

onstrating how vulnerable the latter are to external shocks wrought, for example, by collapses in fish stocks. Rasmussen, Friis, and Poppel continue the statistical line of analysis by examining various issues relating to income transfers and the distribution of income in Greenland. In doing this, the respective authors highlight a number of important findings. Rasmussen, for instance, shows that income transfers per capita are remarkably similar when one compares the largest towns to the smallest settlements. He also goes some way to pinpointing how important the informal economy is in Greenland. Friis, meanwhile, shows that there are substantial inequalities in the transfers of income made to different regions. In revealing that already poor East Greenland is the overall loser, Friis raises disturbing questions about public policy. Specifically, it seems that the regional dimension to policy has been forgotten. Poppel pursues a different line of inquiry, showing how the distribution of income in Greenland has become significantly more equal since the introduction of Home Rule in 1979. He also presents figures that show the purchasing power of skilled workers and professionals halving during the period 1979–1994. Given Greenland's continued dependence on skilled labour from overseas (chiefly Denmark), this raises serious questions concerning the ability of this country to attract the workers it urgently needs. Focusing on tourism projects in Greenland, the final chapter in this section of the book is informative and provides an important foundation for research. One is left to wonder, however, why researchers continue to ignore the likes of Jacky Simoud in Qeqertarsuaq and Kelly Nicolajsen in Tasiilaq? Both have enjoyed considerable success in promoting tourism in different parts of Greenland. Surely lessons can be learned from their experiences?

The second half of the book is less focused. It is also not clear why particular chapters were included in a book relating solely to Nordic countries. Jussila, Huusko, and Segerståhl, for instance, provide an excellent discussion of how the information superhighway may change the meaning of location — and not necessarily in a benign manner for peripheral regions. The discussion remains abstract, but its relevance to regions of the north is obvious. Hallin, meanwhile, presents a fascinating discussion of the potential impact of deregulation and privatization in different regions of Nordic countries. The ideas are not new, but economists outside the north would no doubt find the material interesting. It is also high time that more attention is paid to competition policy in countries such as Greenland. Lindström and Árnason then change tack again, focusing on autonomy in Aaland and Iceland, respectively. The issues tackled by the former are as relevant to Scotland, Wales, the Basque country, Nunavut, and Denendeh as any place Nordic — even if one believes that a Europe more dominated by Brussels will lead simply to the Europeanisation rather than Finlandisation of the Aalands. And the chapters by Pavlenko and Bærenholdt? The former was disappointing; the latter almost incomprehensible.

In short, the two halves are very different. The scholar of Greenland will find the first invaluable. Others may find particular chapters in the second half intriguing. What the book clearly lacks, however, is a concluding chapter drawing together themes relevant to socio-economic development in the north and elsewhere. (Graham Poole, Micronomics, 400 South Hope Street, Suite 2500, Los Angeles, CA 90071, USA.)

AMERICAN BEGINNINGS: THE PREHISTORY AND PALAEOECOLOGY OF BERINGIA. Frederick Hadleigh West (Editor). 1996. Chicago: University of Chicago Press. xxi + 576 p, illustrated, hard cover. ISBN 0-226-89399-5. £59.95; \$US75.00.

Not often is such an important book published with such an inappropriate title. Even the much more appropriate subtitle would be better if it were 'The archaeology and palaeoecology of Beringia' because West's synthesis of the prehistory of this important region now straddling the Bering and Chukchi seas already requires major revision.

The contentious question of human origins in the Americas is assumed to have been resolved by West's limited interpretation of what is now known about Beringian archaeology. This assumption is based on another assumption that all reported sites located south of glaciated North America are no earlier than what is now known in Alaska — less than 12,000 years old. The recent verification by a group of sceptical archaeologists of the Monte Verde settlement in southern Chile as having been occupied at least 12,500 years ago has disproved these assumptions (Meltzer and others 1997). West's one valid premise is that the earliest sites in the Americas must exist somewhere in eastern Beringia. Unfortunately, they have not been found, largely because archaeologists have looked for the wrong level of technology, and they have not always looked in the right places.

