds are characterized by heavy, inorganic temper. Coarse temper is generally characteristic of the plain pottery also.[4] Since all the pottery under consideration is presumably of the same age, the significance of this relationship is not clear. However, the writer believes that further excavation in Nunivak middens will show that the check stamped ware, though existing into historic time contemporaneous with the other pottery styles, extends backward in time further than any other decorative style and may be the oldest pottery type on the Island. This seems quite likely since it is one of the oldest types on the adjacent mainland.

TABLE I

Surface Treatment and Temper Comparison

Surface Treatment	Pebbles	Gravel	Pebbles and Grass	Gravel and Grass	Sand	Sand and Grass
Norton Check Stamped	1	4			17	9
Nunivak Check Stamped		1			5	2
Yukon Line-Dot	6	8				
Yukon Lined	2	2				
Pointed Ridge Near Rim	17	14	1			
Grass Matting Impression on Vessel Bottom		4				
Constricted Bands		3				
Plain	304	206	101	33	5	5

The similarity between certain pottery styles of the Bristol Bay-Norton Sound region of Alaska and those from Japan, the Kuriles and Kamchatka has been pointed out by deLaguna (1947) and Oswalt (1952; 1953c). The major point in this resemblance is the presence of the situla-shaped vessel decorated with horizontal lines and dots, split

[4]In a collection of modern pottery obtained by Dr. Lantis on Nunivak Island in 1940, a single check stamped sherd is different from all the others in the collection because it "was made of extremely pure clay that contained only a few small quartz grains and iron lumps as impurities". (Matson, n. d.).

dots, shell-made striations, zig zag lines, rim knobs and horizontal ridges and grooves in both areas. The fact that these decorative styles are relatively early in eastern Asiatic sites and late in Alaskan sites indicates that the diffusion of the elements was from west to east (Oswalt, 1953b, c). As can be seen, several decorative styles found on Nunivak Island occur in the above list. Since check stamped pottery is old in both eastern Asia and Alaska, it is doubtful whether the type can be considered as belonging to this flow of pottery elements from the Japan-Kurile-Kamchatka region to Alaska that apparently took place relatively late in the prehistoric period.

Perhaps the most obvious point to be made in connection with the Nunivak pottery collection is the close resemblance to pottery from Hooper Bay Village. Not only are the vessel shapes the same, but all th types of surface treatment occurring on Nunivak vessels, with the exception of check stamping, are also characteristic of Hooper Bay pottery. It is thus apparent that along with the Hooper Bay pottery, that from Nunivak fits into the Bristol Bay-Norton Sound pottery category as defined by deLaguna (1947, pp. 228-29). However, the presence of check stamping as the dominant decorative motif suggests the influence of more widely distributed pottery techniques and represents the survival of an older Eskimo pottery style.

Fig. 3: Pottery vessel from lower Manwhyenuk Lake.

Fig. 4: Pottery vessel from Nelson Island. This pot stands 17.5 cm. high and has a diameter at the mouth of 16.5 cm.

APPENDIX

This section is devoted to the description of two previously unpublished pottery vessels, one of which is in the University of Alaska collection, while the other was briefly on loan to the University.

From Kilik Camp on the Lower Manuwhyenuk Lake at the head of the Alaska Peninsula, is a large, flat bottomed vessel with sides that flare to approximately a quarter of the distance from the mouth and then constrict toward the rim (Fig. 3). The pot is tempered with sand and grass and has Norton Check Stamped decoration.

A flat bottomed pot with flaring sides that constrict slightly at the neck was purchased from Mr. Frank Waskey who collected it on Nelson Island (Fig. 4). The vessel is charcterized by Yukon Line-Dot decoration but since it is complete, tempering materials used can not be determined. The University Museum possesss a numbr of sherds obtained by Mr. Waskey on Nelson Island which have Yukon Line-Dot and Nunivak Check Stamped decoration. This would seem to suggest that historic and recent-prehistoric pottery from near the mouth of the Kuskokwim River will be closely related to that found in the Nunivak sites.

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Plate 1: Sherds from Nunivak Island, Alaska

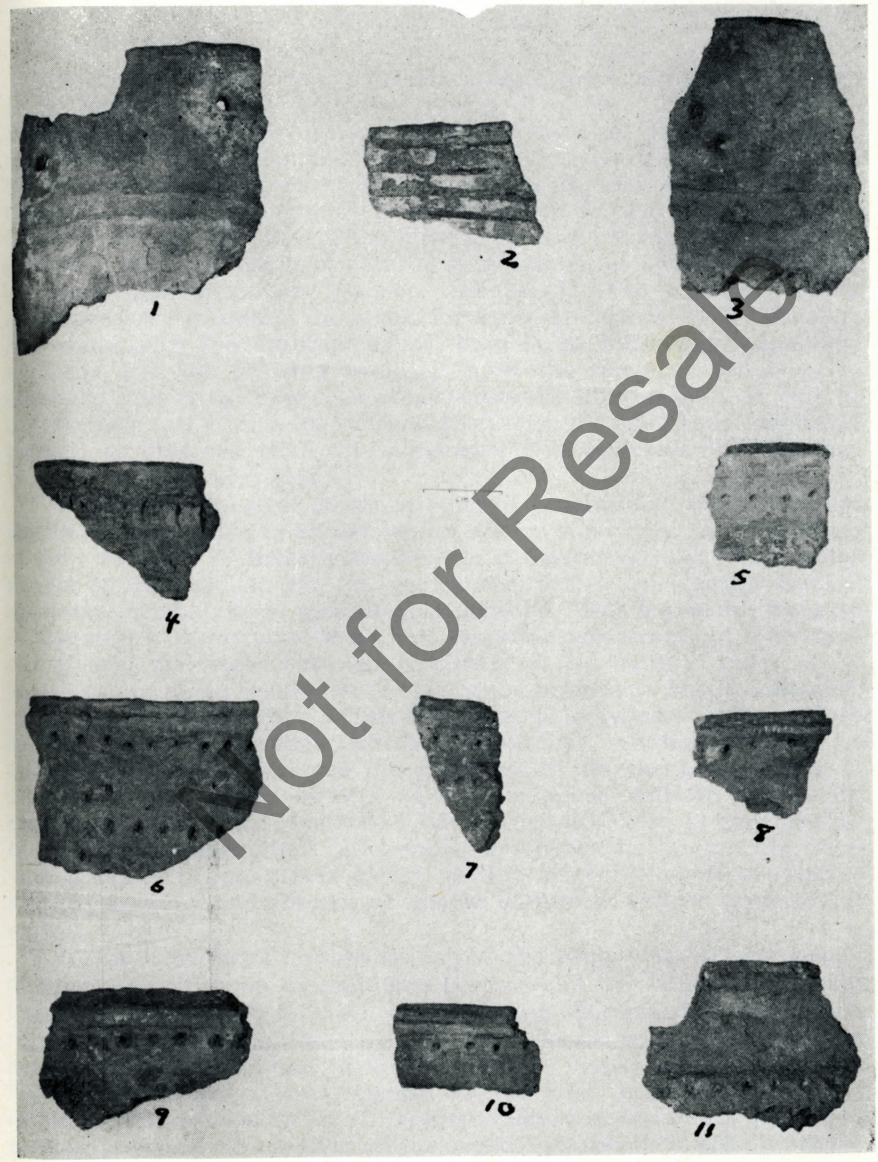

Plate 2: Sherds from Nunivak Island, Alaska

PATTERNS OF PREFERENTIAL MARRIAGE AMONG THE ALASKAN HAIDAS[1]

ROSEMARY A. ALLEN

In recent years kinship studies have taken some new turns. Concern is no longer primarily with the tracing of origins or distributions—the significance of the general social function of the total kinship organization, apart from the mere terminological system, has come to be emphasized. Students of kinship in this country (Eggan, Schmitt, Opler) as well as in England (Evans-Pritchard, Fortes) have concerned themselves with the place of the kinship units in the functioning society and even with the effects of acculturative influences upon the dynamic, changing kinship system (Spoehr, Schapera). Also in recent years, more precision in stating the actual incidence of various social behaviors has come with the anthropologists' interest in sociological statistical methods, and the growing emphasis upon the range of behaviors in standard situations among as many members of a society as can be ascertained, rather than the concentration upon the ideal (and idealized) pattern as obtained from the statements of a select few informants. (Lewis, 1953; Spoehr, 1947).

Since this statistical documentation of generalizing statements has not been appreciable in earlier works, we encounter the usual problem of new methods of investigation—little comparative data. This latter aspect of the problem can be surmounted, I feel, for kinship studies, by a careful analysis of genealogical material. This is possible because of the nature of the data—it consists essentially of records of individual overt acts, marriages between members of the culture under study which can be dated relative to the age of the informant who is a member of the genealogical record. When this is tied to knowledge of the culture during the time through which genealogical information may be ascertained, we can analyze the relations of the changing ranges of standard behavior to aspects of the changing cultural scene. In exemplification of this method, I have attempted here to give precise numerical documentation to trends observable in an acculturation situation and in one aspect of the kinship system—marriage patterns and the presence and absence of various culturally defined preferential mates.

In the Crow type kinship system of the Haidas, there is a special emphasis placed upon the mother's brother and the father's sister and their lines, both sets of cross cousins being distinguished from each other and from the parallel cousins who are classed with siblings. In the actual social organization of the Haidas, the father's sister (and her female lineal descendents) were ceremonially important, and the mother's brother was the most important figure in the actual household group to which the individual belonged. Murdock (1934, pp. 368-9) points out the importance of the father's clan, singled out with a special

[1]This paper was read at the Fourth Alaska Science Conference in Juneau, September, 1953.

term and characterized by a joking relationship which was also a feature of the close bond between members of the same moiety whose fathers were clansmen (Allen, n.d.). It is these features, plus the organization of the aboriginal society into exogamous moieties and matriclans, loosely associated with specific villages (de Laguna, 1952) that are the important underlying factors affecting the aboriginal kinship patterns.

I would like to examine here the evidence of certain marriage patterns among the Alaskan Haidas, as recoverable from genealogies collected at Hydaburg, the last Alaskan Haida community, in 1952, with special emphasis upon marriages into clans already related by blood or marriage to the individual, and the tendencies to marry individuals standing in certain real or classificatory relationships to each other. Since I will roughly group the individual marriages into three chronological groups, certain trends associated with periods of acculturation will be uncovered.

In Group I, I have placed those individuals who were not yet born or were still under twenty when the communities of Howkan and Klinkwan were merged and the "progressive Christian community" of Hydaburg established in 1911. In Group II, I have placed individuals who were no more than twenty when Rev. Gould established the first permanent mission at Howkan in 1883, setting up church, boarding school and sawmill, and initiating a period of intense and directed acculturation to American middle class Protestant culture. This was also the period of the establishment and growth of the commercial salteries and canneries which made a cash crop out of the aboriginal basis of subsistence. The community houses were deserted as the individual family became economically independent and the religious importance of the father's sister and the economic and educational primacy of the mother's brother were made less important. In Group III are those earlier, as far back as the informants could remember, for all of these fell into the same earlier period of acculturation—when the main contact agents were the men of the maritime fur vssels and the traders who established posts in the territories of the Northwest Coast tribes without attempting to direct the acculturation of the Indians except toward an acceptance of, and desire for, the new trade goods. Individuals of unknown age were placed with their siblings of known age.

I have recorded 159 marriages in Group I; 162 in Group II and 178 in Group III for a total of 499 recorded Kaigani Haida marriages. This includes, of course, in each group a few marriages where the clan of one or both parties was unknown, but this remained constant in each period and forms only 10.4% of the total.

The information, presented in Tables I and II, tells us something about three classes of marriages: into related and unrelated clans; into forbidden clans; into non-Haida groups. It also gives us information about marriages with specific clans, such as that of the father, marriages into affinally related clans, and some information regarding the identification of the father's sister's daughter and the mother's brother's daughter.

