VARIATIONS IN CHECKED POTTERY FROM AN ARCHEOLOGICAL SITE NEAR UNALAKLEET, ALASKA[1]

by
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The pottery described in this article was excavated during the summers of 1968 and 1969 from a series of semi-subterranean houses on the coast of Norton Sound. This site, near the present village of Unalakleet, occupies an old beach spit that is now about one-quarter mile from the coastline. Five of the excavated houses may be considered to belong to the Norton culture. Two of these, on which radiocarbon analyses have been completed, have dates of 86 ± 52 B.C. (P-1531) and 204 ± 52 B.C. (P-1532). The sixth house, which for the purposes of this article I will call "evolved Norton", has a date of 347 ± 49 A.D. (P-1530). All dates are based on a half-life of 5,730 years.

The manner of occupation of the site was such that all of the houses had a great deal of overburden on them. This overburden, ranging in thickness from one foot to as much as six or seven feet, was composed of natural storm-washed gravel as well as cultural deposits. The houses are, in general, so close to one another that after the collapse of one house, debris was thrown into the depression from surrounding houses. Pottery was found in the cultural overburden as well as on the house floors. There can be little doubt that the overburden was deposited soon after the collapse of the houses, since the

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Location	Rims Type: 1	2	3	Bases Type: 1	2	3	Body sherds
House 119							
Fill	4,3		1,2				2,3,1
Floor	1						3
Evolved Norton house							
Fill	1						
Floor	3						1
House 118							
Fill							1
Floor							3,2,1
House 3							
Fill				2		1	
Floor	1,3			3			3
House 2							
Fill				1			4
Floor	2						1
House 120							
Fill	8	1,2	1,2	2,3	2		8,3,2,4,9,22,5,11
Floor	2,2			1	5		1

Figure 1. Distribution of sherds

Underlined numbers refer to the number of sherds believed to belong to a single vessel.

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Fill	1						
Floor	3						1
House 118							
Fill							1
Floor							3,2,1
House 3							
Fill				2		1	
Floor	1,3			3			3
House 2							
Fill				1			4
Floor	2						1
House 120							
Fill	8	1,2	1,2	2,3	2		8,3,2,4,9,22,5,11
Floor	2,2			1	5		1

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pottery and other artifacts are similar. Therefore, the pottery from the house floors and from the overburden will be described as a unit, except in those rare, and probably fortuitous, cases in which significant variations were found only in either the overburden or the house floor. Figure 1 gives the distribution of sherds according to excavation unit.

SOURCE OF CLAY

Large outcroppings of clay occur about 15 miles down the coast from the site. The source is known to the present natives of Unalakleet and the clay from it was used by them to line their ovens. X-ray diffraction analysis of a pottery sample from a Norton house and the clay samples from this source shows them to have a very similar mineralogical content, thus making it probable that the same clay source was used by the Norton inhabitants of the archaeological site as by the present natives of Unalakleet.

METHODS OF CONSTRUCTION

In all cases, it appears that the clay was pressed into shape by hand. Slight depressions on the inner walls of the pottery were probably made by the potter's fingers during construction. The same tendency to break or flake off in layers that was noted by Oswalt at various sites along the coast of Alaska (1955:34) was observed on the pottery from Unalakleet. This is probably the result of intensive paddling which aligns the clay particles in parallel planes.

Another method of construction, although used rarely by the Norton inhabitants at the Unalakleet site, is the firing of pots in baskets. The few examples of this method of construction were found in the house floors and not in the overburden. Larsen (1950) describes and pictures baskets excavated from the Platinum Village site and some of the patterns are similar to those found on the pottery from Unalakleet.

In all cases, the temper appears to have been plant fiber. Neither the sand grains, nor the minute sparkling particles mentioned by (Griffin 1964), are present. These differences are probably the result of the different clay sources that were used by the Norton people of Iyatayet and those used by the Norton people of Unalakleet.

