

DID BERING STRAIT PEOPLE INITIATE THE THULE MIGRATION?

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Abstract: The Ruin Island phase of northwestern Greenland and adjacent Ellesmere Island is associated with artifact assemblages that resemble those of western Alaskan Punuk, rather than Canadian Thule culture or the North Alaskan Thule tradition, the supposed source for the Inuit expansion eastward across North America. Ruin Island assemblages also contain numerous artifacts obtained through contact with the medieval Norse. The re-evaluation of radiocarbon series associated with Eastern Arctic Thule culture suggests temporal priority for the Ruin Island phase, with a probably thirteenth century assignment. The role of iron is assessed as a motive for instigating the initial movement of Inuit from Alaska to the Eastern Arctic, and it is concluded that this was possibly a commercially-motivated enterprise undertaken by peoples whose ancestors had long engaged in the metal trade across Bering Strait

Keywords: Greenland archaeology, Punuk culture, Inuit origins

When Erik Holtved (1944, 1954) excavated early Inuit winter houses at Ruin Island and other locations in the Thule District of far northwestern Greenland, he recovered artifact assemblages that were significantly different from those excavated earlier by Mathiassen (1927) from Thule culture villages in Arctic Canada. The most striking characteristic of these assemblages was their resemblance to western Alaskan Punuk, rather than to Canadian Thule culture or the North Alaskan Thule tradition which was assumed to have given rise to the Inuit expansion eastward across North America. Holtved termed these assemblages "Ruin Island" and, on the basis of their association with artifacts apparently obtained through contact with the mediaeval Norse, he assigned them to the period around AD 1300 (Holtved 1944, II: 179). The advent of radiocarbon dating confused the temporal picture, with samples of ivory, driftwood and Arctic willow associated with Ruin Island complex sites producing dates as early as the ninth century AD (Meldgaard 1977:35). Together with the Punuk cast of Ruin Island assemblages, these early dates suggested that the origin of the initial phase of ancestral Inuit expansion to the eastern Arctic should be searched for in western Alaska.

The temporal placement of the Ruin Island complex was established with greater certainty by radiocarbon dates obtained from sites on eastern Ellesmere Island, excavated during the 1970s and 1980s by Karen McCullough and Peter Schledermann. The seventeen dates on terrestrial materials excavated from components on the Canadian side of Kane Basin suggested a temporal placement for the Ruin Island occupation during the late twelfth to early thirteenth centuries, significantly later than had been previously postulated and only a century earlier than Holtved had originally estimated (McCullough 1989: 240-241). Since scattered radiocarbon dates on early Thule materials from Arctic Canada continued to support Mathiassen's original (1927) estimate of 1000 AD for the Thule expansion eastward, McCullough (1989: 257) and others (Morrison 1989; Gulløv 1997; Whitredge 1999) have followed Holtved (1944, II: 151) in considering the Ruin Island complex to have resulted from a secondary movement of Alaskan peoples through a pre-existing Thule Inuit occupation of Arctic Canada. The close stylistic similarity of Ruin Island artifacts to those of Alaskan Punuk culture suggested to Holtved (1944, II: 149) that this incursion occurred very rapidly, and in fact McCullough (1989:188) has presented evidence indicating that

Table 1: Radiocarbon dates associated with supposedly early Thule components from High Arctic Canada, calibrated using OxCal v3.4 (Ramsey 2001; Stuiver et al. 1998) and shown with 1 σ range.

Laboratory Number	¹⁴ C Age, Years BP	Material	Component	1 σ Cal. Range, Years AD
Beta-111668	740 \pm 60	caribou bone	Mittimatalik	1220-1300
Beta-146776	680 \pm 40	caribou bone	Resolute M1, House N	1280-1390
Beta-146775	670 \pm 40	caribou bone	Resolute M1, House N	1280-1390
Beta-140676	590 \pm 40	caribou bone	Brooman Point, House 12	1305-1405

some Ruin Island pottery was probably made from Alaskan clay and carried from Alaska to the northeastern Arctic.

If the appearance of Ruin Island materials is thought of as a secondary migratory event, it may imply that the Ruin Island phenomenon was an interesting but essentially transitory episode in the Inuit expansion to Arctic Canada and Greenland, and may not have contributed significantly to that effort or its long-term results. The following paper explores an alternative reading of the significance of the Ruin Island event, involving the presence of other cultural agents—Dorset Palaeo-Eskimos and Greenlandic Norse—and their influence on the early Inuit expansion eastward from Alaska.

