

A Circumpolar Reappraisal: The Legacy of Gutorm Gjessing (1906-1979)

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Front and back photos show motifs from Greenland and Spitzbergen. © C Westerdahl 1974, 1977

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CHAPTER 7

ARCTIC CULTURES AND GLOBAL THEORY: HISTORICAL TRACKS ALONG THE CIRCUMPOLAR ROAD

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Abstract:

In 1944 Gutorm Gjessing proposed the first comprehensive study of circumpolar Arctic cultures that used broad anthropological methods—ethnography, archaeology, and geography—in an attempt to construct a unified theory for arctic cultures and prehistory. Although flawed as an over-arching theory, his landmark “Circumpolar Stone Age” still challenges us to search for underlying themes and trends in Arctic anthropology. Recent advances in environmental studies, anthropological theory, new data from the Eurasian Arctic, and realization that regional development and southern interactions played larger roles than circumpolar contacts have replaced the earlier emphasis on migration and diffusion as processes that governed Arctic cultural studies in the mid-20th century. Nevertheless, the widespread distribution of shamanism, reindeer herding, and sea mammal hunting, and similarities in technology, social life, religion and folklore remind us that Arctic cultural development has a global quality perceived first by Bogoras and Gjessing that continues to distinguish it as a distinct sub-field of anthropology.

This volume honors Norwegian anthropologist Gutorm Gjessing, reviews milestones in circumpolar anthropology, and evaluates the relevance of Gjessing’s work for future studies. The timing of this task is opportune, for the Arctic that Gjessing described is being transformed today in a way we could not have imagined even ten years ago. Some lands are disappearing, and others are emerging from beneath millennia of ice. The dates and routes of animal migration are changing; shorelines, villages, and archaeological sites are eroding; permafrost is melting; Arctic and Subarctic lands and oceans are becoming accessible to navigation and development as never before; and Arctic peoples are being forced to adapt to unprecedented change in their environment, settlement patterns, and subsistence practices. If current trends continue, by 2050, or sooner, sea level will drown out many coastal villages and archeological sites around the world and the Arctic Ocean may be ice-free in summer, reducing Arctic sea mammal populations, increasing fish and bird life, and having variable impacts on caribou, musk-ox and other game. Modern native observers describe these events with expressions like “we haven’t seen these weathers before” and “the earth is faster now” (Krupnik and Jolly 2002). Facing these unprecedented challenges archaeologists have issued a call to arms to salvage sites endangered by melting permafrost, snow fields, and glaciers and coastal erosion around the world (Blankholm et al. 2007; Blankholm 2009; Bourgeois et al. 2007).

Such conditions will greatly exceed those of the Medieval Warm Period, ca. 800-1300. At that time Dorset culture disappeared, Thule whale-hunters advanced across the North American Arctic to become the ancestors of modern

Inuit; reindeer breeding spread throughout northern Eurasia bringing major changes in cultures and human populations; and Vikings colonized the North Atlantic, Greenland, and Vinland. Certainly the modern response will be different; but its effects may be equally far-reaching. As the world looks north and begins to exploit newly-accessible Arctic resources, controversies between states are beginning to arise and indigenous peoples are demanding increased control over their homelands and the disposition of its resources. Gjessing—an activist with circumpolar interests in the mold of Russian ethnologist Waldemar Bogoras—would not be idle if he was here now.

I met Gjessing only once, in Oslo, in January 1971. I had just finished my dissertation and was researching Scandinavian Younger Stone Age collections as part of a comparative study of early maritime adaptations on both sides of the North Atlantic (Fitzhugh 1974), pursuing speculative proposals of trans-Atlantic contact (Greenman 1948; Ridley 1960; Kehoe 1962, 1971). We met in an Oslo coffee shop near the Oldsaksamlings Museum. I well remember his engaging personality and beaming smile as he told me he had left archaeology long ago, but he nevertheless agreed to contribute to a symposium on circumpolar maritime adaptations I was organizing for the IX International Congress of Anthropological and Ethnological Sciences in Chicago in 1973 (Gjessing 1975b). Despite his disclaimer, he was soon to be writing “Socio-Archaeology” for *Current Anthropology* (1975b) and *Ideas about Prehistoric Societies* (1977, 1980), a book published two years before he died that chided the ‘new archaeology’ for failing to be anthropological, holistic, and interdisciplinary. Not a great

fan of the current theoretical rage, I found Gjessing well-informed and delightfully irreverent.

As modern researchers search for Gjessing's intellectual niche (e.g. Stylegar 2008) at a time when interest in big theories has faded in favor of fine-grained approaches, it is good to be reminded of Gjessing's humanistic search for an inclusive anthropological archaeology. He would have been pleased to see how northern archaeologists and scientists have embraced interdisciplinary studies and indigenous perspectives as demonstrated recently by the role of social science and indigenous peoples in the International Polar Year 2007-8 (Krupnik 2009).

Historical Milestones

When Gjessing's *Circumpolar Stone Age* appeared in 1944, the emerging science of Arctic archaeology was based largely on ethnographic theory and amounted to little more than rampant speculation punctuated by bits of archaeological data. Until 1920 the history of northern peoples and culture had been based on explorers and travelers whose scattered observations of Eastern Inuit had set in motion the search for the origin and antiquity of the Eskimo. During the 1920-30s the "Eskimo problem" catalyzed the incipient field of Arctic archaeology in its search for the origins of a well-defined culture with distinctive technology, wide geographic distribution, and closely-related languages and dialects ranging from Labrador and Greenland in the east to Chukotka in the west. Without 'the Eskimo' there probably would be no such concept as circumpolar anthropology or archeology. Instead we would have something more like the situation in northern Eurasian studies today: a diverse skein of cultures and languages linked by an overlay of reindeer breeding. But while the Eskimo problem served as an organizing principle and in Denmark as a disciplinary base for "Eskimology," it has sometimes led northern anthropology into blind alleys of ethnological theory, racial classification, and cultural misrepresentation (Schindler 1985). In the following we review some of the milestones in the development of circumpolar anthropology with particular attention to its emergent maritime dimension.

Gjessing's work owed much to the efforts of ethnologists and culture theorists who had been interested in Eskimos I since Inuit first appeared in England as captives of Martin Frobisher's voyages to Baffin Island in 1576-7 (Figure 1). George Best, one of Frobisher's captains, recognized their oriental features and reported their possession of copper, brass, and iron implements and ornaments which he believed originated in Asia (Best 1578). His report includes a remarkable passage describing Inuit houses at what must be the archaeological site of Kamaiyuk (Figure 2; Fitzhugh et al. 1993):

Upon the maine land over against the Countesses Island we discovered, and behelde to our great

¹ I use the generic term 'Eskimo' rather than 'Inuit' in its historical sense as the most inclusive terminology describing the totality of this northern culture group from prehistoric times to the present.

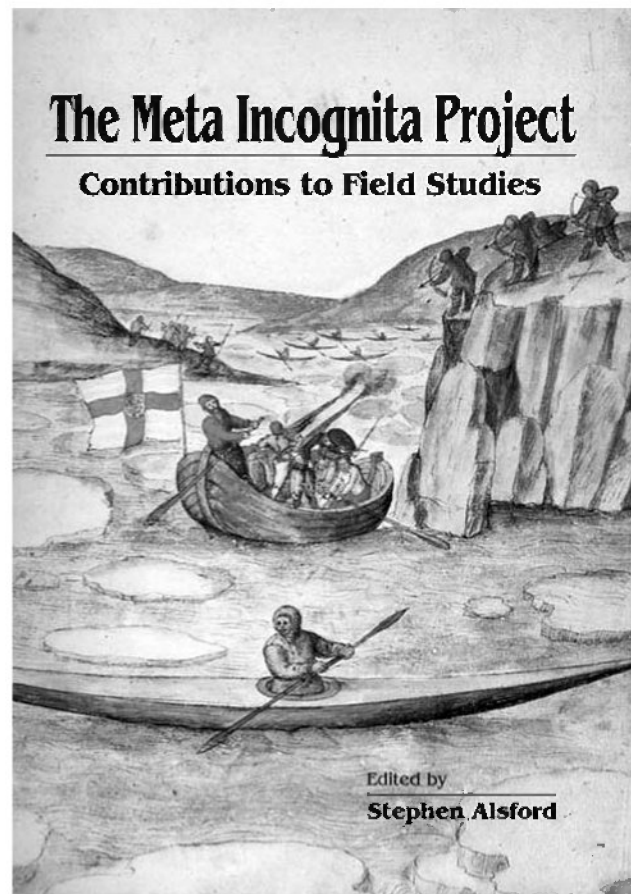


Figure 1. John White's sketch, "A Skirmish with the Eskimos" showing an encounter between a group of Martin Frobisher's sailors and Inuit in 1576 near Kodlunarn (Frobisher's Countess of Warwick) Island typifies the unpredictable relations between Europeans and Inuit in the early contact period. The Canadian-American Meta Incognita Project 1990-1994 explored the archaeology of the Frobisher voyages and the impact of early European contacts on Baffin Island Inuit. This image, courtesy of the Trustees of the British Museum, appeared as cover art for the MIP's 1991 field report (Alford 1993)

marvell, the pooore caves and houses of those countrie people, which serve them (as it shoulde seeme) for their winter dwellings, and are made two fadome under grounde, in compasse rounde, lyke to an Oven, being joined fast one by another, having holes like to a Foxe or Conny bear, to keepe and come together. They under trench these places with gutters so, that the water falling from the hilles above them, may slide away without their anoiaunce: and are seated commonly in the foote of a hil, to shielde them better from the colde winds, having their dore and entrance ever open towards the South. From the ground upward they builde with whales bones, for lacke of timber, whiche bending one over another, are hansomly compacted in the toppe together, and are covered over with Seales skinnes, whiche in stead of times, fenceth them from the rayne. In eache house they have only one roome, having the one halfe of the floure raysed with broad stones a fote higher than y other, whereon strawing Mosse, they make their nests to sleepe in. (Best, in Stefansson and McCaskill 1938. 1:64-65)



Figure 2. Kamaiyuk, an Inuit winter village site containing Elizabethan artifacts scavenged by Inuit from Frobisher's Kodlunarn Island mines, workshops, and caches, was excavated by a Smithsonian team in 1990-92. Located a kilometer east of Kodlunarn Island in outer Frobisher Bay, Baffin Island, Kamaiyuk was almost certainly the site described by George Best in 1578. (photo: William W. Fitzhugh)

Unlike the ambiguous and myth-laden saga accounts of *skraelings* encountered by the Norse in Vinland 500 years earlier, Best's description stands out as the first eye-witness account of Inuit culture written by a European observer. And if we look beyond its racist cast, Best's is a fairly accurate description of an Inuit winter village with its semi-subterranean sod-covered dwellings.

By the end of the 18th century enough information was available for scholars to begin formulating better-informed notions about the origins of northern peoples. One of the most influential was a theory which contained the germ of circumpolar culture theory in an explanation of the origins of Greenland Eskimo culture proposed by the earliest Danish historian of Greenland, David Crantz in 1767:

It appears therefore most probable, that the present race of savages first came to Greenland in the 14th century, not from Europe, but from North America. If they are of European origin, they must either be supposed to have traveled by way of Nova Zembla and Spitsbergen...but the discoveries in the Icy sea, which provide the insular situation of these countries, are fatal to this hypothesis. Or they must have crossed the hyperborean ocean, and worked their way through fields of ice, in their frail barks. Or lastly, we must have recourse to the no less

improbable supposition...that they were transported from Norway to Greenland on a huge ice-flake.

