ETHNOARCHAEOLOGICAL AND CULTURAL FRONTIERS: ATHAPASKAN, ALGONQUIAN AND EUROPEAN ADAP-TATIONS IN THE CENTRAL SUBARCTIC. By HETTY JO BRUMBACH and ROBERT JARVENPA. New York: Peter Lang Publishing, Inc., American University Studies, Series XI, Anthropology and Sociology, Vol. 20. 325 p. US\$46.50.

This book uses ethnoarchaeology to examine the basic biological and ecological processes underpinning cross-cultural interaction between the Metis/Cree, Chipewyan, and Euro-Canadians involved in the late-19th- and early-20th-century fur trade along the upper Churchill River. As has become the habit of many northern researchers, the authors have used a very broad definition of ethnoarchaeology, which allowed their methodology to include historic sites archaeology, archival records from the fur trade, and ethnographic data that included both memory culture and ongoing behavior. Information collected from these divergent sources was guided by and interpreted against a series of four linked hypotheses that served to "... provide a sort of 'connective tissue' between theoretical and empirical domains" (p. 4). Simply stated, these hypotheses are 1) European traders caused a gravitation of the Cree and Chipewyan toward common ground. This resulted in increased stress, which caused their niches to be modified. 2) Inter-species relations and niche definition will be exhibited in inter-ethnic relations through time. 3) The perspective of animal ecology that interactions between species can be classed as positive, negative, or neutral can be used as a broad analogical framework for interethnic relations between groups living near the Churchill drainage. 4) Socioeconomic dominance in the system led to different ecological and economic positions within the trade.

Though these hypotheses, which are in fact much more complex than represented here, may have provided the authors with an interesting starting point and a straw man against which to test their data, they do not provide a strong thread throughout the book. The Hudson's Bay Company Archives, archaeological survey, and ethnographic data provided Brumbach and Jarvenpa with a wealth of data, the analysis of which has certainly benefited from the researchers' adherence to a structure. In the end, however, the questions they originally sought answers to were more precise than the new knowledge gained from their quest, and hence the hypotheses are only analyzed in passing in the conclusion.

This is in no way to diminish the contribution of their work or its significance. Science is commonly built on the shoulders of experiments that went astray and in the process led to greater discoveries. Brumbach and Jarvenpa dealt with an impressive array of variables. For archaeologists, their attempt to compare the trading of prepared foods between post inventories and the archaeological record will certainly influence subsequent work. Changing patterns of seasonal movement and shifting home ranges described for the Metis/Cree and Chipewyan are important beyond the parameters of their study area. Attitudes toward bush vs. post life, overland travel vs. adherence to waterways, and isolated solo encampments compared to communal kin-based communities are all features of post-contact subarctic settlement patterns. Similar problems are dealt with and pondered by most anthropologists working in the northern forests, be they ethnologists, ethnohistorians, or ethnoarchaeologists.

The work is well researched and scrupulously presented. Although interpretations will be debated, certainly the soundness and quality of the research is above question. Perhaps future editions of the book will have given the authors time to reflect on their analysis and provide them the opportunity to more fully address their original hypotheses.

I am personally bothered by the appearance of books that are based on pages that are quality reproductions of reduced typed text. On the other hand, academic publications have small circulations and often very heavy price tags, so compromises on typesetting are inevitable. The editing of this book is quite good, but by no means perfect. Plates, charts, and tables are well done and clearly reproduced.

Ethnoarchaeological and Cultural Frontiers is a work that will certainly be widely used as a reference by subarctic specialists. The long-term users will be researchers concerned with the Native people of northern Saskatchewan. While reading, I tried to do comparisons with my own work among the Dene of the Mackenzie drainage area and with the Cree along the Hayes River to determine if Brumbach and Jarvenpa's findings had wider applicability. Many of their observations on the contact process appear not only consistent in the broader picture, but may lead other researchers along some new and productive avenues of thought. Students who take the time to read the work will discover the richness of the Subarctic. It is a work well worth adding to one's library, as it inspires notes in the margins and dog-eared pages at favorite references.