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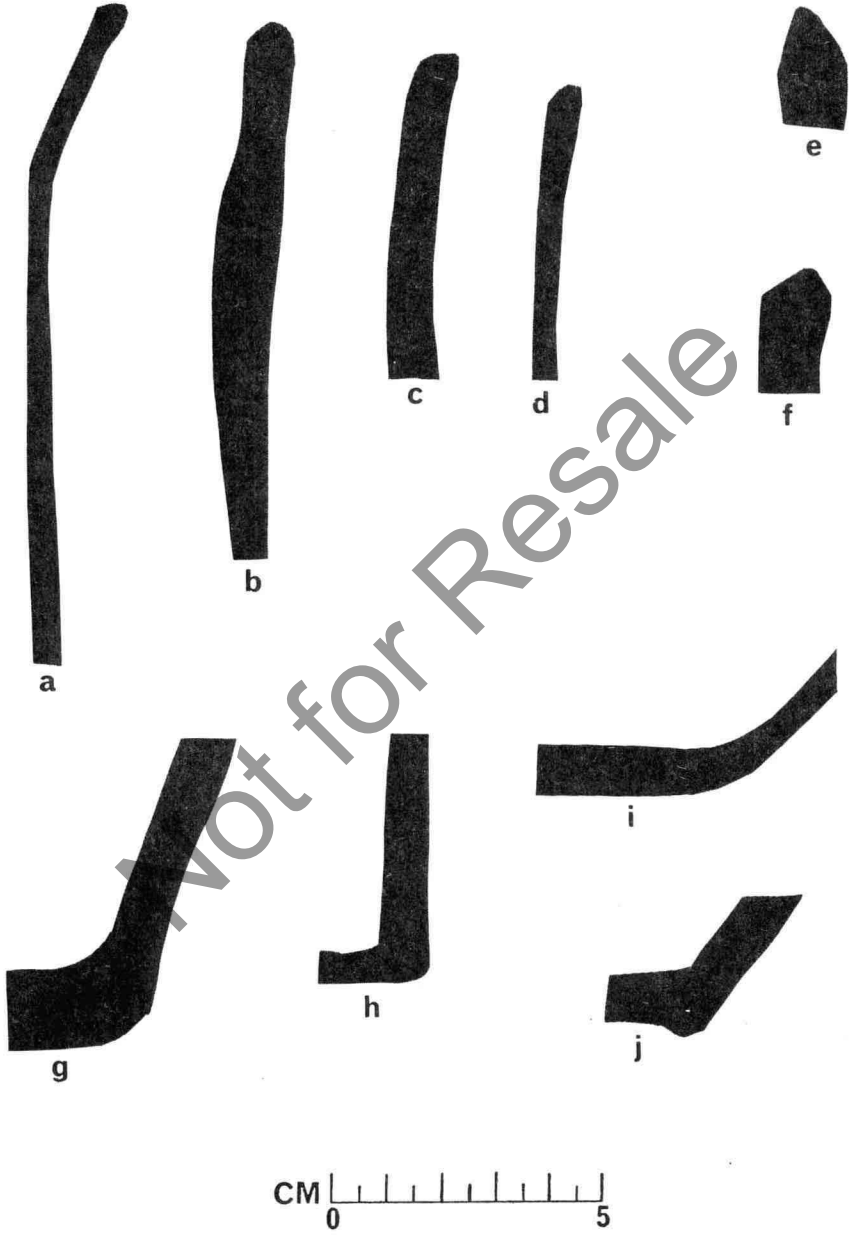

Figure 2.

