

and economically' (page 190). Given that cooperation within the region is marginal to the basic problems in Russia and that the high probability that the old power structures and vested interests in both the civil and military domains might perceive a threat from such cooperation, the prospects of realizing a common-security community across the former 'east-west' divide are by no means guaranteed. Kjölberg, however, concludes on an optimistic note, saying that in case it becomes possible to induce and sustain a cooperative behaviour among people unaccustomed to each other, the Barents region 'can become an important link in the line of regional cooperation from North to South' (page 199).

An illuminating comparative perspective on the Barents region is provided by Noralv Veggeland, who compares this initiative with three other east-west regions in Europe today: the Baltic Sea, the Alps-Adria, and the New Euro-Region. According to Veggeland, all three were launched as top-down, state initiatives, and did not benefit from any strong common identity basis in the territories concerned. The Barents region, even though a product of top-down initiative, is described as different, in being a 'functional region with potentials for becoming horizontally integrated' (page 209), institutionalized at both state and regional levels and not yet as developed as the Baltic or Alps-Adria regions in terms of economic networks.

Pertti Joenniemi tends to view the emergence of the Barents region as a manifestation of a trend of region-building that has now reached the northernmost reaches of Europe, further stimulated by the end of the Cold War. His point of departure from the approach adopted by most of the fellow contributors is that he regards regionalization as a more momentous European tendency, in which states are fast losing control over their subjects. In this perspective, regional alternatives to statism seem potentially compensatory, in terms of the quality of world order, for both the erosion of hegemonic stability and the more acute forms of pathology that are afflicting the weak state.

*The Barents region* is rich in thought and argument, innovative in its approach, and logically consistent in its presentation. A must for the student of Arctic affairs, it deals competently with concept and reality of regionalism in the Barents area from various perspectives, with one striking exception. Although the editors do point out at the outset that 'the volume does not pretend to be exhaustive, and central matters like the role of indigenous peoples, regional authorities or private organization are not given in-depth discussion...' (page 8), the absence of a chapter on indigenous issues from a Sami perspective is regrettable in what otherwise is a volume of exceptional merit.

That noted, it goes to the credit of the book that it not only provides answers to wide-ranging questions about the Barents region but also raises pertinent questions for further research. For example, it remains to be seen how regionalism of varying attributes fits within globalization; a central question for which evidence and interpretation are necessarily inconclusive. This uncertainty is further

magnified by the unevenness of different regional settings and of the varying degrees to which economic, political, and cultural life has been regionalized. The links between regionalism and what has been termed as 'negative globalism' (implying largely unaccountable power and influence exerted by multinational corporations, transnational banks and financial arenas, and their collaborators with the ideology of consumerism and a growth-oriented development ethos) also need to be explored. In the context of the Barents region, it might be interesting to explore whether the main regionalist tendencies are reinforcing the drift toward negative globalism or creating resistance (where an understanding of indigenous perspectives could be illuminating) and alternative mitigating options, including the promotion of positive globalism (that is, the democratization of global institutions, creating accountability to more democratic social forces, and establishing procedures for wider participation by representatives of diverse peoples). (Sanjay Chaturvedi, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

**ARCTIC ADAPTATIONS: NATIVE WHALERS AND REINDEER HERDERS OF NORTHERN EURASIA.** Igor Krupnick. 1994. Hanover, NH: University Press of New England. xvii + 355 p, illustrated, hard cover. ISBN 0-87451-632-3. £30.50; US\$17.50.

*Arctic adaptations* is a remarkably ambitious and — within the constraints of its methodology — successful research project. I will return to that caveat, but first a summary of the project, its arguments, and findings.

Krupnik describes his project as that of 'Arctic ethnoecology' (page 270) employing resource biology, systems analysis, and energetics in order 'to assemble and analyze various historical models of human behavior in Arctic ecosystems' (page xii). Thus the focus is on 'subsistence, resource management, and ecological behavior' (page xiii). The geographical reach of the book is nothing less than from Kol'skiy Poluoostrov to the Bering Strait; its reach in time is in centuries (even millennia: the final chapter is a discussion of Arctic adaptations of Paleolithic hunters), particularly the eighteenth and nineteenth centuries, supplemented with data collected from 'local elders' during field trips between 1971 and 1987.

The principal research resources, then, are archival 'such as native population and fur-tax registers, and administrative reports on the status and welfare of the native people' (page 15) through the Tsarist and Soviet epochs. Ethnographically, there is an engaging comparative slant: sea-mammal hunters (particularly the Asiatic Eskimo [*sic*] and reindeer pastoralists (particularly the tundra Nenets and the Chukchi) are compared. The *modus operandi* (and there was really little choice) is statistical — 'the cold algebra of quantification' (page xiii).