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THE ASCENT OF DENALI. By HUDSON STUCK. Lincoln: University of Nebraska Press, 1989. (Originally published in 1914 by Charles Scribners Sons.) 188 p. Hardbound, US\$22.95; softbound, US\$8.95.

After 27 years of reading climbing adventure books, I must admit that I am a bit jaded and hard to please. Yet I found myself, after sitting down for a brief glance at Archdeacon Stuck's book, three hours later nearly finished with it. It was thoroughly absorbing and entertaining.

The book gives the account of the first complete ascent of Denali (otherwise known as Mount McKinley). The participants are Hudson Stuck (Archdeacon of the Yukon), Harry Karstens (an Alaskan adventurer), Robert Tatum (a postulant for holy orders) and Walter Harper (an Alaskan of mixed race). The year is 1913.

Between March and June of that year, these four adventurers made the arduous approach to Denali, climbed the main (south) summit (20 320 feet) via the Muldrew Glacier route, then descended and made their way on foot through the tundra and forests back to civilization. Although the work and discomfort must have been immense, the foursome appears to have weathered the labours with little trouble. Perhaps they made men tougher in those days, and, of course, climbing Denali may not have been much more difficult than pioneering in the frigid Alaskan winters, anyways.

Throughout the narrative I was struck by the simple and innocent attitude to mountaineering shown by the foursome. They were indeed climbing the mountain for the simple joy of adventure, with no ulterior motives. Stuck's comments on reaching the summit were that "There was no pride of conquest, no trace of that exultation of victory some enjoy upon the first ascent of a lofty peak, no gloating over good fortune that had hoisted us a few hundred feet higher than others who had struggled and been discomfited. Rather was the feeling that a privileged communion with the higher places of the earth had been granted" (p. 108).

Stuck also stands out in his support for the native people of Alaska. He begins the book with a plea for the return to the original Indian name, Denali (The Great One). Throughout the book he makes impassioned pleas for the respect and proper treatment of our indigenous North Americans. His concern for the two Indian boys, Esaias and Johny Fred, who assisted them in their adventure is genuine and touching. This book stands out as a very readable account of mountaineering before it became the slightest bit trendy or glamorous — when climbing a mountain was done solely for the private adventure and not for equipment endorsements and lecture tours. The equipment used and food eaten is ridiculous in light of our modern-day outfits, yet these four men never complained, had no close calls or epics, and appear to have enjoyed their climb. This is a book that would be very enlightening to our modern generation of pink and lavender clad alpinists who embark upon the annual pilgrimage up Denali with little idea of the roots of their "sport."

The book ends with a summary of all prior exploration of and attempts to climb Denali. By doing so, Stuck has tied all the strings together into one bundle. Now in this single volume one can make one's way from the first sighting of Denali by Captain Vancouver in 1794 to the first ascent of the highest summit on 7 June 1913.

This book is not only a very entertaining piece of mountain literature but is, as well, a significant piece of mountain history. It deserves a place on the bookshelf of every mountain lover. As well it would make delightful reading for the non-climber. The antique type and photos preserved in this publication add to the sense of history that the book conveys and make it a delightful acquisition.

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THE NORTHERN FOREST BORDER IN CANADA AND ALASKA. By JAMES A. LARSEN. New York: Springer-Verlag, 1989. 272 p. US\$79.50.

The boundary between the northern boreal forest and the arctic tundra has been shown by the meteorologist Reid Bryson and his associates to be related to the median position of the arctic front in summer. This climatic-vegetation tension zone is the topic of Larsen's latest book. (Larsen has also written *The Boreal Ecosystem* (1980) and *Ecology of the Northern Lowland Bogs and Conifer Forests* (1982), both published by Academic Press.)