Alaskan archaeologists work with the assumption that the earliest occupants of sub-Arctic Beringia must have had an Upper Palaeolithic level of technology in order to survive the cold winters. Evidence excavated by Yuri Mochanov and Svetlana Fedoseeva (major contributors to this volume) that early people lived along the Lena River using a Lower Palaeolithic level of technology is mentioned but dismissed by West as being irrelevant. The pebble and flake tool technology recovered at the Diring Yuriakh site near Yakutsk (Mochanov 1993) and the similar technology from Middle Pleistocene sites in north China should not be summarily dismissed. It should also be noted that the early occupation of Honshu, Japan, has now been pushed back to 500,000 years (Imamura 1996: 28). Even if the early occupation along the Lena River near the coldest part of the northern hemisphere was during interglacial times (Waters and others 1997), the people must have been adapted to the extremely cold winters. Even if these particular people did not move eastward into what is now Alaska, others with a similar simple level of technology could have been the original occupants of eastern Beringia. But Alaskan archaeologists search for

sites containing bifacial projectile points and/or microblades, which are known to be present in Upper Palaeolithic sites in Siberia. Pebble tools are occasionally found in Alaskan sites, but they are usually considered to be an unimportant part of the lithic material culture. Archaeologists should search for sites containing only pebble and flake tools but lacking carefully shaped artifacts known to be Late Pleistocene and Early Holocene in age.

The same goes for just where to look. Most Alaskan sites are in central Alaska, which is assumed to be the most likely region for Upper Palaeolithic hunters to have pursued large game animals, because much of the region is believed to have been a steppe grassland until Holocene forests encroached. Actually, this region is the easiest part of the state in which to find sites, because there are many steep bluffs of loess exposed by river and road cuts, especially in the Tanana Valley. Most exposed loess was deposited in final Pleistocene and Holocene times. Thus, the lucky archaeologists are able easily to find the microblades and biface fragments exposed in appropriate final Pleistocene/Early Holocene sediments.

Of course, loess was deposited onto these bluffs during earlier stages of glacial retreat, but most of these sediments have been redeposited into the valleys. When excavated, this redeposited muck contains abundant Pleistocene faunal remains, which are summarized in the volume by Dale Guthrie. Artifacts are also found in the muck, but they are not considered to be significant because they are out of original context.

Nevertheless, it is assumed that Upper Palaeolithic hunters had pursued these abundant herbivores, including mammoths, across the vast Siberian steppes from European Russia to eastern Beringia and thence down the hypothetical ice-free corridor east of the Rocky Mountains. These early hunters are known as Clovis on the southern Great Plains, where mammoths were despatched at about a dozen known waterholes about 11,000 BP. Only a handful of fluted points similar to Clovis have been found in Alaska, none in early dated context, nor associated with kill sites. Evidence that the northern part of the ice-free corridor remained icebound until after 11,000 years ago is ignored (Lemmen and others 1994; Duk-Rodkin and others 1995). Clovis has generally been accepted as the earliest identifiable culture south of the melting Wisconsinan continental glaciers, although Clovis occupation sites in the eastern United States recently dated greater than 12,000 BP (Brose and Barrish 1992; Wisner 1992) do not fit the model of American beginnings presented in the book, nor the evidence that the ice-free corridor remained closed until after 11,000 BP. It seems clear that people were already well-established in southeastern North America as well as in southern Chile before the earliest accepted occupation of eastern Beringia. If so, archaeologists must look for and learn to recognize earlier sites in Alaska that lack typical Upper Palaeolithic technology.

Bluefish Caves, in northwestern Yukon, the earliest

excavated site in eastern Beringia, is briefly summarized by Ackerman, but the reported evidence for microblade cores, flakes and burins from a stratum earlier than 12,000 BP, and a mammoth bone core and refitted flake directly dated 23,500 BP are dismissed by the editor because the dated stratigraphy is said to be insecure. Also, Dale Guthrie (personal communication, 1997) has dismissed similarly flaked mammoth bones in Alaska as being naturally broken. The possibility that some early people flaked mammoth bones for use should not be so easily dismissed.

There are other hints of earlier sites outside of central Alaska. Ackerman's summaries of work in southeastern and southwestern Alaska are especially valuable because they include insightful discussion and suggestions for further work. Excavations continue at the Lime Hills Caves near the headwaters of the Kuskokwim River, which have yielded probable bone artifacts in deposits dated earlier than 13,000 BP. The recent discovery of human remains dated 9400 BP from a cave on Prince of Wales Island (Lysek 1997) in extreme southeastern Alaska supports the idea that caves and rockshelters may prove to be very significant in the elucidation of the question of when people first entered eastern Beringia. The latter discovery also supports the hypothesis that early people expanded along the coast following the rich marine ecosystem that included fish and shellfish, plus both land and sea mammals and birds. It should be noted, however, that except for a few refugia, most of the coast of southern Alaska remained glaciated from about 25,000 to after 12,000 BP, so most likely early people first occupied the coast sometime before 25,000 years ago. Unfortunately, most sites occupied by early people with a maritime adaptation are probably now under water. We should expect important discoveries in the future as the technology improves for pursuing underwater archaeology. Meanwhile, caves on and near the coast, especially those in refugia, should be excavated carefully.