Evidence has recently been presented (McGhee 2000) to suggest that the prevailing interpretations of radiocarbon dates to indicate that the initial Thule migration occurred at approximately AD 1000 is incorrect. A major cause of this problem appears to have been the imprudent interpretation of dates obtained from samples of materials (e.g., driftwood, Arctic willow, and materials from the marine reservoir) which occasionally or systematically yield incorrectly early age measurements (McGhee 2004; Nelson and McGhee 2002). A reassessment of the dates associated with the Ruin Island complex (McGhee 2004) suggests that the earlier and more variable age ranges on dates obtained from Arctic willow may indicate the use of wood that was old at the time that the sites were occupied, and that these dates are best ignored. Discarding measures on willow, we are left with a suite of eleven dates with age ranges concentrated in the thirteenth and fourteenth centuries (Table 2). These span the date that the Norse first reported having encountered signs of natives in the area, and agree with the age of the Ruin Island occupation as originally suggested by Holtved (1944, II) on the basis of the presence of Norse artifacts in Ruin Island assemblages.

A small series of dates on apparently reliable materials is now available from components of what has been considered the earliest (pre-Ruin Island) phase of Canadian Thule culture, that associated with harpoon heads of the Natchuk and Sicco-like forms (Morrison 1999). The dates (Table 1) indicate that these components are essentially contemporary with, or perhaps slightly later than, the Ruin Island occupation. Dates on reliable materials associated with Classic Thule culture in High Arctic Canada indicate that this episode occurred primarily during the fourteenth and fifteenth centuries, and that it was probably initiated a few generations later than the beginning of the Ruin Island occupation (McGhee 2004).

This reassessment of the evidence relating to the initial phases of the Inuit expansion to the eastern Arctic once again gives probable temporal priority to the Ruin Island complex. It suggests that the colonization episode that brought ancestral Inuit to the eastern Arctic did not occur through the slow eastward expansion of North Alaskan Thule culture whalers, as has previously been seen as the most likely mechanism, but that it was initiated by a rapid eastward movement of peoples from western Alaska. The apparent rapidity of this movement through the relatively unproductive environment of the Central and High Arctic to a location in the extreme northeast of that region—approximately 4000 km from the origin of the migration—suggests that it took the form of goal-oriented exploration. Artifacts made from meteoric iron and smelted metal, as well as other materials apparently derived from European contacts, occur more frequently in Ruin Island houses and middens than in those of any other phase of Thule culture in Arctic Canada (Holtved 1944; McCartney 1988; McCullough 1989). The position of Ruin Island complex sites near the iron resource of the Cape York meteorite fall in northwestern Greenland, as well as adjacent to the *Nordsetur* region visited seasonally by mediaeval Norse hunters, suggests that the goal may have

been metal obtained from these sources (McCartney 1988; McGhee 1984, 2004).

Recent investigations on the Greenland side of Nares Strait have, however, turned our attention to the possibility of other agents being involved as mediators in the scenario described. Recently acquired radiocarbon dates from the region (Table 2) provide evidence that Late Dorset people survived along the coast of Nares Strait and Kane Basin until at least the thirteenth century, and occupied the area synchronously with the Neo-Eskimo pioneers from Alaska (Appelt and Gulløv 1999; Appelt 2003). Iron of meteoric origin is associated with Late Dorset dwellings in amounts and forms that may be interpreted as a stock of raw material for future use and trade (Buchwald 2001: 57).

If rumors of the availability of metal in the eastern Arctic provided the motive for the initial eastward movement of ancestral Inuit, it has been argued (McGhee 2004) that Punuk-related peoples who were already engaged in the trade in metals crossing Bering Strait from Asia would be likely candidates to undertake such an enterprise. Bandi (1995) and Mason (2000) interpret the apparent martial nature of Punuk societies as related in part to their involvement in the metal trade, and such aggressive and maritime oriented societies would appear capable of accomplishing a rapid movement through unoccupied or sparsely occupied territory until they reached the northeastern retreat of the Late Dorset culture Palaeo-Eskimos and their Norse neighbors (Gulløv 2000).