TABLE I. TOTAL MARRIAGES AMONG THE ALASKAN HAIDAS

	Group III		Group II		Group I	
	M	F	M	F	M	F
Marriages into related clans[1]	10	31	33	25	10	10
Marriage into own moiety	1	1	5	5	9	7
Marriage into own clan	—	—	1	—	7	5
Marriage into unrelated clan[2]	62	48	34	38	29	35
Total no. of marriages to Haidas	73	80	73	68	55	57
Total marriages to other natives	6	2	3	12	6	13
Total marriages to whites	—	17	2	4	5	23
TOTALS	79	99	78	84	66	93
	178		162		159	

[1]into clans mentioned in same genealogy in ascending generations or older siblings.

[2]into clans not mentioned elsewhere in same genealogy in ascending generations or among older siblings.

Firstly, there appears to be a sharp reduction in the number and percentage of marriages into related clans, from 41 cases in Group III to 20 in Group I; from 32% of all marriages in Group III to only 20% of all marriages in Group I. (Better knowledge of the immediate ascending generations on the part of the informants and hence more accurate records, could be responsible for the increase shown in Group II—58 marriages, over 48% of all marriages.) Assuming any form of preferential marriage and interclan relations reflected in preferential marriages, this would indicate a breakdown in such sentiments and practices in the present era of acculturation.

Another indication of the breaking down of the older associations related to clan and moiety membership can be seen in the statistics for marriages into the same moiety, prohibited when aboriginal ideas of clan and moiety exogamy prevailed. There has been a steady increase of marriages into the same moiety from 2 in Group III to 10 in Group II and 16 in Group I. There were no marriages between members of the same clan in Group III and only 1 in Group II, but 12 in Group I. In fact, over 17% of all marriages in the youngest group—the group which is loosing the use of sibling terminology for fellow clansmen—are with members of the same clan or moiety.

I feel that the apparent increase in marriages to members of other tribes is probably more apparent than real: some marriages of lineal ancestors in Group III to members of tribes of less prestige, or under suspicious circumstances such as possible captivity and slavery, have been 'forgotten'—there are indications of this in certain discrepancies in some genealogies. In view of the past history of inter-tribal visitings, trade and marriages in this culture area, the only significant statement that can be made on this subject today appears to be in the way that social contact between members of various tribes are made—today the young people marry members of tribes met at government school or privately operated church schools, and this has led to marriages not only with other coast Indian tribes, but also with Athapascans, Eskimos

TABLE II. MARRIAGE INTO RELATED (HAIDA) CLANS

	GROUP III						GROUP II						GROUP I					
	M	% of T^2 M	F	% of T^2 F	T	% of T^2	M	% of T^2 M	F	% of T^2 F	T	% of T^2	M	% of T^2 M	F	% of T^2 F	T	% of T^2
consanguinal—																		
Fa clan	8	10.1	4	4.0	12	6.6	8	10.4	4	4.8	12	7.4	4	6.1	7	7.5	11	6.9
MoFa clan	-	-	3	3.0	3	1.6	2	2.6	4	4.8	6	3.7	1	1.5	3	3.2	4	2.5
MoMoFa clan	-	-	-	-	-	-	-	-	4	4.8	4	2.6	2	3.0	2	2.1	4	2.5
MoHus clan	-	-	1	1.0	1	0.5	5	5.9	1	1.1	6	3.7	-	-	-	-	-	-
FaFa clan	-	-	-	-	-	-	-	-	-	-	-	-	1	1.5	-	-	1	0.6
affinal—																		
Spouse's clan	3	3.8	3	3.0	6	3.2	2	2.6	2	2.4	4	2.6	-	-	-	-	-	-
SisHus clan	8	10.1	13	13.1	21	11.7	7	9.1	6	7.1	13	8.0	-	-	2	2.1	2	1.3
Browi clan	5	6.3	7	7.1	12	6.6	6	7.8	5	5.9	11	6.9	2	3.0	-	-	2	1.3
BroWi clan	1	1.3	1	1.0	2	1.0	3	3.8	3	3.6	6	3.7	-	-	2	2.1	2	1.3
MoMoBroWi clan	-	-	1	1.0	1	0.5	-	-	1	1.1	1	0.6	1	1.5	1	1.1	2	1.3
MoSisHus clan	-	-	-	-	-	-	-	-	3	3.6	3	2.0	2	3.0	1	1.1	3	1.8
other individuals	1	1.3	-	-	1	0.5	-	-	12	14.3	12	7.4	2	3.0	1	1.1	3	1.8
total no. relationships T	26	32.9	33	33.3	59	32.2	33	42.3	45	53.5	78	48.6	15	22.5	19	20.3	34	21.3
marriages to related clans T^1	10		31		41		33		25		58		10		10		20	
actual no. of marriages T^2	79		99		178		78		84		162		66		93		159	

and "State Indians." Of course, cultural resemblances are getting more widespread as aboriginal culture patterns lose ground to the overriding white ways.

There has been a decided change, however, in the nature and amount of inter-marriage with whites. After forming 9.6% of all marriages in Group III, and all of these being Haida women and white men, marriages with whites dropped to less than 4%, two thirds Haida women, in Group II and rose to 18% of all marriages in Group I, with one-sixth of these being marriages of white women to Haida men. (There is no significant difference in the pattern allowing for the size of the sample, when Group I is broken down into those resident in Hydaburg and those living elsewhere in Alaska or the United States).

The forces leading to the disruption of the ties with the home community are probably similar to those leading, or contributing, to the marriages outside of the tribe and race—increased education and acquisition of skills enabling better competition in the white world plus loss of strong family ties. The forces bringing back the Haidas and incorporating their white wives and husbands within the community seem in most cases to be those of unusually strong and cohesive families. All three of the white women in Group I residing in Hydaburg and a third of the men are married to members of two unusually close-knit families with no members of this generation living elsewhere than in Hydaburg at the present. There is also a tendency, difficult to present statistically, toward a history of marriage to whites in certain families, from marriages recorded in Group III down to the present.

When we turn to a study of marriages into clans already related through ties of kinship, we see that the father's clan leads all other consanguinally related clans in all groups: over 6% of the total marriages in Group III, over 7% in Group II and nearly 7% in Group I. This is surpassed or closely matched in Groups III and II by marriages into clans affiliated by previous marriages of siblings, but in many cases these were also in the father's clan—the system of counting employed herin hides the relationships of any one person with the related clans in order to show the range of total relationships.

The largest proportion of marriages into affinally related clans in Group III—which persisted into Group II—was to sister's husband's clan; over 11% in Group III with 6% marrying into the brother's wife's clan in this group, and only 8% and 7% respectively in Group II. Consistent with the general lowering of percentages of marriages to related clans, less than 3% in Group I are marriages to members of clans of siblings' spouses. In Group III a larger percentage of women than men married into clans related by marriage of siblings of either same or opposite sex and in Group II there is a slight reversal, still not statistically significant.

The significance of the sex ratio of marriages into related clans is in general unexplained by any knowledge of social conditions possessed by the writer; three times as many women as men married into related clans in Group III, about a 7 to 5 ratio exists the other way in Group II and equal proportions in Group I. The only one of these that would appear significant from the size of the sample would be in

Group III, and our knowledge of the subtleties of social organization during the aboriginal and early contact periods is sadly lacking.

In both Group III and Group II, twice as many men as women married into their father's clan, which is nearly reversed from Group I. In view of the pattern of inheritance of titles and positions from the mother's brother it has been suggested or surmised that there would be a high incidence of marriage of the men to the mother's brother's daughter. Yet equal numbers of men and women married into this clan in both Groups III and II and there are actually more marriages all along, absolutely and percentage-wise, into the clan of the father's sister than into that of the mother's brother's wife—which would be the respective clans of the real and classificatory father's sister's daughters on the one hand and mother's brother's daughters on the other. Table III shows the number of actual marriages of men to these cross cousins.

TABLE III. MARRIAGES OF MALES TO CROSS COUSINS

	Fa clan	FaSisDr	MoBroWi clan	MoBroDr
Group III	8	—	1	—
Group II	8	—	3	*
Group I	4	—	1	**

* mother's mother's brother's daughter's daughter
** mother's mother's mother's brother's daughter's daughter

There may easily be an additional factor operative in this situation which would encourage marriage into the clan of the father's sister. This is, of course, in the matrilineal system of the Haidas, also the clan of the father. We have already noted an emphasis upon the clan of the father, expressed in a joking relationship both with members of this clan (who are members of the opposite moiety and hence potential mates) and also with those whose fathers are members of ego's father's clan (all of whom are member's of ego's moiety and hence forbidden as marriage partners). But we may venture the suggestion that the close and pleasurable association with the father's clan, the emphasis upon friendly and intimate and non-disciplinary relations, may be expressed among other ways by a preference for the women of that clan, among all the potential mates who are members of the several clans of the opposite moiety. The maintenance of a joking relationship with apparently certain relatives in both of the exogamous moieties is of great theoretical interest, and deserves further study among other poeples for whom joking relationships are reported.

When we turn to marriages to the real rather than the classifactory cross cousins, we find no marriages recorded with the true father's sister's daughter. While there are likewise no marriages recorded with the true mother's brother's daughter there are single cases in Group II and I of marriages carrying the relationship one and two generations further back, which along with the previously unreported extension of the term for mother's brother to mother's mother's brother (Allen, n. d.) indicates or suggests an overriding of generational lines complimentary to the downward extension of the term for father's sister. But on the basis of these genealogies, any attempt to identify, first the mother's

brother's daughter with the father's sister's daughter; the theoretical result of symmetrical cross cousin marriage, or alternatively to show a differential relative incidence of marriage with one or the other of these cross cousins, must return the Scot's verdict of "not proven."

The application of this quantitative analysis to genealogical material shows, then, in one more way that theoretical analyses of the logical principles of kinship terminology and organization must be supported, modified, and—in effect—applied by and through sociological materials. Further, the sociological knowledge which elucidates the practices of kinship customs must be based upon studies which take into account the range of human behaviors in standard situations. A preliminary study such as this, of a people whose complex social organization has become so highly influenced by our own, is of importance mainly to indicate what should be done in more favorable circumstances. Such studies should be made of functioning non-Western societies still maintaining a major share of aboriginal social organization and also among peoples of relatively unelaborate organization, such as the Eskimo or northern Athapascans.

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REGIONAL CHRONOLOGIES IN SPRUCE OF THE KUSKOKWIM RIVER, ALASKA

WENDELL OSWALT[1]

The problem of dating driftwood samples recovered from ruins on the shores of the Bering Sea coast and Arctic Ocean has led to the pressing need for establishment of living tree chronologies in all areas where such driftwood specimens could have originated. After determining the local regions of consistent ring sequence in living trees, it is not only possible to date a larger percentage of the archaeological wood but also to relate the derived chronologies to climate, driftwood origin, and other studies. Living tree chronologies have been defined for much of interior Alaska and the Yukon River proper (Giddings, 1941, pp. 12-28; Oswalt, 1950, pp. 26-30), the forested areas of Seward Peninsula (Giddings, 1941, p. 32; 1951, pp. 2-6), the Kobuk River region (Giddings, 1942, pp. 2-8), and the Copper River region (Oswalt, 1952, pp. 5-10); however, the previous absence of an over-all Kuskokwim River ring sequence was a major gap in Alaskan tree-ring data.

The Kuskokwim River rises in the west central section of interior Alaska and derives much of its initial volume from the glacial streams flowing northwest from the Alaska Range. Below Medfra, where the Kuskokwim River as such may be said to originate, the river flows in a general southwestern direction among well-rounded hills with occasional cut banks along one side. Beyond Kalskag the hills disappear, and a low, relatively flat alluvial plain is the characteristic geographical feature all the way to the Bering Sea, into which the Kuskokwim empties. The waters of the lower Kuskokwim River, unlike those of the Yukon, are not dissipated into many small channels at the mouth; consequently, relatively large ocean-going ships may enter the river proper and small river steamers may go upstream seven hundred miles.

