

The author's style is intensely descriptive. He crams about as much information into the 166 pages of text as would be possible in a readable account. As a result, this short book contains a large quantity of data that could not be obtained anywhere else save in the numerous sources the author cites in his bibliography. Even those sources would not be enough, of course, because the documentary material is supplemented by VanStone's own ethnographic data in certain key areas, and surely his experience in the region has colored his interpretation of the historical sources. The bibliography, a contribution in its own right, includes a number of early Russian titles dating from 1823, as well as several unpublished manuscripts and other archival entries.

The maps, which contain the absolute minimum of pertinent information, constitute the major weakness of this study. The first three (of four), which focus successively on Alaska, southwestern Alaska, and the Nushagak River region, are all right as they stand. However, they would have been of greater assistance to the reader had they all been placed in the introductory account of the geographical and ethnographical background of the study rather than scattered, apparently randomly, through the first 69 pages of the book. Only map 4, which pinpoints the salmon canneries in Nushagak Bay in 1908, is effective. The material presented in part 2 of the book, especially, would have been greatly enhanced by the inclusion of a number of maps of this sort, each one focusing on the specific subject under consideration. This omission is especially serious in the chapter dealing with settlement patterns; the reader is forced to back up 40 pages or more (to map 3) every time he wants to find out precisely what place the author is talking about.

As it stands, this book will probably not appeal to a very wide audience of anthropologists. It is, however, an important addition to the literature on the Eskimos and as such will be useful to specialists on northern peoples. In addition, it may also be of interest to students of more general problems of culture change and contact. Its ultimate worth, though, will depend to a significant extent on how well it relates to other studies that one expects will be forthcoming as a result of VanStone's extensive research in the Nushagak region. If future reports fulfill the promise suggested by this one, and if the various

publications are carefully integrated with one another, the series as a whole may well constitute one of the most significant contributions to our knowledge of arctic peoples ever made by a single author.

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The Liquid State

An Introduction to the Statistical Theory of Classical Simple Dense Fluids. G. H. A. COLE. Pergamon, New York, 1967. xii + 284 pp., illus. \$12.

Liquid state physics is entering a period of rapid development. Cole's monograph is one of a number of books on the theory of liquids to be published in the last few years. (Some others are by J. A. Barker, 1963; I. Z. Fisher, 1964; S. A. Rice and P. Gray, 1965; P. A. Egelstaff, 1967.) Cole has made valuable contributions to the theory of liquids, including some excellent review articles. The present book appears to be an extension and amplification of his earlier reviews.

The general approach taken here is to describe properties of liquids by means of probability distribution functions of small subsets (usually one, two, or three) of the large number of molecules in the fluid. This approach is commonly called the hierarchy method and was pioneered by Yvon and by Kirkwood. As the title of the book indicates, Cole's discussion is limited to classical fluids (not helium or Fermi liquids), to simple fluids (excluding systems where internal molecular structure plays a significant role, and including mainly the heavier rare gases), and to dense fluids (either liquids or gases at typical liquid densities). Even within these narrow limitations of approach and content a substantial literature has developed.

In the first three chapters Cole reviews some background material on the liquid state properties to be discussed and on general statistical mechanical techniques. The next three chapters are concerned mainly with the theory of the radial distribution function. Derivations are presented for all the standard approximate equations, due to Born and Green, Yvon, Kirkwood, Cole, and Fisher, and Percus and Yevick, and the hypernetted chain equations; and the numerical consequences of those equa-

tions are summarized and compared with experiment. Cole concludes this part of the book correctly with the remark "... the calculation of the thermodynamic properties of equilibrium fluids is still far from its final state."

The final three chapters deal with nonequilibrium properties. Here the main emphasis is on the Fokker-Planck method, due originally to Kirkwood. Cole discusses also Eisenschitz's version of this theory, and the closely related Rice-Allnatt theory. Numerical calculations of viscosity, thermal conductivity, and diffusion are compared with experiment, and agreement is typically no better than within a factor of two. (This may be not much better than one can get from dimensional analysis and the simplest of physical pictures.) Here again, Cole remarks correctly that "the theory of transport in liquids has not yet reached its final form. . . ."

In spite of the somewhat negative conclusions that can be drawn from the approaches described here, this book is a valuable summary of how these approaches work.

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Odyssey of an Engineer

As I Remember. The Autobiography of STEPHEN P. TIMOSHENKO. Translated from the Russian edition (Paris, 1963) by Robert Addis. Van Nostrand, Princeton, N.J., 1968. xviii + 430 pp., illus. \$9.75.

This is a very interesting book indeed. It is the story of an eminent teacher who literally lived two lives, the first in Russia before the revolution and the second in the United States after it. It is the story of a man whose father was born a serf in Russia; who after a good education rose to a position of eminence in his chosen field of engineering mechanics in Russia; who between the ages of 40 and 44, during the Russian revolution, wandered all over eastern Europe under frightful circumstances, with hardly a place to sleep; who at the age of 44 came to the United States barely able to understand English and then in the next 40 years fundamentally transformed the teaching of engineering mechanics in our universities; and who now, nearly 90, is still hale and hearty.