As far as our knowledge of the northern nations extends, the Calmucks, Jakutes, Tungusians, and Kamtschadales who occupy the northeastern regions of Great Tartary between Mongolia and the Arctic ocean, appear to bear a greater affinity to our Greenlanders than the Laplanders, Samoieddes, and Ostiacks, or any of the tribes bordering upon the north and northwest of the same sea. Our Greenlanders, it should seem, having settled in Tartary after the grand dispersion of the nations, were gradually impelled northward by the tide of emigration, till they reached the extreme corner of Kamtschatka, and finding themselves disturbed even in these remote seats, they crossed the Strait to the neighboring continent of America. It does not necessarily follow from hence, that America was originally peopled by them; there are various ways in which that last hemisphere might have been stocked with inhabitants, at a period greatly prior to the settlement of these fugitives. The chief part of the American tribes differs too widely from the Greenlanders to countenance the notion of a kindred origin. All that I would contend for is that

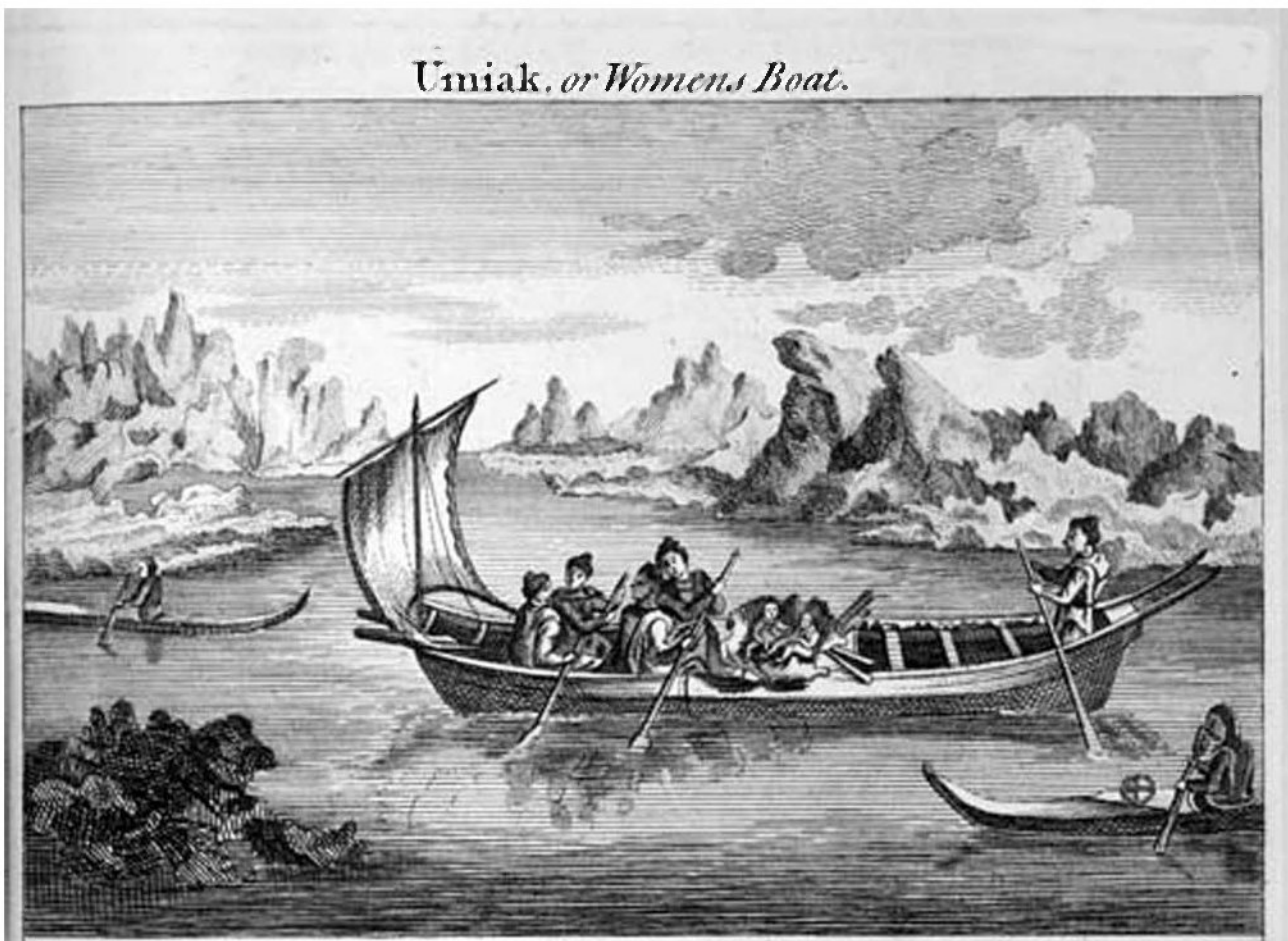


Figure 3. "Umiak, or Woman's Boat" appeared as Plate VI in David Crantz' 1767 *The History of Greenland Including an Account of the Mission Carried on by the United Brethren in that Country*, London: Longman, Hurst, Rees, Orme, and Brown. The woman's boat, seen here with smaller men's hunting kayaks, was used for carrying the hunters' families and dogs during summer camp moves and migrations. Sails are not known to have been used before European contact. (credit: Smithsonian Institution Library 86,088,632, SIL33-131-04.tif)

the northernmost track of the new world was thus peopled. (Crantz 1820:238-40)

Crantz noted that similarity in foods, dress, skin boats, manners, and religion between Siberian and American native peoples had been observed by others and that Bering's voyages of 1725-1741 produced evidence of similarities between Aleuts and Greenlanders. Crantz' theory about Eskimo origins was the first step toward a distinct circumpolar culture theory (Figure 3). Although his treatment was not extensive, his use of comparative ethnology, linguistics, and racial typing together with history and geographical data foreshadowed the anthropological theory Franz Boas applied to Eskimo origins. Crantz' conclusions established the boundaries of a scholarly debate that has continued for 250 years since Thomas Jefferson's 1787 expressed similar views of American aboriginal origins in *Notes on the State of Virginia*.

The Paleolithic-Eskimo Connection

After the discovery of European Paleolithic and Mesolithic sites containing bone and stone tools associated with extinct Pleistocene animals as well as extant Arctic species like reindeer, grizzly bear, and musk-ox, it was not long before

knowledge of Eskimo technology helped identify similar artifacts found at Paleolithic sites. The publication and display of Eskimo artifacts obtained by James Cook in Alaska in the 1770s and from Canada and Alaska by the Parry, Lyon, and Beechey voyages of the 1820s attracted immediate interest from specialists who had been puzzling over the functions of tools preserved in European cave sites and kitchen middens (Dawkins 1874; Hamy 1870). Having observed Beechey's Alaskan Eskimo collections at the Ashmolean, Boyd Dawkins (1874:354) noted that Eskimo harpoons, bird and fish spears, sewing needles, arrow straighteners, scraper blades, and stone lance heads were almost identical in shape and design to those found in the Magdalenian reindeer-hunter levels at such sites like Les Eyzies, La Madelaine, and Kent's Hole (Figure 4, Dawkins 1874:353-359). More remarkable was that both cultures decorated their implements with similar styles of engraved and pictographic art illustrating hunting scenes, weapons, and even species of animals that continued to be hunted by Eskimos (Figure 4b). Dawkins concluded that warming climate at the end of the Ice Age must have caused hunters to follow retreating cold-adapted animals as they migrated north, and from the Arctic shores east into Siberia and America. As Dawkins saw it:

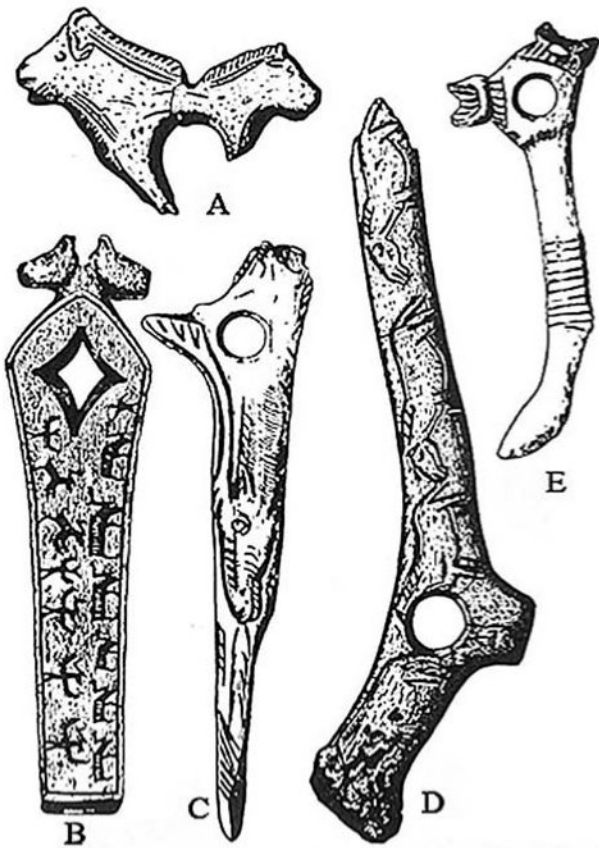


Figure 4. Comparison of Eskimo and Magdalenian shaft-straighteners (Sollas 1924: fig. 291). A, C, E from Magdalenian levels at Laugerie Basse; D from La Madeleine; and B, a Western Alaskan Eskimo ivory specimen in the British Museum collections (Dawkins 1874: fig. 123).

Paleolithic man appeared in Europe with the arctic animals, lived in Europe along with them, and disappeared with them. And since his implements are of the same kind as those of the Eskimos, it may reasonably be concluded that he is represented at the present time by the Eskimos, for it is most improbable that the convergence of the ethnological and zoological evidence should be an accident. (Dawkins 1874:359).

Dawkins went further and proposed a direct racial connection: Insofar “as we have evidence of the race to which the dwellers in the Dordogne belong, that evidence points only in the direction of the Eskimos” (1874:358). The idea of a racial affinity to the Eskimo was to become the subject of a major treatise (Testut 1889) revolving around interpretation of the Chancelade skull as a new, non-Cro-Magnon race whose anatomical features were closest to the Eskimo and whose smaller body size seems to be reflected also in the small size of tools and handle grips in Magdalenian and Eskimo tools. Based on Testut’s skeletal analysis, Sollas (1924:584) reported Chancelade was “a veritable Eskimo, who lived in southern France during the Magdalenian age.”

The idea of an Eskimo Paleolithic was not palatable to some European scholars who criticized Dawkins for making sweeping connections across great distances and

time (Steensby 1905; Dechelette 1908), although the latter noted the possibility of cultural convergence in similar environments (*ibid.* p. 312). Nevertheless Dawkins’ ideas gained appeal as the most rational explanation for the many cultural similarities. Writing about the same time as Dawkins, Hamy (1870) broadened the ethnographic frame to include other Arctic groups: “It is solely among the Arctic people, Lapps, Eskimos, and Chukchis that we find the same customs, weapons, and implements as those of the Magdalenian age. These races continue down to our days, in circumpolar regions, the age of the reindeer as it existed in France, Belgium, and Switzerland” (quoted in Sollas 1924:556).

The final stage of development of this idea appeared in William J. Sollas’ *Ancient Hunters* (1924), in which the use of ethnographic analogues for Paleolithic cultures reached its most elaborate form as part of a model of world prehistory. With more information on Alaskan Eskimo ethnography (Murdoch 1892; Turner 1894; Nelson 1899), Sollas expanded the list of Eskimo ‘types’ in Magdalenian to include the hairpin, snow scraper, ivory pendant, bone needle-case, spear thrower, and wound pin, and made more general reference to non-typed traits like the stone lamp, gorge, and drill-bow. In addition to designating ethnographic ‘representatives’ of Paleolithic cultures—Fuegians and Tasmanians for Mousterian, Bushmen for Aurignacian, and Eskimos for Magdalenian—Sollas saw successive waves of evolutionary development resulting in the outward displacement of the previous resident culture from its European hearth into hinterlands where elements of the original culture and racial type persisted. The final stage called for Magdalenian eviction by Neolithic peoples and their expansion north across a broad front from the Caucasus to the Mediterranean, and subsequent movement north into the Eurasian and eventually North American Arctic via the Bering Land Bridge, whose existence had been established by this time. Yet Sollas was somewhat circumspect and recognized weaknesses “sufficient to justify those who maintain a skeptical attitude” (1924:580).