On the basis of Ruin Island artifact styles, which show as much resemblance to Birnirk and Western Thule as they do to Punuk assemblages, McCullough (1989:254) suggested that these early migrants originated somewhere to the north of Bering Strait, probably along the northwestern Alaskan coast. However, the geographical as well as cultural relationships between these three western complexes has become more uncertain as a result of recent excavations and revised series of radiocarbon dates (Gerlach and Mason 1992:65). Csonka (2000: 64) notes that excavations at Ekven, on the Siberian shore of Bering Strait, supports earlier indications that Birnirk may have a stronger presence in Siberia than in Alaska, a conclusion previously drawn by Gerlach and Mason (1992:67). Recently excavated components at Wales and Ekven, on either side of Bering Strait, show a confusing amalgam of Punuk, Birnirk and Western Thule traits (Csonka 2000, 2003; Dneprovsky 2002).

A similar combination of traits is apparent in Ruin Island assemblages, and it would probably be safe to state

that—aside from the specimens of Norse origin—Ruin Island artifacts would not be noted as anomalous among the numerous specimens collected from the eroding midden at Ekven (Blumer and Csonka 1998: 102). Such amalgamations of traits are not confined to the temporal period of the Ruin Island migration, nor to mixed assemblages such as that from the Ekven midden, but also occur in individual burials from the Ekven cemetery (Bronstein 1995; Bronstein and Plumet 1995). The presence of Punuk/Birnirk/Thule assemblages in the Bering Strait area provides an appropriate cultural background for the proposition that the Ruin Island migration may not have originated in northern or northwestern Alaska, but from a society inhabiting the Bering Strait region and already engaged in the iron trade from Asia to Alaska.

If the Ruin Island occupation of the eastern High Arctic did result from a rapid movement of people from Bering Strait, would we expect that cultural traits related to western Alaska might be detected in later Inuit cultures of the Eastern Arctic? The general uniformity of Inuktitut/Inupiaq dialects spoken between northwestern Alaska and Greenland, together with the resemblance of Canadian Thule culture materials to ancestral complexes in North Alaska, suggests that Inuit of the central and eastern Arctic trace much of their cultural ancestry to eastward movements from North Alaska which occurred at some time after the Ruin Island migration (Woodbury 1984). It therefore seems probable that the Ruin Island episode would have left little mark on the cultures of later Canadian Inuit, but this may not be true of Greenland.

The significant number of winter houses and depth of middens associated with Ruin Island occupations in the Smith Sound region (Holtved 1944; McCullough 1989) suggests that this occupation episode was neither short nor ephemeral. The suite of radiocarbon dates associated with the Ruin Island episode (Table 2) suggests that occupation may have occurred over a period of at least two centuries. Both Holtved (1944) on the Greenland coast of Smith Sound, and more recently Schledermann and McCullough (2003) on the Ellesmere Island coast, have documented substantial occupations of the region during later centuries. Holtved (1944, II: 73) appears to suggest continuity of occupation, with several Ruin Island cultural elements contributing to the succeeding Inussuk complex in West Greenland, while Schledermann and McCullough (2003:124) interpret cultural change in post-Ruin Island times as resulting from a combination of *in situ* development of local regional adaptations, and northward movements of Canadian Thule populations. The Inughuit society that has occupied the region in recent times seems to trace its linguistic ancestry

Table 2: Radiocarbon dates associated with Late Dorset and Early Thule components from twelve sites in the Smith Sound region of northwestern Greenland and eastern Ellesmere Island. Dates are calibrated using OxCal v3.4 (Ramsey 2001; Stuiver et al. 1998) and shown with 1σ range. (cf. Appelt 2003: 23-28, 39-47).