The only class of Alaskan tree known to have all the requirements for successful and consistent cross-dating is the conifer; on the Kuskokwim the white spruce *(Picea glauca)* is the only species of conifer recorded (Hustich, 1953, pp. 144-62), and it is in general the most valuable for Alaskan tree-tree studies. Sampled stands were located primarily along river banks and in potential flood areas from which the trees could be dislodged and set adrift, most often to reach the sea and become coastal driftwood.

Aided by a grant from the University of Alaska Department of Anthropology the writer was able, during the summer of 1953, to collect living tree samples from below McGrath on the Kuskokwim River to the limit of the species in the vicinity of Bethel, a distance of approximately four hundred miles. During the course of the trip 20 stands were tested with a Swedish increment borer and approximately 250 cores were obtained. Of this number 41 with sufficient ring variability and tree longevity were selected as the primary basis of

[1]The writer wishes to acknowledge the many helpful comments on this study by Dr. J. L. Giddings, Jr. and Mr. T. Smiley.

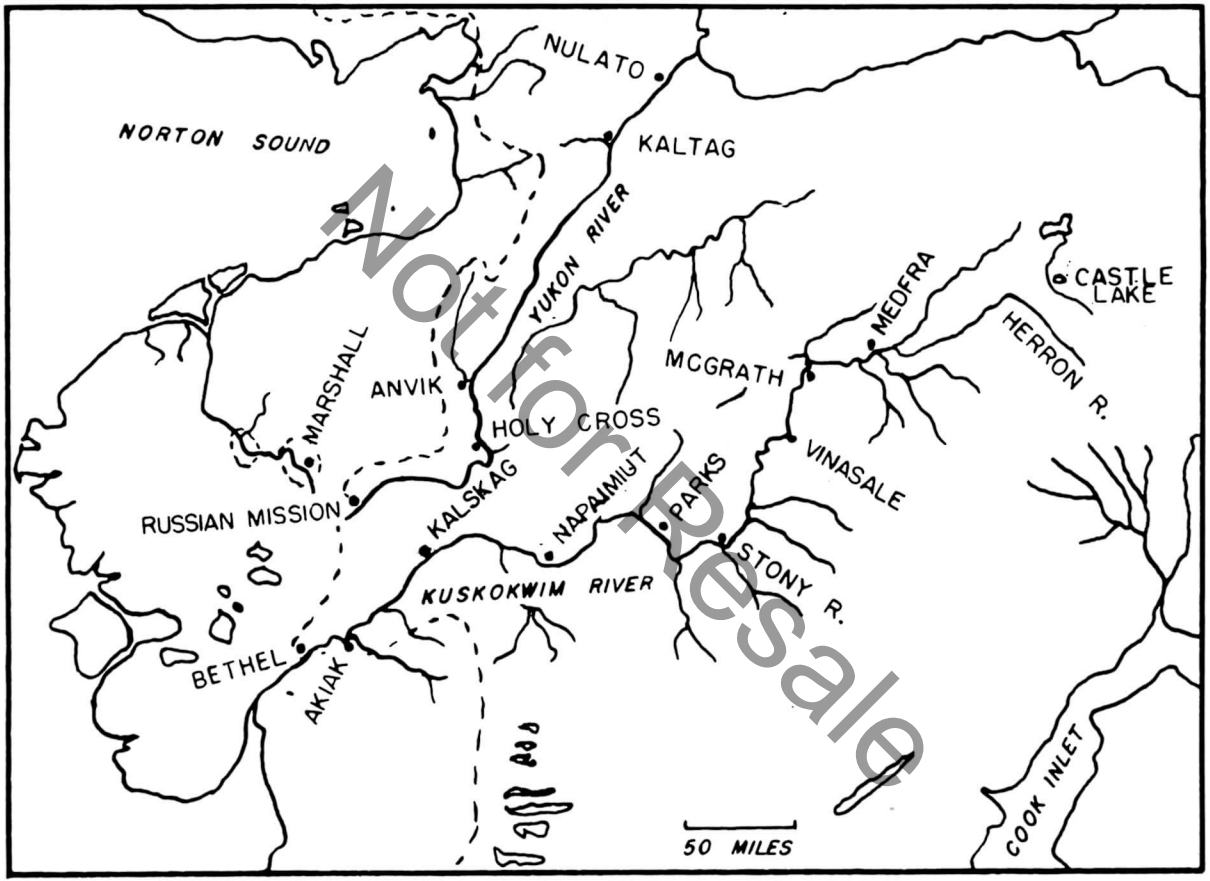

Figure 1. Map of the Kuskokwim River region, Alaska. The dotted line indicates the approximate limit of spruce in the area.

this report. Supplementing this series was an additional 40 cores, of which 6 were utilized, from the headwater regions of the Kuskokwim not visited by the writer.[2] The 47 selected cores were prepared and measured in hundredths of a millimeter, the results plotted on metric paper, and then visually compared. In each case the cross-dating was of definitive but not optimum quality in relation to most previous Alaskan groups. The measurements of the individual trees were combined with others in the same stand or an adjacent stand and averaged to form group means. The means of unmanipulated data were plotted and compared among themselves as well as with similar groups from other Alaskan localities. A synopsis of the empirical similarities in regional sequences is outlined in the summary, while the individual year by year group averages are recorded in Table 1 and the individual groups plotted in Figure 2. The latter demonstrates the changing character of the ring record in this area but is not intended to show regional cross-dating.

The number, name, area of collection, and number of measured samples, along with any other pertinent data, of each group are listed below. The seven cores constituting Group I (Herron-Castle) were derived from trees in two localities separated by approximately twenty miles (all distances are approximate). This group is presented only to indicate in a general way the ring sequence for the headwater region. Since the Herron River stand is on a relatively small stream, it could not contribute any appreciable amount of driftwood to the coast, and the Castle Lake stand is over a low divide in the Yukon River drainage. The Herron River sampling station, from which three cores were utilized, is a river bank stand in a floodable area of silty soil. The four Castle Lake cores are from black spruce *(P. mariana)* on a well-drained lake shore. The river bank sampling stations that follow are below McGrath on the Kuskokwim River and spaced at roughly 20 mile intervals; adjacent stations are often combined to form a regional group. Group II (McGrath), with four samples, is from a single scattered stand, five miles below the town of McGrath. Group III (Vinasale), with four samples, is also from a single scattered stand, two miles below the abandoned village of Vinasale. Group IV (Swift), with three samples, is from a stand eighteen miles up the Kuskokwim from the mouth of Stony River. Group V (Stony) was derived from two separate stands. One, represented by three trees, is on the island including the Stony River Trading Post at the mouth of the Stony River, while the second group of three trees is sixteen miles down river from the Trading Post. Group VI (Parks) includes five samples from eight miles below Parks. Group VII (Napaimiut) consists of three samples from thirty miles above Napaimiut and one sample from four miles below the same village. From twenty miles above Napaimiut to the limit of the species, the spruce become quite scattered. Group VIII (Kalskag) derived one sample seventeen miles above Kalskag and two samples eight miles below the same village. Group IX (Akiak) includes two samples from

[2]The cores from Herron River and Castle Lake were collected through the kindness of Mr. C. J. Lensink.

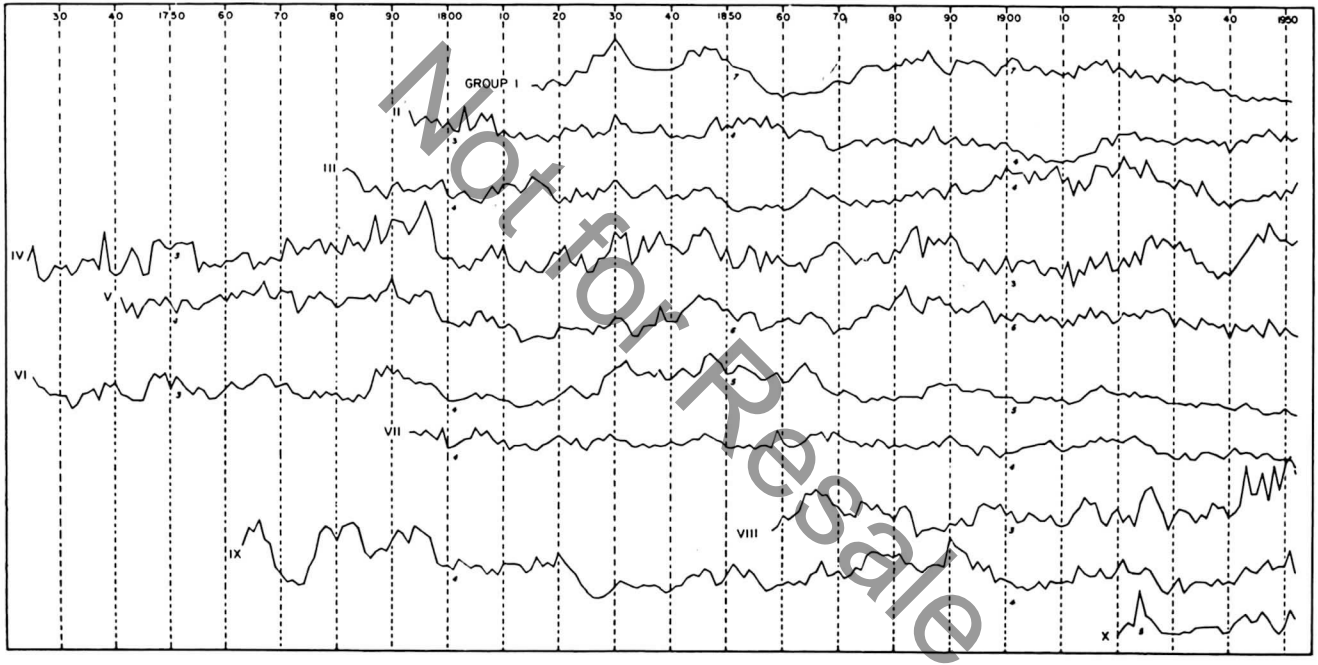

Figure 2. Regional ring patterns for spruce of the Kuskokwim River, Alaska. The graphically represented measurements are in one hundreths of a millimeter. The small numbers throughout the body of the graph represent the number of individual trees forming the means at fifty year intervals.

two miles below Akiak and two others from six miles below Akiak. The final group, number X, includes five short samples from one-half mile above the village of Bethel. The Bethel region is the last outpost of spruce along the Kuskokwim River. Eight miles above the village one 193 year old tree and a 160 year old one were sampled; at the village proper the oldest sampled tree had 64 rings, while the younger trees had 37, 40, 42, 44 and 52 rings, seeming to indicate an eight mile advance in the limit of the species in less than 129 years. That some of the trees around the village have been cut for Christmas trees is possible but unlikely, since most of them are quite small and contorted. Many of the sampled spruce growing near (within forty miles of) the limit of the species contained very complacent ring records, which in part accounts for the inferior quality of Group VIII.

Because of the general varience of Groups VI, VII, and VIII from each other and from the ring patterns characteristic of trees farther up the Kuskokwim, it is difficult to list those rings which are diagnostic of the entire river series; however, in general, the consistently small rings are A.D. 1793, 1801, 1809, 1826, 1885, 1910, 1912, and 1949. The 1783 faintlate ring (Giddings, 1941, p. 72) is usually indistinguishable in the Kuskokwim River spruce.

