

COMPARISONS AND CONCLUSIONS

*For things were done in the
Midnight Sun that no tongue
will ever tell.*

Robert Service
*Ballad of the
Black Fox Skin*

The following interpretations assume that the artifact collection from the Putu site is very nearly complete. This assumption is of sufficient importance that elaboration is here needed on the reasons for such assumption. First it should be recalled from the site description and a look at the site map in Figure 2 that the area for necessary testing was quite limited by the immediate topography. On all but the north side of the site the slopes are quite steep, and on the north side there was a higher terrace on which most of the original surface was exposed. Testing outside the known occupation area on the north terrace uncovered no cultural material. All excavation units were extended beyond the area of artifact recovery. The slopes below and the terrace above the site appear to have been unused.

Excavation technique chosen for the site had as a goal maximum artifact recovery with provenience data. The success of that technique is indicated by our obtaining the provenience of over 95 percent of all materials, including flakes no larger than a few millimeters in any dimension. Very few flakes were first seen on the screen and fewer still in the backdirt. One measure of the degree of collection completeness is the number of flakes and broken artifacts that we have been able to join, just over 300 at this time. Another measure comes from the sample of large bifaces. Of

the 41 specimens so identified only 2 were found complete. The remaining 39 fragments were combined to reduce the sample to 15 complete bifaces. Only 7 pieces remain incomplete. As already shown in the descriptive section, bifaces were deliberately broken to produce engraving tools. It is quite likely that some of the 7 missing pieces were taken from the site for later use. It is most unlikely that at each camp all tools were produced *de novo*.

While it is a fair assumption that the Putu collection is considerably more than a representative sample, it is an equally fair assumption that the site represents only one aspect of the range of cultural remains that should be associated with the culture. Whatever the season of the site's occupation it is only one of the years' many seasons. Those tools appropriate for one season of one place should not be expected from each place where tools were left behind.

Internal Comparisons

The contrasting paucity of formal tools in Zone I and the complete absence of bone and antler in Zone II are consistent with other indications of separation between the two zones. I feel that the biface and burins found in Zone I, because of their degree of patination, a factor absent in all other Zone I artifacts, belong to Zone II, that their occurrence in Zone I is due to the activities of ground squirrels rather than of man. Zone I has the appearance of a brief stop, to build several fires, have a meal and spend some time shaping a few bits of antler, a few bits of stone. The remains show that these activities did take place. The remains are also

typical of a hunting station and I think in this particular case they may represent a very specialized form of hunting, that of wolf hunting. The modern Nunamiut pattern is to occupy a high lookout a mile or more from steep sandy banks where wolves are likely to have a den. The lookout may be continued for several days until movement of wolves gives away the den's location after which traps or snares can be set, or the wolf pups dug out. While the Putu site location is poor for caribou hunting it does have a good view of several potential wolf denning areas.

Unfortunately none of the Zone I remains have sufficient typological distinctiveness that might give clues to the identity of these hunters.

The initial Paleoindian occupation of the site presents a much different scene. A large number of specialized tools were discarded, broken, or lost, tools used for hunting, butchering, hide preparation, and manufacture of other tools. The first three activities are seen in the 10 projectile points, 41 larger bifaces, and 3 scrapers. In all these 54 tools make up just less than 12 percent of the collection of tools. The remaining 88 percent of the tools were to varying degrees associated with the manufacture of other tools, most likely the fabrication of items from bone, antler, ivory, and wood.

While organic remains were not preserved in the acidic soil, one possible suggestion of what was being manufactured comes from the blades recovered at Putu. All blades were broken and of these all but three are missing one or both ends. As part of the lab analysis the blades were separated into proximal ends, mid-section, and distal ends.

Then each piece from each group was fitted against all end breaks from the other two groups, regardless of color, size, shape, or stone type. It appears that blade sections were the desired product either manufactured at and removed from the site, or brought to the site as finished products. Based on the number of mid-sections and ends at least 200 blade sections are missing. One possibility is that they were inset in slotted antler shafts. Evidence for such shafts comes from the early materials at Trail Creek (Larsen, 1968), which included thin antler shafts slotted on both sides as well as a few microblades that are almost certainly associated with them. Judging from the lengths of both shafts and blades it would seem that each shaft had from 6 to 8 blade sections inset. (It should be noted that like the Putu specimens, all of the Trail Creek blades are blade sections.) If we take this as a reasonable estimate then the 200 + missing Putu blade sections could be accounted for by the manufacture of 25 to 30 slotted shafts, a not at all unreasonable estimate considering the number of shaping and engraving tools used at the site. A similar interpretation and comparison with the Trail Creek tools has been made by Anderson (1970) for the Akmak blades.