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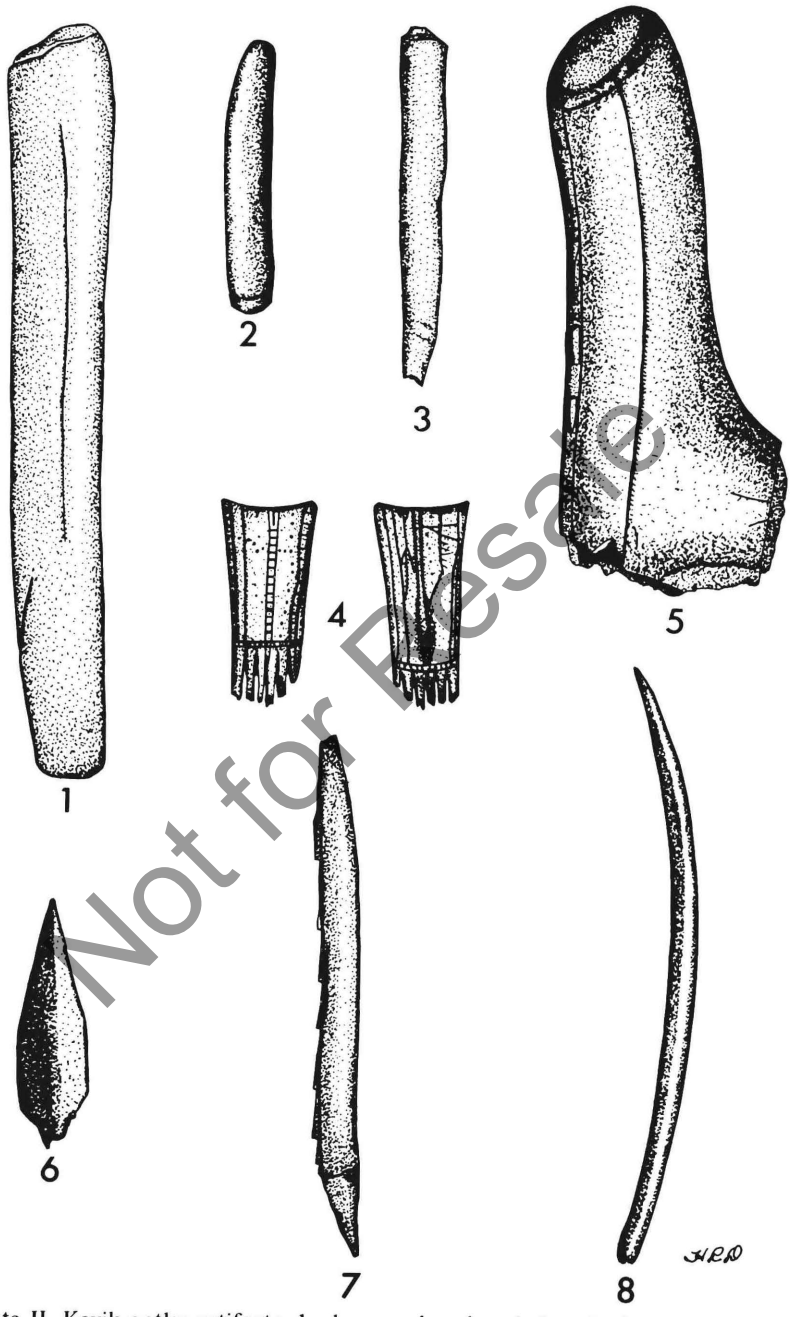

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Plate II. Kavik antler artifacts. 1, sharp wedge, dorsal view; 2, sinew twister; 3, fid, probably; 4, comb; 5, decorated beam section; 6, arrowhead point fragment; 7, leister prong; 8, fish spear center prong. To scale, length of 1, 6 3/8 inches.

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Figure 3.

The second vessel was in extremely poor condition when found on the floor of a Norton house. It is now being conserved in the University Museum of the University of Pennsylvania; therefore measurements cannot be given. The general shape is that of a deep bowl with vertical sides and a rounded base. This would appear to be an uncommon type, as none of the base sherds in this, or any other, house would lead one to propose such a shape.

