

view". Planned or unplanned, the first seven chapters are in a sense a prelude to the last two, wherein the reader is offered a glimpse of the heart of the matter.

William Sturtevant, one of anthropology's senior scholars, identifies several issues of broader interest in Chapter Eight. He agrees with Martin at the outset that much of the previous work on the topic has suffered from the ethnocentric assumption "that Indian motives were those of Western economic man". Yet, world view and the relation of man to nature are perhaps the most difficult aspects of ethnohistorical reconstruction, according to Sturtevant. He cautions against trusting older contemporary sources for such insight, not to mention sources which are several hundred years old. As an example of the best and most sympathetic work of this sort, Sturtevant discusses Irving A. Hallowell's work among the Ojibwa as the basis for rejecting Martin's thesis. Among the Ojibwa, events are apparently the consequence of the behaviour of persons. Hallowell's observation that the Ojibwa idea of causation was personalistic is the theme of a valuable and complex discussion which results in Sturtevant's observation that among the Ojibwa "it would make no sense whatsoever to take revenge on game animals for human illness". Thinking beyond data and analysis, Sturtevant is concerned about the nature of historical and anthropological explanation, our own professional world view, and our notions of causation, all issues which Martin's book brings to the fore. Sturtevant's candour in admitting that we may not adequately understand our own scholarly world view is a notable contrast to the lack of such intellectual anxiety among the other contributors.

Krech allows Martin to have the final say in the last chapter of this collection, a fair-minded consideration in light of the preceding avalanche of disapprobation. Martin uses this opportunity to its fullest and, in particular, approaches the concerns of one of the contributors in a manner that imparts lasting value to this collection. With a tone of modest confidence, Martin writes that his book is one of "controlled imagination, well within the usual scholarly bounds", and apparently regrets that the authors of this volume are not concerned with his book on that plane. The one exception is Sturtevant, whose provocative discussion of Hallowell is given special consideration by Martin in his concluding remarks. The gist of Martin's remarks is that Hallowell recognizes an association between animals and human disease and simultaneously denies it. Martin also demonstrates that Hallowell's observations on subarctic Indian disease ideology are at times enigmatic, perhaps muddled, and can be interpreted in different ways. For this and other reasons having to do with the cosmology of Canadian subarctic hunters and gatherers, Martin remains unreconciled to his critics.

This collection of essays can be considered from at least two points of view. Clearly, it is an unreceptive treatment of what is seen to be a speculative, ideational interpretation of certain historical events by an historian. It is regrettable in light of this that more of the authors did not deal directly with Martin's evidence on the Micmac and the Ojibwa. Several of them range far afield, with the result that much of Martin's discussion was not subjected to in-depth analysis. It would also have been valuable to include a scholar or scholars of Native American origin among the contributors, given the ideational issues inherent in the topic. A non-Western perspective provides a necessary balance to the limitations of our own scholarly world view, and remains uncommon in the anthropological literature of North America. Of less significance is the absence of a map depicting the distribution of Indian groups discussed in the text. All in all, Krech is to be commended for recognizing the importance of Martin's bold perspective and for assembling this collection of erudite papers as an acknowledgement. In the end, Martin's theory cannot be rejected, in the sense that "the available evidence rarely necessitates our judgments but is at least consistent with them" (Conkin and Stromberg, 1971:219). In the absence of one demonstrably correct explanation there may be numerous interpretations, and this is the substance of scholarship. Krech's book is an embodiment of this essential, ceaseless process.

Perhaps more importantly, this collection raises fundamental issues, both implicitly and explicitly, which transcend scholarly specializations and disciplinary boundaries. The very nature of ethnohistorical inquiry is one of these issues, as Martin and his critics, most notably Sturtevant, demonstrate the difficulties in advancing one particular explanation as the correct one. With respect to Hallowell's data, at least, the "truth" may depend on who is interpreting it. This leads into questions of what constitutes evidence, as well as matters of causation and objectivity. Those who use the historical record regularly are undoubtedly aware of these and related issues in the pursuit of their own particular interests. For those of us who make brief forays into the written past as anthropologists and archaeologists, such an awareness is equally as essential if a sensitive treatment of the subject is sought.

I recommend this book to all with an interest or investment in historical and ethnohistorical research. It would be particularly valuable to those who are just starting out, as it is a clear testimony to the fact that complex questions require complex, creative, and disciplined answers. In any event, these answers

never come easily. I would also recommend the book to anyone with scholarly interests in the social sciences, as the book is a concise illustration of the healthy tension which exists between exceptionally creative generalists and learned specialists. Each has a perspective and both are essential. Finally, the book will appeal to those with an interest in the early history of the New World, who undoubtedly will delight in the discovery of yet another facet of fur trade history. This period seems to be a bottomless pit of historical richness.

That Martin remains unreconstructed despite the barrage of criticism is less important than the fact that his ideas have been examined in a serious and forthright manner. Although Krech's book offers no final solution to the debate surrounding Martin's novel thesis, it has deepened the thinking which may yet lead to a resolution.