While 9 of the 24 bifaces were also broken and used as engraving tools, and may have been fashioned for this purpose alone, the majority appear to have been used as knives with most of them showing signs of resharpening. Some, if not all of the projectile points may have been used as knives. Butchering of game is certainly indicated.

The variety of lithic raw materials, almost all from bedrock sources, show more than passing

knowledge of the immediate area. The use of Batza Tena obsidian from the other side of the Brooks Range extends the range considerably beyond mere local knowledge. It is interesting to note that a single flake of obsidian is part of Humphrey's early Utukok material (Humphrey, 1970).

Several features in Zone II provide evidence for specific activities at the site. Two separate events are seen in the location of a hearth (Feature 9) directly above a concentration of flakes (Feature 10). The duration of time separating these events cannot be absolutely determined. The absence of thermal fracturing on the flakes argues against their having been dumped in the fire and argues for at least some time to isolate and insulate the flakes from the fire.

A second concentration of flakes (Feature 11) found at the base of a small boulder shows flaking activity at that spot, and the overall high density of flakes in the immediate area suggests selection of the southwest portion of the site for flaking activity. At the present stage of analysis it appears that the concentration of large boulders in the south-central part of the site may have formed a structure, that flaking took place to the west, as did cooking, and antler working and butchering were more common in the north and northeast part of the site. A major problem in the analysis of activities is the amount of lateral movement of artifacts, a factor that can be appreciated by a glance at Figure 5.

External Comparisons

There are a series of northern sites which I feel show close relationship with the Putu materials, including some of the 50 + locali-

ties reported for the Batza Tena obsidian source (Clark, 1972); at least five of the Utukok sites (1, 3, 6, 12, and 13) reported by Humphrey (1970); the Akmak assemblage at Onion Portage (Anderson, 1970); the early occupation at Trail Creek (Larsen, 1968); and the Chindadn occupation at Healy Lake (Cook and McKennan, 1970).

The Batza Tena sites, due to their location at a quarry used during much of man's occupation of Alaska, all run high risk of being mixed assemblages. The collections from the Batza Tena localities include most of the artifact types found at Putu. These include both fluted points, lanceolate point-knives, micro-blades, polyhedral cores, end scrapers, large biface knives, and utilized flakes. The lack of burins and graters is probably due to obsidian being an exceptionally poor material for such tools, and the primary concern at the site was the shaping of obsidian tools and tool blanks.

The Utukok sites show closer similarities. These sites are essentially large surface sites, all located on elevations that are good hunting lookouts, and all run a considerable risk of being multi-component sites. Two of the sites, 1 and 12, show the same mixture of fluted and lanceolate points as found at Putu. While Humphrey places site 1, along with 3 and 13 in his Clovis-like Driftwood Creek complex, and sites 12 and 6 in his Kiktoyak complex, I feel they could be lumped into a single complex. This is based on my interpretation of Putu as a brief occupation or occupations by a single group, in other words a single complex, and the marked similarities with Putu artifact types and those from both Utukok complexes. These types include blades

and micro-blades, polyhedral cores, end scrapers, large biface knives including the knife-gravers, fluted and lanceolate points, burins, gravers, boat-shaped tools, and high proportion of utilized flakes. The overall mixture of most of these elements at Putu and the two early Utukok complexes suggest to me a single group. Three separate cultures seem clearly out of line.

Humphrey has pointed out the similarity of his Kiktoyak complex with both Akmak at Onion Portage and the lower levels at Healy Lake (1970, pp. 138-9). The lack of projectile points at Akmak prevents the usual method for site comparison, however, the assemblage does have distinct artifact types that do allow comparison. Most of the Akmak formal tools types have counterparts at Putu. One type found only in Akmak, ovoid core bifaces, may be the result of different available raw materials. Another type, the campus-type micro-core, while not found at Putu, was almost certainly used to produce the very narrow, multi-faceted micro-blades that are present. At both Akmak and Putu the carrying away of blade sections was a common trait. Other tool types found at both sites include burins, large bifaces, ground stone, end scrapers and utilized flakes.

