NEW WORLD AFFINITIES OF CAPE DORSET CULTURE

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The historical development of general Dorset theory is too well known to require repetition here, but it may be reiterated that many of the uncertainties which still beset our knowledge of this extinct culture continue to be important issues in present-day archaeological literature, at least as far as northern areas are concerned. Now, in view of recent field work in Newfoundland which has led to clarification of that southernmost manifestation of Dorset culture (Harp, 1950, 1951, 1952), it may be of interest to see if any new light can be shed on the problem of Dorset's external relationships.*

The most recent hypothesis bearing on Dorset origins and development suggests that this culture did not derive from the north or northwest, but rather " . . . that it may represent an arctic tundra and glacial lake culture of considerable antiquity in eastern North America" (Hoffman, 1952). This interesting thought is based on a correlation of the geological events of the Mankato, the archaic cultural sequence of the northeast, and Carbon 14 dates. It is implied that eastern Dorset culture may have diffused from the Great Lakes area during Algonkian IV times, that it followed the glacial retreat northward into the Labrador peninsula, thence along the coasts, and finally came out to the islands of the Arctic archipelago and Greenland. This, it is suggested, would account for early Dorset-like manifestations in other cultures of the northeast and would also explain the lack of Dorset remains in Alaska.

It seems to me, however, that there are certain difficulties inherent in this idea, for it does not square with archaeological fact, as that appears today, and it assumes a far greater antiquity for Dorset in the northeast than anyone has ever allowed.

In the first place, present indications are that Dorset is more ancient in the northern than it is in the southern portions of its known realm, although that would hardly be the case if it had originated in the Great Lakes area. For instance, Collins (1953-a) has postulated an evolutionary sequence for burins and "boot creasers" of the Dorset culture: in this series the plausibly most recent stone forms, the polished nephrite gravers, are found in Newfoundland Dorset sites; an earlier intermediate form is recorded from Collins' Frobisher Bay site; and the true burins, presumed to be the oldest form, are to be found in west Greenland. From that point, the most direct linkage seems to be with the finds made in Anaktuvuk Pass, Alaska (Solecki and Hackman, 1951), and beyond to the Denbigh Flint Complex of Norton Bay, Alaska (Giddings, 1949, 1951). Also, as I shall mention again later on, there is evidence that the latest type of Dorset bone harpoon head has been observed in Newfoundland.

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The archaeological discontinuity between Dorset and the early northeastern Indian cultures could be exemplified by a consideration of many traits. For instance, prismatic blades and polyhedral cores, and the techniques which they presuppose, were strongly characteristic of Dorset culture. On the other hand, among the archaic Indian cultures of the northeast, these traits do not appear to have attained any semblance of importance until the New York Focus of the Hopewellian Phase. Ritchie figures a number of prismatic blades from this level (1944: Plates 101: 7; 106: 8), but from the earlier Brewerton Focus of the Laurentian Aspect he shows only a single specimen (Ibid., Plate 237: 72), and this is much like the few coarse blades which I have from a non-Dorset context in southern Labrador (Harp, 1951, p. 208). There are many such basic deficiencies in the common character which has been purported to link Dorset with the archaic Indian cultures of the northeast.

From the standpoint of other archaeological evidence, Dorset culture appears to have derived from Alaska by means of a movement, or series of movements, which passed eastward across the northern fringes of the the continent, although it must be admitted that as of the present time this cannot be proved. The chief difficulty in tracing such a diffusion arises from our lack of data from the central arctic regions: the vast reach between Alaska and King William Island has so far been filled only with the remains of the Thule and later cultures. Yet, with regard to the archaeological traces along this central coast, Birket-Smith has suggested that work done there in the past has probably given us a most incomplete picture of the prehistory of the area (1930, pp. 609-610). And, in this same connection, one might recall the results obtained by Knuth in northern Greenland when he excavated tent rings of an unspectacular variety which has generally been accorded little or no attention by earlier archaeologists (Knuth, 1952, p. 25). In other words, it seems highly probable that Dorset remains will be found in the region of the central arctic coast whenever sufficient time is devoted to a purposeful search for them.

It is true that Dorset remains have not yet been discovered in Alaska, and it is possible that they may never be found there, at least in the pure form of what we are wont to call Dorset today. After all, our concept of this culture has been formed in the eastern Arctic, and we have no way of knowing how long this complex will be sustained as it is traced backward in time and space. Yet, in the past few years a considerable body of evidence has accumulated which suggests that Dorset was related to earlier Eskimo, or other, cultures in Alaska. Some time ago Collins pointed out a number of generalized resemblances (1940, p. 571): Dorset stone-working techniques were said to be like those of the Old Bering Sea, prehistoric Aleutian, and Cook Inlet cultures, and he also believed that Dorset art was similar to Style-1 of the Old Bering Sea manifestation. This early recognition of a link between Dorset and the northwest has since been further clarified by the discovery of the Ipiutak culture and the Denbigh Flint Complex.

Larsen and Rainey's analysis of Ipiutak shows that important similarities appear to have united this culture with Dorset (1948, p. 153). They note first of all that the two cultures were based on the same economic factors and lived by more or less equal dependence upon the seal, walrus, and caribou. Each had a highly developed flint industry which was responsible for a great majority of its tool and implement types. As for specific resemblances of traits one can point to the following: inset side and end blades of chipped stone; bone adz heads; chipped and ground adz blades; and ground and polished transverse chisels. The combination of chipping and grinding on flint, which occurs in Dorset, may also be noted in a unique Ipiutak specimen, a long, leaf-shaped point which has rubbed facets on both faces (Ibid., Pl. 35: 20). In addition to these positive correlations, there are certain negative parallels between the two cultures: the absence of whale hunting, the bow drill, traces of the dog sled, and pottery (Ibid., p. 153).