DECORATION

Unlike the Iyatayet site, none of the pottery at Unalakleet could definitely be assigned to the categories of Norton Plain or Norton Linear Stamped (Griffin 1964: 273-4). These types are sometimes approximated by erosion patterns and it is not always possible to distinguish erosion from decoration. Few sherds of these varieties, however (whether erosion, Norton Linear Stamped or Norton Plain), were found at Unalakleet.

On the floor of the house dated 204 ± 52 B.C. and in the "evolved Norton" house, a base and several body sherds were found which do not appear to have been check-stamped in the usual manner (fig. 4; a). Instead of the sharp outline of each of the checks usually found on pottery, the indentations on these sherds have a rounded outline. Nor are the indentations found in precise rows, as is usual in check-stamped pottery. Larsen (1950: fig. 57; 1, 2) found at the Platinum Village site coiled basketry which resembles the impressions on these sherds.

Except for the few sherds described above, all of the pottery excavated has checked decoration. The length of the checks varies form 1 mm to 4 mm, with a mean of somewhat over 2.5 mm. The most common length measurements are from 2 mm to 3 mm. The width of the checks varies from 1 mm to 3 mm, with a mean of slightly over 2 mm. The most common width measurements are from 1 mm to 2 mm. The length/width ratios of the checks vary from 1 (square checks) to as much as 4 (very rectangular checks), with a mean length/width ratio of 1.4.

The size of the checks of the pottery from the "evolved Norton" house has a mean length of over 3 mm, and a mean width of almost 2.5 mm. Both of these averages are slightly above those of the earlier houses. However, in no case did the length or width of the checks fall outside the range observed in

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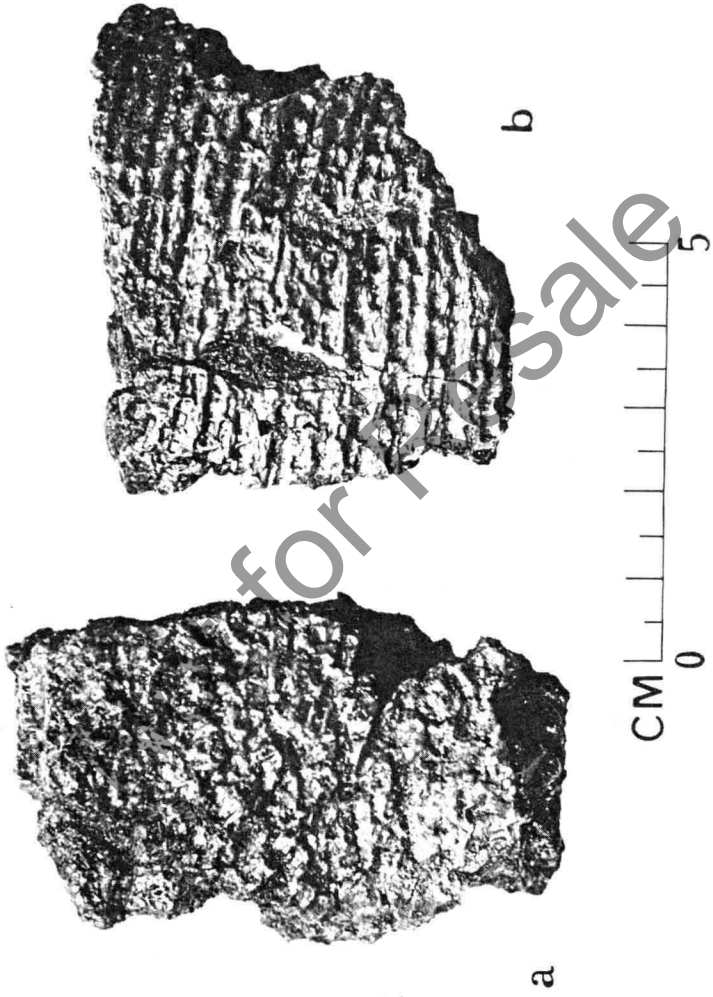

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the other houses. There is no observable difference in the size of the checks between house overburden and house fill in any of the houses. Both the overburden and floors contained large and small checked pottery.

