

FOREWARD TO APPENDIX 1:

TWENTY YEARS ON: A PERSPECTIVE ON MISHA'S 1986 PAPER

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Another facet of memories related to this first Bronshtein's paper of 1986 (and to its earlier version published in Russian [cf. Bronshtein 1985]) is that it sheds new light on the relationship between archaeological data and its ethnological interpretation. The paper originated in the years of Bronshtein's Ph.D. research in Moscow, 1984 or 1985, when he produced his initial analysis of the Bering Sea prehistoric ornamentation styles based upon the miniature decorative patterns on ancient ivory objects. For the first time he argued that several prehistoric styles, like Old Bering Sea (OBS), Okvik, Birnirk, etc., or even their sub-style variations, OBS I, OBS II, etc., were historically coexisting rather than stratigraphically positioned cultural phenomena. More than that: he assumed that they served as identity markers to particular social units or small bands of migrants who lived side by side in the same communities with the bearers of other decorative traditions (Bronshtein 1985:106).

Bronshtein challenged me to find evidence of such practice in ethnological records from the contact-era Siberian Yupik societies in Chukotka. Sure enough, ethnological and oral history data lacked (and still lack!) any reference to support Bronshtein's claim. There is no solid evidence that social units within historical Eskimo communities—extended families, clans, neighborhoods, bands, or groups associated with men's houses—marked their harpoons or other tools with 'clan-specific' ornamentation and that such marked style differences could persist over several generations, even centuries. Of course, there was plenty of data on the clan-specific personal names, dances, historical narratives, details in ritual, clothing, and even facial ornamentation. Traditional

community life was always abundantly rich in available venues to express one's group identity; so, why should people spend hours and days in carving miniature ornamentation on hard-core ivories that won't be even seen with the naked eye! This is where archaeological hypothesis and ethnological records had no overlap whatsoever—or, at least, how it had been viewed back in the 1980s.

As much as Eskimo ethnologists remain skeptical to these days about the possibility that social units within Eskimo communities used different ornamental styles on hunting objects as markers of their identity, Bronshtein kept pushing that scenario in his later publications (Bronshtein 1988, 1991, 1993). His persistence was finally vindicated in a recent review of the available radiocarbon dates on ancient ivory objects from St. Lawrence Island, Alaska (Blumer 2002). Although Blumer's paper does not deal directly with ancient cultural sequences in Chukotka, it speaks as if reading from Bronshtein's playbook. It did argue for several migrant groups living side by side in prehistoric communities, such as old Gambell and for three or even four co-existing decoration/art styles being primarily *cultural* indicators rather than chronological markers, as universally assumed. Bronshtein's record of choice, the barely visible curves, hyphens, and dots on ivory harpoon heads, turned out to be the only surviving proof of the age-old social complexity. To the contrary, the richness of the accompanying ethnological tradition—stories, names, songs, rituals, clothing, facial and body ornamentations—has no remaining trace in the archaeological record. Literally, just a tip of the cultural 'iceberg' survived, whereas the whole iceberg's body was gone. We owe this valuable lesson to Michael Bronshtein.

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APPENDIX 1:

VARIABILITY IN ANCIENT ESKIMO GRAPHIC DESIGNS: ON THE PROBLEM OF THE ETHNIC AND CULTURAL HISTORY OF THE BERING SEA FROM THE 1ST MILLENNIUM. B.C. TO THE 1ST MILLENNIUM A.D.¹

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Abstract: By analyzing designs on Old Bering Sea, Okvik and other later Eskimo cultures, it is possible to reconstruct the design system of its predecessor termed Palaeoeskimo. The more complex motifs of Old Bering Sea represent a series of styles that developed abruptly after adopting iron for engraving, while the simpler forms of Birnirk and Dorset cultures represent the descendents of Palaeoeskimos, relegated to the peripheries of the Eskimo world, who irrupted into its center much later. Burial data, collected by Russians from the 1950s–1980s, from Cape Dezhneva reveals a considerable diversity in ethnic composition. Changes in style occurred abruptly; no transitional forms are known. Ipiutak culture provides an example of an Old Bering Sea group who migrated to North America at a fairly late period.

Keywords: Chukotka, Bering Strait archaeology, Culture Contact

Introduction

Ancient Eskimo designs engraved on bone (walrus ivory) artifacts have attracted the attention of researchers for over 100 years. From the first efforts of the early 20th century up to the most recent publications, Eskimo art has been considered a valuable historic and ethnographic source. Most dramatically, S.V. Ivanov (1963) termed the study of the designs of Siberian peoples “one of the most important and urgent ethnographic tasks.”

From the late 1950s until the early 1980s, an extensive body of material on Chukotka’s ancient Eskimo engraved art has entered circulation as a result of archaeological excavations (Arutiunov and Sergeev 1969, 1975; Dikov 1974, 1977, 1983; Sergeev 1959). The exceptional artistic variety and the extensive amount of new discoveries allow us to significantly complement and modify the conceptions of the ornamental art of the Old Bering Sea Eskimos from the 1st millennium. B.C. to the 1st millennium A.D. These data are especially valuable because the overwhelming majority of bone artwork was found in well preserved burials containing purposefully placed grave goods. Thus, archaeologists have a chance to link the various types of ancient Eskimo designs

and other elements of their culture with greater precision and completeness, which in turn immeasurably raises the informative value and reliability of the designs as historic and ethnographic sources.

Despite a significant number of excavations, the ethnocultural history of the Bering Sea area in the 1st millennium. B.C.–1st millennium A.D. is known only in a very general sense. Important stages in the formation and development of the cultures across the vast North Pacific region remain unknown or the subject of contentious discussion. The necessity to expand our knowledge is obvious. During the 1st millennium B.C. to the 1st millennium A.D., the Bering Strait region, including the islands and the continental coast of Chukotka and Alaska, witnessed intensive contacts of various ethnic groups of Asia and America. During this period the unique material and spiritual culture of Arctic sea hunters was formed and a variety of social processes led to the emergence of the modern ethnic groups of the Russian Far North and Alaska: Asian Eskimos, coastal Chukchi, Kerek, coastal Koryak, and Alaska Eskimos.²

¹Translated by Ms. Slobodina, edited by O.K. Mason.