Meldgaard's appraisal of Sarqaq types from west Greenland similarly stresses several chipped stone forms which he believes tie this manifestation in with both Ipiutak and the Cape Denbigh Flint Complex (Meldgaard, 1952). Among these are side blades, narrow points with concave or straight base, lanceolate blades, thick concave side scrapers, and rhomboid flint blades or points. Yet, in thus relating Sarqaq to earlier Alaskan cultures, Meldgaard at the same time suggested that it was separate from both Dorset and the West Greenland Stone Age (Solberg, 1907) and had derived from a different source. Collins (1953-a) has disagreed with this view, and I concur with his opinion. Despite the fact that certain particularly characteristic Dorset types are lacking in the Sarqaq collection (and I think in all fairness it may be pointed out that the Sarqaq collection is relatively small and came from a tightly restricted area), yet there are demonstrable affinities between the two in the presence of a flat, oval stone lamp; chipped stone burins; a polyhedral core; small, chipped stone side blades; concave side scrapers; snub-nosed end scrapers; and even the dominant Sarqaq type, the rhomboid-lanceolate end blade, has also been found in a Dorset context in Peary Land, northern Greenland (Knuth, 1952, Fig. 10: 2). Further similarities of a secondary nature are to be noted in the probable absence of the bow drill, the predominance of chipped stone artifacts, the practice of unifacial chipping, and the combination of chipping and grinding techniques on flint-like substances (Meldgaard, 1952).

It seems to me that we are faced here not with a problem of separate origins and development, but rather with the probability of internal differentiation, both chronological and typological, within Dorset culture as a whole. Also, I think it is permissible to consider such an entity as "generalized" Dorset, realizing that future research will no doubt clarify any such internal differentiation, inasmuch as that does not seem to be practicable now on the basis of published information.

At any rate, taking Dorset culture as a whole, its measure of concurrence with Ipiutak led Larsen and Rainey to speak of it as an

" . . . eastern parallel to the Ipiutak culture . . . " (1948, p. 153). They also included Dorset in their formulation of a generalized Ipiutak Complex, and this latter was equated with the concept of Palaeo-Eskimo (Steensby, 1916) and distinguished from the later Arctic Whale Hunting Complex (Larsen and Rainey, 1948, pp. 37-40). The Ipiutak Complex is held to have derived from a proto-Eskimo source which had roots " . . . deep in the epipalaeolithic cultures of the Old World" (Ibid., p. 182), and it is believed to have reached the American shores early in the first half of the first millenium A.D. (Ibid., p. 155). Some time after this arrival in the New World a proliferation of Eskimo culture is thought to have begun, followed by the movement of some palaeo-Eskimo groups towards the east, and the subsequent evolution of these into what we recognize in the northeast as Dorset (Ibid., p. 184).

Despite the strong indications of close relationship, Dorset cannot have derived wholly from the Ipiutak Complex, for there are differences of important magnitude between the two. One of the most characteristic attributes of Dorset, for instance, was its technique of preparing flint cores and the ensuing removal of prismatic blades from these; yet this combination of traits is virtually unknown in Ipiutak. As Larsen and Rainey say, "It should be noted that not a single fluted core, and hardly any regular, oblong, thin flakes were found at Ipiutak" (Ibid., p. 92). Another discrepancy, in my opinion, is a decisive difference between the art styles of the two cultures: whereas the art forms of Ipiutak were superbly ornate, those of Dorset were extremely simple and primitive. Surely this bespeaks an earlier time level for Dorset, as Collins has suggested (1951, p. 428), or at least it denotes that Dorset had little or no contact with Ipiutak in the latter's flourishing stages. Then a more basic horizon must be sought, one from which both of these manifestations, and particularly Dorset, could have come.

I believe that such a basic horizon may be more nearly approached by the Denbigh Flint Complex which Giddings discovered on the north Bering Sea coast of Alaska (Giddings, 1949, 1951). At Cape Denbigh stratified remains showed three major levels, the uppermost of which contained evidence of several stages of recent Eskimo culture. Beneath this, in an intermediate zone, there may have been more than one phase of culture represented, but the striking feature of this zone was the predominance of stone types which seemed closely related to Ipiutak and Near Ipiutak; in addition, however, there was some pottery, a trait not found at Ipiutak. Giddings also observed that the intermediate levels contained a few flaked blades, points, and scrapers which suggested Dorset: these included thin end and side blades (Giddings, 1949, Fig. 2: b, c, f), and short knife blades with one broadly convex edge (Ibid., Fig. 2: d). At the lowest level, and separated from the upper horizons by a sterile layer, was found the microlithic culture which Giddings has named the Denbigh Flint Complex.

We are not concerned here with the Old World relationships of the Denbigh Flint Complex, but, on the other hand, I think there are definite indications that the Denbigh Complex may have been a source stream from which at least portions of Dorset culture were derived.

In the first place, this complex, as it is now known, is notably based on distinctive flint-working techniques, including the manufacture of prismatic blades from polyhedral cores, and the extremely fine diagonal flaking of implements made from such blades (Giddings, 1951, pp. 194-195). The presence of prismatic blades and polyhedral cores is equally characteristic of Dorset culture (see Plate 1-A), and, moreover, both Dorset and the Denbigh Complex shared the trait of flaking many of their smaller implements from such blades (Ibid., p. 195). Many instances of this practice are to be seen in the Dorset material from Newfoundland (also see Plate 1-B).