One of the most thoughtful skeptics was Frederica de Laguna, whose review of the Paleolithic-Eskimo art connection and detailed treatment of purported artistic continuities, conducted as a PhD dissertation, clearly established the pitfalls of both the general theory and specific element-by-element comparisons (de Laguna 1932/1933). Her conclusions, based on study of “practically every element of art of the Thule culture and of the modern Eskimo” (1933:99), were largely negative. The few motifs held in common (dot, spurred circles, spurred lines, and “ladder” patterns) were too simple to validate the claim (Figure 5). “On the basis of the material presently available it is impossible to provide that Eskimo art is more closely related to that of the Palaeolithic than are other arts of comparatively simple content” (1933:103). Still, like others before her, she did not consider the negative conclusion as final. Okvik and Old Bering Sea art, just discovered archaeologically and only a few hundred years older than her Thule data and unquestionably ‘Eskimo’, had more Paleolithic character and was still more than 9,000 years

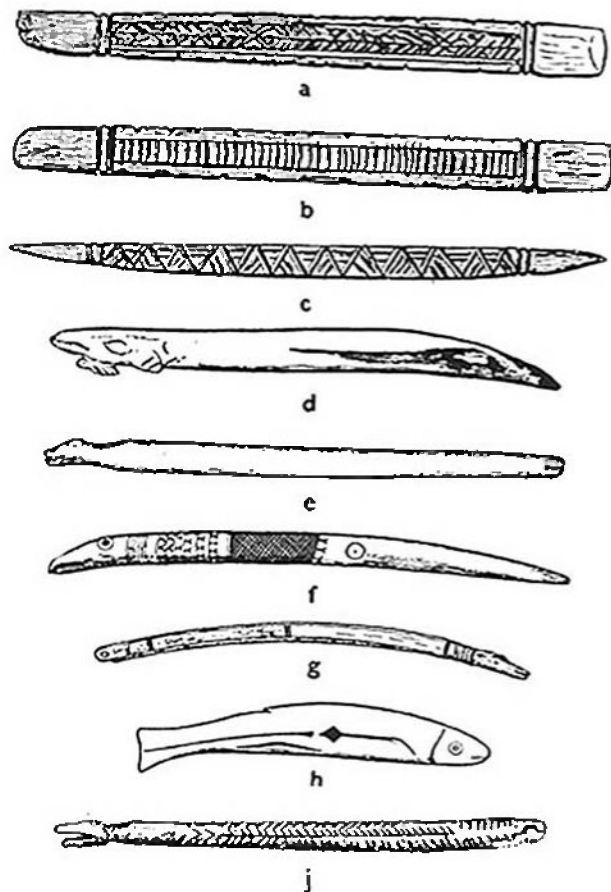


Figure 5. Magdalenian and Eskimo ivory and bone implements: a, b, and c illustrate two faces and the side of a Magdalenian ivory chisel; d, ivory rod with a wolf-like head, from Mas d'Azil; e, Eskimo sinew-twister; f, Yup'ik Eskimo wood-working chisel; g, Eskimo drill bow from Norton Sound; h, Yup'ik Eskimo ivory sewing bag fastener; j, Magdalenian rod with fish-like ornament. (Sollas 1924: fig. 302).

removed from terminal Magdalenian. As de Laguna noted, "The archaeology of Siberia still holds the key to this mystery." Surprisingly this observation is as true today as it was in the 1930s.

More recently Edmund Carpenter, inspired in part by the voluminous records on tribal and archaeological art assembled by Carl Schuster (Schuster and Carpenter 1996), became engaged in a life-long search for this connection in Arctic and Siberian art and developed a more positive view of continuities, including those seen in ethnographic and prehistoric Dorset and Old Bering Sea Eskimo cultures (Carpenter 2002). Carpenter and Schuster explained the gaps in the archaeological record as a function of the poor archaeological record of Siberia and by supposing these designs had been handed down over generations on perishable materials or in social culture such as dances, games, oral, and other forms of symbolic representation that left no archaeological trace (Figure 6a-d). They proposed that many common graphic designs referred to ancestors and genealogical reckoning. While intriguing and theoretically possible, their ideas have been difficult to verify archaeologically because of the absence of archaeological evidence from the Eurasian North.

Boas and "The Method of Detailed Comparison"

Given the lack of data for testing Paleolithic theories of arctic cultures, retrenchment was inevitable. It is not surprising therefore that the next major step in circumpolar studies involved a search for regional data that might be used to solve larger geographic problems. Fresh from his pioneering research among the Baffin Inuit and with ideas about how to integrate linguistic, ethnographic, folkloristic, biological, and archaeological data to reconstruct culture history, Franz Boas organized the largest coordinated anthropological study of all time to solve the question of the peopling of the New World and relationships of peoples across Bering Strait. Boas' Jesup North Pacific Expedition (1897-1903) mounted by the American Museum of Natural History involved comparative and distributional studies of adjacent peoples from the Amur to the Columbia River. In his words,

The method of detailed comparison of contiguous tribes will reveal the effects of intermixture, linguistic borrowing, and exchange of cultural forms. By following out patiently and in detail the lines of interchange of culture, it is possible to trace the historical development of the tribes inhabiting a definite region. (Boas 1905:91)

Boas believed that detailed comparative studies of ethnographic, folkloristic, archaeological, and biological elements would reveal historical connections and expose successively earlier cultural strata so that the ultimate source of peoples and their migrations, environmental adaptations, and historical development could be determined (Boas 1903, 1905, 1933).

The JNPE actualized the type of intensive field study that would have been a logical next step in the development of circumpolar anthropology, especially following the ethnographic studies of Eskimo cultures conducted by Boas in Baffin Island and by Edward Nelson, John Murdoch, and Lucien Turner for the Smithsonian in Alaska and Ungava between 1875-85 (Nelson 1899; Murdoch 1892; Turner 1894; see Fitzhugh 2002a, 2009). However, at the time Eskimos were thought to be a recent eastern intrusion into the Bering Sea region—an 'Eskimo wedge' as Waldemar Bogoras, Waldemar Jochelson, and Boas called it (Dumond 2003)—and as a result, the JNPE reports and Boas' syntheses ignored the possibility of deep Eskimo antiquity in North Pacific and Beringian culture history.

JNPE history was re-visited during recent decades through examination of museum collections by Russian, Japanese, and North American scholars (Fitzhugh and Crowell 1988a, b; Fitzhugh 1994; Fitzhugh and Chaussonnet 1994; Chaussonnet 1995) and by centennial archival and analytical studies (Krupnik and Fitzhugh 2001; Kendall and Krupnik 2003; Kendall et al. 1997). The major impact on circumpolar studies of the JNPE was the recognition of a second major culture interaction zone focused around the North Pacific Rim, counter-balancing that proposed for



Figure 6a.



Figure 6b.



Figure 6c.



Figure 6d.

Figure 6. Yamal Nenets clothing patterns: a-c, winter garment from Hallaspugor, Yamal, and details of parka trim and ornamented bag from Yamal-Nenets Shemanovskii Museum, Salekhard, Russia; d, Ted Carpenter and William Fitzhugh examine bags with fur and metal pendant decoration in Shemanovskii Museum. (photos: Sven Haakanson)

the circumpolar Arctic coasts and tundra. This historical construction, which Boas (1910) and Jochelson (1928) called the ‘Americanoid theory’ cited a cultural and linguistic boundary between Turkic-speaking Yakut, Evenk, and Even groups and a group of loosely-related ‘Paleo-Asiatic’ peoples composed of Koryak, Itelmen, Yukaghir, Chukchi and others in northeastern Siberia, but excluding Eskimos, who were thought to be more closely related by such features as raven mythology, salmon ritual, and folklore to each other and to Northwest Coast Indian tribes. Believing that linguistic and folkloristic data were less susceptible to environmental modification and therefore more accurate indicators of cultural tradition,

Boas, Bogoras, and Jochelson interpreted the culture history of the North Pacific as a continuum of historically-related groups whose distribution had been split in more recent times by an intrusive Eskimo wedge of Canadian origin (Figure 7). Ironically, today the tables have turned and it is the North Pacific margin rather than the circumpolar Arctic coasts that has become the focus of modern investigations of Eskimo origin.

Although the JNPE did not make many contributions to Eskimo ethnography (having ignored the American Yup’ik and Inupiat regions because the Smithsonian had conducted work in these regions), it had a long-lasting effect on circumpolar studies by establishing scientific credentials for the Canadian theory of Eskimo origins. As Hatt (1949:5) pointed out, these conclusions might have been considerably different had Boas and his colleagues taken