Despite objections to certain basic premises pursued by the editor in order to present his theory that available evidence leads to the conclusion that the first Americans entered Alaska about 12,000 years ago, this important volume will stand for a long time as a compendium of current knowledge about the Late Quaternary environments and archaeology of both western and eastern Beringia. There can be little question that description is immortal, although interpretations of the evidence often fall by the wayside.

To set the stage for Beringia, there are 12 papers on various aspects of the palaeoenvironment of northeast Asia and Alaska. Nineteen summaries of important archaeological sites and regions in western Beringia (eastern Siberia and the Russian far east) make available in English the significant research results obtained by Russian archaeologists during the last four decades. This is followed by 36 summaries of sites and regions in Alaska, plus the short summary of Bluefish Caves, just across the Yukon border. Unfortunately, other important early Yukon sites are not included. Translations are excellent, and most

papers are generally quite clearly written and easy to read. I found few typographic errors, although one should be mentioned only because it provoked a fit of laughter to lighten otherwise absorbing but stolid text. It was refreshing to read that hairy mammoths (*Marmota marmota*) dwelt in the Tangle Lakes region of central Alaska during Holocene times. (Alan L. Bryan, Department of Anthropology, University of Alberta, Edmonton, Alberta T6G 2H4, Canada.)

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THE GREENLAND AND DAVIS STRAIT TRADE, 1740–1880. A.G.E. Jones. 1997. Bluntisham: Bluntisham Books. xxxiii + 230 p, hard cover. ISBN 1-871999-08-1.

The author has produced an invaluable volume for all researchers of the Arctic whale fishery. He has provided a comprehensive listing of vessels sailing from British ports to the waters of Greenland and the Davis Strait from 1764 to 1865. The names of the vessels, their masters, rig, tonnage, place built, owners, draft, number of years in the trade, and classification at Lloyd's are all taken from *Lloyd's registers* and the *Register of the underwriters* and recorded year by year. There are three indexes: by ship's name (each year of sailing indicated); by name of master (each vessel on which he served is listed); and finally a list of owners (with list of vessels belonging to each).

This work provides an immediate ready reference to track the presence of a vessel in the fishery, outline of a master's career, and the port where any particular owner

was located. Used in conjunction with Lubbock's *Arctic whalers* (Lubbock 1937), a season-by-season account of the northern fishery, a researcher will have a sound basis for further investigation. Despite a tremendous amount of work in the last 30 years, there are still some amazing gaps, not to say gaping holes, in our knowledge. London, the principal whaling port c. 1750–1800 and home of the South Seas fishery, still currently awaits a historian who will elucidate its progress and level of economic success in detail, although *The British whaling trade*, by Gordon Jackson, is an invaluable contribution to the understanding of the trade nationwide.

Using Jones' volume as a starting point, details of the fleet in each port can be assembled and then refined by reference to local sources, more particularly port registers (customs registers), which include full details of shareholdings, the sale of shares, changes of master, alterations to the vessels, etc. Sailing to and from the fishery can be checked from bills of entry and the notices of departures and arrivals in the local newspapers. For Hull, a particularly useful manuscript survives in the Local Studies Library and a transcript in the Hull Maritime Museum. Written by William Coltish, ship's husband for Messrs Eggintons (not Eggington, as throughout in the present volume), major Hull whaleship owners, it lists the vessels that sailed north from 1772 to 1809 with amount of oil (in tons) recorded against each name. From 1810, it records the master's name, too, and the number of whales caught, and, from 1814 to 1842, these details are given for all the British ports.

Jones prefaces the main text with a series of short essays, which give a useful summary of important Arctic topics: the movements of ice, the location of the fishing grounds, the patterns of trade, and the use of oil and whalebone. These brief notes point out the many areas where much work still needs to be done. One of the problems is the lack of contemporary accounts by the whaling masters, although Scoresby's two-volume *Account of the Arctic regions* (1820) is the great exception. This not only gives a history of the whaling trade up to his time, but also a description of the materials employed in the fishery, and important chapters on the meteorology and topography of the Arctic, and on the whales and other animals encountered there. Scoresby also wrote an invaluable biography of his father (1851); remarkably, the only other comparable work is the autobiography of William Barron (1895), sometime master of *Truelove* of Hull. Apart from these major sources, researchers are largely reliant on the diaries of whaling surgeons for eyewitness accounts of northern whaling.

A logbook tends to be a somewhat restricted record of a particular voyage, but now, thanks to the articles and books of Ann Shirley, Cordelia Stamp, and others, there is a considerable corpus of these texts in print. Together they can be used to plot ice movements and the distribution and migration of whale species. Gil Ross in Canada has done a tremendous amount of work on the latter, and Stuart C.