Lab. No.	Locality	Component & Culture	Material	^{14}C Age, Years BP	1σ Range, Years AD
AAR-7466	Washington Land, Torvegade Fjord	Structure 2, <i>Late Dorset</i> , 1 st episode	Muskox bone	820 \pm 40	1185-1270
AAR-7467	Washington Land, Torvegade Fjord	Structure 2, <i>Late Dorset</i> , 2 nd episode	Muskox bone	654 \pm 36	1290-1390
K-4256	Washington Land, Cape Buddington	Dwelling, <i>Late Dorset</i>	Arctic hare bone	690 \pm 65	1270-1400
K-6708	Inglefield Land, Qeqertaaraq	Structure 161, House, <i>Late Dorset</i>	Charcoal, <i>Salix</i> sp.	711 \pm 43	1260-1390
KIA-17726	Inglefield Land, Qeqertaaraq	Structure 4, <i>Late Dorset</i> , Arrowhead, <i>Early Thule</i>	Antler	891 \pm 29	1040-1220
KIA-16942	Inglefield Land, Cape Kent	House 4, <i>Early Thule</i>	Muskox horn	892 \pm 36	1040-1210
K-4469	Inglefield Land, Cape Kent	House 2, <i>Early Thule</i>	Antler	640 \pm 50	1295-1395
AAR-3233	Inglefield Land, Qeqertaaraq	Structure 294, House, <i>Early Thule</i>	Caribou bone	640 \pm 50	1295-1395
K-1489	Inglefield Land, Ruin Island	House 6, <i>Ruin Island phase</i> ,	Woollen cloth	680 \pm 100	1260-1410
KIA-16936	Steensby Land, Nuullit	House 29, <i>Ruin Island phase</i>	Muskox horn	884 \pm 25	1060-1090
KIA-16941	Steensby Land, Nuullit	House 29, <i>Ruin Island phase</i>	Muskox horn	724 \pm 20	1277-1293
KIA-16938	Melville Bay, Cape Seddon	House 11, <i>Ruin Island phase</i>	Antler	558 \pm 38	1320-1425
GSC-3003	Ellesmere Island, Skraeling I.	House 22, <i>Ruin Island phase</i>	Heather	830 \pm 50	1160-1410
GSC-3156	Ellesmere Island, Skraeling I.	House 21, <i>Ruin Island phase</i>	Heather	660 \pm 60	1280-1400
GSC-3059	Ellesmere Island, Skraeling I.	House 15, <i>Ruin Island phase</i>	Heather	580 \pm 50	1300-1410
GSC-3038	Ellesmere Island, Skraeling I.	House 15, <i>Ruin Island phase</i> ,	Woollen cloth	700 \pm 50	1260-1400
Geo-6069	Ellesmere Island, Skraeling I.	House 6, <i>Ruin Island phase</i>	Oak wood	670 \pm 110	1250-1410
GSC-3396	Ellesmere Island, Eskimobyen	House 25, <i>Ruin Island phase</i>	Heather	760 \pm 70	1190-1300
GSC-3561	Ellesmere Island, Sverdrup	House 6, <i>Ruin Island phase</i>	Heather	620 \pm 50	1300-1400
AAR-7370	Inglefield Land, Inuarfissuaq	House 8, <i>Post Ruin Island</i>	Antler	431 \pm 38	1430-1485
KIA-16937	Dundas area, Thule Uummanaq	House 10, <i>Post Ruin Island</i>	Caribou bone	323 \pm 17	1520-1640

to groups moving from Arctic Canada over the past two or three centuries (Mary-Rousselière 1991; Schledermann and McCullough 2003: 125).

The initial Inuit expansion into southwestern Greenland took place during the 14th century, a time when the Smith Sound corridor to Greenland was occupied by Ruin Island societies. In the following century winter dwellings with the diagnostic Ruin Island kitchen annex together with separate men's houses were being built in the abandoned Norse Eastern Settlement located in the southernmost part of the island (Gulløv 1997: 343ff, 2003). This would appear to implicate the Ruin Island people as a prime mover in a goal-oriented Inuit expansion along the west coast to southern Greenland. Another expansion, lacking the Ruin Island architecture but with characteristics of late Dorset influence from the Thule District of northwestern Greenland, reached the east coast by travelling around the northern end of the island (Gulløv 1997: 383; 2004: 295ff).

If the Ruin Island people did leave a surviving cultural legacy, would it be recognizably different from that of the presumed Inupiaq-speaking North Alaskan ancestors of eastern Thule culture? Linguists have generally concluded that the Yupik/Inupiaq linguistic boundary in Norton Sound is the result of a recent southward expansion of Inupiaq speakers, and that prior to this expansion Yupik languages formed a continuum from Siberia across Bering Strait to the entire Seward Peninsula and areas to the south (Krauss 1988; Woodbury 1984: 53). Archaeologists have, therefore, generally assumed that Yupik languages were spoken by the ancient peoples who lived around Bering Strait and who are associated with the Old Bering Sea, Okvik, Punuk and probably Birnirk cultures. If the Ruin Islanders spoke a Yupik language and shared in the cultures of the Bering Sea coasts, surviving elements of their language and culture might be recognized in those of the Inuktitut-speaking Inuit of the Eastern Arctic. A small number of such resemblances have been noted. Swadesh (1951:70) and Woodbury (1984: 60) report several phonological affinities between Greenlandic dialects and those of western Alaskan Yupik languages, but ascribe them either to coincidental independent innovation, or to convergence.