SUMMARY AND CONCLUSIONS

The Kuskokwim River series of spruce samples has the general ring qualities characteristic of "Series A Dating" (Giddings, 1943, pp. 26-32), which is found in spruce growing at or near the limit of the species on interior Alaskan mountain sides or toward the coastal tundra zone. In the McGrath and Vinasale groups there are also faint traces of "Series B Dating" (Giddings, 1943, pp. 26-32), best known from the Stevens Village-Fort Yukon region along the Yukon River, indicating a transitional type of ring pattern. A visual analysis of the regional groups indicates that the Herron-Castle group compares most favorably with the Alaska Range Series A of Giddings (Giddings, 1941, Table 4) even though the former represents a complacent valley bottom sampling. The McGrath, Vinasale, and Swift groups are most similar in detail to the Yukon River samples from Nulato to Anvik (Oswalt, 1950, pp. 26-30), while the Stony group closely parallels the entire lower Yukon series. The Parks, Napaimiut, Kalskag, and Akiak groups diverge considerably from each other and from the lower Yukon and middle Kuskokwim groups. Although the reason for this divergence is not clear, it should be noted that these middle Kuskokwim groups are from an east-west transection, and east-west disconformity in dating regions has been recognized previously from other Alaskan localities (Giddings, 1943, pp. 26-32; Oswalt, 1950, pp. 26-30). This may be due to the fact that while summer temperatures seem to have an influence on marginal tree growth (Giddings, 1941, p. 75; 1943, pp. 26-32), the summer isotherms in the Bering Sea region are in a north-south direction (United States Weather Bureau Summaries), thus seemingly subjecting the middle Kuskokwim trees to a more variable climatic influence than those from north-south transections. However, if temperature is the single dominant factor in the growth of marginal spruce toward coastal Alaska, then a

greater degree of ring uniformity should be expected than is actually present in the trees of the lower Kuskokwim River region. This poses an unsolvable problem since the historic temperature records necessary for comparison with Kuskokwim tree growth are for only a relatively few years.

The interpretation of driftwood tree-ring dates from archaeological sites along the Bering Sea coast, toward which this paper is oriented (for various statements on arctic driftwood see Kindle, 1921, pp. 50-53; Holtedahl, 1922, pp. 521-531; Transche, 1925, pp. 367-398; Giddings, 1952, pp. 129-142), necessitates a constant awareness of a number of crucial variable factors. Among these is the lag between the time a tree died and the time it was actually used in the construction of a dwelling. The Hooper Bay driftwood collected by the writer (Oswalt, 1951, pp. 6-8) during the summer of 1950 may be considered as a pilot study in this regard. In the Hooper Bay Village region driftwood is plentiful enough to supply cabin logs as well as wood for heating houses and the sweatbath structure. The thirty selected log samples from along the beach already had been axe-marked by individual Eskimos who would return later with a boat or dog sled and haul the logs to the nearby village (one mile) where they would be used during the winter. Of these thirty samples twenty-one were satisfactory for dating purposes and fourteen actually dated; of this number, eleven end dates fell within the 1939-1949 decade, while the other three end dates were 1901, 1933, and 1938. Assuming that these logs were used the following winter in house construction, there would be a cluster of dates reflecting a period of construction very soon after the trees were deposited on the beach. It is possible that this situation might have differed somewhat under conditions before European contact but it does not seem likely. The end date for a single isolated piece of wood in a midden may, as in the above example, be several decades behind the actual date of use. This seems to indicate that the time lag, while present, is not so great that the derived dates would be outside their associated context. There are of course factors which could distort the driftwood dates; for example, if for a number of successive years the interior river valleys contributing the bulk of the coastal driftwood did not flood during the spring breakup of the ice or during the fall, then the likelihood of a large quantity of standing timber being dislodged and drifting to the sea during that year would be small.

Other problems are the origin of the driftwood and the possibility of dating any selected sample. As noted above nearly one-half of the specimens in the Hooper Bay collection were actually dated, but only two cores, one from Nulato and the other from Stevens Village, could be traced to the region of their origin with any degree of accuracy. Both of these factors will be better controlled when we have more living tree samples from the various small western Alaskan rivers contributing driftwood to the Bering Sea coast. As seen in the case of the lower Kuskokwim River groups the ring sequence may change greatly within a very few miles. It is likely that some ring records in spruce approaching the western Alaskan limit of the species have ring

sequences far removed from the typical Series A Dating, which may well be one reason that much of the Bering Sea driftwood recovered to date cannot be fitted into the existing regional chronologies.

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TABLE 1 GROUP I—HERRON-CASTLE

	0	1	2	3	4	5	6	7	8	9
1810	—	—	—	—	—	28	28	24	31	33
1820	30	28	33	41	40	40	55	55	55	61
1830	70	63	55	49	45	44	43	43	43	43
1840	43	45	48	60	60	55	64	61	61	52
1850	52	46	45	43	41	34	29	24	22	21
1860	19	21	23	22	22	23	23	24	27	32
1870	33	32	31	38	45	46	46	46	43	44
1880	48	47	53	49	53	51	60	51	46	41
1890	39	52	50	49	51	50	48	42	38	46
1900	49	54	51	44	43	46	45	39	43	41
1910	39	41	36	47	44	49	51	49	53	41
1920	47	44	37	44	36	38	39	33	40	37
1930	34	37	33	34	32	34	31	26	26	27
1940	21	22	18	17	20	19	20	19	20	18
1950	18	17	—	—	—	—	—	—	—	—

TABLE 1 GROUP II—McGRATH

	0	1	2	3	4	5	6	7	8	9
1790	—	—	—	55	41	47	50	45	48	40
1800	45	39	37	61	38	43	53	46	53	34
1810	38	33	32	37	30	31	33	31	28	33
1820	32	41	38	38	43	40	31	36	34	38
1830	53	44	44	36	36	36	36	37	44	36
1840	32	33	31	34	33	32	33	44	50	39
1850	44	42	51	45	50	49	42	52	41	45
1860	41	32	35	40	38	38	35	34	24	21
1870	23	25	27	30	30	25	30	32	28	30
1880	32	29	28	25	32	27	32	43	31	28
1890	30	33	27	26	32	26	27	27	24	29
1900	29	22	22	19	14	19	16	11	13	12
1910	11	14	12	16	18	20	21	33	33	26
1920	37	37	37	39	31	34	33	30	31	30
1930	28	30	34	31	32	31	29	31	27	30
1940	25	29	32	30	36	36	35	42	37	31
1950	36	31	34	—	—	—	—	—	—	—

TABLE 1 GROUP III—VINASALE

	0	1	2	3	4	5	6	7	8	9
1780	—	51	54	50	44	33	33	39	32	26
1790	38	41	33	35	34	36	38	35	40	44
1800	30	27	31	34	27	25	23	31	38	31
1810	40	40	39	32	37	47	44	40	36	28
1820	23	29	24	37	29	33	26	37	33	39
1830	45	39	34	28	29	33	35	40	35	28
1840	29	31	27	30	36	35	38	37	29	29
1850	24	18	16	19	20	20	18	23	20	22
1860	18	19	21	26	30	37	35	32	29	31
1870	26	25	22	27	24	20	27	25	26	24
1880	28	26	32	31	35	29	35	38	35	28
1890	39	42	34	33	36	35	36	41	50	46
1900	56	51	51	51	42	54	46	47	54	58
1910	42	48	32	45	36	43	58	58	57	49
1920	55	66	56	57	48	64	53	45	45	44
1930	39	46	43	41	32	45	35	29	24	27
1940	23	26	29	27	28	28	33	32	36	29
1950	38	35	44	—	—	—	—	—	—	—

TABLE 1 GROUP IV—SWIFT

	0	1	2	3	4	5	6	7	8	9
1720	—	—	—	—	46	60	32	28	34	42
1730	39	42	34	38	48	46	48	39	71	38
1740	34	36	46	58	50	34	35	63	65	58
1750	57	62	63	61	63	36	45	40	44	41
1760	46	46	48	53	53	39	45	43	49	49
1770	46	66	61	52	59	57	64	66	53	63
1780	56	52	70	60	64	55	65	87	62	69
1790	83	82	81	70	78	87	100	84	55	49
1800	50	49	40	44	39	49	47	54	61	48
1810	62	43	39	36	47	40	37	36	44	55
1820	53	61	47	43	53	37	38	49	50	57
1830	73	68	73	44	50	68	55	64	74	62
1840	62	59	53	58	70	70	77	71	59	48
1850	59	41	41	48	62	56	38	56	45	53
1860	47	44	44	46	37	49	51	53	61	65
1870	64	57	51	45	50	48	53	55	46	47
1880	59	55	64	75	79	51	70	62	68	63
1890	71	66	53	47	46	40	50	44	36	43
1900	53	39	47	49	47	49	39	35	43	42
1910	33	48	25	41	37	53	42	48	57	40
1920	41	51	44	57	46	65	72	60	69	66
1930	60	66	58	60	47	48	40	40	34	40
1940	37	44	51	58	65	74	66	83	74	68
1950	68	64	67	—	—	—	—	—	—	—

TABLE 1 GROUP V—STONY

	0	1	2	3	4	5	6	7	8	9
1740	—	64	50	59	45	55	61	61	56	63
1750	58	50	61	61	54	54	58	60	63	66
1760	60	68	63	70	68	66	72	79	65	63
1770	70	69	69	50	56	65	63	69	64	61
1780	54	58	64	64	64	63	66	60	68	71
1790	81	65	63	59	67	65	70	68	51	43
1800	43	42	39	44	39	52	53	43	48	39
1810	38	41	36	25	26	29	30	29	28	29
1820	39	37	36	38	36	36	32	40	37	40
1830	46	46	41	30	30	38	40	40	57	44
1840	44	44	52	56	61	67	63	64	62	54
1850	55	49	44	50	52	50	35	37	39	43
1860	44	46	43	41	49	51	48	47	42	32
1870	37	38	37	45	48	48	58	59	57	55
1880	63	69	77	60	55	51	67	64	67	60
1890	60	52	56	53	56	58	63	55	43	51
1900	48	45	52	50	46	45	52	46	50	47
1910	40	46	41	51	49	58	49	55	51	44
1920	46	54	50	52	48	55	54	55	56	53
1930	39	48	45	42	39	49	44	44	40	42
1940	30	43	39	38	42	36	32	48	40	34
1950	40	35	33	—	—	—	—	—	—	—

TABLE 1 GROUP VI—PARKS

	0	1	2	3	4	5	6	7	8	9
1720	—	—	—	—	—	41	34	32	26	27
1730	25	25	14	18	27	28	31	21	36	33
1740	36	26	25	22	21	21	36	45	42	46
1750	31	43	36	31	26	33	30	23	24	27
1760	32	38	33	32	35	38	43	45	42	34
1770	35	36	29	27	24	24	30	24	30	26
1780	29	22	24	20	26	23	31	50	43	53
1790	45	50	41	41	37	39	36	36	34	27
1800	22	21	22	23	26	29	24	28	26	24
1810	23	21	17	16	17	18	21	18	21	23
1820	26	30	35	31	27	24	28	27	43	47
1830	51	54	59	50	45	46	48	44	50	41
1840	41	47	52	48	44	47	62	65	60	55
1850	46	47	54	53	50	46	42	42	45	48
1860	39	40	45	52	56	49	46	35	31	29
1870	27	31	30	28	22	22	25	25	26	25
1880	24	26	26	26	26	25	35	36	39	37
1890	38	38	33	32	31	34	33	32	26	26
1900	26	26	22	22	22	27	26	25	26	24
1910	25	22	22	24	28	31	34	38	33	31
1920	30	30	28	32	28	29	27	27	25	22
1930	22	22	21	22	19	22	22	21	21	19
1940	17	16	20	22	18	17	13	13	14	14
1950	19	14	12	—	—	—	—	—	—	—

TABLE 1 GROUP VII—NAPAIMIUT

	0	1	2	3	4	5	6	7	8	9
1790	—	—	—	44	44	40	45	41	36	48
1800	29	30	34	37	38	48	40	45	38	33
1810	37	27	31	31	33	29	27	31	34	38
1820	41	37	33	38	30	28	35	38	36	42
1830	38	37	37	31	30	33	30	32	31	32
1840	35	33	32	35	38	37	43	40	37	36
1850	30	30	31	30	33	29	31	32	30	46
1860	35	31	31	34	36	42	43	45	37	45
1870	43	39	36	36	33	35	32	39	36	31
1880	33	31	34	31	30	32	33	36	33	37
1890	42	38	34	33	30	25	33	31	27	23
1900	26	26	28	32	32	34	35	35	38	32
1910	29	30	33	33	34	39	37	41	38	40
1920	38	37	40	42	39	35	34	26	27	26
1930	23	21	27	22	21	27	29	27	25	23
1940	26	32	27	28	27	24	26	26	22	21
1950	22	21	15	—	—	—	—	—	—	—