The occurrence of diagonal flaking which is so clearly distinctive in the Denbigh Complex, is less so in Dorset, yet I think something very close to this does exist in at least one case, a type of side-notched, serrated-edge blade which I found in Newfoundland. The largest specimen illustrated here in Plate 1-B: 1 best exemplifies a technique which seems comparable to that used on some of Giddings' specimens (Ibid., especially Fig. 63: b); in fact, there appears to be very little difference in the over-all perfection of these examples, even though they come from opposite sides of the continent. Surely, then, some of the Newfoundland Dorset specimens fall within the range of variation of diagonal flaking that characterizes the Denbigh Complex. Otherwise, it must be admitted, this particular technique can hardly be cited as a strong Dorset attribute, at least on the basis of present knowledge.

Many of the very small side and end blades which Giddings illustrates (Ibid., Fig. 61) find their almost exact counterpart in the Newfoundland Dorset inventory. Note especially Plate 2-A: 4-9. The Newfoundland specimens, however, do not have diagonal flaking.

A most significant element of the Denbigh Complex is the burin which was found in a considerable variety of size and types, and which Giddings shows to be related to Old World forms (Ibid., pp. 194-195). This implement, in its true, palaeolithic form, does not seem to have been widespread in Dorset, but it is a definite trait of that culture, at least in terms of derived forms. The closest affinity exists between the Denbigh specimens and those described by Meldgaard from west, and other parts of, Greenland (Meldgaard, 1952, pp. 225-228). Therefore, if Collins is correct in believing that the Sarqaq culture of west Greenland is basically related to Dorset, and I feel that he is, then we may affirm this type as another indication of kinship between the Denbigh Complex and Dorset.

One further type in the Denbigh Complex shows some resemblance to a Dorset form: this is the chipped stone triangular point which Giddings illustrates and classifies as a possible harpoon blade because of its similarity to Ipiutak forms (Giddings, 1951, Fig. 64 and p. 195; Larsen and Rainey, 1948, Fig. 20: 6). These blades are short, wide, and thin, and some of them have concave bases, and I believe that here again we may have coincidence of types within a mutually acceptable range of variation. Some of the typical Dorset triangular points are shown here in Plate 2-B.

The function of these points may have been the same in both cultures although in each case an element of doubt is involved. The Denbigh specimens are only suggested to be harpoon blades, and Wintemberg advanced the same thought with regard to the Newfoundland points which, as he observed, fitted into the slots of the Dorset bone harpoon heads (1940, p. 324). In this connection, it may also be recalled that the bow and arrow have never been positively identified as concomitants of Dorset culture.

Giddings states that the Denbigh type was found in a variety of sizes (1951, p. 195), but those which he illustrates seem to me to fit into the Dorset range. It appears that the Denbigh points have also been basally thinned, and this, too, is a characteristic of the Dorset specimens, whether concave- or straight-based. Presumably the Denbigh points are bifacially worked, whereas many of the Dorset specimens have mostly unifacial flaking.

I do not mean to imply exact similarity in these triangular points, but I do wish to emphasize whatever degree of likeness that does exist, for in discussing Dorset-Indian relationships later on we must note the suggestion, advanced by some authorities, that Dorset culture obtained its distinctive projectile point from a northeastern Indian source. Contrariwise, I would propose that the Denbigh type could just as well have been ancestral to the Dorset point.

On the level of secondary characteristics there are two other relatively minor instances of correspondence to be noted between the Denbigh Complex and Dorset. First, Giddings remarks on the conspicuous small size of all the Denbigh artifacts (Ibid., p. 194), and that is also the nature of Dorset implements. Secondly, although ground stone objects were only a small element in the Denbigh Complex, several artifacts of chert had been both chipped and ground, and Giddings suggested that these implements may have been creasers or "groovers" (Ibid., p. 195, and Fig. 59-b: 4). This is an interesting occurrence in view of the fact that the use of this combination of techniques has been definitely associated with Dorset culture in the eastern Arctic.

In retrospect, some of this evidence is weak, and some of it appears to be relatively strong, but in its totality I feel that it has considerable significance and lends support to the hypothesis of Denbigh-Dorset relationship already advanced by Collins (1953-b). We cannot, of course, attribute the genesis of Dorset entirely to the Denbigh Flint Complex, for they patently do not coincide at all points of reference; furthermore, there may be other manifestations, as yet undiscovered, in the general area of the Bering Strait bridgehead which might have been equally responsible for later developments in palaeo-Eskimo culture. It remains for future research to discover what other factors may have been involved and to plot out the various reacting forces, but I believe that in the meantime we have begun to discern the first tangible outlines of a prehistoric kinship between Denbigh and Dorset.

Reducing this proposition to conservative terms of least probability, then, it seems to me that incipient Dorset partook of the same impulses

that had been responsible for the Denbigh Complex; similarly, it held something in common with the earliest stage of the Old Bering Sea, early Aleutian, Cook Inlet, and the somewhat later Ipiutak manifestations. Subsequently, as it diffused eastward, Dorset assumed the character of a more or less substantive entity and became at last the distinctive expression of Eskimo culture which we recognize as the earliest in the eastern Arctic.