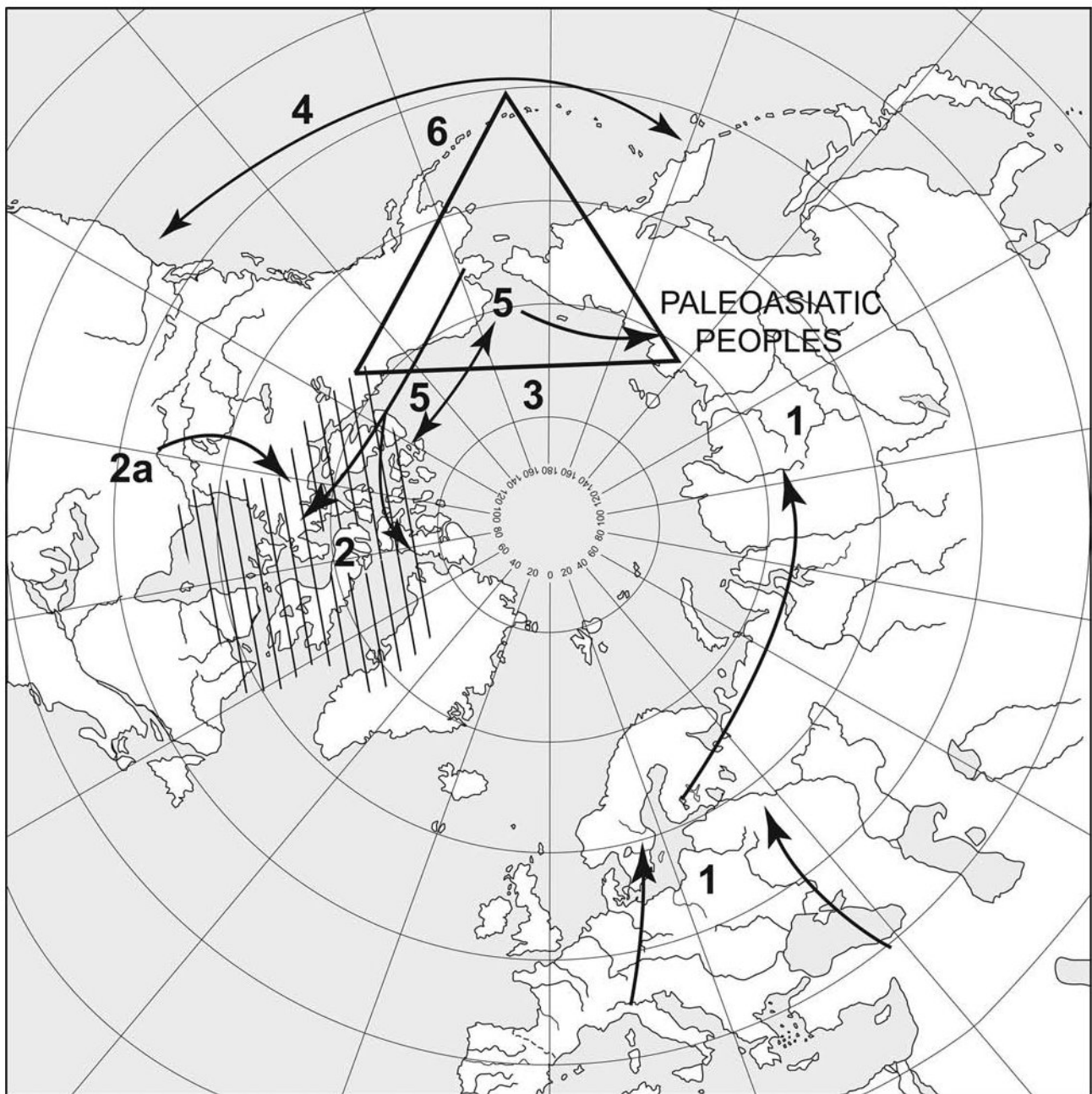


Figure 7. Theories of Eskimo origin; 1, Paleolithic/Magdalenian (Dawkins, Sollas); 2, Central Canadian origin theory (Boas), and 2a, Eschato-Eskimo Barren Ground inland origin (Birket-Smith); 3, Eskimo wedge theory (Boas, Bogoras, and Jochelson); 4, Americanoid influences on Paleoasiatic cultures of northeastern Siberia (Boas, Bogoras, Jochelson); 5, Eskimo origins in Bering Strait with migrations into Chukotka, Canada, and Greenland (Steensby, Mathiassen, Collins).

account of Edward Nelson's collections and publications on the Yu'pik Eskimo of the Alaskan Bering Sea coast (1899), in particular, data on the extensive raven myths and others which closely parallel Koryak, Kamchadal, and Northwest Coast culture forms. This would have shown that only the Inupiat of North Alaska diverged considerably from the North Pacific culture pattern. By not uncovering (and perhaps ignoring) evidence of Alaskan or Siberian origins, Jesup conclusions about an eastern Eskimo intrusion lent weight to Boas' previous opinions. Even through these conclusions were indirect and based on negative evidence, they fit into an established trend of thought, benefited from Boas' growing influence, and laid the groundwork for the next thirty years of research. Other important results were

the establishment of the new methods of comparative study and problem definition, new ideas about time depth and stages of cultural evolution, and the emergence of a northern maritime focus for Subarctic culture contacts in the North Pacific.

Another extremely important contribution was the internationalization of northern anthropology. The participation of Russian ethnographers Bogoras and Jochelson and German-trained Berthold Laufer brought European traditions of linguistic and folkloristic anthropology into Arctic studies as part of a project whose goals were to gather detailed ethnographic data and material culture from specific groups while also seeking

understandings about broader issues of culture contacts and history. Collaboration between Boas and other JNPE members continued many years after the field expeditions of 1897-1902, with Bogoras and Jochelson periodically in residence at the American Museum and Laufer eventually taking a curatorial position there and later at the Field Museum in Chicago. Jochelson went on to participate in archaeological and ethnological studies in Kamchatka and the Aleutian Islands and became director of the Museum of Anthropology and Ethnography (Kunstkamera) in St. Petersburg.

Bogoras' Circumpolar Culture

In 1924 Bogoras, whose JNPE fieldwork with the Chukchi and growing familiarity with the cultures of the Russian Arctic and taiga zones had given him a broad overview of northern peoples and adaptations, began to see the same kind of broad cultural unity and connections Boas had envisioned for North Pacific peoples. Building on Dawkins and Sollas, and on Steensby's (1905, 1917) geographical and anthropological study Eskimo origins, and believing Asian reindeer herding was too recent to be relevant, Bogoras became the first to propose the existence of a unified circumpolar cultural tradition.

The northern circumpolar zone extends through the old world and the new almost without interruption. It encircles the terrestrial globe, forming a continuous strip of land. Over its whole extent there are the same conditions, cosmographical and geographical, meteorological, floral, and faunal. So it is the only zone of land which is almost wholly uniform. Local variations are but of slight importance. Human life and culture which have developed under these conditions are likewise more or less uniform, and they represent in many ways, as it were, a typical case created for the purpose of study and also of working out new ethnographical methods.

[The] Arctic Ocean may be likened to the Mediterranean Sea, and notwithstanding the severity of climate the cultures was spreading along its coastal line from very ancient time, passing from one tribe to another, mostly in eastward directions. This intercourse of tribes helped to make the culture still more uniform. In this way was formed the special northern circumpolar culture, distinct and different from the culture of more southern latitudes.

The circumpolar culture is a special product of arctic latitudes, and tribes of various extraction who came from the south northward along several meridional lines, accepted this culture, borrowing it from the earlier inhabitants. We have no definite data whether the circumpolar culture has developed in one or in several places. Still it is natural to assume that this culture originated in one region and thence gradually spread in uniform uninterrupted extension across the immense areas of the polar world. (Bogoras 1924:226-7)

Bogoras' theory of a relatively homogeneous circumpolar culture (Figure 8) called for a possible common origin from late glacial reindeer-hunters but recognized that multiple origins might be indicated by the existence of various ethnological groupings, including a northeast Siberian Paleoasiatic group, a Samoyed and Lapp group; an Eskimo-affiliated group; and an Ostyak-Vogul group. He also noted the extensive similarities in physical appearance, behavioral and emotional aspects, material culture, subsistence techniques and foods, folklore, shamanistic religion, and bear ritual. Yet Bogoras also noted the importance of history in that arctic cultures have been influenced by various waves of immigrants who advanced, generally, from west to east. The modern ethnographic representatives of these early waves, geographically-positioned according to chronology included: (1) Eskimo; (2) Chuvano-Yukaghir dog-drivers; (3) Chuvano-Yukaghir and Chukchi-Koryak reindeer-breeders and Dolgan; (4) Samoyed, Ostyak, Vogul, Zyrian, and Lapp reindeer-breeders; and (5) Tungusic and Finnish new-comers in both east and west (Bogoras 1924:238). Bogoras thought all ultimately originated from racial stocks in south-central Siberia. He noted that such sequences were not yet identifiable in North America and that the absence of reindeer-breeding there was probably attributable to the "wedge" of Eskimo peoples in Bering Strait who were historic enemies of the Chukchi and were hostile to the idea of herding reindeer as contrary to their religious belief in a free-spirited animal world.

In 1929 Bogoras elaborated his concept, citing it as "an excellent field for the comparative study of a culture, perhaps unique in the world" (1929:579). In addition to discussing the common conditions of arctic environments and shared features of northern cultures, he noted that these cultures seemed to change very slowly, being preserved in their primitive state in the ice and snows of the north as if it were frozen on purpose for such preservation." (ibid). Bogoras linked the similarities among cultures inhabiting the arctic zones with the conditions of life in tundra zones, and of those occupying subarctic forest zones with a different set of life conditions.

Bogoras established the outlines of circumpolar culture theory as it has been envisioned for the remainder of the 20th century. Its basic themes included (1) existence of a circumpolar culture 'type' keyed to the conditions of arctic and subarctic environments; (2) enhanced capabilities of migration and diffusion in sparsely-populated northern regions; (3) west-to-east directionality of migration and patterns of culture change; (4) importance of southern and western sources of innovation and overlays to the basic circumpolar culture type (e.g. dog- or reindeer-breeding); (5) an eastward horizontal stratification of culture with preservation of the oldest cultural forms or patterns in eastern regions; (6) arctic cultural retardation as a mechanism by which ways of life that vanished in places of origin were preserved in the north or changed slower there because of isolation and harsh climate; and the idea (7) that migration and diffusion can be rapid and influential in effecting culture change in sparsely populated northern environments.

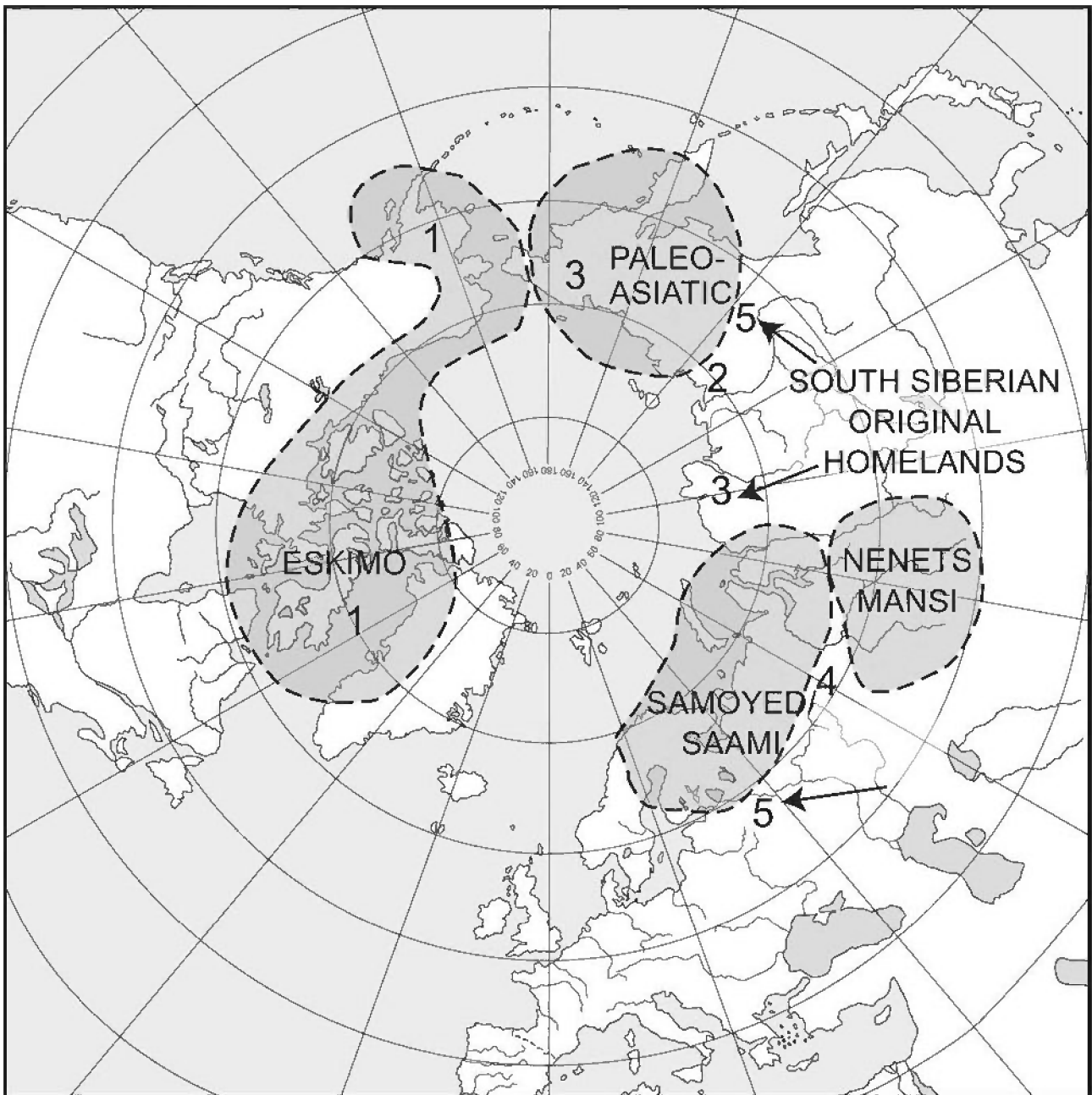


Figure 8. Bogoras' circumpolar culture type was composed of four ethno-culture groups (Eskimo, Paleoasiatic, Ostyak/Vogul (now termed Nenets/Mansi), and Samoyed/Lapp (now Nenets/Saami) and five chronological waves consisting (from earliest to latest) of (1) Eskimo; (2) Siberian dog-drivers; (3) Siberian reindeer-drivers; (4) West Siberian reindeer-drivers; and (5) Turkic and Finnic newcomers with horses.