If we look at Greenland as a whole, the scenario of Inuit expansion as reconstructed by archaeology also reflects the linguistic situation in the country. There is little doubt that West Greenlandic is a dialect which can be traced back to Thule people, some of whom (i.e., the pioneers of the Ruin Island phase) settled in what was then uninhabited West Greenland. There is also little doubt that another group travelled around the north coast to East Greenland, and is associated with an East Greenlandic dialect which is quite

distinctive, although most of its forms can be traced to a language closely resembling Central West Greenlandic. Since the eighteenth century the linguistic situation on the fringes of the west coast has also included two dialect groups influenced by East Greenlandic: Upernavik, with an East Greenlandic phonological framework introduced from the north; and Qaqortoq-Nanortalik in the southernmost area, with an original West Greenlandic dialect strongly influenced by Greenlanders from the east coast (Petersen 1986).

As dialect formation took place before the Inughuit settled the Thule District, we have reasons to assume that the origin of East Greenlandic should be sought somewhere in the north. The apparently rapid rate of change in the formation of this dialect suggests that contact occurred with another dialect, and Late Dorset Palaeo-Eskimos are the best candidates for a role in such an acculturation process. Although we know nothing about the Dorset language, the linguistic hypothesis draws our attention to the Late Dorset occupation of the Thule District, where Inuit expansions southwards and northeastwards began during the Ruin Island phase (Gulløv 1997: 477). Central West Greenlandic can be referred to as a dialect that retains the oldest features comparable to Inupiaq, while East Greenlandic is a newer dialect related to a migration which occurred early enough for local or regional change to have occurred as a result of a long regional process (Petersen 1986: 402). However, both East and West Greenlandic have surprising phonological and structural similarities with a common Inupiak-Yupik stratum (Fortescue 1998: 191; Olsen 1986).

In East Greenland vestiges of a Punuk cultural origin seem to have survived in parts of the hunting equipment, such as blocks for the so-called winged harpoons (Larsen 1934: 102). Constructed in a different way than the familiar winged objects from the Old Bering Sea-Punuk continuum (Bronshstein 2002), these objects appeared in North East Greenland with the Neo-Eskimo expansion from the north.

Following the expansion further south along the east coast to the surviving Inuit group at Ammassalik, we find the tradition that some individual shamans, the *angakkut puullit*, have the wry-mouthed kayaker as their strongest helping spirit, together with the polar bear and the walrus. No such shamanic helper as the wry-mouthed kayaker exists in West Greenland nor in Canada, but can be related to similar beings known from Seward Peninsula and Nunivak Island in Alaska, and found in carvings from the Birnirk culture (Curtis 1930: 80ff; Ray 1977: 115; Sonne 1986). This tradition apparently came to East Greenland from the north, together with Punuk and Dorset cultural elements, to form "Greenland's most exclusive, most complex and most artistic Eskimo community" (Thalbitzer 1914: 732).

In the biological realm, Utermohle's detailed study of Inuit/Inupiaq crania noted that the greatest resemblance to Birnirk period crania from Alaska were found in samples from western Greenland. He concluded that "The inhabitants of Greenland may well represent an unadmixed (until historic intervention) residuum of the morphological pattern of the earliest Thule culture migrants" (Utermohle 1984: 368). The study of crania from late heathen graves in Upernavik shows a slight difference from the somewhat earlier West Greenland crania, and both differ slightly from the Northeast Greenland crania (Jørgensen and Vesely 1974), dating from a time when the last generation of early Inuit moved south from Thule prior to the advent of the Inughuit.

Inconclusive as these intimations of distant relationship are, they may hint at the survival of cultural elements brought to the Eastern Arctic by the earliest Inuit who reached the area from the west. Their existence provides some meagre support for the proposition that the "Thule migration" was not a simple ecologically-driven expansion of North Alaskan whalers. Rather, the initial phase of the Inuit colonization of the Eastern Arctic may have been a commercially-motivated enterprise undertaken by the peoples whose ancestors had long engaged in the metal trade across Bering Strait.

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