Concerning the problem of possible Dorset-Indian contact and relationship, the existence of "Eskimo-like" artifacts in northeastern Indian sites has long been recognized, and the derivation of these traits has occasioned considerable comment down through the years. I believe it was Jenness who first pinpointed this problem in terms of Dorset Eskimo-Beothuk Indian association, for evidence from Newfoundland led him to believe that some diffusion of culture had occurred there, or in Labrador, between these two groups (Jenness, 1928, 1929). More specifically, he suggested that Dorset had been in contact " . . . over many centuries . . . " with the Beothuk, and this before the arrival of the Thule culture in the eastern Arctic. He also believed that Dorset had obtained from the Indians such traits as the shape of their knives and arrowheads, and had contributed to the Indians bone harpoon heads, semi-lunar knives, and soapstone pots (1933, p. 395). De Laguna noted that the " . . . borrowed Eskimo traits . . . " appeared first in the Red Paint-Laurentian group of cultures, and she felt that the emergence of the Laurentian Aspect might be attributed to contact between Indian and Eskimo (1946, 1947). However, she presumed that these Eskimo traits had been received from Newfoundland Dorset after the latter had been subjected to indirect Thule influence (de Laguna, 1947, p. 17).

It is hardly necessary to review all the details that have been elaborated upon during the growth of this theory, for the advent of radiocarbon dating has threatened the entire structure of these beliefs. Ritchie has shown in a recent paper that " . . . Dorset Eskimo could not have been the donor of the ground slate industry to the Laurentian . . . because of the much greater antiquity of Laurentian in the northeastern area" (1951, p. 49). His hypothesis is based on the Carbon 14 dates for the late Archaic period in New York state, and, as he points out, these indicate that " . . . the Laurentian in central New York encompassed a temporal span of some 2000 years intervening between approximately 3000 and 1000 B.C." (Ibid., p. 48: quoting Arnold and Libby, 1950, p. 7). Then, using the broadest estimate of Dorset chronology, that of Martin, Quimby, and Collier (1947, p. 503) who establish this culture between 100 and 1000 A.D., Ritchie shows that at least 1000 years passed after the end of Laurentian and before the arrival of Dorset in the northeast. As far as the Newfoundland-Labrador area is concerned, and this I think was the most likely zone of contact between Dorset and Indian, I believe the above figure might actually be increased to almost 2000 years, for I would conjecture the arrival of Dorset in Newfoundland at a time closer to 1000 A.D.

However, it makes little difference if the postulated interval between these two manifestations was 1000 or 2000 years; in either

case Laurentian must then have been the autonomous possessor of those traits which had previously been thought of as Eskimo. And, by indirection, Ritchie's hypothesis eliminates the possibility of diffusion from Dorset to Laurentian of all traits that were held in common by the two manifestations.

If this proposition be accepted, there is a derivative which Ritchie also takes into cognizance: "But if it is now fairly certain that the very much older Laurentian and related cultures could not have obtained the ground slate and bone artifacts referred to from Eskimo neighbors, does present evidence justify the reverse of this situation? Can we assume that a delayed or tarriant Laurentian tradition in the isolated Gulf of St. Lawrence region served as an agent of diffusion of Laurentian traits among the Dorset and later Thule Eskimo?" (Ritchie, 1951, p. 49).

I should like to propose a negative answer to each of these questions. To begin with, if we assume that such contact and diffusion did occur, then it must have taken place during relatively recent times, long after the demise of true Laurentian, and within a period which would encompass Beothuk Indian culture as well as Dorset. In all likelihood, Dorset culture did not reach Newfoundland before 1000 A.D., and, quite possibly, several centuries later. One good indication of this is the generally solid condition of bone refuse and artifacts in the sites there; in the absence of any permanently frozen soil, the rigorous climate could be expected to disentegrate such material with some rapidity. The time of arrival of the Beothuk Indians, or their ancestors, is uncertain: all we know is that these people were the bearers of a taiga economy, and their material culture may thus have been ultimately related to the Laurentian tradition (Cf. Spaulding, 1946). Indeed, I think one might even believe that they were the " . . . delayed or tarriant Laurentian tradition in the isolated Gulf of St. Lawrence region . . . " of which Ritchie has spoken (1951, p. 49).

Jenness thought it probable that the Beothuk lived on the Labrador mainland prior to 1500 A.D. (1929, p. 38), and he also suggested that Dorset-Beothuk contact had occurred there before 1400 A.D. (1928, p. 179). There can be no reason to doubt this onetime occupation of Labrador by the Beothuk, and we also know that remains of the Laurentian tradition have been found there as far north as the Hopedale area (Strong, 1930). That would allow considerable geographical scope for the meeting of Dorset and Beothuk culture, and it also seems, on that basis, that the temporal scope available for their communion could have been a period of several hundred years. However, the mainland has not yielded any good archaeological evidence of such contact and diffusion, and the zone wherein it could have occurred is thus narrowed to Newfoundland.

Jenness believed that the following traits of Dorset culture also appeared among the Beothuk: harpoon heads with rectangular sockets; triangular arrow heads made of flint, quartz, and basalt; curved-edge knives of flint and quartz; and a style of art on Beothuk bone ornaments that resembles Dorset engraving (1928, p. 179). However, in a slightly

later reference (1929, p. 37), he averred that the majority of Beothuk specimens are closely similar to those from Algonkian sites in eastern Canada and the United States: for example, birchbark vessels, triangular arrow points, long adz blades, tanged points of rubbed slate, discoidal hammerstones with thumb and finer pits on each face, soapstone plummets, etc. I am sure that this latter comparison is perfectly valid, yet I do feel that it is necessary to review the probability of the first statement.