All of the sherds which were not eroded show a check design. This includes the bottom of the base sherds. However, in no case did the interior of the vessel have checks. Small sherds give the impression of neat parallel rows of checks, but many of the larger sherds destroy this impression. Instead, the rows of checks meet one another at various angles. Some of the rows are curved, making it appear that the stamp was rolled across the surface of the pot. Generally, rim sherds have rows of checks parallel to the lip, but this is not always the case, for some rim sherds have rows which meet the lip at sharp angles. When viewed as a whole, it seems that the primary aim was simply to decorate the entire exterior of the vessel.

Two sets of sherds from the overburden of one house, and a set of sherds from the floor of another, show treatment of the surface prior to the application of the checks (fig 4: b). This treatment takes the form of inscribed parallel grooves on the vessel exterior into which the checks were impressed. In addition, the sherds from the house floor have a layer of clay 2 mm thick applied before the grooving and checking process was begun (fig. 4; b). Both the exterior surface of the pot proper and the interior surface of the 2 mm thick layer of clay, or stucco (I hesitate, because of its thickness, to call it a slip), have marks made either by a fine comb or by some fine vegetable matter. Since both the interior surface of the stucco and the exterior surface of the pot proper have these marks, it is assumed that the pot was dried before the stucco was applied, thus making the marks permanent.

Both Griffin and Oswalt state that checks were applied with a paddle and Oswalt further mentions that an appropriately checked paddle was found, out of context, at Jabbertown. This is undoubtedly one technique of applying the checks, but in the overburden of one of the Norton houses excavated near Unalakleet was a dentate tool which could have been used to check the pottery equally well (fig. 5; a). The wide end of this tool measures 12 mm in length, and the narrow end, of which a small piece has been broken, measures 14 mm. The four teeth on the wide end vary in length from one to four millimeters. The four teeth of the narrow end measure from one

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to two millimeters. The thickness of the artifact, and hence the thickness of all the teeth, measures 2 mm.

It is interesting to note that the sides measure 36 mm, or almost twice the width of the wide end of the artifact. Each side is divided in half by a notch 2 mm wide. If a side were pressed into clay, two lines, each 17 mm long, would appear. It therefore seems possible that the sides were used as a gauge in order to lay out the rows of checks on the pottery.

I have performed various experiments with this tool and two of these will be described here. The first (fig. 5; b) was done with the wide end of the dentate stamp using the small (1 mm) check as a guide. It was found that vertical rows could be made in a straight line quite quickly by positioning this small check over the impression made by it on the previous stroke. The clay tablet contains three vertical rows of four checks each. It should be noted that some of the Norton sherds also contained these very small checks interspersed between larger checks. When the small end of the tool was used to check a tablet, it was harder to keep the rows straight because this end lacked a small check.

The second experiment was done using the sides of the dentate tool as a gauge (the grooves were deeply impressed in order to make them stand out) along the bottom and along one side of the tablet (fig. 5; c). The bottom tooth was placed in the bottom groove and the tool was pressed into the clay. The tool was then moved to the left, thus making a horizontal row of four checks. The second horizontal row was made by aligning the tool with the upper vertical groove (this groove was made at the same time as the lower vertical groove and is separated from the lower groove because the 2 mm wide notch on the side of the tool leaves no impression) and repeating the process used in making the lower row. Thus, this tablet contains two rows of four checks each. No grooves corresponding to those that I have described are to be found on Norton pottery. However, it is possible that they are lightly inscribed and therefore obliterated in the process of checking the vessel.

A third method of using this tool is suggested by some of the Norton sherds. These have some checks that overlap other checks. Apparently, after making one row of checks, the new row as aligned by impressing the first tooth of the dentate stamp in the last tooth mark of the first row.

