

"PILLOWS" AND OTHER RARE FLINTS

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Eskimos are often as perplexed as excavators about the meaning of some of the flints that turn up in the old Arctic sites. Flint of all kinds were quite puzzling to our Eskimo assistants at Cape Denbigh in 1948 and later. The use of a flint as an arrow point or a harpoon point could be outlined in terms of slates, but such things as side blades and burins had to be explained at length from a non-local background of technical knowledge. Sometimes none of us attempted to divine the functions of flints, falling back upon useful descriptive names. Thus a class of high-backed unifaces that looked like hair fasteners became known as "barrettes." Then, one day, we all debated for some time over a curious biface (Fig. 1, 5) from Norton culture levels (palae-Eskimo) that had been carefully flaked about all four of its edges on both faces. It was not the part of a broken point, as we first thought, but it appeared to have been intended as the finished rectangle that it was for some specific purpose. One of the Eskimos called it a "pillow." When the two other similar pieces (Fig. 1, 6 and 7) later turned up, they were calmly accepted as pillows, the function of which we could not guess.

From time to time since field days these small, symmetrical, and carefully fashioned objects have become the focus of attention. If they were to be explained functionally, a reason would have to be found for the equal treatment of all four edges. Some encouragement to regard them as useful pieces, rather than as eccentrics, came upon finding two closely similar flints illustrated from the Near Ipiutak burials at Point Hope.¹ These were listed as unidentified flint blades, possibly knives "with sharp retouched edges along ((the)) entire margin."

Upon closely examining the Van Valin collection of Birnirk period artifacts from the pure Birnirk site at Point Barrow² in 1950, a possible solution to the flint rectangles came to light. One of the harpoon heads, an eroded specimen of antler, was narrow in the plane of the line hole. Like more than half of the Birnirk harpoon heads from this site, this specimen was equipped with side blades. Part of the harpoon head had disintegrated in such a way, however, as to expose a wide section of "one of" the side blades, and to suggest that this was not a matter of the inseting of two separate blades, but of the insertion of a single flint through the width of the harpoon head (Fig. 2, 1 upper). None of the other thin, or narrow, harpoon heads were equipped with side blades on both sides, and most of the wide harpoon heads provided

¹Larsen, Helge and Froelich Rainey. Ipiutak and the Arctic Whale Hunting Culture. Vol. 42, **Anthropological Papers of the American Museum of Natural History**, 1948. Plate 81, 2 & 3.

²Mason, J. Alden. Excavations of Eskimo Thule Culture Sites at Point Barrow, Alaska. **Proceedings of the Twenty-third International Congress of Americanists**, September, 1928. Pages 383-394.

with double side blades appeared on the surface to have the usual pair of blades (Fig. 2, 2 and 3 upper). The harpoon head with the presumed pillow-flint inserted was still firm enough to prevent us from loosening the flint without the danger of breakage. This problem has recently been taken up with John Hale, Physicist of the Radiology Department of the University of Pennsylvania Hospital, who offered to expose for us several plates of X-rays. The best results from a range of exposures were obtained at 100 milliamperes seconds at 80 kilovolts, target 40 inches, as shown in Figure 2, 1-3 lower.³ The pillow flint (Fig. 2, 1) is shown in this radiograph to be, as suspected, a single piece, fitting into a slot that appears to have been formed by grooving from both sides of the harpoon head until the groove met and could be widened to receive the blade. The other two harpoon heads, of antler (Fig. 2, 2) and ivory (Fig. 2, 3) show in the radiograph that they were provided with double side blades, a fact that was not readily determined by outward examination alone. One of these wider specimens (Fig. 2, 3) appears to have its side blade slots meet at the center, even though separate blades were inserted.

The X-ray method of examining side blades thus proves to be useful in determining the forms of flints still held in place, where these flints may be needed for comparative purposes without tearing them loose from their matrix.

