results, such as the Ahlswede-Daykin Inequality, reach their full generality and naturalness in the setting of distributive lattices. I have found it pedagogically helpful to include a unit on distributive lattices before presenting this inequality to students.

It is also possible that, in a long semester, an instructor may not want to work through all the details of extremal set theory, and instead include some related topics with a slightly different flavor. In addition to including some lattice theory, one can move on from the linear extensions of the XYZ Conjecture to discuss dimension theory of posets. Later, after becoming thoroughly familiar with subsets and binary vectors via the Kruskal-Katona Theorem, one can finish the course with a unit on coding theory. I will take this approach in my next graduate course.

In packing a well-developed subject into 250 pages, one must make choices; these will never please everyone, and quibbling wastes time. On balance, one is hard put to find complaints about this well-written and thorough book. It is a valuable addition to the literature, it will make it easy for interested mathematicians to acquire a new specialty, and it brings another area of mathematics into the accessible graduate curriculum.

DOUGLAS B. WEST
UNIVERSITY OF ILLINOIS

BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 19, Number 2, October 1988

0273-0979/88 $1.00 + $.25 per page

Stochastic geometry and its applications, by D. Stoyan, W. S. Kendall, and J. Mecke, with a Foreword by D. G. Kendall. John Wiley and Sons, Chichester, New York, Brisbane, Toronto and Singapore, 1987, 345 pp., $49.95. ISBN 0471 90519 4

As a subject Stochastic Geometry surely existed (albeit anonymously) before this term first appeared in a title of a collection of papers [**1**] edited by E. F. Harding and D. G. Kendall in 1974. Numerous problems (and of course less numerous solutions), which in retrospect should be attributed to this field, have been discussed in countless papers scattered within journals and books too often devoted to nonmathematical applications and therefore obscure from the standpoint of a pure mathematician.

In many cases the authors of these papers were equipped merely with the tools of classical geometrical probability theory among which the notions of uniform distribution and independence were the basic. And yet their objectives were substantially more complicated concepts of what later came to be known as Stochastic Geometry. In the lucky cases the deficiency in tools was compensated by intuition.

Terminological ambiguity was quite widespread. For instance, within a paper considering random finite arrays of points the term "distribution" could simultaneously mean (a) the realization at hand, (b) the distribution of the typical point in the array, (c) a statistical estimate of (b), or (d) the distribution of the underlying point process. This terminological and conceptual mess