TABLE 1 GROUP VIII—KALSKAG

	0	1	2	3	4	5	6	7	8	9
1850	—	—	—	—	—	—	—	—	32	36
1860	45	42	45	49	65	64	68	63	63	55
1870	54	45	47	44	58	56	50	55	48	47
1880	41	52	54	48	27	32	33	35	34	32
1890	39	37	44	37	37	52	57	54	52	56
1900	46	50	40	41	49	47	42	42	47	39
1910	37	39	47	53	63	57	59	43	37	49
1920	53	41	47	38	58	69	73	60	50	35
1930	46	53	51	48	41	49	45	58	54	55
1940	46	50	56	91	66	66	85	61	91	70
1950	91	99	85	—	—	—	—	—	—	—

TABLE 1 GROUP IX—AKIAK

	0	1	2	3	4	5	6	7	8	9
1760	—	—	—	68	83	80	90	73	70	48
1770	41	35	37	33	34	49	58	79	85	81
1780	71	85	86	88	84	61	56	62	65	63
1790	73	81	78	70	85	82	79	75	53	50
1800	50	46	56	51	49	50	50	43	47	42
1810	52	53	52	51	45	48	59	50	54	50
1820	63	54	48	43	34	28	23	22	24	26
1830	32	37	35	33	31	34	33	34	31	27
1840	29	32	33	40	43	41	48	45	33	35
1850	42	51	48	40	47	42	35	29	30	33
1860	34	36	34	37	34	43	45	55	42	44
1870	46	40	43	50	48	60	64	64	60	61
1880	59	61	53	54	48	45	50	51	51	50
1890	77	69	65	61	49	55	48	52	37	40
1900	39	37	31	32	30	32	38	31	39	36
1910	36	38	36	52	45	43	43	50	42	42
1920	49	58	46	45	45	50	48	38	30	27
1930	34	41	29	35	39	39	38	35	41	36
1940	39	37	45	52	49	46	53	59	50	52
1950	53	67	47	—	—	—	—	—	—	—

TABLE 1 GROUP X—BETHEL

	0	1	2	3	4	5	6	7	8	9
1920	14	21	26	23	56	34	30	24	18	17
1930	16	16	19	18	22	23	23	24	24	18
1940	19	26	30	35	28	29	37	32	22	17
1950	21	39	31	—	—	—	—	—	—	—

BUCKLAND ESKIMO MYTHS[1]

CHARLES LUCIER

Briefly, the Buckland Eskimo, the Kangyikmiut, may be characterized as seasonal migrants between the inland and coastal areas. About nine months of each year, September through early June, are spent up river fishing and hunting. The most permanent Buckland village is situated outside the down river or northern margin of spruce timber. Here, in the fall and early winter, the inhabitants formerly lived in semi-subterranean, moss-covered houses with a central fireplace. Frame houses built of lumber imported from the United States have now largely replaced the aboriginal style house.

Later, usually in January, the Kangyikmiut moved up river to their camp at the caribou corral. From there, hunting parties ranged widely over the interior of Seward Peninsula in search of caribou, small game and fish. Shelter on hunting trips was provided by the "itchalik", a hemisperical skin tent supported by a framework of arched willows. The "itchalik" was also used as a dwelling through late winter and the spring and summer months.

When spring neared, the Kangyikmiut moved gradually down river, stopping at fishing and hunting camps on the way. By June, they reached Eschscholtz Bay, the easternmost extension of Kotzebue Sound. In early summer they fished and hunted sea mammals, especially the white whale (beluga). In July and August, most of the people went to Kotzebue for trading and entertainment, but by late August they were ready to go up the Buckland River in skin boats to their fall fishing sites.

This semi-nomadic existence was somewhat changed by the introduction of the domestic reindeer into Alaska in the late 19th century. Along with the reindeer came more private exploitation and federal maladministration which adversely affected the native culture. On the credit side, the people's general economic level was raised by the abundance of food, warm clothing, and materials that the reindeer provided. However, the collapse of the reindeer industry in the 1930's and 1940's mean economic disaster for the Kangyikmiut.

The gold rush largely passed by the Buckland River area, for prospectors moved on when they found no extensive gold deposits. At approximately the same time, missionaries representing the Friends Church arrived. Buckland native religion with its overt manifestations and ceremonial complexes fell before the Christian doctrine and changing ways. Then, too, remnants of the earlier material culture were largely replaced by western manufactured goods. It should be emphasized that the influences of alien culture, either on an intellectual or material level, were not a recent phenomenon. Since the middle of the

[1]These stories were gathered during the winter and spring of 1951 at Elephant Point, Eschscholtz Bay, Alaska. Mr. and Mrs. Arthur Nagozruk Jr., of Buckland, Alaska supported and encouraged the author's field work and the Department of Anthropology, University of Alaska provided financial assistance.

19th century, Russian influences from St. Michael and elsewhere were strong. Numerous foreign explorers and commercial whalers who visited or wintered at such places as Cape Prince of Wales and Point Hope also exerted new influences. Before the Europeans and Americans came, there had been extensive trade and social intercourse, direct and indirect, with the Eskimo and possibly the Chuckchee of Siberia. In addition, the Kangyikmiut were in frequent and friendly contact with the neighboring Athapascan speaking Indians, namely those living about the Koyukuk or lower Yukon rivers. Of course, they also interchanged ideas freely with other Eskimo groups in northwest Alaska.

Buckland Eskimo population in recent years has been about one hundred inhabitants. It is probable that the Kangyikmiut have decreased in number since their first contact with the whites, for epidemics, such as the influenza outbreak in 1918, have killed many people. The incidence of active tuberculosis is high, as elsewhere in western Alaska, and deaths from this and other causes are frequent, as is confirmed by the large number of recent burials on the hillside at Elephant Point.

Considering the small number of people at Buckland, the writer feels that he was fortunate in obtaining as his principal informant, Andrew Sunno, a Kangyikmiut reportedly born about 1860. With one exception, the myths given were told by Andrew. As Andrew has also lived in the Unalakleet-St. Michael region on Norton Sound, he included some stories from that area. The translator was Jessie Ralph, a Selawik Eskimo woman who was born about 1898; she also related the story, "He Met a Giant Bird".

The recording procedure used was for Andrew to speak in Eskimo for several minutes and then Jessie translated it into English. Later, each story was reread to the informant, who understood English quite well but chose to speak through a translator. The precise wording of the translator has not been retained throughout the myths, but it is hoped that the original meaning is unaltered.

The informant's comments and explanations are enclosed in parentheses; the writer's remarks are in brackets.

A MAN, A CARIBOU, AND A WOLF

The Buckland people were starving. Early one morning a hunter went out to look for game. He didn't have any breakfast, because there wasn't anything to eat. All day long the hunter walked over the hills. He went down into a creek and then up on the next ridge. He stopped on a high place to look around the country. Over on a hillside he saw something move. When the thing came closer the hunter could see that it was a caribou. It was running away from something. The caribou didn't turn when it saw the man. It came straight toward him.

Caribou came right up to the man and said, "A wolf is chasing me. If you hide me, I'll give you something really good." Then Caribou hid himself behind the man. Soon a wolf came running along following the fresh caribou tracks. The wolf ran up to the man. Wolf pulled back his headskin and showed his human face. Wolf said, "Give me that

caribou. I smell him around here somewhere." Caribou put his mouth near the man's ear and whispered, "Oh, don't tell the wolf I am here."

Wolf talked to the man for a long time, trying to find out where the caribou was hiding. He told the man he could have anything he asked for, if he would tell where the caribou was. Caribou whispered again, "Don't believe what the wolf says. His presents will disappear as soon as he gets what he wants. He is a deciever." Finally Wolf got tired. He pulled his headskin down over his face and went away.

When Wolf was gone, Caribou came out in front of the man and thanked him for keeping his word. Then Caribou started to paw away the snow and moss. Wherever he dug below the moss there was a cache of good food, like beluga, muktuk, and ugruk meat. This was Caribou's gift to the man who saved his life.

For the rest of his life that Buckland man didn't go hungry. He fed his family and relatives even when there wasn't any game in the country. All he had to do when he needed food was to go to the hills. He only had to dig up the moss, and there was his food.

A GIANT WORM LIVED NEAR ELIM

Tirichuk was a giant worm who lived near Elim. The worm lived in a cave in a rocky cliff. He used to lie with his body in an inside room and with his head at the cave opening. Skin boats sometimes went by in front of the cliff. If Tirichuk was hungry he sent out two long feelers and dragged in the boat and the people, and ate them.

One Elim family had an only son, who got eaten by the giant worm. Usually the boy took his kayak far offshore out of the worm's reach, but once he was careless and came too close.

The boy's father made up his mind to kill Tirichuk. He made a big, strong harpoon with a sharp end blade. Then he walked to the cliff. He crawled up under the hole where Tirichuk lived. The giant worm couldn't see him because the rocks hung out at that place. When Tirichuk heard the man, he stretched his long body out across the beach. And when he did this the scales that covered his body were spread apart. The man saw his chance and stuck his big harpoon deep into Tirichuk's soft belly. Blood squirted out of the hole in his belly and Tirichuk swam out to sea in a hurry. Nobody has ever seen that Tirichuk since.

A TIME LONG AGO

A long time ago a lot of people were in a qaligi. Each person had sticking out from the middle of his forehead the snout of some kind of animal, like fox, wolverine, weasel, wolf, and others. Maybe those people came from animals.

A WOMAN BECOMES A BEAR

A woman really loved her husband, named Pisiksokhole. But he got sick and died. She wrapped his body in a kayak skin cover and took him to the burying place.

One day the woman was out walking when she met a redpoll, sitting on a willow branch. The little bird sang, "Pisiksokhole, he lives.

He is married, he is married." The bird told her where he was living. And sure enough when she went to the grave she saw that her husband had run away. The woman was full of hate and swore she would get even with Pisiksokhole.

Now the woman got ready for a trip. She soaked a light-colored brown bear skin and worked the skin until it was soft, then she put the animal skin over her own naked body. She put some wooden rods along her ribs. She started off across the country until she saw a village. There on a hillside she met Pisiksokhole and his new wife. That man didn't know the bear was really his first wife. He shot some arrows at the bear but didn't hurt it. Then the mad woman came up close to Pisiksokhole. She pulled back the bear snout and showed her face. Pisiksokhole didn't know what to do. He said, "Oh, won't you come and be my wife again?" The woman said she had already suffered enough on account of him. And then she jumped on him. She tore Pisiksokhole to pieces.

She tried to take off the bear skin, but it had dried, and it stuck to her skin. She became a bear and went south towards Nunivak.

Back at the time of the flu epidemic of 1918, a real old, toothless bear was killed near the Kobuk. Along the ribs of the old bear they found some rotten wooden sticks. So some people think that was the woman who changed into a bear.

That's all I remember. If you want to hear the real story you should go to St. Michael.

EAGLE AND YAKSHUK

There was a family with a daughter who wouldn't get married. A boy in another village heard about the girl and went to see her. He was dressed in his best spotted parka and sealskin pants. The girl's father and mother liked the boy as soon as they saw him. They thought he would make a good husband for their daughter. And they needed somebody to hunt for the family, because the father was too old to do much hunting. That boy wanted to get married, but the girl wouldn't talk to him. She wouldn't even look at him. Her father scolded her for being so foolish. The girl got mad. She took a wooden food bucket, put a little food in it, and started to go outside. Her mother was mad. She yelled after her daughter, "I hope the passage grows longer."