²Editor’s Note: The accepted ethnic designations are Siberian Yup’ik (“Asian Eskimo”) and Yup’ik and Inupiat (“Alaska Eskimo”).

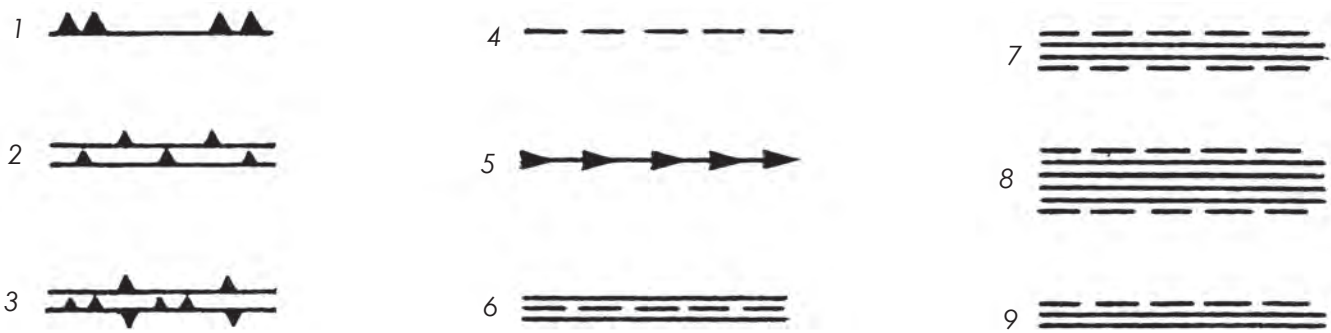


Fig. 1. Basic motifs of the Old Bering Sea graphic design, D_1 (1-3), D_2 (4-6), D_3 (7-9).

The ethnocultural history of the Bering Sea area during the two millennia in question is traceable only within the archaeological materials of the five Neolithic ancient Eskimo cultures mostly represented by burials and dwelling remains. Each culture can be characterized by an elaborate form of ornamental decoration. Archaeologists usually distinguish five independent styles in the ancient designs of the Bering Sea Eskimos, corresponding to the above-mentioned archaeological cultures: Old Bering Sea, Okvik, Ipiutak, Birnirk and Punuk. The recently excavated ornamental art of the ancient population of Chukotka allows a fresh perspective on the question of the originality for each of the typological variants of the Eskimo design.

Old Bering Sea burials are the most prevalent types within the Uelen, Ekven, Chini, and other cemeteries on the Chukchi Peninsula. According to the commonly held view, the most distinguishable feature of the Old Bering Sea (OBS) design is its complex curvilinear character. However, my analysis³ shows, using a series of Uelen and Ekven burials, that contain such important indicators of the Old Bering Sea culture, e.g., the numerous two-holed harpoon heads and the characteristic winged objects, contain both curvilinear *and* straight-line motifs, with the latter playing the leading role [Arutiunov and Sergeev 1973: Fig. 29 (55), 34 (100, 101), 54 (14); Arutiunov and Sergeev 1975: Fig. 35 (16, 17), 59 (8), 84 (4)]. In addition, although curvilinear designs occur in Ipiutak less frequently than in Old Bering Sea I, nonetheless, curvilinear designs are quite common in Ipiutak. A few curvilinear motifs are also used in other ornamental traditions of other ancient Bering Sea Eskimos. For these reasons, the definition of the Old Bering Sea design as curvilinear does not seem sufficiently precise. Curvilinear designs reflect a *quantitative* rather than a *qualitative* difference in Old Bering Sea ornamentation system from other typological variants of the Old Bering Sea design system. Curvilinearity in Old Bering Sea graphic designs

should be considered only a developmental tendency. The study of Old Bering Sea art was born when Henry Collins (1937) directed attention to curvilinearity and employed the changes in curvilinear designs to define late Old Bering Sea ornamentation styles. From my viewpoint, the evolutionary aspect of the OBS style was a momentous development and is considered below in a more comprehensive manner.

In my opinion, the aesthetic originality of the Old Bering Sea design is that it contains specialized complex or “micro-detailed” elements that either lack analogs in other ornamental systems or differ from the related motifs of the Okvik, Ipiutak, Birnirk, and Punuk styles (Fig. 1). My numerical calculations show that the micro-detailed motifs are the most widely spread design elements, due to their incorporation into the all essential parts of ornamental compositions. The motifs of the other ancient Eskimo designs, related to the Old Bering Sea graphic design elements that are discussed here, occur much less frequently in ornamental compositions.

Specifically, Old Bering Sea complex ornamental motifs form three well-defined groups; if one excludes their co-occurrence on the same object. The first group (D_1) is formed by designs of straight single or double lines, framed by tooth shaped forms (i.e., denticles (Fig. 1, 1-3). The second group (D_2) contains three types of dashes (Fig. 1, 4-6). The third group (D_3) includes three to six parallel lines, of which two outside lines are, as a rule, dashed (Fig. 1, 7-9). Thus, the Old Bering Sea graphic design includes three different styles (marked D_1 , D_2 , D_3), characterized by an obvious typological unity but simultaneously and noticeably different from each other.

Collins (1937:46-49, 85-92) is well-known for defining *three* ornamentation styles in Old Bering Sea ivory carving art. However, subsequently, Collins revised his scheme⁴

³Ancient Eskimo engraved artifacts from the collections of the Peter the Great Museum of Anthropology and Ethnography were studied (Collections # 6479, 6485, 6508, 6519, 6561, 6587, 6588).

⁴Although not cited by the author, the clearest revisions are those of Collins (1961, 1964).