These views and the theories behind them have been criticized for environmental determinism; overstatement or simplification of cultural similarities; 'heliocentric' European views of cultural superiority; marginal and temperature-influenced ideas about culture change; and the directionality of diffusion and migration. While many of these criticisms are valid, Bogoras was aware of environmental variation and local adaptation and he often noted the importance of historical events and influences and how cultural practices can override environmental forces. In actuality, his formulation did not propose the existence of a single circumpolar ethnic culture, but rather a set of comparable northern cultures whose similar elements resulted from the requirements of northern life.

During the revolution and the 1920s Bogoras became increasingly engaged in the practical problems of Russia's northern peoples and during the early Soviet era chaired the Communist's 'Committee for the North', the agency that was given authority for developing and implementing policy in the Soviet North (Slezkine 1994:152-183). Nevertheless Bogoras kept working at his anthropological materials and found time to write his circumpolar culture papers. However in the 1930s Stalinist oppression began, and the role of anthropologists in northern administration declined. For the next forty years Russian anthropologists had little opportunity to contribute to circumpolar studies. The few who did, like Adrianov, Chernetsov, and Moshinskaya, whose excavations on the Lower Ob and in

Yamal (Chernetsov 1970; Chernetsov and Mozhinskaya 1974) attracted Larsen and Rainey's attention as a possible source of early arctic maritime adaptations, faced political repression for promoting indigenous issues and, in Adrianov's case, execution.

During the decade when Bogoras was formulating his circumpolar ideas, major efforts were being taken to investigate Eskimo origins in North America. The Stefansson-Anderson Arctic Expedition of the American Museum of Natural History (Stefansson 1919) explored the region between the McKenzie River and Barrow, Alaska, and Danes initiated field studies in Greenland and the Central Canadian Arctic under the banner of Knut Rasmussen's Thule Expeditions. The Fifth Thule Expedition of 1921-24 directed at the Central Canadian Arctic produced exceptional, although contradictory, results. Rasmussen's epic journey by dogsled across the North American Arctic provided powerful evidence of recent linguistic connections from Greenland to Chukotka, a view that was shared by the expedition's archaeologist, Therkel Mathiassen, who saw Alaska and the Western Arctic as the likely source for Eastern Eskimo culture. However the expedition's ethnologist, Birket-Smith, elaborating Boas' earlier views, developed a theory of inland origin from the central Canadian tundra and forest zone. Boas' and Birket-Smith's Canadian theories were soon eclipsed by an explosion of archaeological work in Alaska and Bering Strait by Diamond Jenness, Henry Collins, Otto Geist, and later by Helge Larsen, Froelich Rainey, James Ford, and Louis Giddings who established this region conclusively as the hearth of early Eskimo developments. The new focus on Beringia was soon joined by Russian archaeologists Sergei Rudenko, Maxim Levin, Dorian Sergeev, Sergei Arutiunov, and Nikolai Dikov at sites on Bering Strait in Chukotka. The collections obtained and sequences developed soon transformed a pedantic debate among ethnologists into an exciting new field of archaeological study. Similar progress was being made in reconstructing prehistoric culture history in Scandinavia by A.W. Brøgger, where Saami rather than Eskimo origins provided the ethnographic anchor for North Scandinavian archaeology. This new window into the past launched Gutorm Gjessing's early career.

Unlike the North American Arctic, Scandinavian prehistory was better known and was anchored firmly into the three-age system of European prehistory. Saami resembled the Eskimo only in having obscure origins and making a late and dynamic appearance in the historical record and probably for this reason prehistoric Scandinavian cultures had not been considered as part of a circumpolar continuum. Except for its late Saami reindeer herding phase, Nordic prehistory was seen as an extension of southern European Stone, Neolithic, Bronze, and Iron Age cultures. Gjessing saw it otherwise.

The Circumpolar Stone Age

Gjessing's CPSA publication transformed circumpolar ethnographic theory into an archaeological construction by combining historical, environmental, and archaeological

evidence. Surprisingly, he succeeded without having a large body of new archaeological data. Archaeological sequences were still vague and ill-defined and were almost entirely lacking for the Soviet Arctic and the Northwest Coast of America. What was most innovative was his creation, using ethnographic subsistence patterns, technology, and environmental and geographic data, of an abstract *prehistoric* culture 'type' that included features of Bogoras' more ethnographically-based 'circumpolar culture'. Gjessing recognized the importance of environmental imperatives and identified their archaeological expressions in various Arctic and Subarctic locations around the globe, thus constructing a network of ancient cultures that shared similar adaptations and technologies. The core of this northern adaptive complex included sledges, skin boats (Figure 9a), ground slate technology, semi-lunar knives, toggling harpoons (Figure 9b), oil lamps, skin tents, underground winter dwellings, and in the boreal zone, curved back slate gouges (Figure 9c). While different cultures or regions shared some aspects of the core elements, they also exhibited unique features and differences in the artifact types, decorative designs, behavioral patterns, and regional histories and associations. Gjessing adopted many of the assumptions inherent in Bogoras' CP culture regarding migration, diffusion of styles and technologies, west-to-east flow, arctic retardation, and other concepts.

Essentially, Gjessing did for archaeologists what Bogoras had done for ethnologists. He provided a fairly simple, systematic framework for connecting prehistoric culture types and for comparing their similarities and differences, with relatively little regard to chronology or cultural associations, which was still largely lacking for most northern regions. Rapidity of migration, the lag effect of diffusion, and the imposition of geographic barriers of various sorts provided accommodation for chronological inconsistencies. It was an elegant theory and it provided a broad interpretive framework for the explosion of northern archaeological work that began at the end of WWII. However, its weakness was the almost complete absence of convincing specific parallels and demonstrated historical connections between Eurasia and North America.

In 1946-47, soon after publishing *Circumpolar Stone Age*, Gjessing visited the United States where, as a Rockefeller Scholar living in New York, he met many American archaeologists who were engaged in northern research including Junius Bird, Henry Collins, Frederica de Laguna, James Ford, James Griffin, Froelich Rainey, William Ritchie, Albert Spaulding, and others. Helge Larsen, who had spent the war years in New York working on the Alaskan Ipiutak report (Larsen and Rainey 1948), was also present. Having so many experts available for sharing information privately and through conferences such as *Man in Northeast North America* (Johnson 1946) at a time when many discoveries were being made contributed to Gjessing's intellectual development, providing material for a commentary on Northeastern prehistory (Gjessing 1948) and influenced the CPSA article he published in *Antiquity* in 1953.

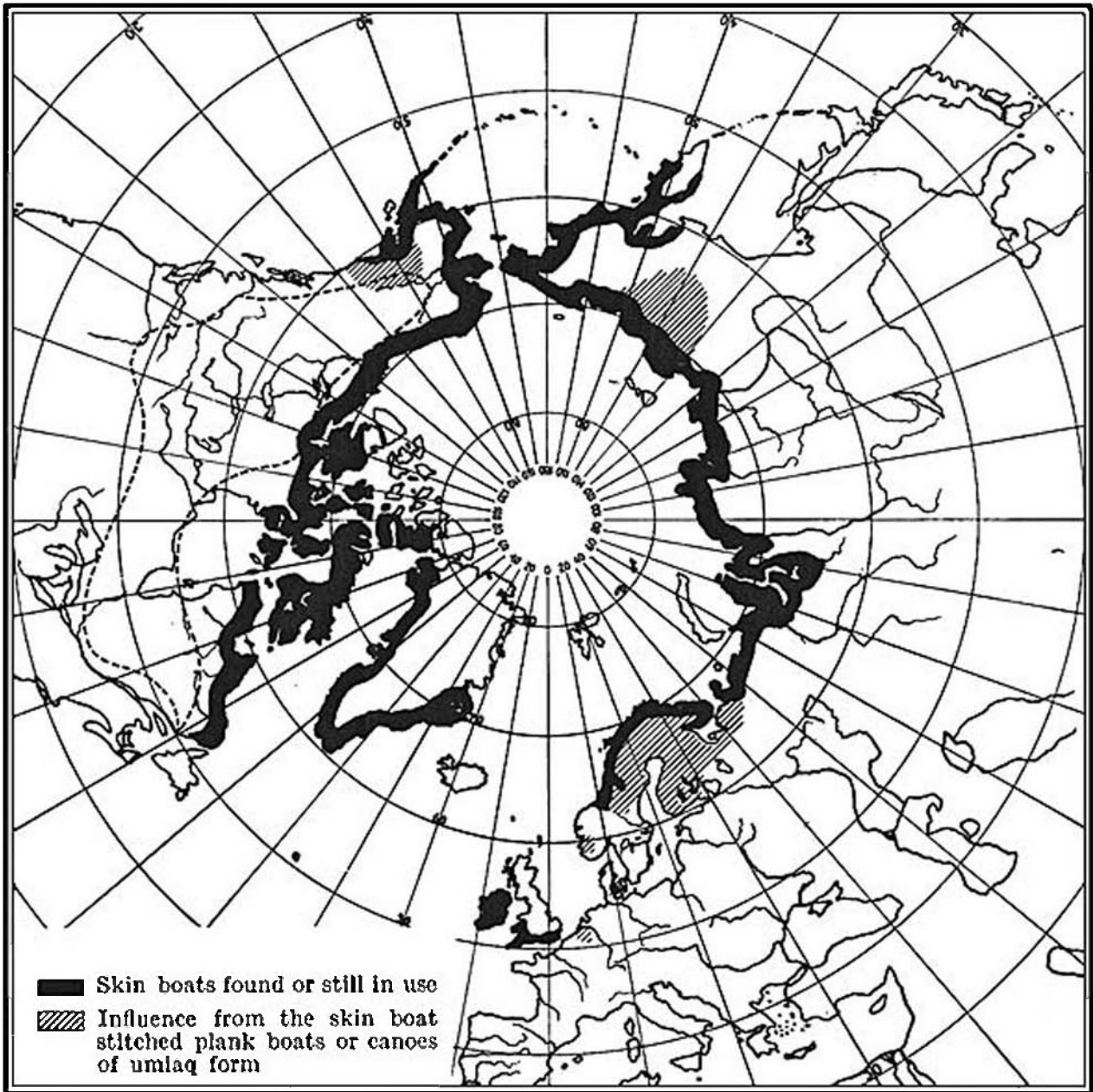


Figure 9. Gjessing's circumpolar (and circumboreal) theory was based on the prehistoric distribution of various Arctic-adapted artifact complexes and technologies including: a, skin boat (kayak/umiak); b, toggling harpoons as illustrated by the present author (1) Jomon, Japan; (2) ca. 3500 B.P. Wrangel Island; (3) Pre-Dorset, Canada; (4) Late Dorset, Canada; (5) Old Bering Sea, Alaska; (6) Punuk, Alaska; (7) Thule, Canada; (8) Iron Age, Norway; and c, ground slate implements (including the curved back gouge, a circumboreal trait), sod dwellings, oil lamps, and other elements. (credit: a, c from Gjessing 1944: fig. 2, 11)

The Post-Gjessing Era

Forty years after Gjessing published CPSA, a 1973 ICAES symposium in Chicago drew a large international group, including the Soviet scholars. The meeting was devoted to a particular aspect of circumpolar studies—northern maritime adaptations—for which a new body of work needed to be synthesized. In the years following CPSA studies had emphasized connections through the boreal forest and Eurasian taiga (de Laguna 1946; Spaulding 1946; Griffin 1960; Schuster 1951; Simonsen 1972; and later, Bryan 1987), as well as across the North Atlantic where similarities in ceramics, ground slate, and lithic industries had been identified (Gjessing 1948; Greenman 1948; Ridley

1960; Kehoe 1962, 1971; Fitzhugh 1975b). An influential symposium had considered cross-ties between Arctic and temperate zones in North America (Campbell 1962), but no global approach to northern maritime adaptations had been undertaken. The Chicago papers covered a wide range of topics, time periods, and cultures from Arctic and Subarctic maritime regions around the world (Fitzhugh 1975a; Yesner 1976).