We can now feel better supported in a belief that the pillow flints were functional after all, and that those found out of context in Norton culture and Near Ipiutak culture sites are rather strong evidence for antiquity in a thin harpoon head like the one unusual form from the Van Valin site. Perhaps the large Birnirk collections soon to be published by James Ford and by Wilbert Carter, will cast further light on this subject.

Certain other flints of unusual form, this time from the Denbigh Flint complex at Cape Denbigh, may be considered in light of the pillow flints. Figure 1, 4 is a handsome four-pronged object of translucent chalcedony, of approximately the same size as the rectangles, all edges of which have been carefully trimmed on both faces. The lower two prongs are larger than the upper two, and the object is vertically bisymmetrical. It is difficult to imagine how a flint of this kind might be used, and it is hardly enough to assume that it, also, formed a double side blade. The possibility that it is an "eccentric," or simply the by-product of a talented flint knapper, deserves little support in the absence of any other such casual work at the site.

Still another form of unusual flint is seen in Figure 1, 3, a bifaced object of red jasper, broken at the left margin, where apparently there had been an extension similar to that of the right margin. The upper shallow projection is sharpened by careful flaking from both faces, as though to give precisely the form shown. This object was found in Norton cultural levels, although it is suspected of being one of the many displaced samples of Denbigh Flint complex workmanship to

³Prints of the radiographs, as well as the other photographs, were made by Reuben Goldberg, Staff Photographer of the University Museum.

be found in these levels. Our main reason for associating this with the Denbigh Flint complex is that four other fragments, two of which are illustrated (Fig. 1, 1 and 2) were found *in situ* in the flint complex. In each of these chert fragments the breaks occur in such a way as to suggest a bi-pronged form like that of Figure 1, 3. Figure 1, 2, in particular, shows signs of narrowing at the right hand margin. These bifaced flints, if indeed their form is two-pointed with a wide portion on one edge at center, can hardly have served as single side blades in any form that we know. A guess as to their method of hafting would involve wrapping of fastening about the center, somehow, so that the two prongs stood out toggle-fashion. We have no cultural authority for suggesting that these were used as toggles, because flints would seem improbable as buttons, line fasteners, or the like. If they could have been effective as fish or gull gorges, we have no knowledge of a similar usage of a flinty material. Nevertheless, all of the flints in Figure 1 call for comparison as thin bifaces flaked on all margins, the bilateral symmetry of which may have a common meaning.

No doubt all of these forms will turn up again as the earlier sites of the American Arctic are excavated, and it is to be hoped that their function will be elucidated when they are found in permanently frozen contexts.

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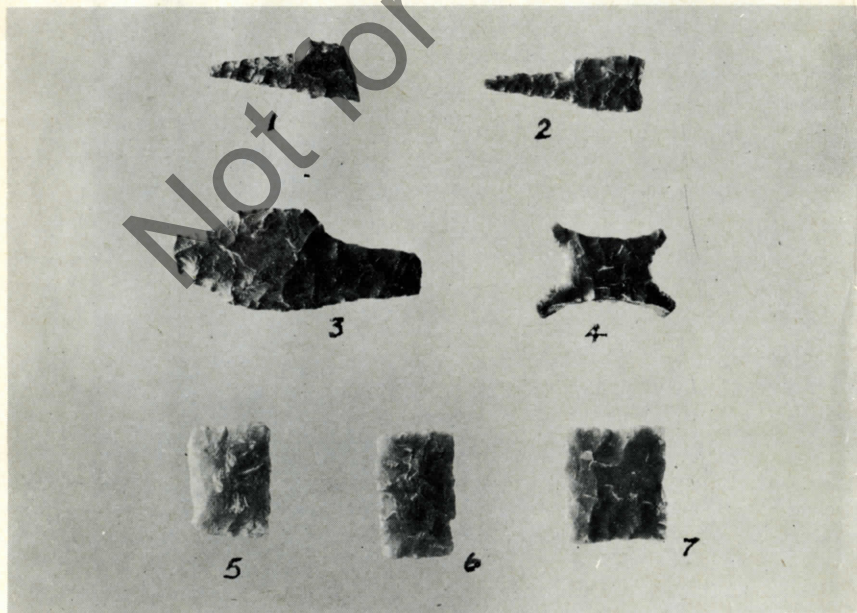