My field data indicate strongly that there was once an occupation of "pure" Dorset culture in northern Newfoundland. Eight sites there show a positive unity: their locations are similarly littoral, the individual soil profiles suggest at least an approximate contemporaneity for the group, and the cultural remains express complete mutual relationship. This material also exhibits a high level of correlation with the inventory of the parent Dorset complex, as that known from other sites in the eastern Arctic. Out of a total of 49 points used for comparison, there were 30 instances of complete agreement, and of 13 points which showed no concurrence it is noteworthy that 9 fell in the category of bone artifacts. Otherwise, there were 6 instances of peripheral relationship which were listed as possible or doubtful (Harp, 1952).

But this Dorset manifestation is only one aspect of a clear-cut dichotomy of prehistoric culture which is to be noted in Newfoundland. The other aspect is somewhat less positive, but I have a small amount of evidence from seven more sites which yielded only non-Dorset material. This I have attempted to characterize as Beothuk because it fits with the picture of these people which can be derived from Howley (1915); it also merges not only with our concept of taiga culture (Cooper, 1946) but with that of the Laurentian tradition (Ritchie, 1940). The main point is that these remains are unmistakably differentiated from those of Dorset culture in terms of artifact types, sizes, materials, and manufacturing techniques. Furthermore, each of these manifestations for the most part appears separately and uncontaminated. In the few instances where a site has yielded sporadic artifacts from both congeries I think we must infer sequent occupation by both cultures, although no stratigraphy is discernible in the generally shallow soil profiles. As I interpret this matter, then, we do not yet have good archaeological evidence in support of the view that culture diffused between Dorset and Beothuk.

There is another side to this problem, however. It appears to me that the concept of association between Dorset and Beothuk cultures has been colored to some extent by the disordered evidence set forth in Howley (1915), and yet there are certain observations in this work which might merit more careful analysis. It has been reported, for instance, that the Beothuk hunted seals on the northern Newfoundland coast and made use of retrieving harpoons, and that seems to be the major evidence of tangency between their culture and that of the Eskimo. Concerning this subject, Howley quotes from two sources which are presumably authentic, if not always primary.

The earliest mention of seals in connection with the Beothuk appears in Cartwright's narrative of his exploration of the Exploits River (which drains from one of the interior lake systems of Newfoundland into the Bay of Exploits and the larger Notre Dame Bay on the island's north coast). Cartwright made his journey in 1768, and as of that period the Beothuk were thought to be confined largely to the Exploits country. He says, "In summer they live altogether, as is supposed, on the seacoast . . . (where there are) . . . a vast multitude of islands abounding with sea-fowl, ptarmigan, hares and other game, besides seals in great numbers . . . Besides hunting all these, they used to kill . . . ", etc. (Howley, 1915, p. 33).

A detailed description of the harpoon which the Beothuk used is given by W. E. Cormack who is celebrated for his 1822 journey across the east-west breadth of Newfoundland. They had two kinds of spears, one for deer, and "The other was fourteen feet in length, and was used chiefly, if not wholly, in killing seals,—the head or point being easily separated from the shaft . . . The Esquimaux adopt a similar plan, the point of their harpoon or spear being somewhat different in form" (Ibid., pp. 212-213). To this Howley added a footnote, which follows in part: "I believe the Beothuks derived the idea of this harpoon from the Eskimo who are adepts in its use, are known to have possessed it a long time, and who, moreover, depend more on the seal and walrus for their livelihood than the former had any occasion to do" (Ibid., p. 213).

Further information concerning the harpoon is given by Howley as he interprets a sketch made by the Beothuk woman, Shanawdithit, in 1829: "It consists of a long straight wooden handle, to which is affixed at one end an iron point of triangular shape set in a bone socket. This socket is not permanently attached to the handle but is kept in place by a long string, one end of which passes through two holes bored through the bone and securely tied, while the other end is brought along the handle . . . The bone socket where it meets the handle is forked and has a groove cut in it, into which the end of the handle is inserted . . . " (Ibid., p. 247 and Sketch VIII).

In his end plates Howley illustrates another such specimen, without recording its provenience, and I quote from his account of it: "The stone or iron point was set into a slot at the small end and then securely bound around the narrow neck by sinew or thong. The two holes were not drilled through, only about half way and are connected one with the other. This was where the string for attachment to the handle was tied. In the swallow-tailed base is a fine groove for the point of the handle to be inserted" (Ibid., Plate XXIV: 32, and description on p. 339). Also see Howley's Plate XXII: 39 for a similar harpoon head which, however, is not described.

In other words, these harpoon heads which the Beothuk are said to have used seem to equate almost exactly with the variant B-2 which Collins thinks is the latest and most advanced of the Dorset harpoon series (1950, pp. 20-21). In the classification which he prepared on the basis of all known Dorset forms, this type B-2 is characterized by a bifurcated base, a closed rectangular shaft socket, a blade slot, and a

single line hole which is parallel to the socket. Collins further states that this latest Dorset type in turn " . . . gave rise to one of the most important modern harpoon types of the Central Regions and Greenland, the form which has a bifurcated spur, a thickened body, and a line hole with both openings on the same side—in short, which differs from its Dorset prototype only in having a round instead of a rectangular enclosed socket" (Ibid., p. 21).