Although we were hindered by lack of information from many areas of the Russian Arctic coast, coverage was sufficient to suggest important modifications to Gjessing's concept. In particular, we found little evidence, other than Eskimo movements and Eurasian reindeer-herding,

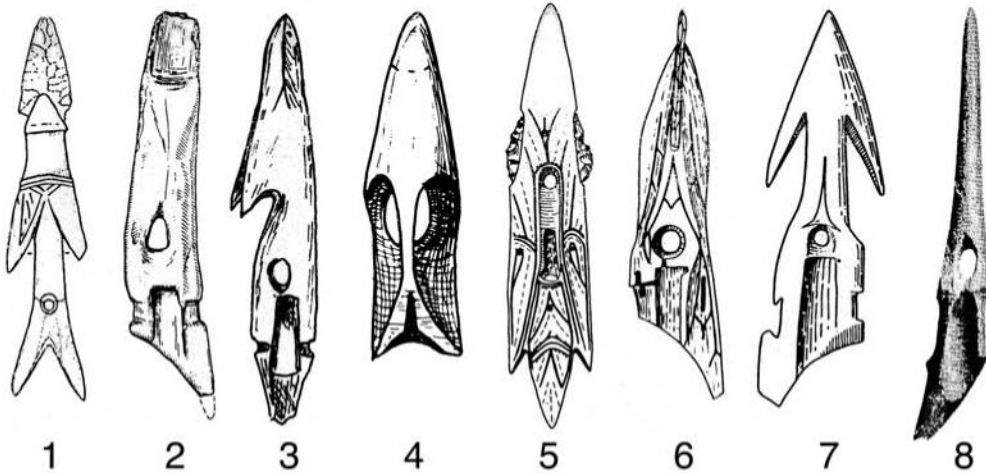
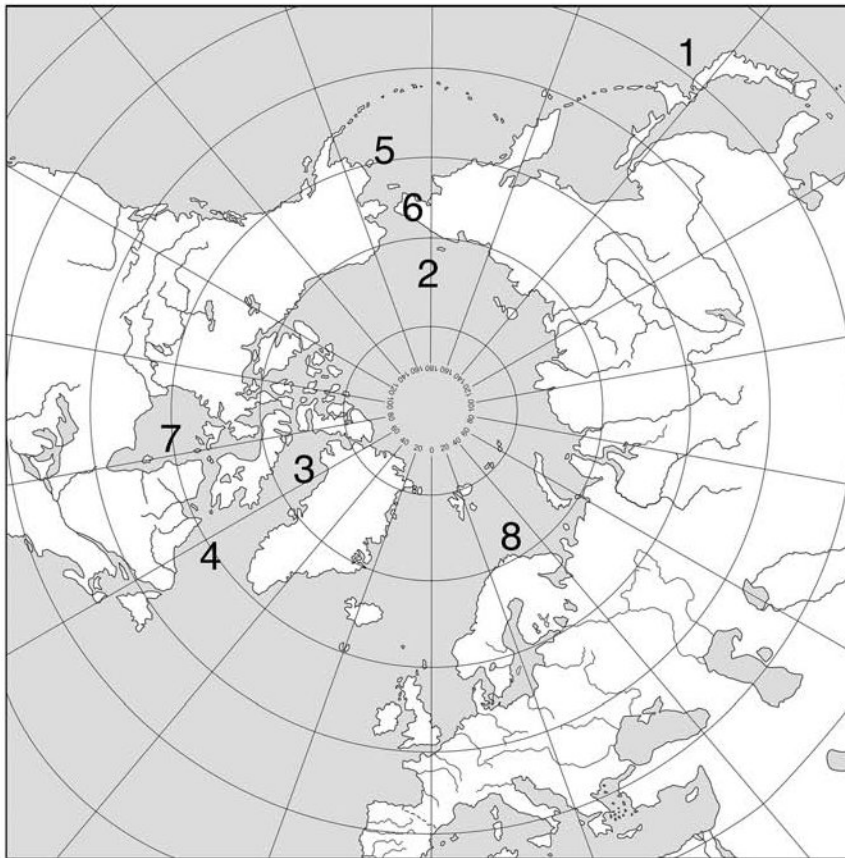


Figure 9b

for the kind of pan-Arctic diffusion and migration that Gjessing proposed. Instead of an advancing easterly wave of population movement and diffusion of harpoons, stone lamps, ground slate tools, skin boats, semi-subterranean dwellings, and others, our reports emphasized three key processes in understanding developments in Arctic regions: (1) the importance of deep regional histories in various core areas; (2) independent development in core areas followed frequently by technological convergence between regions; and (3) influence from southern contacts and diffusion. The latter was a re-statement of the dynamic originally noted by Bogoras, which Carl-Axel Moberg (1975) called cross-economy connections along north trending coasts and rivers. These and other results (see Fitzhugh 1975b) and

subsequent research progress, summarized in Figure 10, are enumerated below:

Northern Maritime Core Areas Probably the most important conclusion was serious question about the proposed continuous circumpolar chain of cultures—at least in the Eurasian maritime/tundra or boreal/taiga regions—envisioned by Bogoras, Gjessing, and others. This belief was based initially on the idea that an early ancestral Eskimo culture or a comparable maritime prototype once existed throughout the Eurasia Arctic as it had in North America and northern Chukotka. Chernetsov (1970) had expressed reservations, and new fieldwork beginning in 1966 with Leonid Khlobystin's work in Yamal and Taymyr (Khlobystin 2005; Pitul'ko 1993, 1999a, 1999b; Fitzhugh

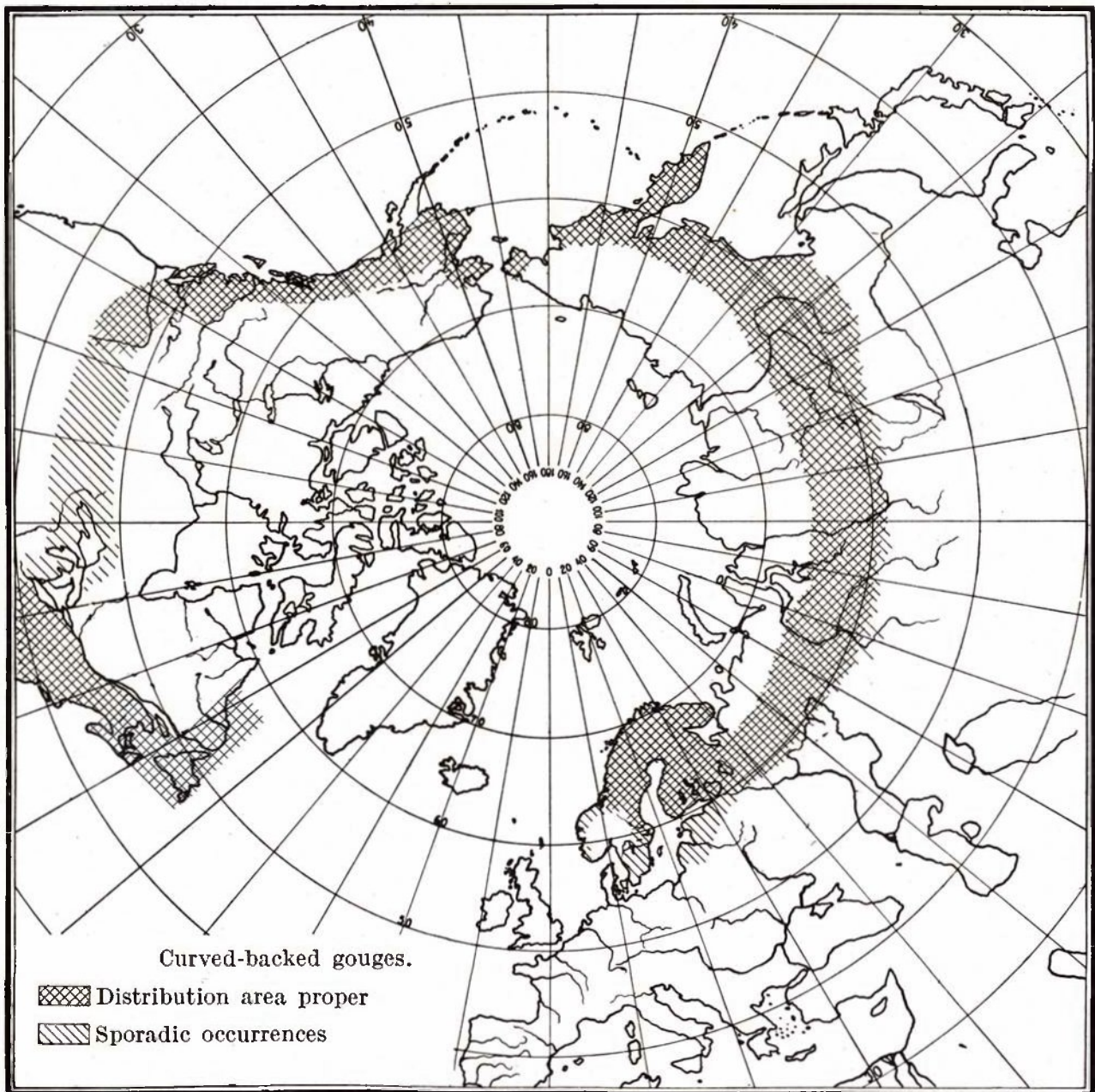


Figure 9c.

2002b) negated any possibility of Eskimo connections and pointed out the growing complexity of any reconstructions that reduced cultural history to a simple circumpolar formula. Instead, the data in 1974 and today suggest the existence of a series of regional northern maritime core areas in ecologically-rich regions in the northwestern Atlantic-Davis Strait and northern Hudson Bay; the North Pacific-Beringian region, and the Scandinavia-White Sea region, supplemented by smaller secondary productive locations in river mouths and estuaries. Not surprisingly, these northern maritime core areas were regional 'hot spots' with highly productive resources and deep occupation histories. These regions had varying degrees of interaction between them but had largely fostered separate (and sometimes multiple) cultural identities, traditions, and histories. Subsequent research reaffirmed the usefulness of the northern maritime adaptation complex and extended the

concept into the southern hemisphere in Patagonia, southern Argentina and Chile, (e.g. Yesner 1980; McCartney 1975), the Subantarctic zone (Sutton 1982), and the southwest coast of Africa.

Northern Barrens A negative corollary of productive northern core areas was the recognition that many areas of northern coasts were 'dead spots' with fewer marine resources and limited or no cultural potential. These regions include much of Russia's Arctic coast from the Kara Sea to the Chukchi Sea, the East Alaska-Coppermine Gulf region, southern Hudson Bay, and High Arctic areas of Canada and Greenland that lacked polynias. Except for its large river estuaries, Russia's northern coasts and parts of the Central Canadian Arctic have shallow seas, little driftwood, and too few fish, seals, walrus, and polar bears to sustain vigorous or prolonged cultural development (Fitzhugh 1998).