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ETNICHESKAYA ISTORIYA NARODOV SEVERA (ETHNOHISTORY OF THE PEOPLE OF THE NORTH). Edited by I.S. GURVICH. Moscow: Izdatel'stvo Nauka, 1982. 268 p. Price 2 rubles 80 kopecks (North American price unknown). Printed in Russian.

The subject matter of this monograph constitutes a continuation of the editor's recently published *Ethnogenesis of the People of the North* (Gurvich, 1980). The focus is on ethnic development of the population of the high north in what is now the U.S.S.R. from the sixteenth century to the beginning of the twentieth century. The monograph was edited by ethnographer I.S. Gurvich, who is presently head of the Department of Northern and Siberian Peoples at the Institute of Ethnography of the Academy of Sciences of the U.S.S.R. An Introduction and a Conclusion are separated by 11 chapters written by ethnographers and historians of the Soviet North: Z.P. Sokolova — Ob' Ugrians (Khants and Mansi); V.I. Vasil'ev — Nenets and Enets; U.B. Simchenko — Nganasans; E.A. Alekseenko — Kets; V.V. Lebedev and Z.P. Sokolova — Sel'kups; V.A. Tugolukov — Evenks and Evens; I.S. Gurvich — Yukagirs, and northeastern Paleoasiatics and Eskimos; and A.V. Smolyak — people of the Low Amur River and Sakhalin Island.

This is a consistent and well-organized work in which all the chapters follow the structure of a unified idea. The authors, irrespective of their research areas, have addressed a number of identical problems. In investigating the ethnohistory of the people of the Soviet North, they have examined: (1) demographic fluctuations of native groups; (2) linguistic and ethnocultural processes; (3) changes in the ethnic structure of the Siberian population; and (4) interrelationships between neighboring populations. The authors used primarily source materials from regional and local archives, including taxpayers' records (*yasak*), as well as church records, which allowed them to make conclusions about marriage norms, interrelationships with the Russians, and the socioeconomic level of the northern population.

The works of past Russian and Soviet historians and ethnographers such as Bogoraz, Dolgikh, and Jochelson are extensively utilized, as are published historical sources such as: *Dopolneniya k aktam istoricheskim* (Addition to the historical evidence) (SPb, 1848-1867); *Kolonial'naya politika Moskovskogo gosudarstva v Yakutii XVII stoletiya* (Colonial politics of the Moscow State in Yakutiya in the 17th century) (Moscow, 1936); and *Kolonial'naya politika tsarizma na Kamchatke i Chukotke* (Colonial politics of the Tsarist government in Kamchatka and Chukchi Peninsula) (Leningrad, 1935).

This systematic work demonstrates an advantage of centrally organized scientific research. Such organization allows successful coordination of long-term projects involving various specialists and research institutions, by dealing from a central point with the complicated organizational, financial, and in-

tellectual facets of preparation for research. Centralized research perhaps should be examined by Western scholars before starting long-term projects. Currently, Western anthropologists often produce monographs consisting of articles which are not topically related. Employment of a centralized approach could lead to the production of monographs that are as well organized as the one being reviewed.

The most important aspect of the ethnohistory of the people of the high north, as the authors note, was the process of exploration and colonization of Siberia by the officials of the Russian Empire. The process of exploration of the northern territories in the seventeenth century caused a significant transformation of population, strengthened conflicts between local ethnic groups, and changed modes of production, among other effects. However, as the authors point out on the basis of information obtained from historical records, exploration of the northern territories did not cause the extinction or decrease of the native population. Russian officials did not wish to exterminate the aboriginal northern population, but rather, in cooperation with local Siberian leaders, to reform them into good and meticulous suppliers of valuable furs.

There would be value in studying the history of the Russian period in North America as a correlate of the socioeconomic strategy of the Russians in Siberia. From the point of view of Russian officialdom, the process of exploring the North American territories presumably had the same rationale as in Siberia; North America was viewed by the Russians as a geographical continuation of their colonial politics (Alekseev, 1982:86). The Russians used a socioeconomic and political strategy in North America similar to that used in Siberia, imposing the local head tax (*yasak*) and strengthening their influence.

The process of colonization of the eastern territories was quite elaborate and will be described briefly below. One of the peculiarities of the aboriginal populations of Siberia, the Far East, and northwestern North America was the absence of any State organization. Lacking an institutional defense against the sophisticated social organization and military superiority of the Russians, the native population had to accept Russian dominion and consequently agreed to pay them *yasak*. Another peculiarity in the Russian population of the eastern territories was the absence of serfdom. Oppressed Russian peasants who had escaped from their landlords in the European part of Russia often fled to Siberia, the Far East, or North America in order to attain freedom. The Russian authorities, surprisingly, instead of having them prosecuted, had promoted them into government jobs. When the government had thus established its control over the northeastern territories, the commercial people (*promyshlenniki* and *kuptsy*) began organizing commercial companies (*artels*) and markets (*yarmarkas* and *bazars*), and the Russian Church began sending missionaries to the East. Thus, in contrast to peasant movements, which had a spontaneous character, the organized government expeditions to the East already had in place a colonial system, i.e. the imposition of regular *yasak* and the extension of State territories.