Fig. 2. The basic motifs of Okvik graphic design.

and most researchers presently distinguish only two styles in the Old Bering Sea design system. To a great extent this reflects the fact that the Old Bering Sea design classification, developed by Collins, lacks firm stylistic criteria. For example, Collins (1937:96) defines Style 2, as “more complex and harmonious” than Style 1. It is even more difficult to graphically distinguish Styles 2 and 3. The drawings of the basic motifs of Styles 1 and 2 were presented in Collins’s work, but Style 3 was only verbally described and not illustrated at all. Several elements coincide: OBS Style 1 motifs 12, 17, 19, 20 are nearly indistinguishable from the style elements in OBS 2–2c, 6, 7a, 8a (Collins 1937:96).

The deficiencies are quite understandable: in the 1930s, when Collins was developing the Old Bering Sea classification, scientists did not have the massive amount of archaeological material available to modern researchers. The Old Bering Sea design classification presented in this article represents a further development and elaboration of Collins’ scheme. Distinguishing a certain group of widely spread complex (“micro-detailed”) ornamental motifs as the basic indicator, it is possible to readily classify any Old Bering Sea graphic design—even in the cases of only partial preservation.

Stratigraphic superposition allows archaeologists to define a relative chronology for the various Old Bering Sea design styles. For example, in the Uelen cemetery, Burial 20(59)—Style D_1 —was overlain by Burial 19(59)—which contained Style D_2 ; Further, Burial 2(60), that contained some objects with Design D_3 , was above Burial 4(60)—Style D_2 (Arutiunov and Sergeev 1969:38).

Consequently, the discussed styles of the Old Bering Sea design replaced each other in sequence D_1 – D_2 – D_3 . This conclusion is supported by other materials, as well. In burials containing Design D_1 archaic harpoon heads were most common (types 2A2y2M3 and 2A2x2M3 in the classification by Arutiunov and Sergeev (1969:Fig. 34); for the D_3

burials, characteristic is the harpoon head that takes one of the last positions in the evolutionary range of ancient Eskimo toggle harpoons (formula 1BYM). In OBS D_2 burials, the whale bones that ancient Eskimos used to define burial pits occur more often than in burials with OBS D_1 . Nonetheless, whale bones were most frequent in graves with OBS style D_3 . This confirms that the hypothesis that the old cultures of the Bering Sea Eskimos evolved toward an increasing reliance on whale hunting.

The comparative analysis of specific burial complexes of the Uelen, Ekven, and Chini cemeteries testifies that the distinguished ornamental styles D_1 , D_2 , and D_3 mostly correspond with the three defined stages of the Old Bering Sea culture that, within a certain amount of confidence, can be considered early, middle, and late. Radiocarbon analysis of bone residues from two burials of the Ekven Cemetery, conducted in the Smithsonian Institution laboratory, provide some idea of the absolute chronology of the stages of Old Bering Sea culture. Thus, Burial 63, in the Uelen-Ekven cemetery, which can be considered an early stage of development as identified by ornamental motifs, is dated⁵ to 2220 ± 65 B.P. (SI-6718). By contrast, Burial 143 from the beginning phase of the late stage of the Old Bering Sea Culture produced an uncalibrated ^{14}C age of 1745 ± 75 B.P. (SI-6717). The dates [would, at first glance—Ed.] make the Old Bering Sea culture a bit older, which, in comparison with the available absolute ages of some Okvik and Ipiutak sites, a dating that seems believable.⁶ The correlation of ancient Eskimo cemeteries on Chukotka with archaeological findings from the islands in the northern part of the Bering Sea [St. Lawrence Island or the Diomedes] and from the coast of Alaska allows me to extend this periodization of the Old Bering Sea design to the entire region. Having defined the *originality* of the Old Bering Sea design, represented by a large number of sites, I can more precisely establish the particularity of other ornamental traditions of the ancient Eskimos of the Bering Sea from the 1st millennium B.C. to the 1st millennium A.D.

⁵Editor’s Note: The author originally cited this age in a calendrical format (B.C. without calibration). While a common practice in the 1980s, in order to infer calendar ages, it is necessary to calibrate ^{14}C ages (cf. Gerlach and Mason 1992).

⁶Editor’s note: The ages are probably too old due to the likelihood that human bone incorporated marine carbon that was significantly older than the terrestrial carbon reservoir (cf. Dumond and Griffin 2002). The burials are probably between 500 and 700 years younger.

The Okvik style of ancient Eskimo design was described⁷ by Rainey (1941:551) as “much simpler, more sketchy [*sic*], more irregular, and less pleasing, than the complex curvilinear designs of the Old Bering Sea stage.” Among the Okvik design system (Fig. 2), the motifs show a certain similarity with the main elements of Style D₁ and, simultaneously, distinguished with larger size, simplified form, and not so sophisticated production technique, served as the basis for Rainey, Rudenko (1961), and some other researchers to de-

and Ekven cemeteries. In my opinion, the graphic designs provide a certain idea of the basic motifs of the Birnirk culture: arrow-like and straight lines framed with triangles and beveled dashes (Fig. 3). Although Birnirk has a certain similarity to the Okvik and early Old Bering Sea engravings (Style D₁), the Birnirk ornamental tradition displays a quite noticeable difference from other typological variants of the ancient Eskimo design system.

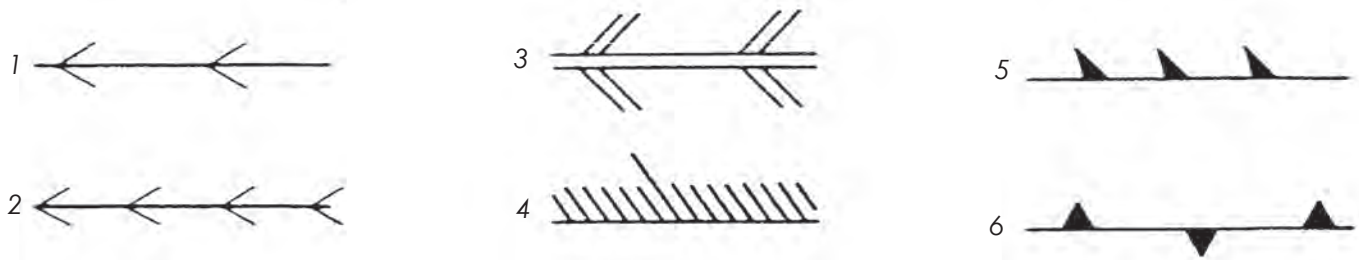


Fig. 3. The basic motifs of Birnirk graphic design.