The mother's words made a strange thing happen. The passage stretched in front of the girl. No matter if she walked slow or fast, the light from the door didn't come closer. She walked and walked. She stopped to rest and walked some more. But the passage went on. Finally the girl was so tired that she lay down on the cold ground and slept. When she woke up she went on towards the light. She was very tired, but she kept on even after all her food was gone. Under her feet there was something that felt like small pebbles, all of the same size. Those really weren't stones, they were blue beads. The girl picked up a handful of the beads—enough for a necklace—and put them in her wooden bucket.

Now the light from the door got brighter. The girl finally came to the door opening. She had to wait until her eyes got used to the bright light.

Outside the tunnel there was a wide, clean ocean beach. When she looked back she saw that the tunnel came out at the face of a rocky cliff. Near the beach was a flat place with low willows here and there. There were some berries and greens good to eat. The girl ate some. When she was rested she built a small [conical, tent-like] house of driftwood poles. Pretty soon she felt hungry, so she walked around trying to find something to eat. She was surprised when she found behind some willows a fresh-killed caribou. The caribou was still warm, and blood was dripping from its nose. The girl didn't have a knife but she knew how to make one. She took her brass bracelet and pounded it flat with a hammerstone. She shaped the cutting edge by rubbing the brass against a stone. Soon she had a good knife. She skinned out the caribou and cut it up. Then she packed the meat to her house and sat down to wipe the blood from her hands. The meat was still warm and steaming, not good to eat. While the girl was sitting there, she looked down at the beach. She saw what seemed to be a seal, lying near the water. When she went to the place she found a dead ugruk. Blood was running out of its nose, just like the caribou. She cut up the ugruk. She ate some of the raw liver and intestine walls. Then she cooked some of the ugruk meat and ate. Next she dug up some moss and covered the house with it. She ate again, this time of caribou meat. That night she slept alone in her little house. In the morning she looked out at the ocean. The water was calm, but far away something flashed in the sunshine. She watched, and soon she could see a man paddling a kayak straight towards her.

That kayak came closer. The girl was afraid. She had no place to hide, so she went into her house and waited. The man in the kayak came ashore and put the kayak on the beach. She could see that he was middle-aged. He was dressed in gutskin hunting clothes. The man came right up to the girl's house and came inside. He didn't say anything. He just looked at her. Then he said, "I've come to get you." The girl picked up her things and followed the stranger to his kayak. She crawled feet-first into the kayak hole, so that when the man sat down her head was in his lap. As he paddled along she looked up at his face. Sticking out from the middle of his forehead was a bird's beak, a little less than two inches long. The beak shined like clean brass in the sunshine. Now the girl thought she would never see her family again. The stranger seemed to know what she was thinking. He began to sing while he paddled.

When the man was finishing his song, the kayak scraped against a sandy beach. They had come to an island. Up above the beach there was a house and two [elevated caches.] The man showed the house to the girl and told her to go and wait there for him. He said he was going hunting and asked her what kind of meat she wanted. She said that an ugruk would be all right. The man went in his kayak just a little offshore and harpooned an ugruk. The girl was sitting inside the doorway of the house all this time. She was afraid to go into the house.

That night they had supper and went to bed. He wanted to sleep with her but she didn't want to. Again the next morning he went out hunting in his kayak. He came back in a few hours with his kill.

Once before he went hunting the man told the girl not to go near the cache closest to the house. That made the girl wonder what was in the cache. When he was gone she walked over near the cache. She didn't see anything to be afraid of, so she walked closer; and then she saw something! Lots of women's hair was hanging down through the cracks in the cache floor. The girl ran back to the house. She was scared. She sat down and waited for the hunter to come back. Then a shadow fell on the floor in front of her. She looked up and saw a strange man standing at the edge of the smokehole. He had a beak like an eagle, instead of a real human nose. He was wearing a ground squirrel parka. The stranger said, "He is going to kill you, like he did those wives in the cache. Early tomorrow morning, after he has gone hunting, you should be ready to run away with me. When he asks what kind of meat you want, tell him a big, black whale. Then he will be gone for a long time." After he said this the man disappeared.

Soon the hunter came home. But this time he didn't go right to his sleeping place. He stopped and looked up at the smokehole. "It seems like you have been talking to somebody while I was gone," he said. The girl didn't say anything. The hunter kept asking her questions until she finally said, "Oh, two little birds were hopping around the smokehole and singing. I talked with one of the little birds and said I wanted wings, so I could fly." The man believed what she said and went over to his bed.

The girl was afraid and didn't sleep very well that night. Once she woke up when she heard some metal being sharpened. At the man's sleeping place a lamp was burning. He was hard at work, sharpening something. The girl raised her head a little bit so that she could see better, but the man heard her move and quickly blew out the lamp and acted like he was asleep. The girl was awake the rest of the night; the man was awake too, but he didn't light his lamp again.

Early in the morning the hunter got dressed and asked the girl what kind of animal she wanted that day. She remembered what the stranger had told her to say. She said, "I want a black whale." The man said that it would take all day to get a black whale. But anyway he left the island in his kayak.

As soon as the hunter was out of sight, the stranger wearing the squirrel parka came to the smokehole and told the girl to come outside. She went out. Standing there was a great eagle taller than a human being. The man had become an eagle.

Eagle told the girl to climb under his wing and find a hiding place under the feathers. The girl climbed up and spread apart the feathers. She crawled under the feathers and pulled them over her. Then Eagle flapped his wings and flew away with the girl. Eagle flew around and around, until he was far above the earth. For a while the girl knew that she was above her own village, but Eagle kept on flying.

It was all quiet until a loud voice came from the ocean below. That was the voice of the kayak hunter. When she looked down she saw that

the hunter had turned into Yakshuk, a giant sea bird with red and black feathers and a beak like a seagull's. Yakshuk sang a challenge to Eagle, "Go on and save yourself."

Eagle knew there would be a fight. He said to the girl, "Hang on to my feathers and keep yourself hidden." Then Eagle dived and the fight started. The girl held on as well as she could and closed her eyes. For a long time those two big birds fought. At last Eagle was the winner. As he flew away he said to the girl, "Spread open the feathers and look down." The girl saw the giant bird Yakshuk lying on the ocean. His wings were beating and his head was jerking, as he died. That was how Yakshuk died.

Eagle flew towards land. Finally he landed. The girl climbed down to the ground and looked around. She saw that the place was on top of a great high pillar of rock. The walls of the rock were so smooth and steep that no man or animal could climb them. On the flat place at the top there was a house and two caches. Two big old eagle skins were hanging outside the house.

Eagle told the girl to go into the house. Inside were two old, white-haired people, man and wife. They were Eagle's father and mother. The parents showed the girl where she was going to live, at Eagle's sleeping place. Eagle came home with a caribou. He took off his skin and became a man. They ate some of the fresh caribou. Then the girl went to bed with the eagle. The girl became Eagle's wife. She had two sons by him. Those boys had beaks like an eagle, in place of a human nose.

Life on the rock was lonely for Eagle's wife. Sometime she stood at the edge of the cliff, looking at the ground below. Once she asked Eagle what the color was that always covered the earth down below. Eagle said it was a great field of salmon berries that no one ever picked. Eagle put his wife on his back and carried her down to pick berries. She filled many caribou-stomach pokes full of berries.

Still Eagle's wife was homesick. Her father-in-law said, "I'm very tired, for all day and all night I hear some woman crying for her lost daughter." The old man told Eagle that he should take his wife home for a visit. Eagle began to get ready for the trip. He built a sled with runners of whole tree trunks, roots, limbs and all. On the bed of the sled he built an itchalik. He put a lot of food and many fine caribou skins on the sled. The skins were for trading with the coast people.

Eagle made sled harnesses for himself and his two sons. They put on their eagle skins. Eagle told his wife to go into the itchalik and stay there until he told her she could come out. He also told her not to look outside while they were traveling, because she would surely get scared and make trouble. Eagle and the boys were hitched and ready to go. The wife went into the itchalik and the sled started to move. It moved slowly at first, because it was so loaded. The sled scraped over the ground for a while, then it fell off into the air. The woman could hear the wing beat of the eagles, as they pulled the sled across the sky. Soon she could hear her children breathing hard. She was afraid they were almost tired out. So she started to raise the itchalik cover, to get a look. Eagle saw her. He turned his head and

told her not to look. His wife obeyed. She didn't say anything even if it hurt her when her children worked so hard.

It wasn't long before the sled touched the earth and stopped. Eagle told his wife to come out of the itchalik. She was happy when she saw her own country all around. There was a lake close by. She knew her village wasn't far away. Eagle gave his wife a pack of caribou skins to trade for ugruk skins and rawhide. Eagle and the boys didn't go home with her.

Outside her parent's home the woman saw only a few footprints in the snow. It was very quiet. She looked in through the door. She could see her father and mother sitting on either side of the fireplace. The old people's hair was all white and pulled back from their foreheads, because they had so often rubbed their heads in worry. Eagle's wife came in the house. When the mother saw her daughter she ran to her. They threw themselves into each other's arms and cried, because they were so happy. They sang a song and cried.

After they stopped crying the mother told about the hard times the family had been having. They had given everything away to people who helped them, because the father was too old to hunt. A man came in and the daughter asked him to go to the sled and bring home her things. A lot of sleds went out from the village. They could see where Eagle's sled had crossed the lake. There was a lot of food and skins to be hauled back. That woman's family was rich now. The woman traded the caribou skins for things that Eagle's family needed. They loaded those things on the giant sled. Eagle and his sons pulled the sled back to their home.

The woman stayed with her family the rest of the winter and the next spring and summer. In the fall she went home with Eagle to the house on top of the rock. The eagles later made many trading trips between their country and the woman's village.

Maybe there is some more to the story, but this is all I remember.

HE MET A GIANT BIRD

My husband's uncle one time met a giant bird when he was hunting inland. The bird dived at him, but the man shot arrows at it. An arrow hit the bird in one foot. The bird opened its claws. It was carrying a whole ugruk. The man got away.

HOW RAVEN GOT AND LOST A WIFE

There was a girl who didn't want to get married. She was good looking. Raven heard about that girl, and he went to her village. He took off his bird skin and hid it outside the qaligi. Now he was a young man. He went into the qaligi. The men in there were talking a lot about the girl who didn't like men. Raven listened so he could decide what to do. The more he heard, the more he wanted that girl. Pretty soon he had an idea.

Raven went outside the qaligi and looked around until he found a piece of seal intestine a little over a foot long. He tied shut one end of the gut. Then he picked up a human turd and stuffed it into the gut, and closed the open end. When everyone was asleep Raven went

to the girl's house. He sneaked in beside her on the sleeping platform. She was asleep. Raven pulled the full seal gut out of his inner parka, where he had put it to thaw. Raven untied one end of the gut; he raised the girl's bedding a little and squeezed the soft stuff out on her bed. Raven woke the girl and said, "See what a mess you made in your bed." The girl was ashamed. And when Raven acted like he was going to leave, she grabbed his hand and begged him not to tell anybody about her accident. Raven promised to keep her secret. The girl was so worried about her dirty bed that she didn't think to push Raven away. Raven slept with the girl that night. When the family got up the next morning, Raven was still in bed. The girl started to sew new clothes for Raven that same day. The girl's father liked his new son-in-law. So Raven stayed with the family.

Ravens' wife fed him whenever he was hungry. But one day when Raven was standing all alone outside, he saw a fresh dog skin hanging from his father-in-law's cache. The warm sunshine was making the fat drip from the skin. The nice dog fat really made Raven hungry. Raven hurried and put on his old skin. Now he was a bird again. He pecked at the dog skin with his sharp beak, and soon the skin was torn to pieces. When Raven was full he took off his bird skin and went into the qaligi.