Howley describes another similar specimen of bone harpoon head that came from what was undoubtedly a Dorset Eskimo burial in vicinity of Port au Choix, Newfoundland (1915, pp. 328-330; and Plate XXIV?), and it is interesting to note that bone foreshafts were also a part of these same grave furnishings. In contrast to this, however, no mention is made of a foreshaft in the description of Beothuk harpoons, nor is such a component indicated in the sketch done by Shanawdithit. Since one might reasonably expect that the Beothuk woman would have been just as accurate in her portrayal of this weapon as she was in others of her amazing sketches, the lack of a foreshaft here might suggest a highly selective adaptation of the harpoon complex into Beothuk culture.

One other aspect of postulated contact between Dorset and Beothuk requires clarification: this is the alleged occurrence of stone vessels in Beothuk culture. We know that several types of both lamps and cooking pots, all made of stone, were characteristic of Dorset culture, but this trait in general is not a typical element of the taiga complex, which the Beothuk evidently shared. Birchbark was the primary material for containers throughout the boreal zone (Cooper, 1946, pp. 288-289), and the earliest detailed reports of Beothuk culture specifically list the presence of this trait. For example, Lieut. Buchan, who traveled up the Exploits River during the winter of 1810-1811 in an attempt to make friendly contact with the Beothuk, came across some of their campsites in the vicinity of Red Indian Lake. His description of the cultural effects observed there includes the following statement: "Their household vessels were all made of birch or spruce bark . . . " and also " . . . there were two iron boilers which must have been plundered from our settlers" (Howley, 1915, p. 86).

Lloyd was told by a John Peyton that the Red Indians had used vessels of soapstone (1875-a, p. 229), but there is no documentation whatsoever for this report. Lloyd himself did find rectangular steatite pots at Conche, on the east coast of the northern peninsula of Newfoundland, but he described them as part of a collection which seems to me obviously a mixture of Dorset and Beothuk artifacts (1875-b, pp. 234-237). And this site, according to my interpretation, is apparently another of those which may be suspected as stratified, although there is no actual proof of this.

In Howley's book we note a statement which implies that "steatite utensils" were more or less characteristic of the furnishings in Beothuk burials (1915, p. 336), but only one specific occurrence is recorded. In this case, a cave burial was found which consisted of the skull and leg bones of an adult, some stone projectile points, "a stone dish"

(not described), and several iron implements of European manufacture (Ibid., p. 332). As far as I can tell, that constitutes the only evidence which indicates that the Beothuk had anything at all to do with stone vessels, and, therefore, I do not think that they were in the habit of manufacturing such articles. It seems more probable that here we have another instance of partial adoption from Dorset culture.

In view of the lack of pertinent archaeological evidence, that appears to sum up the case of Dorset-Beothuk contact. The only positive grounds for postulating diffusion of culture between these two peoples seems to be the use of the sealing harpoon by the Beothuk, and, if we can believe the accuracy of the reports that have come down to us, the bone head of this harpoon was the latest Dorset type. It is also possible that the Indians may have utilized this harpoon without benefit of a foreshaft. As for the matter of stone vessels, the evidence is perhaps even more tenuous, although I believe it must be added to the positive side of the balance in favor of contact and diffusion.

But if that much diffusion actually did occur, could there not have been more? In this connection we might consider briefly the case of Dorset's distinctive triangular projectile point with concave base. Mathiassen (1927, Pl. 2, p. 51) at first thought this type was a specialized form of the central Eskimo and connected with the Thule culture; he also stated that it was common among northern Indians and might have been adopted from them by the Eskimo. Later, of course, this was accepted as an unquestioned Dorset trait. With regard to the non-Dorset occurrence of this type, however, perhaps the closest resemblance to the isosceles Dorset form is to be noted in specimens which Ritchie figures as representative of the Brewerton Focus of the Laurentian Aspect (1944, Plate 111: 2, 10, 11-13, 20, 21). Otherwise, northeastern Indian triangular points, as Wintemberg observed (1939, p. 95), are noticeably broader of base and more nearly equilateral than the Dorset form.

In the case of the Laurentian points, if we may accept the validity of Carbon 14 dates, this triangular type must have resulted from a tradition that was entirely separate from the Dorset manifestation in the northeast. As for the Dorset form, there appears to have been a definite tradition for this type in early Alaskan culture levels (Jenness, 1940, p. 8), and I have already stated my belief that it could possibly have derived from such New World prototype as the triangular harpoon blades of the Denbigh Flint Complex. However, it is also important to note that Gjessing includes this same type as a characteristic of circumpolar boreal culture in both Old and New Worlds, and he writes that "Especially typical perhaps are arrowheads with serrated edges and a concave base . . . " (Gjessing, 1944, p. 38). It will further be recalled that this circumpolar complex has also been equated with the Laurentian Aspect (Spaulding, 1946). This could mean that the Dorset form was received originally from such circumpolar diffusion and that Dorset culture thus shared with Laurentian a certain degree of ancestry. It does not imply, however, that these two recipients of such a trait, and perhaps others, had to be contemporary.

Thus it seems that the bulk of evidence shows that Dorset can be related to early Alaskan cultures by a series of direct trait linkages. Some of these I have mentioned, and there are others which could be similarly checked back. In addition, of course, there are some elements which are less easy to trace from Dorset to palaeo-Eskimo traditions, but always the probabilities seem to be weighted in favor of that source. The conclusion is that we are faced with a rather striking reduction in our concept of the cultural exchanges that have long been thought to have occurred between the Dorset Eskimo and Beothuk Indians. If the above-mentioned clues point the way to prehistoric actuality, we can hardly build a substantial claim for long and continued contact between these two groups of aborigines on the basis of a possibly incomplete adaptation of the harpoon by the Beothuk, and, with somewhat less confirmation, the presence of stone vessels in their culture.