It is important from the beginning for the reader to understand that Larsen adopts a Baconian view of science. That is, it is his stated intention (p. v) to survey the composition of plant communities as they are affected by environmental factors and not to provide a theoretical framework for community organization. This is somewhat misleading since Larsen's own phytosociological viewpoint is not without its principles. One of the tenets of phytosociology that Larsen upholds is that plants are climatically controlled and that their composition better expresses their ecological relationships to one another and the environment than any other characteristic.

Central to Larsen's organization of this book is the belief that "there is still a place for the expression of data in relatively straightforward presentation, in which the performance of the species . . . is given no analytical treatment, leaving analysis and interpretation to the reader if so desired, using any method selected" (p. 201). This alerts the reader that he should expect the book to be essentially an uncritical collection of observations by different researchers. In this sense the book is very good, providing a complete and upto-date review of vegetation research in this part of the boreal forest. This research describes the northern forest border as a vast unsettled area (roughly comparable in size to the eastern United States, but essentially without any roads) in which natural processes operate on a vegetation that is still unaffected by Europeans. Areas such as this are becoming increasingly rare and, as such, increasingly more valuable for ecological research.

Is it possible, as Larsen asserts, that from a purely observational approach readers can analyze and draw conclusions about species performance using any method available to them? This is an old controversy about whether it is possible to observe nature with a "value-free language." Readers will respond differently to this question and will rate the book's value in this context. We believe the book would have been more valuable if Larsen had hypothesized how he thinks the environment is actually coupled to plant population and community dynamics. An example of this preferable approach is found in the gradient studies of J.T. Curtis. Curtis and his associates identified the significant environmental factors and the species tolerance curves of the vegetation in Wisconsin. Further studies then showed the physiological mechanisms that explained the plant's adaptations to these environmental gradients (for example, Wuenscher and Kozlowski, 1971, Ecology 52:1017-1023). These studies, unlike Larsen's book, explicitly gave the coupling between the vegetation and the environment.

Larsen, in taking a Baconian approach, can make only general statements, often rather obvious to contemporary ecologists. The conclusions Larsen comes to are that the northern limit of trees and the air mass boundary in summer are well correlated. Changes in atmospheric circulation patterns have caused a displacement of the mean frontal zone during the Holocene with subsequent changes in vegetation boundaries. A complex of factors is involved in the advance or retreat of trees near their limits of growth. Temperature appears to be especially significant, as it limits translocation, water absorption and photosynthesis and is correlated to plant growth. Also the declining availability of nutrients (N,P,K) in soil is one of the other factors reducing tree growth.

In conclusion, the book is of value in providing an overview of the plant ecological research that has been done in the northern forest border of western Canada. However, readers who are hoping to find an explanation or even an hypothesis of how the vegetation in this ecotone is organized will be disappointed.

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NUNIVAK ISLAND ESKIMO (YUIT) TECHNOLOGY AND MATERIAL CULTURE. By JAMES W. VanSTONE. Chicago: Field Museum of Natural History, 1989. Fieldiana, Anthropology, New Series, No. 12. 108 p., 107 figs., bib. Softbound. US\$23.

Isolated by shallow seas in summer and constantly moving ice in winter, the Yupik-speaking people of Nunivak Island were slow to give up their traditional technology and social organization. Indeed, as James VanStone points out (p. 42), "until World War II, Nunivak was about 50 years behind the Seward Peninsula-Norton Sound area in acculturation." For this reason the publication under review is particularly valuable.

When anthropologist Margaret Lantis spent a year on Nunivak Island in 1939-40 in her study of social organization, she found the people still occupying semi-subterranean houses, the men living apart from their families for much of the year in the qasgiq — the familiar Alaskan Eskimo ceremonial structure serving as a men's house. She also found traditional items of local manufacture in staple use for many subsistence and housekeeping purposes. Although unsure of herself when dealing with material culture, she recorded what she saw in word pictures, photographs, and drawings.

Half a century later, when the fifty-year lag of the people of Nunivak is erased and they have caught up fully in acculturation