In a little while Raven's father-in-law came running into the qaligi. He was plenty mad. He said, "Some person with three toes has torn up my dog skin; all of you take off your mukluks to prove you aren't the one!" All the men but Raven lined up around the edge of the sleeping platforms so Raven's father-in-law could look at their bare feet. Raven stayed in back, but his father-in-law saw him there. He told Raven to come out and show his feet like the rest. Raven said he had five toes on each foot, just like any real human being, but it did Raven no good to argue. His father-in-law came right to him and pulled off one of his mukluks. Raven's feet had three toes!

"You are the one who ruined my dog skin!" shouted the father-in-law. And so Raven lost his wife.

ILYARUNIK

A family with four sons lived at Deering. All the children were little when their father died, but they had to help their mother take the father out of the house to the burying place. Pretty soon the mother died too. No one would help them bury their mother. Their mother's brother was afraid to touch her body. That uncle stood on the house roof and told the boys to lift the dead body up through the smokehole. A bunch of people came and watched the orphans try to lift the mother's body. Nobody would help them. The boys tried two times, but the body was too heavy for them. It fell back down on the floor. The boys tried again and this time they got the body up on the roof. The uncle told the boys to drag their mother to her grave.

The oldest orphan boy was called Ilyarunik. He didn't forget those people who laughed at him and his brothers. He wanted to grow up to be a strong man so he could get even with those people. The orphans

didn't starve. Their uncle gave them food. Ilyarunik grew up. Now he was almost a man, but he didn't forget who his enemies were.

After playing games one night Ilyarunik thought about one of his enemies. He went to that man and killed him with his own bare hands. Another time when they were playing games, a man made fun of Ilyarunik. So Ilyarunik killed him. He was so strong he only needed his hands to kill a man.

The boy's uncle was living with them. One day the uncle and Ilyarunik went out to the bird cliffs to gather eggs. Ilyarunik's uncle lowered him down the cliff on a rawhide line. Ilyarunik found a good place and stopped to pick up eggs. But when he pulled hard on the line, as a sign to be pulled up, the line fell down. It was lucky that Ilyarunik didn't fall off the rocks. Up above, the uncle looked over the edge and made excuses to himself for dropping the rope. He thought Ilyarunik must be dead, but he didn't even go down to see. He went back to the village. Ilyarunik was standing there on that narrow place. He thought maybe his uncle had tried to kill him.

Ilyarunik stayed on the cliff for hours. In the middle of the night he made up his mind. He wrapped the rope around his body. He was going to jump. He didn't care much if he got killed. He jumped out into the air—he spread his arms and sailed like a bird. When Ilyarunik hit the water he went under like a diving bird. He came up for air, then he started to swim towards Deering. He could swim like an ugruk. When Ilyarunik came home he smiled at everybody he met, even his uncle.

Now Ilyarunik was hunting seals and caribou. He fed his younger brothers. Later the uncle sent his brother Suluk to Tapqaq. The brothers, Kuvravuk and Nugruk, went up North.

One time Ilyarunik heard about the walrus skin that lived in a hole in the rocks at Cape Deceit. The big skin caught boats that came too close to the Cape. It ate the people who were in the boats. That didn't scare Ilyarunik. He took a hunting knife and swam to the place where the walrus skin lived. When he got there he saw the water moving. Then he saw that walrus skin. It came and wrapped itself around Ilyarunik, and they sank to the bottom of the water. Ilyarunik just pushed with his arms and pushed the skin off. He cut it to pieces. He killed that skin. Then Ilyarunik swam away deep under water.

Ilyarunik once heard Kuvravuk's voice. He said that Nugruk had been killed by the giant shrew, Ugrunukpuk. Suluk and Ilyarunik went to avenge their brother's death. Suluk went in his kayak. Suluk's kayak paddle had blades made from whale shoulder blades. Ilyarunik swam along beside his brother's kayak. The people at the village told them where Ugrunukpuk lived. They came to a lake inland. They saw Ugrunukpuk lying in the sun on the other side of the lake. Suluk paddled his kayak across the lake. Ilyarunik went around by land and came behind Ugrunukpuk. Suluk made a splash in the water with his paddle. Ugrunukpuk woke up and started after Suluk. Then Ilyarunik grabbed Ugrunukpuk's hind legs and held on. Ugrunukpuk swam after Suluk. He didn't even feel anybody hanging on his hind legs.

Suluk landed the kayak and jumped out. Suluk grabbed Ugrunukpuk's front legs. The two brothers pulled until they tore Ugrunukpuk to pieces. Then the brothers went home.

Ilyarunik killed one more Deering man before he went to live at Iyarovik [Chamisso Island]. Suluk was living at Tapqaq. He took all the best caribou skins away from the Tapqaq men when they came back from hunting inland. The people of Tapqaq were afraid of Suluk, but finally they got tired of him. One time they filled his kayak full of skins. When Suluk got in the kayak they put more on top of him, so he couldn't move. Then the men stuck him with spears and shot his body full of arrows. Ilyarunik went to Tapqaq to bury his brother. Then he killed some Tapqaq people to get even with them.

Ilyarunik swam back to Iyarovik. There was a place south of the the island where the water was full of smelt. Ilyarunik could hardly swim through the fish, they were so thick. He put a stick at the place to mark it, but the ice took it away. Ilyarunik would have piled rocks there, only he couldn't swim and carry rocks too.

After Ilyarunik came back to Iyarovik he built a stone house and got a wife. Later he got another wife. The Tapqaq people came after Ilyarunik to kill him, but they couldn't get close to the island. When they came close Ilyarunik threw rocks and killed them. He could throw rocks a long way. He even threw rocks over Church Rock. That's about seven miles from Iyarovik. Sometimes Ilyarunik swam across the bay and hunted caribou When he came home he pulled the dead caribou along through th water.

Finally Ilyarunik had four wives. In the fall he hunted caribou and the wives were busy putting food away for winter. Those four wives ate a lot. They had to have many caribou to keep from starving in the winter.

When Ilyarunik was starting to make a good living, the Tapqaq people came to kill him. He heard them coming from far away. He told his wives to get some rotten salmon eggs. Ilyarunik rubbed the rotten fish eggs all over his face and body. Then he put on his oldest parka and took a walking stick. He went to the beach, acting like he was old and weak. The salmon eggs started to steam, and the steam went up like a cloud over him. The Tapqaq men were in their boats offshore. Ilyarunik yelled at his enemies, "I am sick with a skin disease. It would be easy to kill me now." When they came in close to shore, Ilyargunik threw rocks. The rocks skipped over the water and hit the skin boats. The boats all sank. Some enemies tried to swim up to the beach. Ilyarunik hit them with rocks and killed them.

Ilyarunik's wives started to think maybe he had killed too many men. One day Ilyarunik came home very tired from hunting. He went to sleep. While he was sleeping, those four wives lifted him up and carried him to the fireplace. They tied rawhide lines to his arms and legs and then they tied the lines to each of the four roof posts. They pulled the ropes tight, so Ilyarunik couldn't move his body when he woke up. The oldest wife felt over Ilyarunik's chest until she found right where his heart was beating. The wives stuck Ilyarunik in his heart with a spear. When the spear went in his heart Ilyarunik woke

up. He pulled one arm and one leg loose. He looked all around the room. Ilyarunik didn't see anybody there but his wives, so he just lay back and died.

There may be some more to the story. This is all I remember. Maybe somebody in Deering knows the story better.

A POOR ORPHAN BOY

A man and wife were happy together, never arguing or jealous of each other. The man was a good hunter and the woman always did her share of work. Like other men, the husband spent much of the time when he was not hunting at the qaligi. When her husband was hungry, the wife brought him food. The man shared his meals with a poor orphan boy, who had no relatives to furnish him with a kayak and hunting gear and other things a young man needed to make a living.

One time when the wife gave the husband his food he whispered to her, "Why don't we pretend we are jealous, just for fun?" The wife answered, "I will do as you want." So when the man had eaten all he wanted, he spilled the orphan boy's food on the floor, and said nothing. The boy went hungry that night and day after day the same thing happened: the woman brought plenty of food; the husband ate all he wanted, then threw away the remainder.

The wife one day didn't take food to her husband. She put on her best kamik and a parka with a fine wolf ruff. Then she walked to a place in front of the qaligi where the men emptied their urine buckets, and there she stopped. No one saw her standing there. Men came out and threw urine against her feet, but she didn't move or speak at all. The frozen urine piled up around her body. Still she didn't move. Only the orphan boy saw her.

The husband was beginning to worry now. Days went by and still his wife didn't come to the qaligi. Finally he went home to look for her. The house was empty and cold. Frost crystals covered the floor and inside walls. He knew she had been gone a long time. The man was crazy with worry now and he asked an angatkok to find his wife. The angatkok tried, but he didn't have enough power to find her. The husband hired every angatkok he could get. At last the qaligi was full of angatkoks, and not one of them could tell the man where his wife was.

The room was all quiet when the poor orphan boy came in front of the people and said to the husband, "I know where your wife is, but no one has asked me. How much are all these great angatkoks worth? They can't find your wife. You gave them almost everything you owned and none of them could find her. I can find her if you give me new clothes, an ice pick, and an ice scoop." The husband said he would.

That poor boy was really an angatkok. He put on his new clothes. He sang a song inside the qaligi and then he went outside to the place where the woman was frozen in ice. The ice was almost above her mouth. The boy sang as he chipped the ice away from her body. She was still alive. He let her go and she went back to her husband.

THREE ANGATKOKS GO UNDER THE SEA

The beluga didn't come to Buckland one spring. So three angatkoks, one man and two women, used their power to bring the beluga. They went over on the east side of the bay [Eschscholtz Bay], and a lot of people were there to watch them. Those three angatkoks were standing on the beach. They were dressed in nice skin clothes. Then the angatkoks walked out together across the mud flats. It was low tide. The people on the shore saw those three angatkoks wade out in the water and they kept on walking right out into deep water. The people waited for the angatkoks to come back. They waited for two tides, about twelve hours. Then the angatkoks came back. When they came out of the water, their clothes were all dry.

Those angatkoks had walked far out under Kotzebue Sound. They chased a lot of beluga back to the Buckland flats. The water was calm after the angatkoks came home, and a lot of beluga swam in close to shore. The Buckland men killed lots of beluga. There was plenty of food for the whole year. This shows how powerful some angatkoks were in the old days.

SPIRITS OF THE DEAD

A woman was in labor, but couldn't give birth to her child. Finally the woman died. The child was still inside her. The village people were afraid of the dead woman's spirit. So all the families loaded their things on sleds and ran away from the place. When they stopped to camp that night, a rich man remembered that he had left his best iron knife in his old house. The rich man tried to get somebody to go back after the knife. Nobody wanted to go back to that place where the dead woman was. They were afraid. They wouldn't go, even for pay.

The rich man's son made up his mind to go and get the knife. He started out late, and when he came to the empty village it was already getting dark. He didn't want to travel in the dark. He said to himself that he would sleep that night in his old home. He lay down to sleep. Then he heard a voice. The voice of his dead brother came from the roof. It said, "You should leave now. Somebody is coming." The man thought, "There isn't anything to be afraid of. I'll just go back to sleep." But before long he heard somebody coming. That person was singing, and a baby was crying. He knew it was the ghost of the dead woman, but he couldn't get out of the house. The ghost came in the house. He saw her come in the room. She was carrying that baby in a meat dish. She came up to him and pushed the meat dish into his hands. Then the man was unconscious.

The voice of his dead brother woke the man the next morning, and it told him to leave the house. This time the man obeyed his brother's spirit. He took the iron knife and went back to the camp.

There isn't any more to tell.

THEY HEARD A GHOST

Some women were sitting inside a house. They heard a ghost outside. One of the women moved fast. She sat down on the floor in front of the door. The ghost was coming in the door. The woman took

her big ulu and acted like she was cutting the air. She said to the ghost, "Split in two." Then she cut the floor. That ghost saw the hole and it went down into the ground without hurting anybody. That woman saved herself and the other women, because she remembered what to do when a ghost came.