FIGURE I

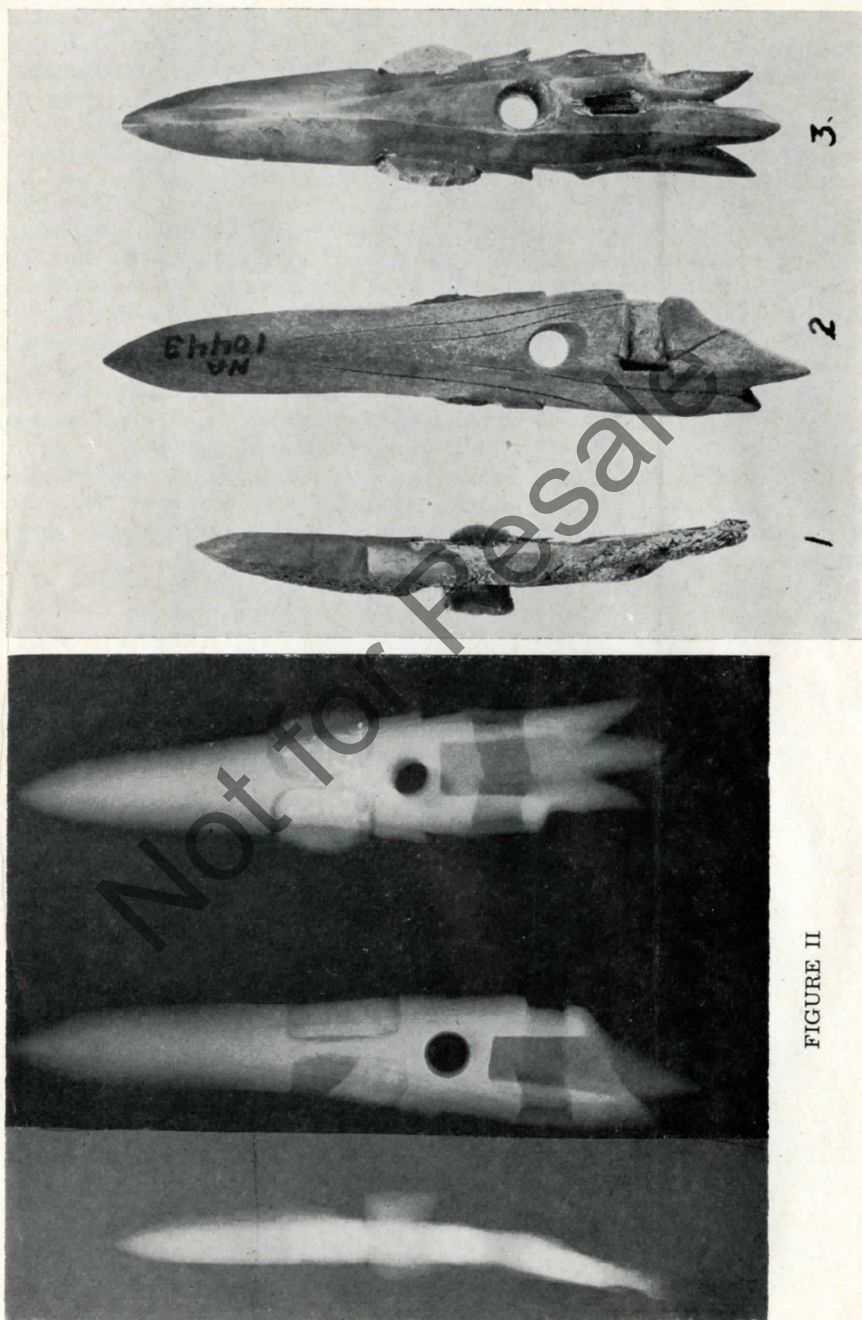


FIGURE II