fine the Okvik design as the predecessor to Old Bering Sea, as the earliest stage in its development. Analyzing the new archaeological data from Chukotka and employing correlations with previously known material leads me to disagree with this viewpoint. In the Uelen cemetery, based on the excavations of Arutiunov and Sergeev (1969), no less than 12 burials can be termed Okvik based on the characteristic harpoon heads with one line hole in their inventory. Each burial also had bone artifacts with a similar type of design that differed from Old Bering Sea I, apparently analogous to the ornamentation on the Okvik harpoon heads from the Ekven cemetery and from other areas of Chukotka and resembling a few designs found at the Okvik type site on the Punuk Islands. The motifs with the highest frequency of occurrence in the Okvik ornamental system are relatively large single and double parallel and convergent sections, parallel double lines, and deeply engraved arrow-like images (Fig. 2). In my opinion, these graphic elements should be strictly considered as Okvik ornamental motifs. The differences from the complex and micro-detailed elements of the Old Bering Sea ivory engraving are obvious. In light of the new data, both designs—Okvik and Old Bering Sea—appear as quite independent graphic systems, not directly derived from one another.

The ancient Eskimo materials from Chukotka obtained since the late 1950s include some from the Birnirk culture, as identified by the characteristic [single] barbed harpoon head (Ford 1959). According to my calculation, sixteen (16) Birnirk burials were recovered from the Uelen

Results from the recent archaeological excavations in Chukotka supplement the definition of a Punuk ornamental style as accepted by scientists following Collins (1937). Ekven and Uelen Punuk burials contained harpoons of the streamlined bullet-like shape and included engraved bone artifacts with the designs with the prevailing motifs that closely resemble Okvik, Early Old Bering Sea, and Birnirk motifs. However, like in the previous case, these motifs are conspicuously distinct and can nearly always be distinguished from other ornamental traditions. In general, larger motifs are characteristic in Punuk engraving dominated by straight lines, but, unlike the Okvik or Birnirk style, Punuk designs are combined also with bevel-lines (Fig. 4). Punuk designs in Chukotka often contain zigzag-like motifs, rarely used in other ancient Eskimo ornamental systems but widely distributed in the decorative art of modern (i.e., 19th century) peoples in Northeast Asia (Fig. 4:2-3).

No “pure” Ipiutak burials or sites have ever been found on the Chukchi Peninsula. However, some Old Bering Sea burials of the Uelen and Ekven cemeteries have walrus ivory artifacts covered with designs identical to the characteristic graphic designs in the Ipiutak cemetery on Point Hope in northwest Alaska. The basic elements in the Ipiutak style are complex and “micro-detailed,” with shapes that are similar to Old Bering Sea engravings, while some Ipiutak bone tools have motifs close to Okvik. Nonetheless, Ipiutak also has quite original designs composed of combinations of two or three parallel lines, often framed with small barbs, small concentric circles with detailed inner areas, smaller T-like

⁷Editor’s note: In the original version of Bronshtein’s paper the text of this quotation differed from the original in Rainey (1941:551). While admitting the author may have wished to translate Rainey for his Russian audience, the original English is restored in this paper.

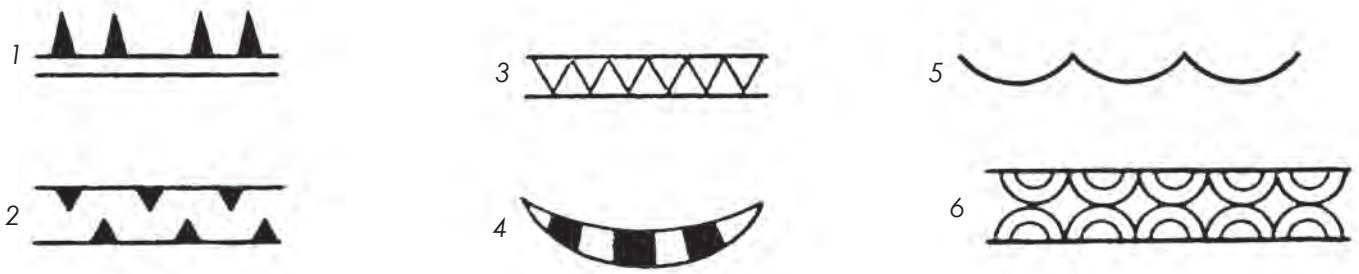


Fig. 4. Basic motifs of the Punuk graphic design.

figures, etc. (Fig. 5). In general, the Ipiutak design represents an independent system like those of the Old Bering Sea, Okvik, and other ancient Eskimo cultures in Chukotka and Alaska.

Having determined the aesthetic originality of the Old Bering Sea variants, on the basis of cemeteries and mixed-assemblage sites, archaeologists can specify the chronological correlations of the various archaeological cultures of Arctic sea mammal hunters of the Bering Sea. Most scholars consider Okvik and Ipiutak the earliest of the cultures discussed, and believe that Birnirk and Punuk were the latest cultures. According to this viewpoint, the Old Bering Sea Culture directly continued the Okvik tradition and precedes Punuk in the western Bering Sea region. In the eastern Bering Sea area,⁸ Ipiutak was succeeded by Birnirk (Bandi 1969:198). Another position has been formulated by Arutiunov and Sergeev (1975), who proposed that the Old Bering Sea, Okvik, and Ipiutak cultures were regional (territorial, to a great degree) and to some extent synchronic variants of the ancient Eskimo cultural tradition, formed in the Bering Strait area by the end of the 1st millennium B.C. Derived from a late Old Bering Sea and Okvik substratum, the succeeding forms of the Old Bering Sea culture, Birnirk and Punuk (Arutiunov and Sergeev 1975:184-185), appeared during the second half of the 1st millennium A.D.