Viewed from another aspect, if we accept the presence of these traits in Beothuk culture, there is evidence here of cultural discontinuity and survival, for they must be the residue from days of onetime contact with the Dorset Eskimo. We know, of course, that the Beothuk still inhabited Newfoundland when the first Europeans arrived, but in all probability Dorset culture, by that time, no longer existed as a pure entity. On the Labrador coast Dorset had been superceded by Thule derivatives (Packard, 1885; Bird, 1945, p. 179), and these Eskimo groups are known to have frequented northern Newfoundland in the colonial period. We do not know if there once existed between Beothuk and Dorset the traditional enmity and distrust that has so often been reported to repel Indian and Eskimo, one from the other, but historically there seems to have been no friendship between Beothuk and the latter day Eskimo. Cartwright, in the narrative of his 1768 exploration, wrote that the Red Indians and Eskimo were "understood" to be enemies, and, he continued, "The Esquimaux in harrassing them kept to their own element the water; where their superior canoes and missile weapons, provided for killing whales, made them terrible enemies to encounter . . . " (Howley, 1915, p. 35). Another tradition maintains that "The Red Indians also knew the Esquimaux whom they despised and called 'four paws' " (Ibid., p. 270).

As far as I know there is no evidence that the Beothuk ever adopted any of this latter day Eskimo culture, and in this regard we might recall part of a quotation already mentioned above: W. E. Cormack, after describing the Beothuk harpoon, said, "The Esquimaux adopt a similar plan, the point of their harpoon or spear being somewhat different in form (Ibid., pp. 212-213). Presumably we may attribute this apparent fact to the warlike contact between Beothuk and recent Eskimo; however, such animosity, even though it were ancient and positive, might not have been the reason for the undeveloped cultural diffusion between Beothuk and Dorset. Birket-Smith has said, "Primitive peoples know their own interest just as well as we do. No groups have been more hostile to one another than the Mackenzie Eskimo and the Loucheux, nevertheless they had regular trading intercourse" (1930, p. 611). It will also be remembered that our

knowledge of the processes of diffusion is probably far from complete. We know that it is generally a most selective affair, and, in this instance, even though there may have been adequate opportunity for cultural exchange between Beothuk and Dorset, perhaps there were no stimuli for the interchange of ideas and material traits beyond those involved in the harpoon and seal hunting.

Also, it seems to me that it may logically be assumed, on the basis of the late type harpoon head, that whatever diffusion did occur came in the terminal stages of Dorset culture. Furthermore, if we may also assume that the Thule Eskimo were by that time pressing hard on Dorset from the west, and that the manifestation in Newfoundland was, in effect, the last pure appearance of Dorset culture, then it might follow that there would have been no opportunity for any Beothuk traits to pass northward into the former Dorset realm. Future archaeological research may provide a more complete answer to this complex of problems, but in the meantime I believe there was little cause for mutual cultural indebtedness on the part of either the Beothuk Indians or the Dorset Eskimo.

Yet somewhere and at some time level we must account for the similarities that apparently did exist between these two northeastern cultural end-products. Perhaps some of these arose from the compounding that took place as diverse cultural traditions ebbed and flowed through the relatively narrow confines of the Bering Strait passage to the New World, but it appears to me that the ultimate explanation lies in the action of circumpolar cultural drift, or population spread (Giddings, 1952), from an ancient horizon in the Old World.