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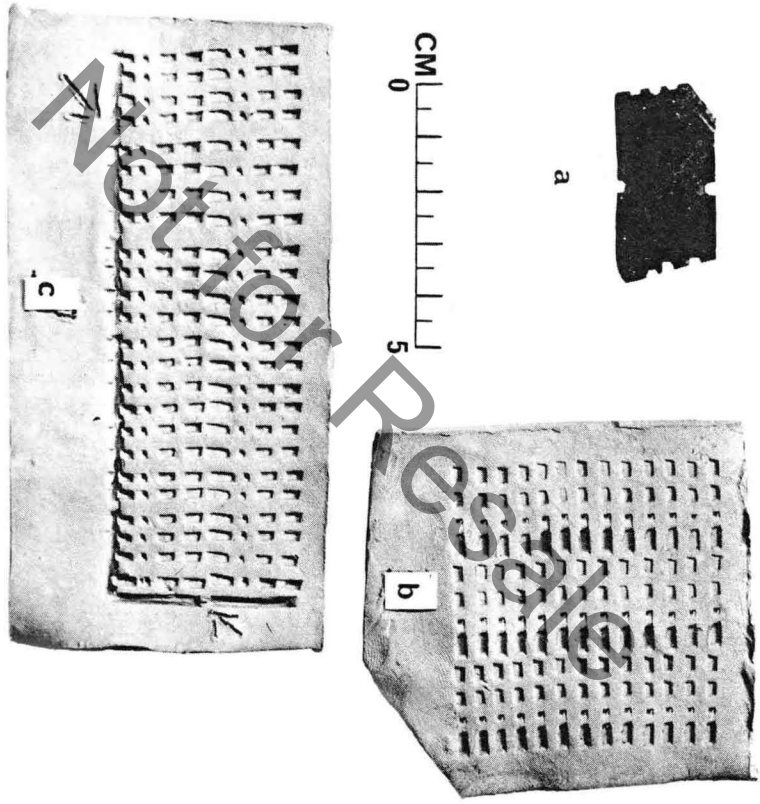

Figure 5.

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I am not suggesting that all of the methods described above were used. The gauge method appears to be the most doubtful, because no traces of it were found on the pottery from Unalakleet. Nor am I suggesting that the dentate tool was used to the exclusion of the check-stamp paddle. What I am suggesting is that more than one method of applying checks was used by the Norton people. This tool was also quite possibly employed at Engigstciak (MacNeish 1956) and at Iyatayet (Griffin 1964), where dentate sherds were found.

A final possible decoration technique must be mentioned. This is the smoothing of the vessel after the checks have been applied. This partially obliterates the checks and may be caused by accidents in the handling of the pot preceding firing. It never appears to cover large areas of the pottery, reinforcing the opinion that it was accidental.

PERFORATIONS

Three sherds are perforated; two are from the overburden of one Norton house and the third is from the overburden of another Norton house. All three sherds are perforated from the exterior surface only. The sherd from the one house has a round conical perforation with a diameter of 5 mm on the exterior of the vessel (**fig. 6; a**). This narrows to 4 mm on the present inner surface of the sherd, which is split and only retains about one-half of its original thickness.

The perforations in the two sherds of the other Norton house are oblong. One of these perforations is on a body sherd. It is 7 mm long and 4 mm wide on the exterior of the vessel. This narrows to 4 mm by 2 mm respectively on the interior surface.

The second perforation from this house is in a type 3 rim sherd (**fig. 6; b**). Measurements on the exterior of the sherd are 8 mm by 4 mm. On the interior of the sherd the measurements are 6 mm by 2 mm. The long axis of the perforation is perpendicular to the plane of the rim and is 4.5 cm below the lip.