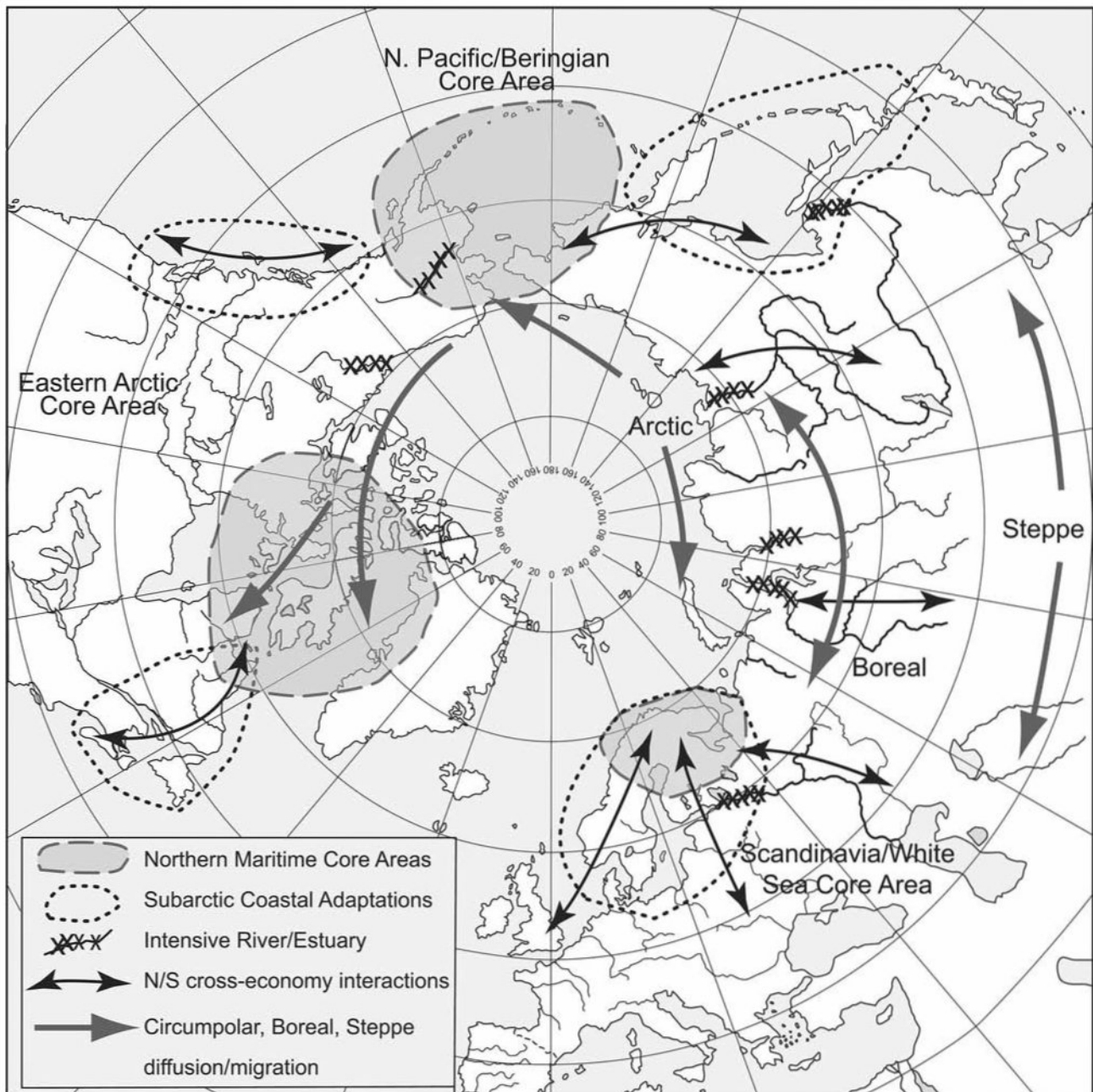


Figure 10. Circumpolar maritime adaptations arise independently in resource-rich core areas influenced by zonal and cross-economy contacts. East-west zonal connections result from migration, diffusion, innovation, and niche expansion. Paleo- and Neo-Eskimo expansions produced cultural uniformity throughout arctic regions of Siberia and North America as a result of migrations stimulated by new technology and adaptations. Turkic culture and language expansions in northern Asia had similar effects due to migrations and population expansions. Reindeer breeding on the other hand may have spread widely in northern Eurasia as a result of borrowing and diffusion.

Stability and Instability of Northern Ecosystems and Cultural Traditions Research has produced strong evidence for varying degrees of ecosystem stability and corresponding cultural stability and resilience (Fitzhugh 1972:167-197, 1977). Subarctic and Arctic maritime ecosystems vary in productivity and abundance of marine mammals, fish, and bird life depending on up-welling, polynia development, seasonality, and other factors. Marine regions like the Northwest Coast, Aleutian Islands, Bering Strait, Okhotsk, and Northern Norway exhibit astounding productivity and relatively great stability and predictability. Even relatively poor marine systems have complex, multi-tiered food webs and overall are relatively stable and

predictable. In contrast, northern interior ecology is far less productive, having fewer species and simpler food webs, and its animals are frequently prone to local extirpation and population crashes due to periodic perturbation from fires, icing, predation, and disease. Even without population crashes, disrupted migration patterns often remove critical resources from human access. Compared to coastal peoples, cultural histories of boreal and taiga regions have lower populations and population densities, exhibit greater seasonal movements, have less complex material culture, and often have shorter cultural phase periods. Cultures with coastal adaptations, or mixed coastal-interior adaptations have more concentrated resources available and exhibit

longer periods of tenure, with cultural continuities that may be traced over thousands of years, such as in the Aleutian Islands, Labrador Maritime Archaic, and the Paleoeskimo and Neoeskimo traditions (Fitzhugh 1997).

The Northern Maritime Technological Complex Bogoras and Gjessing pointed to a suite of technological features noted above that he considered as indicators of common history. More recent research has shown that many of these technologies have different origins and separate histories in different Arctic and Subarctic core areas. Nevertheless, the presence of functionally comparable technologies and adaptations in many northern regions points toward a shared northern maritime technological complex rooted in the requirements of northern life, as exemplified by ground slate industries (Fitzhugh 1974, 1975b). This technology has been found to be superior to chipped stone technologies for processing fish and sea mammal materials. Studies of the history, context, and forms of these adaptations should be the focus of new research on comparative, historical, and functional aspects of northern cultures, rather than trait-list comparisons between cultures.

Mixed Economy Adaptations Despite their relative advantages, maritime adaptations rarely suffice as the exclusive means for sustaining human populations. Only in extremely productive marine systems like the western Aleutians was it possible for cultures to be sustained over long periods of time without terrestrial game, and even in these situations crises and local extinctions occurred. For this reason many northern ethnographic cultures were partitioned demographically into maritime- and interior-oriented segments which exchanged products of land and sea. Interior peoples generally needed fish, sea mammal oil, and waterproof sea mammal hides for boat covers and boots, while coastal peoples needed warm furs, sinew, and wood or bark products. Saami, Koryak, Chukchi, and various Inupiat and Inuit groups organized themselves this way (Krupnik 1988; 1993). Even in cases where hostilities existed, such as between Innu and Labrador Inuit, arrangements were made to exchange critical products. For this reason studies of northern maritime archaeology must also incorporate regional perspectives and interior research programs.

Bering Strait: Eskimo Hearth and Continental Crossroads The 2000 year history of Eskimo occupations at and around Bering Strait (Okvik, OBS, Punuk, Ipiutak, Birmirk, Thule) demonstrated the ecologically and culturally productive nature of this region but left unanswered questions of earlier occupations and Eskimo 'origins' (Collins 1951, 1973; Dumond and Bland 2002; Dumond 2009; Fitzhugh et al. 2009). While it is evident that there is a long history of maritime adaptation along America's North Pacific shores, many scholars suspect that northeastern Siberian cultures may have developed the first toggling harpoons, initiated the hunting of large whales with float gear, and introduced dog-sleds, sinew-backed bows and slat armor to Alaska and the Northwest Coast.

'Unknown' Northeast Asia Likewise, the cultures of East

and Central Asia appear to be the likely source of metal and military technology for the Bering Strait region as well as the impetus for new forms of art and religious beliefs seen in masked burials and shamanistic elements in early Eskimo burial practices, especially noted at Ipiutak (Larsen and Rainey 1948; Collins 1951, 1971; Chard 1974; Arutiunov and Fitzhugh 1988; Dumond and Bland 1995; Dumond et al. 2006; Mason 2009). While archaeological exploration of northeastern Siberia has progressed rapidly in recent decades (Chard 1974) and has become better-known, partly as a result of the U.S. National Park Service's translation of Russian literature, it and Russia's Arctic coast are the least-known areas of the North and hold the promise of important discoveries.

The Yamal Chimera For some years material excavated by Adrianov, Chernetsov, and Mozhinskaya at Ust'Poluy Iron Age sites on the Ob River and in southern Yamal seemed like a possible source for an early Eskimo-like maritime adaptation with harpoons, sea mammal hunting, and dog and reindeer sled traction. Although Ust'Poluy was cited by Larsen and Rainey in 1948 and queried by Moberg (1975) and others, no intensive maritime adaptation has been identified from the Pechora to the Indigirka Rivers. Yamal's putative circumpolar connections are now seen as a largely local development although having connections to the White Sea to the west and to metal-producing societies in the southern Urals. Contrary to Larsen's and Rainey's speculations with regard to similarities to ritual and art at the northwest Alaskan Ipiutak site, new research has shown that Yamal has no proto-Eskimo features (Fitzhugh 1998; Fedorova 2003a, b).

The Russian High Arctic Human occupation of northwestern Siberia began at least 40,000 years ago (Pavlov et al. 2001) and on the Arctic coast of northeastern Siberia by 30,000 years ago (Pitul'ko et al. 2004). Similarly, the 8000 year old Mesolithic Zhokhov site located in the northern Laptev Sea displays a land-hunting adaptation focused on caribou and polar bear hunting with no indication of toggling harpoon technology or maritime-based subsistence (Pitul'ko 1993). Although it was often predicted, no early maritime-adapted cultures have been found in the Russian High Arctic between the Pechora and the Kolyma rivers. In these areas, interior or riverine adaptations have been dominant for the past 2000 years, coupled with reindeer breeding or hunting in some areas (Khlobystin 2005). If a Russian Arctic High Arctic maritime adaptation existed during the Holocene, most of its sites have vanished under rising sea levels or been lost to riverbank erosion.