My examination of the new data on the Old Bering Sea designs confirms the basic conclusions of Arutiunov and Sergeev (1975). Out of 16 Uelen and Ekven burials of mixed Old Bering Sea and Okvik character, only a single burial had the Old Bering Sea design of Style D₁ and Okvik designs. Four graves contained several of the Old Bering Sea ornamental styles—D₁ and D₂; while eight had the D₂ style of OBS; and three had both D₂ and D₃. In the materials from the Okvik site on the Punuk Islands, judging from Rainey (1941), Okvik designs are most often combined with the Old Bering Sea ornamental style D₁; and in some cases, D₂; but only in one case, D₃ [Rainey 1941:Pl. 4(3, 7-10), 6(7, 9), 9(3), 12(12), 13(8-9), 17 (3,5,10), 19 (7, 8), 21(6), 23(1), 25(6), 35(3), 36(7, 12)]. From these co-occurrences, one can reasonably conclude that Okvik co-existed with the Old Bering Sea Culture in the early (possibly during the final phase of the early stage), as well as the middle, and even the initial phase of the late stage of its development. The upper chronological limit of the Old Bering Sea culture is probably at the young end of the scale, rather than within the terminal end of the Okvik culture. This is substantiated by the fact that among the 36 Uelen-Ekven burials with the late Old Bering Sea style D₃, not a single artifact with the Okvik ornamentation was found.

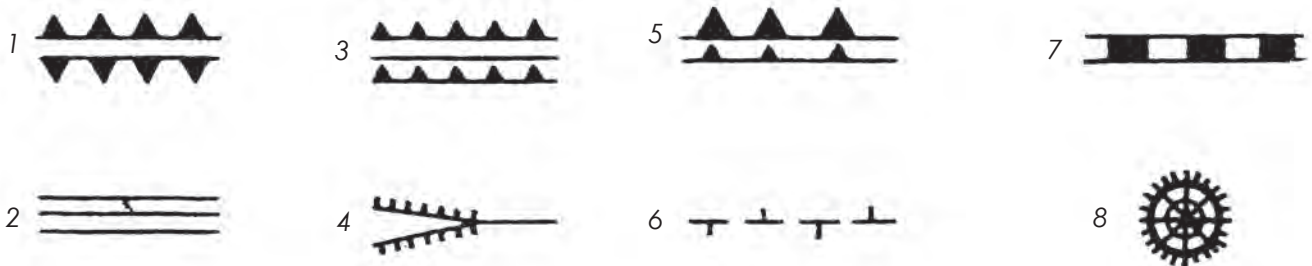


Fig. 5. Basic motifs of the Ipiutak graphic design.

⁸More accurately, the eastern Chukchi Sea; Bronshtein, writing in the mid-1980s could hardly have anticipated the discovery of an Ipiutak component at Qitchauvik near Golovin (Mason et al. n.d.). Most Ipiutak sites are north of Bering Strait, only one near Point Spencer was known in 1985. A Birnirk occupation may have occurred at Safety Sound (Bockstoce 1979), but the editor (Mason 2000) questions this attribution.

One of the more interesting cemetery finds includes the individual walrus ivory artifacts engraved with Ipiutak designs that occur within 31 burials of the Uelen and Ekven cemeteries. In the Ipiutak burial cluster, one burial also contained the Old Bering Sea Style D₁; one burial simultaneously contained the D₁ and D₂ designs; while seven also employed the D₂ style; with another eleven simultaneously using D₂ and D₃. Roughly one third (n=11) had only the D₃ style. It is noteworthy that most of the Uelen-Ekven burials with objects bearing Ipiutak ornamentation co-occur with the middle and late stages of the Old Bering Sea Culture.

According to the motifs within the Cape Dezhneva cemetery data base, the chronological correlation of Birnirk and Punuk in relation to the earlier Old Bering Sea cultures can be hypothesized as follows. In the Old Bering Sea burials of the Uelen and Ekven cemeteries, Birnirk and Punuk features appear during the transition from the middle to the late stage in the development of the Old Bering Sea Culture (n=15 burials). Birnirk and Punuk features are also found in five late Old Bering Sea burials. Seven Birnirk and Punuk burials at Uelen and Ekven had individual artifacts with Old Bering Sea D₃ design, while in six Uelen-Ekven burials the Birnirk and Punuk designs were found along with Okvik motifs. Eight burials had the Ipiutak ornamental tradition. In general, based on these data, it seems advisable to slightly move the time of the Birnirk and Punuk emergence farther back in the past. Very likely, the period of Birnirk and Punuk co-existence with the Old Bering Sea ethnic and cultural tradition was much longer than archaeologists have wished to believe.

The lengthy synchronic existence of the Old Bering Sea cultures allows archaeologists to consider them not so much as phases in the development of a single Eskimo cultural tradition—an approach that is typical for some foreign scholars (Bandi 1969:191-194, 196, 198-199)—but as local variants, possessing some specific features due to certain ecological and socio-historic factors. Each variant had various types of harpoons, most widely distributed in each culture, originality in graphic design and relief décor on bone tools, differences in burial orientation and in body position (e.g., a significant proportion of Birnirk burials are flexed). In my opinion, the implication is that people of various ancient Eskimo cultures of the Bering Sea were independent ethnocultural and probably ethnosocial communities, typologically close, judging by their areas, tribes, or related tribal groups. At the same time, the qualitative differences in their designs must have played the role of ethno-differentiating signs. The originality of the Eskimo design variants might also have

emerged to a great extent not spontaneously, but as a result of consensual activities aimed at emphasizing the unity of the people belonging to a certain ethnosocial group and in opposing them to foreigners.

The recently discovered ancient Eskimo materials from Chukotka can be used to specify the areas of individual ethnocultural communities of Arctic sea mammal hunters. Confirming the commonly held view that Old Bering Sea and Okvik traditions had a close mutual interference, the study of the Old Eskimo designs also occasions several amendments to our notion of the cultural referents of some specific sites of the Old Bering Sea–Okvik circle. For instance, the Okvik Site on the Penuk Islands is, from my viewpoint, not purely Okvik, as it is traditionally considered, but is actually Okvik–Old Bering Sea. A significant number of harpoons and other bone tools from Okvik contain designs with typical Old Bering Sea micro-detailed elements (Rainey 1941:492, 494, 540).⁹ The findings from Diomedede Island undoubtedly reveal its Old Bering Sea character (Collins 1937:pl. 14(3-6).