Both of the oblong holes appear to be punched rather than drilled. The inner wall of the perforation in the body sherd has striations which go from the exterior surface of the sherd to the interior surface. It seems unlikely that these striations would have run in this direction if the perforation were drilled. The

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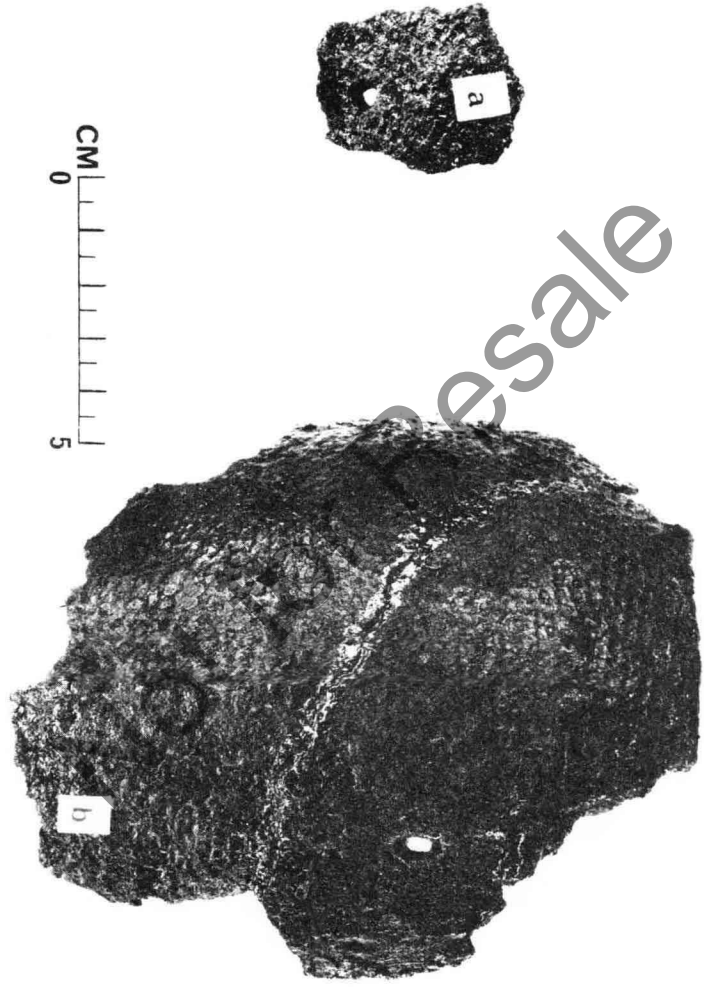

Figure 6.

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perforation in the rim sherd is rounded where it meets the exterior surface of the pot. This would occur only if the clay around the perforation were smoothed after the perforation had been made. In other words, it appears that these two perforations were made before the clay was fired. If they were repair holes, they would have been made after the clay was fired. They were probably then made in order to attach something to the vessel, and the position of the oblong hole in the rim sherd suggests that they were made to attach a handle.

IMPLICATIONS

The pottery from Unalakleet appears, in many respects, to be similar to pottery from other Norton sites. There are, however, some differences which have no completely satisfactory explanation at the present time. Why, for instance, should there be no Norton Linear Stamped pottery at Unalakleet when it was found less than seventy-five miles away at Cape Denbigh? Two possible answers suggest themselves. First, the difference in time was long enough so that Norton Linear Stamped pottery was no longer in use. Giddings (1964: 245) suggests an average date of 403 B. C. at Cape Denbigh. This is at least two centuries earlier than the earliest C14 date from Unalakleet. Second, the degree of communication between the peoples of the two sites, for whatever reasons, was tenuous enough so that some decoration techniques known at Cape Denbigh did not find their way to Unalakleet.

Other unanswered questions are concerned with the amount of variation found within the pottery from Unalakleet. For example, why should there be only one vessel which is "stuccoed", grooved, and then checked? Again, there are a number of possible explanations. One is that the actual potters were being "imported" from other areas where different pottery techniques were used. If this were actually the case, it does not seem that they came from the north, since no variation comparable to the above exists in the northern sites. This variation, and others, might have had their origin in groups from the interior and only more archeological work in this area will prove or disprove this theory.

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