Northward Shift of Subarctic Maritime Adaptations Intensive subarctic maritime centers become recognizable world-wide around 6000 years ago as sea levels stabilize and salmon and marine mammals begin to play an important role in settlement and subsistence in many northern regions. In some areas such developments seem to have begun much earlier, perhaps by 12-14,000 years ago on the Amur and Kamchatka Rivers and in early Jomon Japan. By 9000 years ago semi-permanent maritime settlements

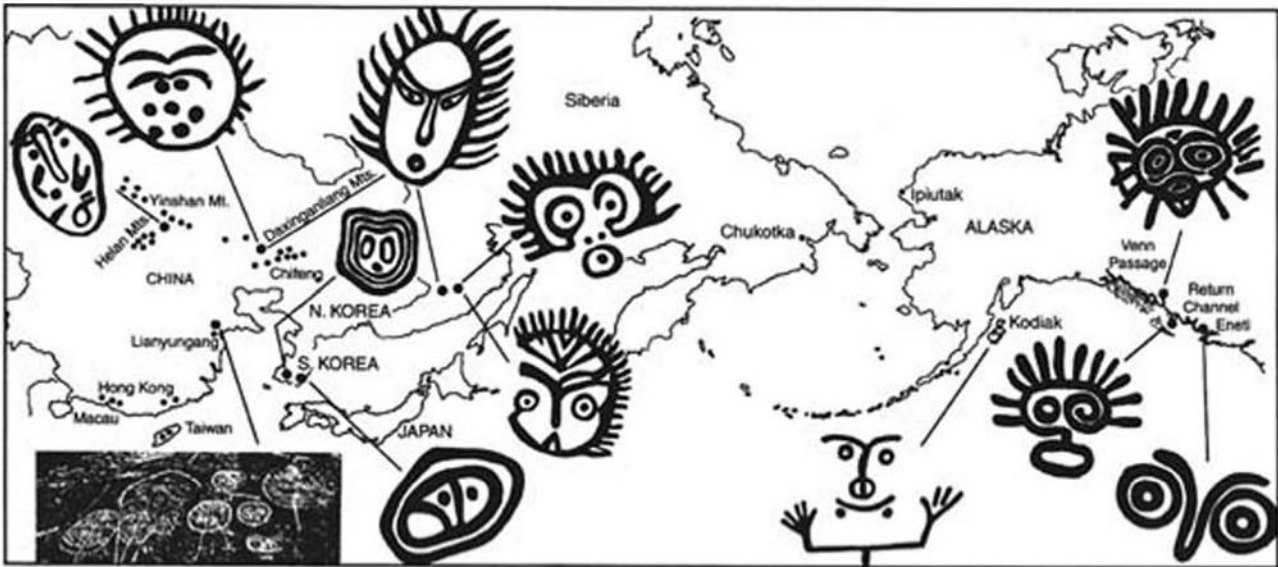


Figure 11. Human face petroglyphs from East and Northeast Asia (Song 1992, 1998) support other cultural evidence suggesting that human masking traditions were once as widespread here as they were in recent times in northwestern North America. Their disappearance in the northeast Asian interior is linked to the shift from hunting to reindeer-herding economies. Their preservation in maritime Asia, Alaska, and the Northwest Coast until the introduction of Christianity probably can be attributed to the persistence among hunters of respectful ritual and beliefs about human-animal interaction.

existed in northern Scandinavia, along the Northwest Coast, and in Unalaska and the Eastern Aleutians. Comparable developments are not known in the Maine-Labrador region until 5500 B.P. (Fitzhugh 2002b; Hood 2008)

Culture Movements, Wedges, and Filters Contrary to Paleolithic theorists and to a lesser degree with Bogoras and Gjessing, there is no over-riding west-to-east migration or progression in Eurasian Arctic cultural development, although such a trend is definitely evident in the peopling of the Americas and Eskimo-related culture history in Northeast Asia and American Arctic regions during the past 6000 years. Cultural ‘back-flow’ from North America into northeastern Asia proposed by Boas to account for the presence of “Americanoid” raven mythology in Northeast Asia is still an open question, as is the reality of an “Eskimo wedge” on later periods of Beringian culture history. Asian influence and movements into North America seem to have been common throughout prehistory (Collins 1973; Powers and Jordan 1990; Dumond and Bland 1995; Dumond et al. 2006; Fitzhugh 2008), explaining the appearance of Alaskan Arctic Small Tool and ceramic traditions, Siberian inspiration for Ipiutak religion and art, the appearance of smelted iron, armor, wrist-guards, compound bows, and dog sleds in Alaskan Eskimo cultures. However, not everything Asian was accepted. Reindeer-breeding, which reached the Asian shore of Bering Strait 1000 years ago, did not become established in Alaska until it was introduced by missionaries and government. Furthermore, Alaskan masking and artistic traditions remained strong south of Bering Strait (Fienup-Riordan 1996) where reindeer-herding and whaling with large communal crews was not practiced, whereas masking and mask-like petroglyphic art appear to have declined or disappeared in northeast Asia following these innovations (Figure 11; Fitzhugh 1988; Song 1992, 1998).

North-South Connections Contrary to Bogoras and Gjessing, Arctic cultures were not isolated or culturally marginal and traded ivory, furs, skins and other products with groups to the south, receiving in return metal and metal technology, ideas about animal domestication, and innovations in art, military, and religious ideas. Grain, domestic animals, and metal flowed into northern Scandinavia from northern Europe, and Russian Arctic cultures received metals and metallurgy techniques, and fine arts from southern centers through contacts facilitated by north-flowing rivers. Other types of transmissions occurred along north-trending coasts on both sides of the North Pacific and western Atlantic Oceans. Southern influences and migrations notwithstanding, Arctic and Subarctic cultures developed distinctive and unique technologies, arts, housing, spiritual beliefs, and ways of living based entirely on their own experience.

The Myth (and Reality) of Arctic Conservatism Although there is no general acceptance of Bogoras’s concept of ‘Arctic retardation’—the preservation of early cultural forms in later cultures—numerous instances of cultural conservatism do occur among northern cultures. How does one explain the 5000-year eastward time-transgressive appearance and retention of Arctic Small tool tradition microblades, bifaces, and burin technology from northeastern Asian Neolithic cultures to Greenland and Newfoundland Paleo Eskimos, microblade retention in mountainous coastal and interior regions of northwestern North America almost into historical times, or the persistence of masking and spiritual traditions of Alaskan Eskimos and Northwest Coast Indians? Conservatism is most evident in the North American Arctic. The reasons for preservation of ancient traditions appear related to conservative values within cultures whose subsistence was based on hunting and fishing, activities in which relations

with animal spirits were of paramount concern. Geographic removal and relative isolation from more active centers of cultural development was also a factor.

Languages and Genomes Biological and linguistic relationships of northern peoples that were active research themes in the mid-20th century declined, only to re-emerge again in recent decades. Recent identification of linguistic connections between Alaskan Athapascan and Central Siberian Ket remind us of the complexities inherent in the history of human groups now continents apart from one another. The presence of Athapascan language among the Navajo makes these trans-Beringian connections all the more striking. It is likely that future genomic research will produce equally surprising results relating to the biological ancestry of northern peoples (Pálsson 2008).

Climate and Environmental Change Climate and environmental change can be natural and/or human-induced. Correlations are demonstrated for Pleistocene human and animal movements with expansions and retreats of ice sheets. Examples of more recent movements of small groups adapted to one side or the other of forest/tundra boundaries, or to intermittent polynia refuges in high arctic regions, have been documented for Scandinavia, the Canadian Arctic, Greenland, and Labrador. There is strong evidence for expansion of southern cultures or cultural elements into the Arctic occurring during warm periods (e.g. domesticates in northern Norway and Sweden; Norse expansion to Greenland) and southward expansion of Eskimo cultures during cool periods, such as Inuit appearance in Norse Greenland (McGovern 2000; Gulløv 2004) and Pre-Dorset, Groswater, and Inuit cultures in Labrador (Fitzhugh and Lamb 1984; Fitzhugh 1997). In these cases, cultures appear to respond to climate and environmental changes in the same way as biota. Reliable methods are now available to explore the instances of climate and environmental change and causes of population movements and declines from many perspectives.

The Future of Circumpolar and Northern Maritime Studies

During the early history of anthropology when Eskimo origins dominated the research agenda circumpolar theory offered a sound basis for understanding and comparing northern cultures. The past half century has seen a shift in focus from grandiose theories to investigating regional cultural developments, environmental and climate issues, north-south interactions, and less emphasis (except in North America), on latitudinal connections along the Arctic coasts or through the Subarctic forests. During this period, maritime adaptations coupled with riverine fishing and hunting have come to be seen as crucial in providing the stability and productivity required for northern cultural elaboration. The fact that animals, peoples, technologies, and ideas have spread rapidly across northern Eurasia and North America gives this region a unique global history that cannot be duplicated in southern portions of the globe. The peopling of the New World and the more or less constant migrations that crossed Bering Strait, mostly from west to

east, since then are as eloquent testimony of the importance of migrations and contacts in Arctic regions as the better understood spread of reindeer herding throughout Eurasia and the Eskimo migrations in North America. Arctic archaeology and anthropology are global by their very nature, and recent trends in international collaboration provide hope that northern research will continue to practiced as a global enterprise.

While research has settled some questions about Eskimo development (in not of their ultimate origin), other questions remain. Boas' idea of an Eskimo wedge—an intrusion into Bering Straits from Canada—is no longer a viable historical event, but the concept has been used frequently to describe an impediment to the passage of new peoples. The fact that Eskimo groups controlled Bering Strait by virtue of occupying both sides was certainly significant, and recent history would have been different if different groups had held opposite shores. During the thousand years that Chuckchi reindeer herders were present in Chukotka, even establishing communities on Bering Strait and learning to hunt seals and walrus, they did not reach with their reindeer. Was Bering Strait a barrier, semi-permeable, or open to enterprising outsiders? Probably, as in most things human, the outcome varied according to the political behavior of the residents and newcomers. Similarly, one wonders whether the northern position and climate of Bering Strait acted as an 'arctic filter' in controlling or influencing the movements or exchanges. Horses and rice would not have been useful to Alaskans, but dog sledges were immediately imported from Siberia about the same time that military hardware like bows and armor appeared, ca. A.D. 500-700. On the other hand, knowledge of bronze and iron production techniques that had become well-established elsewhere in Northeast Asia 2000 years ago never reached Alaska, even though its people knew and desired these materials. Someday we hope to understand better the dynamics at Bering Strait.

The proliferation of maritime anthropological studies in recent decades and their extension into prehistory has reinvigorated classical circumpolar theory and offers a new window into northern culture history that has only begun to be explored. Holocene sea level rise has already inundated the great proportion of the coastal records of ancient cultures. Only in northern regions where ice sheets produced isostatic rebound have these early records been preserved on uplifted beaches and river terraces. Yet even here, tilting from the release of inland ice has removed many coastal records, as in parts of West Greenland, Norway, and Alaska. Where records survive they are frequently associated with semi-permanent houses and settlements whose middens contain well-preserved deposits of archeofauna and botanical remains as well as artifacts. These deposits provide precisely-dated sources of paleoclimate and environmental information. Many of these sites, and indeed the world's entire coastal record, are threatened by a sea level rise of several meters during the coming century. We may soon be forced to become underwater archaeologists to recover the remains of inundation. The lacunae we recognize along much of the 8000 miles of the Russian Arctic coast, which has been such

an impediment to understanding the history of circumpolar peoples, may soon become a general phenomenon of coastal archeology throughout the world. For these reasons it is timely to consider what we have learned and still need to learn from the sites and regions where these resources are still available (Blankholm et al 2007, Blankholm 2009).

Despite environmental threats, northern coastal regions have a number of advantages for pursuing the integrated style of research proposed by Gjessing's Circumpolar Stone Age. The northern environment is still largely intact and relatively unspoiled. Most of its biota survive and live under conditions that have existed for thousands of years, a fact that facilitates environmental reconstruction. Northern cultures and peoples also have been resilient to modern impacts, and many practice subsistence adaptations that are hundreds or even thousands of years old. Such people are aware of and understand the movements of animals, weather signs and cycles, and have deep knowledge of their lands and its resources. Other advantages include the relatively better preservation that often occurs in northern locations due to the build-up of middens, colder climate, permafrost, and waterlogged soils.

Gjessing and Bogoras provided northern anthropologists with a sound theoretical foundation for an early phase of northern cultural research. Today we perceive a far more complicated story than was imagined by these scholars, whose adaptive and comparative methods are more useful today than their historical scenarios. With new tools available and new geography to be explored it seems likely that the next half-century will provide many answers, but only if we can avoid raising world sea levels and destroying the very evidence we need to resolve circumpolar problems.

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