Among the identifiable burials within the Uelen Cemetery, twenty six Old Bering Sea graves, only ca. one third of the total OBS burials, contain ornamented artifacts. Eleven burials are Okvik, while ten contained both Old Bering Sea and Okvik designs. By contrast, according to my calculations, the Ekven Cemetery contains 84 Old Bering Sea burials; roughly half the burials have ornamented bone artifacts. Six Old Bering Sea burials at Ekven contain artifacts with Okvik engravings. Nonetheless, despite its proximity to Uelen, no *pure* Okvik burials have been found in the Ekven Cemetery.

Old Bering Sea Style D₁, which is not an Okvik design, covers Ipiutak harpoons at Point Hope, Alaska, as observed by Larsen and Rainey (1948:73, Fig. 13), A similar design decorates a bird hunting side-prong and a few other walrus ivory artifacts at Ipiutak (Larsen and Rainey 1948:143, Fig. 47; p. 137, Fig. 38). Okvik designs do occur at Point Hope, for example, the well-known baby walrus figurine (Larsen and Rainey 1948:125, Fig. 31) which is decorated with straight deep marks characteristic for the Okvik engravings. In general, the region with Okvik designs is identical with the area with Old Bering Sea design; no sites or cemeteries contain only the classic Okvik designs. Another possible culture exhibiting Okvik influences is the Kurigitavik culture, as described by Yamaura (1984); this culture covered only a small area on the American coast of the Bering Strait around Cape Prince of Wales. The character of the designs on the Kurigitavik harpoon heads as well as some construction

⁹In several cases, Rainey (1941:492, 494, 540) directed attention to the difference between these designs and the “typical Okvik” ones, calling them either “unique” or “close to the Old Bering Sea stage.”

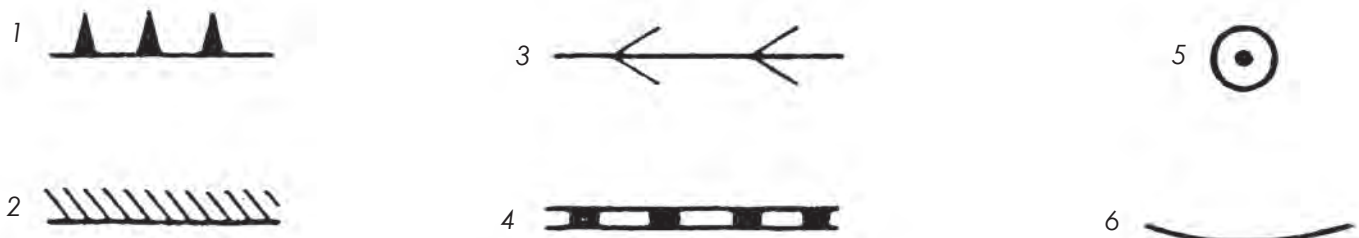


Fig. 6. A hypothetical reconstruction of the basic motifs of a "Paleo" Eskimo graphic design, predecessor of Old Bering Sea.

peculiarities testify, in my opinion, to this assumption. Further archaeological research will be necessary to more definitely solve this problem. However, even if the hypothesis of the Okvik character of Kurigitavik is confirmed this will hardly change the vision of the Okvik Culture as a very local, territorially limited variant of the Old Eskimo Bering Sea tradition.

In my opinion, the study of the new material on the ancient Eskimo designs provides firm reasons to consider some group(s) of the Ipiutak population as residents of the north-eastern coast of the Chukchi Peninsula, along with Old Bering Sea, Okvik, Birnirk, and Punuk people. For example, as noted above, Ipiutak designs are a unique occurrence in 31 Uelen-Ekven burials, about 20 percent of the total number of identifiable burials within the two largest ancient Eskimo cemeteries in Chukotka.

A formal analysis of the typological variants of the ancient Eskimo design provides the additional material for determining the degree of similarity of various ethnocultural traditions which existed among the Bering Sea mammal hunters at the beginning of the Common Era, C.E. or A.D. 1. According to my observations, two basic trends can be distinguished in the ornamental engravings of ancient Eskimos. The first is associated with the prevalent use of simple, easily distinguished motifs: deep straight lines, angle, triangles, arrow-like figures (Okvik, Birnirk, to a great extent Punuk design as well as the designs of the Old Bering Sea cultures of the American Arctic—Dorset and Thule). The second trend involves the extensive use of complex or micro-detailed elements: denticles, dash lines, discontinuous lines (Old Bering Sea and Ipiutak designs). A large number of common motifs, including the characteristic circle with a dot in its center, the similarity of some compositions and of many technical methods of bone working convincingly testify to both ancient Eskimo design variants originating from a common Palaeoeskimo ("paleo" Old Bering Sea) tradition.

In my opinion, the comparison of the most long-lasting or stable (i.e., long-term) elements from various ancient

Eskimo ornamental systems allows the reconstruction of the basic motives of a hypothetical "Palaeoeskimo" [equivalent to Arctic Small Tool tradition—ed.] design. In this construct, the principal motif was apparently the arrow-like figures, long triangles (spurs), double parallel lines, and circles with a dot in the center (Fig. 6).

According to the viewpoint accepted by many scientists, the Eskimo design system serves as the common basis for designs of many peoples of Northeast Asia and Northwest America, including Aleuts, northeastern Paleoasians, Athabascans and the Tlingit. The hypothesis of a genetic connection between the Palaeoeskimo and Ymyakhtakh (Burulga) designs (Fedoseyeva 1983) seems quite convincing (Arutiunov 1983). The hypothetical reconstruction of the basic motifs of the Palaeoeskimo engravings indicates that this extremely archaic ornamental tradition most probably appeared when the ancestors of Athabascans and Eskaleuts dwelled in the north-east of Asia—i.e., prior to crossing to North America.