The book sustains an argument. At the crux of it are two observations. First, that 'Arctic hunting was crucially dependent upon very short runs of abundant game' and

even their predictability was always uncertain (page 231) (in strong contrast to conditions in the boreal forest/taiga environment). And second, respecting reindeer pastoralism, 'natural hazards...could...sharply decrease the stock in a very short time' (page 103). In both pursuits, then, the practitioners lived with abrupt and radical changes in opportunity: the 'feast-and-famine' syndrome was present with a vengeance, strongly influencing harvesting and production practices (hunters' overkill; pastoralists' overstocking). Nor was the human population itself immune from similarly eruptive conditions — disease, fatalities at childbirth, accidents, and starvation all took their periodic toll. Settlements, hunting grounds, and pastures would be abandoned; and, yet, local populations would recover, and even exceed, their earlier numbers: abandoned settlements and territories could well be 'reclaimed' years or generations later.

With such data, Krupnik gives short shrift to notions (once powerfully fashionable) of Arctic ecology being in 'equilibrium' and of the 'ecopopulation' strategy being one of 'steady state.' To the contrary, '*high growth rate* (human and animal)...proved to be an adaptive form that yielded better results than any kind of drive toward stabilization and equilibrium with the environment' (pages 225–226; emphasis added).

Such analysis is exemplarily processual.

Regrettably, such is strikingly not the case respecting some of the *social* dimensions of the thesis. Let me address this with respect to reindeer pastoralists (chapter 3, principally), where there are repeated references to 'rich' and 'poor' owners without a word as to how this division came about or how it was maintained across generations (as references to 'stratification' might suggest) — if, indeed, it was. Answers would lie embedded in the practices of *inheritance* and *marriage partnerships* and (mentioned but in passing) *rich-poor work partnerships* of mutual benefit. In other words, in the circulation of wealth and labour, and the possible appropriation of wealth, too: was there no reindeer rustling?

In short, the processes of *life cycle* along with the nature of pastoral *competition* remain hidden from us. Here, it is regrettable that Krupnik did not look at statistical data (I assume this would be possible) within the same pastoral community or camp over a sequence of years, and, better still, look at the rise and fall of the fortunes of selected individuals through their life cycles. Of particular interest would be the entries of pastoral wealth of, say, a 'rich' household head before and after the children marry.

Returning to the book as a whole, and Krupnik's handling of statistics, I am in wonderment over what he is able to find and the arguments he is able to construct. But, I am concerned over his dependence — left largely unproblematized — on statistics collected by strangers and officials of different political regimes. There is also dissonance between, on the one hand, the 'message' from the statistical data of unpredictable change in just about all ecologic, economic, and social arrangements, and, on the

other hand, repeated recourse in his text to the 'traditional' and even the 'average.' In places this is taken to a kind of decimal-point absurdity. Thus, the number of dogs per family among the reindeer Chukchi is '3.68' — even so, 'the actual distribution by families and camps was highly uneven' (page 104).

Nevertheless, *Arctic adaptations* is a book of challenging importance for on-going circumpolar research. If only for this reason, it *deserves* critical assessments beyond the adulatory. (Robert Paine, Department of Anthropology, Memorial University of Newfoundland, PO Box 4200, Elizabeth Avenue, St John's, Newfoundland A1C 5S7, Canada.)

**QUATERNARY INSECTS AND THEIR ENVIRONMENTS.** Scott A. Elias. 1994. Washington, DC and London: Smithsonian Institution Press. xiii + 284 p, illustrated, hard cover. ISBN 1-56098-303-5. £31.25; US\$47.95.

The insects outnumber all other life-forms on the face of the Earth, at least in number of species. Indeed, the Coleoptera (or beetles) by themselves constitute more than half the total of all species, plant or animal, terrestrial or marine, all added together. Arguably, the beetles are the dominant life-form of the planet.

The zoologist Haldane is said to have been asked by a Victorian bishop what had been learnt about the nature of the Creator by studying the creation. 'The Lord Almighty,' replied Haldane, 'must be inordinately fond of beetles!'

No beetle is marine, nor has the group exploited parasitism, but with these exceptions the beetles have moved into almost every conceivable ecological niche. Modern estimates number twenty million species, all with different needs, and each filling its own environmental place.

The beetles' extraordinary diversification occurred in their almost unimaginably distant early history, and in consequence there has been little need for them to evolve new species in more recent times. The overall composition of the beetle fauna has remained virtually unchanged for many millions of years, although the abundance and distribution of individual species has varied greatly in response to local and global changes in climate.

Large insect groups need not evolve new species to meet changes in environment, for they are so diverse that there will already be existing species perfectly adapted for the new circumstances. All that changes is the abundance and distribution of extant species. Therefore, looking back across the mere million years of the Quaternary period, one finds that the same familiar beetles now alive also lived then. Their distribution and abundance accurately indicate the climates and environments then prevailing. Fortunately, beetle remains preserve well either by fossilisation or by preservation without mineralisation in bogs or ice. So it is that the beetles, more than any other insect group, have become the recorders of Quaternary climate.

Scott Elias well describes the advances in palaeoecology resulting from the study of Quaternary insect remains, and