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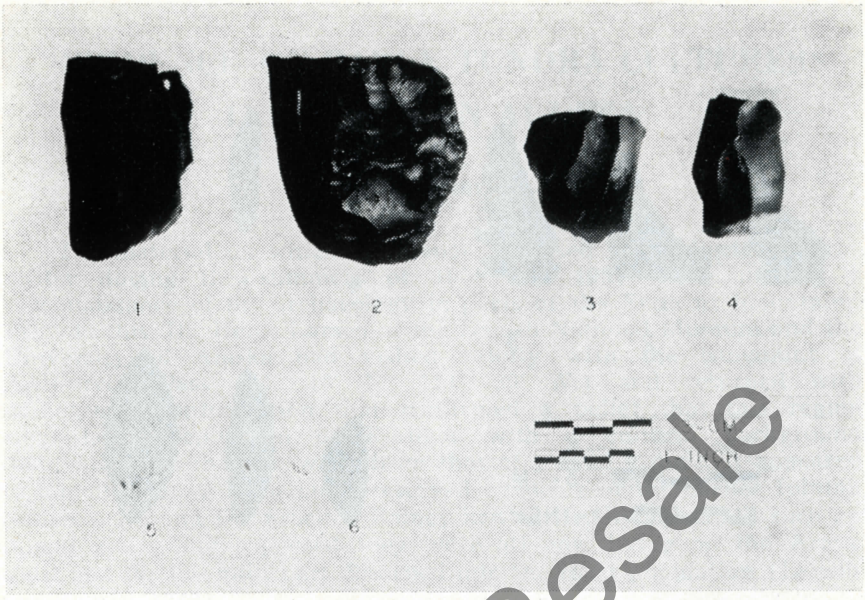
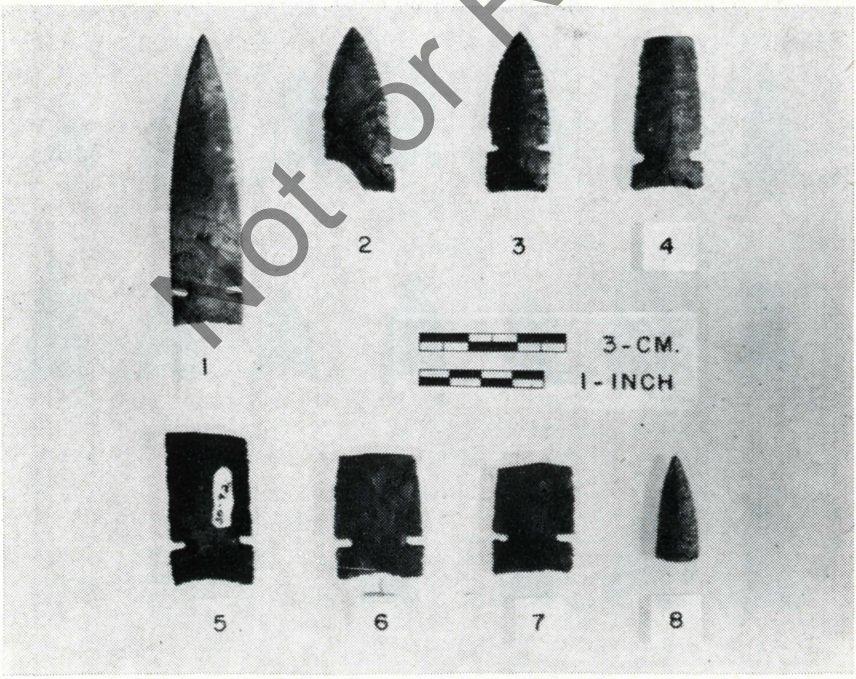
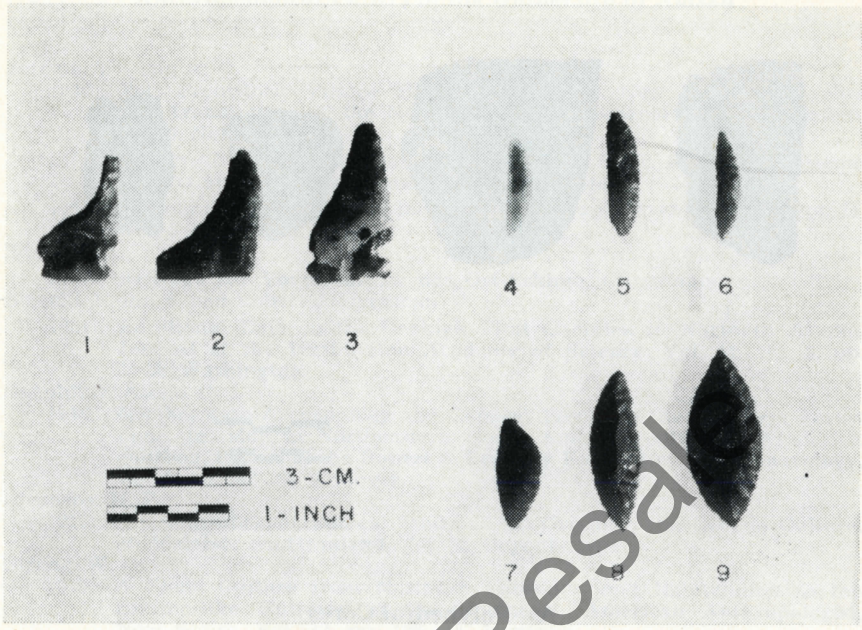


A—Polyhedral Cores

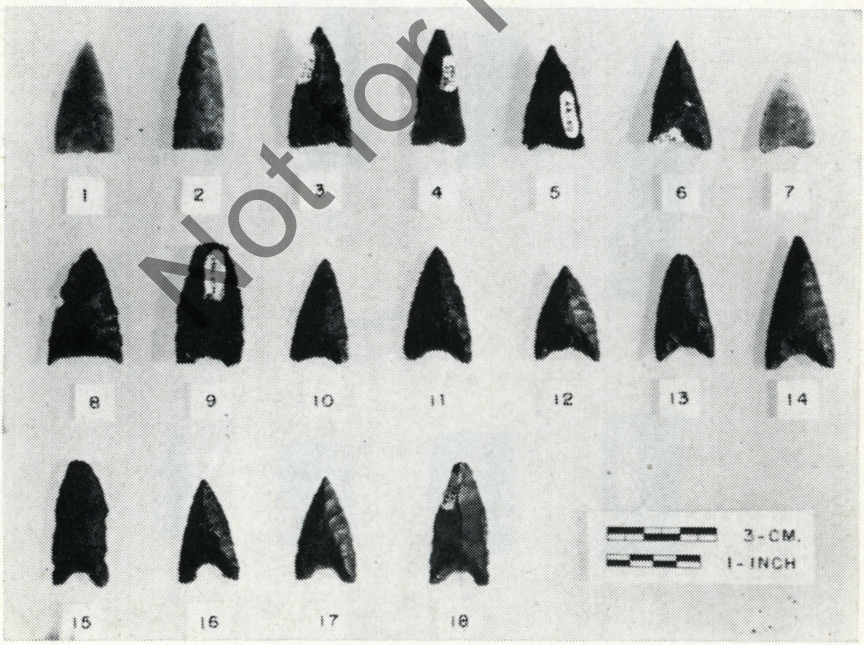


B—Side-notched, serrated-edge Points

Plate 1: Some Dorset Artifacts from Newfoundland



A—Side Blades (Nos. 4-9)



B—Series of Triangular Points

Plate 2: Some Dorset Artifacts from Newfoundland