While published descriptions for Healy Lake are not yet completed I have had the opportunity to examine the finds up to and including the 1970 field season there, and made a brief visit to the site during the 1969 season. Both Healy lake and Putu have fluted and Chindadn points as well as burins, blades and large bifaces. Due to the uncertain stratigraphic position of the Healy Lake materials it is impossible to determine at this time whether the lanceolate point-knives are also

part of the early tool assemblage, although I suspect this is the case.

Comparison with Trail Creek is also difficult due to uncertain stratigraphy with the added complication that so few stone tools were found in the early occupation and no organic remains came from Putu. The comparison is based on similar microblades occurring at both sites. The single chalcedony point fragment (Larsen, 1968, p. 56) which Larsen considers might be the oldest artifact from Cave 2 may be the remnant of a reworked fluted point.

Five of the above mentioned sites have been assigned dates, four of the sites with radiocarbon dates and one with obsidian hydration dates. The former place Akmak at older than 8,500 years, Healy Lake at 11,000 years, Trail Creek at ca. 9,000 years, and Putu at 11,470 years. The obsidian hydration dates for Batza Tena indicate an occupation ca. 12,000 years ago. These similarities in time and closeness in space can be interpreted in a variety of ways. It is possible that we are dealing with a series of separate migrations, each group maintaining a distinct tool kit and stone working technology; or we have evidence for a single group or related groups who show some differences in adapting the same tool kit and technology to different environmental conditions, the conditions of terrain, purpose of terrain use, and materials available for technological needs. I believe that latter interpretation is the more likely. All of the sites are found in what is today a very similar environment, an environment that might have been the same during the more rigorous conditions of the late Peistocene. This is presently a tundra environment with scattered islands of tiaga forest with herds of moose and caribou as the major

large game animals. Certainly the environmental differences found to the immediate north and south of the Brooks Range are considerably less than those much farther south where Clovis sites are known, sites in low, hot desert, high plains, prairie, and Gulf coastal plains. The present interpretation of Brooks Range prehistory for the time periods later than Clovis occupation provide no evidence for numerous distinct groups occupying small regions, indeed only during the period just preceding historic contact when Nunamiut and Kutchin co-existed on the north slope do we have more than single definable occupations. Farther to the south Clovis is usually given a unique position or occupation of their terrain. In order to postulate a simultaneous occupation by distinct groups or a rapidly changing sequence of technologies I feel we should be able to demonstrate major differences in cultural remains, and, ideally, the stratigraphic proof.

The archeological finds at Putu give evidence for a culture with a larger variety of tool types than has previously been shown for the north. The projectile points, and/or knives, includes fluted, lanceolate, triangular Chindadn, and a suggestion of bone points with inset micro-blades; shaping tools include a variety of burins, graters, utilized flakes, and split-knife pseudo-burins. Cores for the material at hand include rotated polyhedral cores, a boat-shaped core and the suggestion of wedge cores. A series of dates from sites with most if not all of this technology suggests an occupation of Alaska's north before 11,400 years ago. The spread of this culture, its knowledge of local terrain and widespread utilization of a raw material source such as the Batza Tena obsidian quarry should indicate that the initial occupation preceded that date by more than a few hundred years.

THE PUTU COMPLEX

Arctic archaeology for many years has resembled a game of follow the leader, in this respect, that once the initial discovery of a totally new period, or culture, or phase has been made, this has been followed almost immediately by numerous similar discoveries by other field workers in other areas. Examples are not hard to find. First in mind are the rather exceptional finds of ASTT (Arctic Small Tool Tradition) by J.L. Giddings. By the time the Denbigh site report was published there were literally scores of ASTT sites known from one end of the American

Arctic to the other. A similar pattern may be seen with the discovery of Side notched points, first again by Giddings, followed by Campbell and then by practically every field worker in the north. The third example, one I want to enlarge upon, has been discovery of fluted point sites in northern Alaska. While the gap in time between Soleki's initial discovery and its follow-up by Humphrey, the decade since Humphrey's Utukok work has seen the discovery of numerous sites containing fluted points. If these sites are not now commonplace, they certainly can no