After the discovery of the Aleutian Islands and southern Alaska, a series of commercial expeditions to North America from Siberian and Far Eastern Pacific ports (Okhotsk and Nizhne-Kamchatsk) took place. Between 1743 and 1786 the Russian Government Treasury received from North America commercial products (primarily fur and sea mammals) worth 193,797 rubles, 90 kopecks. In addition, they collected products worth 42,392 rubles, 10 kopecks, in *yasak* (Makarova, 1968:55,81). One effect of these enterprises was a significant increase in the Russian population in North America. In 1794 the Russian population in Alaska was over 800, compared to 500 in 1788 (Alekseev, 1982:38-39). However, according to Fedorova (1971:120-121), by the end of the eighteenth century the population in Russian America was about 8000 which included only 225 Russians. The Russians in North America hunted sea mammals, fished, built ships, and attempted to cultivate some crops. Several Russian settlements were established, in the Aleutian Islands, on Kodiak Island, on the Kenai Peninsula, and in southeastern Alaska. By the end of the eighteenth century the Russian-American Company was founded. The company monopolized all commercial enterprises in Russian North America and held almost all the political power in the region. Until Alaska was purchased by the American government in 1867, Siberian-North American contact was very close. The Russians' management of Alaska always represented the interests of the Tsarist government and was carried out in cooperation with their Siberian partners and supporters.

The Russian period in Alaskan history is not emphasized in the present monograph; my purpose in briefly illuminating this period is to suggest that future research address Russian colonial history in the East as a unified whole.

This monograph can be recommended as an excellent textbook for students of circumpolar science and history. It should be translated into the major scientific languages, since it contains recent scientific information about the ethnohistory of the people of Siberia and the Far East which is an important contribution to the social sciences.

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THE ROLE OF FIRE IN NORTHERN CIRCUMPOLAR ECOSYSTEMS.

Edited by ROSS W. WEIN and DAVID A. MACLEAN. Scientific Committee on Problems of the Environment (SCOPE) 18. New York: John Wiley and Sons, 1983. 322 p. with glossary; and author, geographic, and subject indices. US\$65.00. Hardbound.

Fire is clearly an important ecological force throughout much of the northern circumpolar forests and taiga, playing a major ecosystem role and presenting a land management problem. This volume of SCOPE 18 is based on an October 1979 conference sponsored by SCOPE, International Man and the Biosphere, and the Fire Science Centre of the University of New Brunswick. The stated objectives of this book and conference are to identify which temperate-region fire concepts or theories apply to the circumpolar north and which concepts are unique to northern ecosystems. Fifteen chapters, contributed by principal authors representing Canada (nine chapters), the United States (three chapters), the U.S.S.R. (two chapters) and Finland (one chapter), cover topics divided into five sections, with an introductory overview by the editors, R.W. Wein and D.A. MacLean.

The first section considers 'Past and present fire frequencies' from post-glacial time (K. Tolonen) to the present industrial period (R.J. Barney and B.J. Stocks). Tolonen's review of sedimentary reconstructions of post-glacial fire histories is outstanding and covers both Europe and North America. The section 'Physical effects of fire' next examines fire behavior in northern forests and shrublands (C.E. Van Wagner) and organic soils (R.W. Wein), effects of fire on the ground thermal regime (the late R.J.E. Brown), and nutrient cycling (D.A. MacLean *et al.*) in northern ecosystems. Van Wagner's chapter here provides a lucid basis for understanding the physical parameters of fire behavior and proposes the idea of the negative exponential age-class distribution as a model for managing boreal forest vegetation stands. A section on 'Concepts of fire effects on individuals and species' specifically considers plant individuals and species (J.S. Rowe) and small mammal and bird communities (J.F. Fox). Rowe's contribution is the outstanding chapter in the book, in this reviewer's opinion; it is much more than a synthesis of the literature in that it proposes new concepts of species fire adaptations in terms of five strategies which boreal forest and tundra plant species have evolved for coping with fire. Rowe then applies these adaptive strategies to different fire regimes and predictions of post-fire succession.

The section 'Fire effects in selected vegetation zones' includes reviews of the role of fire in jack pine (*Pinus banksiana* Lamb) (J.H. Cayford and D.J. McRae), in black spruce (*Picea mariana* (Mill) B.S.P.) (L.A. Viereck), and in fir-dominated forests (V.V. Furyaev *et al.*), as well as the lichen-dominated tundra and forest-tundra (A.N.D. Auclair). Unfortunately a more general discussion or survey of fire effects in arctic tundra is not included here or elsewhere in the book. The final section, 'Fire control and management', includes chapters on the special problems of fire control and prevention in commercial peatlands in the U.S.S.R. (V.I. Chistjakov *et al.*), and on important topics of fire management in wilderness areas and parks (M.E. Alexander and D.E. Dube). Here the difficulty is discussed of formulating a policy that protects facilities and visitors and at the same time insures long-term ecosystem functioning.

Although most authors attempt to provide a circumpolar dimension to their discussions, it is sometimes difficult to see which temperate area fire theories are being tested for their applicability to northern ecosystems. The excellent overview by R.W. Wein and D.A. MacLean states that in northern forest and