A BOY IS TORTURED

There was an old woman who lived alone with her grandson. The boy was not yet a man, but was able to hunt some. One day the boy met a cross fox. He killed the fox, skinned it, and brought the skin home with him. A rich man saw the boy carrying his nice fox skin. The rich man wanted that fur. But the boy wouldn't sell the fox, and the rich man got angry. He tied the boy to a stake and stripped off his clothes. Then he built a fire in front of the boy. As the fire burned the boy's belly, the rich man tore away the skin and muscle with a sharp stick until the boy's intestines fell out of his body.

When there was a skin toss the people sang a song about how the boy had been killed. Nobody took revenge against the rich man.

AIYAUHROAQ

An old man named Aiyauhroaq lived with his son's widow. The son was killed by some men, who also tried to kill Aiyauhroaq.

One time the daughter-in-law went outside to cook. She stayed for a long time. When she came back her face looked different. The old man could read her mind, and so he knew she had been talking to somebody.

Early one morning the woman went out of the house and didn't come back. A lot of enemies came around the house. The old man was inside, all alone. One of those enemies hollered down through the smokehole, "How do you want to be killed, Aiyauhroaq? Do you want to be shot full of arrows; or do you want to burned alive?" The old man said, "Well, I would like to stay close to the burning fire. I choose to be burned." Then those men set the roof on fire. The house started to burn. Aiyauhroaq hollered at his enemies, "Thank you for making such a good fire." Then he got out of the burning house by using the tunnel he had dug. He came up in the brush and he could see all the enemies standing around the burning house. Then Aiyauhroaq took his bow and arrows. He shot those enemies, one after another. They didn't know where the arrows were coming from. Aiyauhroaq killed all those men except two. He saved two men, so they could tell people how they lost the fight.

This happened in the spring. Aiyauhroaq threw the dead bodies into the river. Early the next fall, when the young ice had formed, the old man was walking on the river ice. He saw a man's body in the water below. The dead man was lying on his back. Aiyauhroaq then made up a song about the dead man. He sang, "Ah, Savegon, I see you there in the water, looking up at me."

Aiyauhroaq was a Tapqaq man. Maybe he lived at Buckland or Selawik.

HOW INNYUKTUT GOT ITS NAME

Innyuktut got its name after some Silawingmiut came and killed all the people but one woman and her baby. Then the Selawik men burned all the houses, with the dead people inside. The Silawingmiut robbed the caches and burned them too.

A young man who was becoming an angatkok told the people that the Silawingmiut were going to come. He said he would know this ahead of time, so he could save himself.

Those Selawik men came up to the village early in the morning, in the early fall. Each one of them had a feather stuck in his hair. The enemies crawled on top of the houses. The Buckland people were all asleep. The Selawik men started shooting arrows into the houses, down through the smokeholes. Other men waited outside the door and killed anybody who tried to come out. They killed everybody, men, women, and children. The dead people's blood ran down the hill and made a small lake there on the flat. If you look in that lake today you'll see that the water is red.

Before the fight, the Silawingmiut left a girl on top of a hill near had caught her, she squatted down in a low place. The Silawingmiut becoming a woman. The girl saw one man run away from Innyuktut. He started to run across the river, on top of the water. The young angatkok was trying to save himself. The Selawik girl yelled; and the Buckland man sank in the water as far as his knees. She yelled again; the angatkok fell face down and sank under the water. Then she could see him swimming as fast as he could. Selawik men were chasing him in the kayaks. Soon the Selawik men paddled up close to the swimmer. They stabbed him to death with their spears.

One Buckland woman got away. She ran upriver along the east shore. She was carrying her baby in her amaut. The woman had some kind of power to make herself hidden. When the Selawik men almost had caught her, she squatted down in a low place. The Silawingmiut came running. They knew she was around there somewhere, but they couldn't see her. They tried to kill her by stabbing all over the ground with their spears. They came plenty close but they missed her. Finally they went away. When it was dark again, the woman ran south along the river. When morning came she hid again and didn't move until it was dark. After a long time she found a Buckland camp. That's all.

INDIANS AND ESKIMOS

A long time ago the Silawingmiut chased some Koyukuk Indians away from the Koyukuk country. The Indians came to Buckland to live. The Buckland Eskimos were their friends. The Indians built a village at Igloo Point, at the mouth of the river on the west side.

The Indians lived at Igloo Point for quite a few years. The real Buckland people lived about a mile and a half upriver at Innyuktut. There never was any trouble between the Indians and the Eskimos. But one day the Silawingmiut came and fought the Indians. The Silawingmiut chased the Indians away and they never came back, except for trading.

HOW SOME ISLANDS WERE MADE

Iyarovik [Chamisso Island] was once an umiak. Egg Island was a black whale. The two smaller islands were harpoon floats. Those underwater rocks between the islands were harpoon lines and float lines. All those things—even the hunters in the umiak—were changed into stone, long ago.

CONCLUSIONS

Eskimo stories are told primarily to amuse an audience, and the author hopes these English translations of Buckland myths have retained some measure of their original function. Additionally, the stories are of interest because they offer an intimate view into the nature and values of a unique and rapidly vanishing culture. Often a story leads the informant to related material which is of value to the researcher. For example, after telling the story, "A Giant Worm Lived Near Elim," the informant remembered that he had once seen the fresh trail of a giant worm, Tirichuk, along the Buckland River. Across each neck of land separating the meanders of the river was a path about two feet wide where the willows and undergrowth had been burned off uniformly close to the ground. There were no human or animal tracks nearby in the soft soil. Andrew conjectures that the vegetation was burned as the giant worm stretched its body overland in order to save the effort of swimming upstream.

No one living at Elephant Point has ever seen Tirichuk, but it is believed that the huge worm resembles a certain blue-and-orange colored insect caterpillar which is common to the area.

Stories of giant worms have been recorded at Kotzebue, on the northeast shore of Kotzebue Sound (unpublished field work by the author) and at Shishmaref (Keithahn, 1945, pp. 27-8), about one hundred fifty miles west of Elephant Point. Nelson gives a "Man-worm" story from Kotzebue Sound (Nelson, 1899, p. 516) but does not specify its place of origin. The Chuckchee, neighbors of the Siberian Eskimo, believe there is a giant worm that lives in the sea (Bogoras, 1904-1909, p. 327). Stories of giant worms also occur among the Nunivak Eskimo of southwestern Alaska (Lantis, 1946, pp. 287, 296).

Another widely distributed theme is represented in the Buckland collection by, "A Woman Becomes a Brown Bear." This story, familiarly known as "Feigned Death," is recorded from such widely separated groups as the Pacific and Bering Sea Eskimo, and from the Selawik Eskimo in the Kotzebue Sound drainage as well as from the Athapascan Indians of western Alaska (Lantis, 1938, pp. 162-66; 1935, p. 116). Far to the east, in arctic Canada, a similar story is told by the Copper Eskimo (Jenness, 1924, p. 87A); it is known from the Chuckchee (Bogoras, 1913a, pp. 329, 602), from the Chugach Eskimo (Birket-Smith, 1953, pp. 154-155) and the Eyak Indians of the Copper River delta (Birket-Smith and De Laguna, 1938, p. 321).

We may have in "Eagle and Yakshuk" an example of a story drift from Alaska to Siberia. Borgoras gives a story which is reported to have come originally from ". . . Nuyak, on the American side" (Bogoras, 1913b, pp. 426-29). The Siberian Eskimo tale closely related to the

Buckland version may be summarized as follows: A woman with her child runs away from her husband because of mistreatment. She comes to a widower's house and he immediately wants to marry her. Before going out in the morning to hunt he warns her not to look in a corner of the house, but she disobeys and finds there the widower's dead wife, who had been torn to death by her husband's big penis. The woman runs away, is pursued by the widower, but he is accidentally killed. She remarries. The new husband, by magic, makes her small son grow into a man. She finds that in truth she has married an eagle; his bird skin hangs outside the house. Her son puts on a bird skin, becomes an eagle, and kills the former husband who had abused his mother.

Stories of giant eagles that carry away a woman and marry her are known from the Copper and Iglulik Eskimo of Canada, (Rasmussen, 1931, pp. 221-2; 1929, p. 284) and the east Greenlanders (Rasmussen, 1939, pp. 124-27) tell similar tales. In these stories the wife escapes and her relatives kill the eagle. Giant gulls similarly carry off women for wives in stories of the Cumberland Sound and Polar Eskimo (Boas, 1907, p. 195; Holtved, 1951, pp. 67-9).

Another linkage between Buckland Eskimo and Chuckchee legends is provided by Bogoras' statement concerning a Chuckchee belief, "Another 'giant bird' is a 'middle [sea] bird.' He lives only on the open sea. Some features of this bird, perhaps, connect him with the albatross" (Bogoras, 1913a, p. 328). The great bird Yakshuk, the Kungyikmiut say, is neither gull nor eagle but yet has a beak "like a gull's." This description may conceivably fit the albatross. In any case, reports of giant birds continue to circulate in western Alaska, and it would not be surprising to find the stories are based on an element of fact.

A familiar character in Eskimo mythology appears in "How Raven Got and Lost a Wife." Exactly the same story of Raven is known at Unalakleet, according to Francis Eben, a Unalakleet resident, age 30 years (verbal communication). Francis was told the story by his father.

The next story, the epic of Ilyarunik, is known all around Kotzebue Sound. It is, perhaps, not unreasonable to assume that Ilyarunik was an actual person whose exploits have assumed superhuman proportions with the passage of time. Probably Ilyarunik's adventures have been fitted to a much older basic story outline. In modern times, some individuals have become widely renowned for great feats of strength and endurance. For instance, one man with several living children is said to have carried weights alone that four ordinary men could not lift (verbal communication with Deering residents, 1950). Thus the Eskimo Strong Man exists in the eyes of his contemporaries, as well as in old legends.

The stories concerned with shamanism and the supernatural are somewhat difficult to interpret since our knowledge of Alaskan Eskimo religion is incomplete. The Buckland notes relating to religion are markedly deficient because of the scarcity of informants and the natural conflict that exists between aboriginal religion and Christianity.

One of the ghost stories, "Spirits Of The Dead," appears to be paralleled outside the area. In a Chuckchee story, a village is abandoned after a newborn baby becomes a cannibal and devours its mother. An

old man forgets a valuable knife and a young man goes back to the deserted village to get it. He is pursued by the cannibal infant but escapes. The hero gets the old man's daughter as a reward (Rasmussen, 1931, p. 433). Other versions of this story are told by the Polar Eskimo (Holtved, 1951, pp. 77-78). The Chuckchee and Greenlandic tales involve a cannibal child, but the Kungyikmiut informant gave no such detail.

Several of the Buckland stories of war and torture resemble closely Eskimo myths from other regions. The story of "Aiyaukroaq" shares these features with a Nunivak myth (Lantis, 1946, pp. 301-02): An old man is forewarned of his enemies' coming and gets ready by digging secret holes and tunnels from the house; the enemy warriors come and try to burn the house; the old man fights the attackers single-handed and the survivors run away.

A parallel between a Buckland and Netsilik (Canadian arctic) Eskimo myth (Rasmussen, 1931, p. 433) is apparent in "How Innyuktut Got Its Name." In both stories a woman makes herself invisible and escapes her pursuers, who stab the ground without avail.

The Buckland war stories fail to mention any conflict between the Kungyikmiut and the Koyukuk Indians and, indeed, one story, "Indians and Eskimos," portrays them as friends. The present-day Buckland Eskimo have no traditions of war against the Indians.

The last Buckland story, "How Some Islands Were Made," explains the formation of Chamisso Island and the smaller islands nearby. Stories of human beings and animals that are turned to stone are quite common throughout the Eskimo area.

The Buckland myths, as a whole, may be characterized as basically Eskimo in style and content. The several parallels cited between Buckland Eskimo and Chuckchee mythology probably would assume relatively less significance if more Alaskan Eskimo myths were available for comparison with the Kungyikmiut stories.

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