The study of various typological variants of the ornamental art of Chukotka and Alaska Eskimos allows one to assume that the closest descendents to the Palaeoeskimo graphics were the Okvik and Birnirk artists, as well as Dorset and Thule peoples. This similarity is apparently explained by several different reasons. The archaic character of the Okvik design seems associated with the initial or substrate elements as Rainey (1941:551) noted, a number of archaic elements occur in the Okvik culture. In my opinion, the similarity of Okvik and the apparently older culture of the Fraser River mouth in British Columbia, noted by Dikov (1979:179-180), also testifies to the same archaic substratum. Probably, the emergence of the local Okvik variant of the Palaeoeskimo tradition can be primarily explained by the existence of *some* ethnic group, that had kept some archaic cultural peculiarities, among the Bering Sea mammal hunters in the 1st millennium B.C.—recalling that apparently Okvik was not territorially or chronologically isolated from the greater Old Bering Sea culture.

The affinity of Dorset and Birnirk designs to the Palaeoeskimo ornamental tradition is apparently associated with the isolated nature of both cultures, whose centers were located at the peripheries of the Eskimo world; a circumstance which resulted in the conservation of some archaic features. This delayed persistence was also linked to the factor of adaptation to the most severe conditions of the continental parts of the eastern Arctic (Dorset) and the Arctic Ocean coast (Birnirk).

The undoubted affinity with the Palaeoeskimo tradition is revealed by Punuk designs; however, in this case, the influence of the late Old Bering Sea design that had developed farther from the initial corpus is noticeable. In the Old Bering Sea design, this innovation or differentiation (“parting”) started with the appearance of micro-detailed motifs, which, probably to a great extent, was catalyzed by the use of iron tools for processing and engraving bone by Old Bering Sea—and Ipiutak—people. For instance, judging by the character of ornamental designs, the Old Bering Sea Burials 6(59) (Uelen Cemetery) and Burial 204 (Ekven), containing iron burins, belong to the early stage of the culture (Arutiunov and Sergeev 1969, 1975).

The finest elements of the Old Bering Sea design were almost identical in the form to the traditional motifs of Palaeoeskimo graphics (Style D₁); furthermore, however, evolving into more “original” styles D₁ and D₂. The increasing curvilinearity in the Old Bering Sea design testifies, as often noted in research publications, to Far Eastern influences (Arutiunov and Sergeev 1969:171; Okladnikov 1951). Without downplaying the role of foreign cultures in the evolution of the Old Bering Sea design, I would rather emphasize another important factor associated with internal processes—the continuous cultural and social development of the Old Bering Sea Eskimos.

Various archaeological data, first of all, the graphic designs on bone artifacts, in my opinion, testify to the existence of smaller divisions within each Old Bering Sea ethnocultural community, on the level of the family or internal corporate groups. The Old Bering Sea design styles D₁, D₂, D₃, described above reflect more than stages in its development (early, middle, and late). Of 119 Uelen and Ekven cemetery burials containing identifiable designs, both styles D₁ and D₂ occur in 15 burials, while styles D₂ and D₃ are combined in 34 burials. Thus, 40 percent of the total number of Uelen-Ekven burials can be referred to periods of parallel, synchronous existence of different ornamental traditions. Let us note another important circumstance. Among hundreds of currently known Old Bering Sea ornamental compositions practically no designs can be classified as transitional from one style to another. Qualitative changes in the Old

Bering Sea Eskimo graphic design were apparently discrete and intermittent, and might have been caused by significant ethnocultural and ethnosocial changes among them. Micro-detailed motifs, distinguished as basic for each of the three styles of the Old Bering Sea ornamentation (Fig. 1), thus performed ethno-differentiating, declarative functions not only on the ethnic level [in relation to outsiders—ed.] but also on the internal level [family or corporate basis—ed.].

The ornamental styles D₁, D₂, D₃ were distributed across the entire territory of the Old Bering Sea culture that included the eastern coast of the Chukchi Peninsula, the islands of the northern part of the Bering Sea, and, probably, some parts of the continental coast of Alaska. Considering the large extent of this area, one can reasonably conclude that the ethnic groups and communities, each with its own typical ornamental style, had been quite numerous. Within individual Old Bering Sea ethnic subdivisions, there apparently were further ethnosocial sub-divisions, as shown by similar and different features in ornamental compositions within one style. According to my observations, ethnic subdivisions include both territorially related (Uelen, Ekven, Chini-insular) and territorially disjunct groups (Uelen-Chini, Ekven-insular).

The study of the graphic design and sculptural relief on ancient Eskimo artifacts made from walrus ivory allows one to offer a few assumptions for the specific reasons of cultural and social evolution of the Old Bering Sea people. From the stage of Style D₁ and Style D₂ co-existence to the initial stage of Style D₃, the most common motif in the Old Bering Sea graphic design and sculptural décor was the motif of the anthropo-zoomorphic face and heads of sea mammals which the Old Bering Sea population hunted. That this design was used as the principal motif meant that the Old Bering Sea Eskimos had made a quantum step toward specialization in sea mammal hunting, which in turn had led to a profound transformation of their spiritual culture. One cannot exclude that, in their midst, cross-cultural hunting communities emerged uniting sea mammal hunters.

Changes in household activities, social organization, material and spiritual culture of the Old Bering Sea Eskimos were accelerated by intensive contacts with other Eskimo communities. Judging by the design materials (cf. above, the data on the Uelen-Ekven burials containing artifacts with various ornamentation types), such contacts, apparently including migrations, occurred throughout the long history of the Old Bering Sea culture. Socioeconomic prerequisites of long-lasting inter-group connections apparently included the peculiarities of Arctic sea mammal hunting, which made hunters constantly move to search for new hunting spots, as well as the necessity to look for matrimonial partners

caused by the relatively low population size and density of the whole ancient Eskimo ethnocultural (ethnolinguistic?) community (Krupnik 1983:90-91).¹⁰

Similar demographic reasons apparently caused the division of the original Palaeoeskimo ethnocultural community into localized ethnic groups. The most important economic prerequisite of the ethnocultural differentiation of the Old Bering Sea population involved the development of sea mammal hunting and the formation of ecologically determined variants [i.e., communities that specialized in walrus or gray or bowhead whale hunting, versus the seal-hunting generalists—Ed.]. The Palaeoeskimo economic specialization, their consistent exploration of more and more remote areas on the Arctic coasts of Asia and North America (even Greenland), a gradual increase of the sea mammal hunters' population, the sophistication of the social structure of the Palaeoeskimo society, foreign cultural impulses, and substrata of various origins, resulted in the ethnosocial differentiation of discrete populations and the formation of independent ethnic traditions, evident in stylistic patterns.

In general, the analysis of all ancient Eskimo design systems, and the comparison of the conclusions with the results of studying other archaeological sources, allows me to distinguish the following five basic stages in the ethnocultural history of the Bering Sea region in the 1st millennium B.C. to the 1st millennium A.D.

1. Division of the "Paleo Bering Sea Eskimo" ethnocultural community into a series of local societies, including the early Old Bering Sea and Okvik ethnic groups. This probably occurred during the first half of the 1st millennium B.C. [associated with the development of the Arctic Small tool tradition—ed.]

2. Migration of a part of the Old Bering Sea people to Point Hope (northwest Alaska) and the formation of the Ipiutak community as a result of the admixture with local [Norton] people, hypothetically occurring in the mid-1st millennium B.C.

3. Active contacts among the Old Bering Sea, Okvik, Ipiutak ethnosocial groups; ethnic division processes in the middle of the Old Bering Sea period; [Hypothetical time:] late 1st millennium B.C. to the early 1st millennium. A.D.

4. Transformation of the Okvik and very likely part of the Old Bering Sea people into the Kurigitavik, Birnirk, and Punuk societies; Ipiutak people were assimilated by Birnirk

and Punuk societies; parallel existence of the late Old Bering Sea society group and the people of the Birnirk and Punuk ethnic traditions; [Hypothetical time:] middle 1st millennium A.D.

5. Development of the late Old Bering Sea, and then the Birnirk and probably Kuritagivik people in the Punuk ("Thule-Punuk") ethnocultural community that later became the base for the formation of historic Eskimos societies both in Chukotka and Alaska, and also formed a substratum that amalgamated with the northeastern Paleosians: coastal Chukchi, Kerek, and probably maritime Koryak during the second half of the 1st millennium A.D. from 500 to 1000.

Appendix

*Ethnic Referents of the Uelen-Ekven Burials**

(Excavations by S.A. Arutiunov and D.A. Sergeev 1969, 1975)

- Marks on single bone engraved artifacts: **b** – ones with the Birnirk design; **d** – ones with the Old Bering Sea design; **I**, **i** – ones with the Ipiutak design; **o** – ones with the Okvik design; **p** – ones with the Punuk design.
- Burials with Ipiutak designs in **bold**.

I. Old Bering Sea Culture

1. Burials containing bone engraved tools with Style D₁ design.

Uelen Cemetery: 15(59)^l, 16(59), 17(59), 20(59), 23(59);

Ekven Cemetery: 25, 37-38, 63,83

2. Burials containing bone engraved tools with Style D₁ and D₂ designs.

Uelen Cemetery: 14-15(58), 6(59)^o, 10(59), **18(59)^{o, i}**, 18a(59)^o.

Ekven Cemetery: 34?, 35, 40, 42, 68, 202?, 203?, 204?, 206?.

¹⁰On the supposed high population numbers of the Old Bering Sea Eskimos of southeastern Chukotka see: Krupnik (1983, pp. 90-91, Table 2).

3. Burials containing bone engraved tools with Style D₂ design.

Uelen Cemetery: **1(55)ⁱ**, 2(55), 3(58), 4(58), 5(58)^o, 7(58), 7(59), 8(59)^o, 9(59)^o, 19(59), 22(59)ⁱ, 3(60)?, 4(60)^o.

Ekven Cemetery: 7^o, **28ⁱ**, 29, **57ⁱ²**, **71ⁱ**, 88, 113^o, 121, **130^{o,i}**.

4. Burials containing bone engraved tools with Style D₂ and D₃ designs.

Uelen Cemetery: 5(57), 12(58)^{o,b,p}, **24(58)ⁱ**, 2(60).

Ekven Cemetery: 10-112^{d,i}, 15?^{p2}, 16?, 17, 18^p, 49, 54, 95, 102, 132, 133, 136, **137^{d,o,i,b-p?}**, **140^{i,p}**, 143^p, 147, 154, 168, 169^{b-p?}, 170-171^p, 182?, **183-184^{i2p}**, 185?, 186^p, 187^p, 188?.

5. Burials containing bone engraved tools with Style D₃ design.

Uelen Cemetery: 8, 9, 10, **11(57)ⁱ**, 13, 14(57), **26(59)ⁱ**.

Ekven Cemetery: 3, 4ⁱ², 5^{b-p?}, 6?, 9, 12, 43ⁱ, 44^{i2p}, 45, 46, 52^p, **53ⁱ**, **55^{i,p?}**, 56ⁱ², 92^p, 103, 115, **148ⁱ²**, 149ⁱ², 150, 151?, 152?, 157, 161-162, 173, 177?-178?.

II. Okvik Culture

Uelen Cemetery: 7(57), 18(57), 19(57), 20(58)^{d,2?}, 22(58)^p, 1(59)?, 2, 3(59), 4(59)?, 5(59)?, 12(59)?, 13(59)?.

III. Birnirk Culture

Uelen Cemetery: 3(57)?, 4(57)^{d i2p}, 6(57), 17(57)^{o,p}.

Ekven Cemetery: 8?, 62, 67?, 123^d, 125^d, 126^d, 135^d, 153, 163, 167, 189, 205.

IV. Punuk Culture

Uelen Cemetery: 1(57)^{d 1 2o?}.

Ekven Cemetery: 14?, 99-100, 114, 129, 139^d, 144?, 155-156^{d,b}, 158.

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APPENDIX 2

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