mate capability of these systems, programmed, but no longer limited, by humans! His citation of U. S. and other Western literature is generous, and perhaps his book is too strongly influenced by some of our own "automation addicts" whose philosophies are: "if one can count the bits involved, one can mechanize the process" or "it's just a matter of 'zeros' and 'ones', what could be simpler?" In Russia, as in the U. S., the tendency to confuse some of the simpler facts of information theory with the far less understood theory of knowledge and brain functions is thus apparent. The book, then, is useful, not only for what it says explicitly but also for what it implies—that the blue sky knows no iron curtain!

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67[Z].—THEODORE E. HARRIS, *The Theory of Branching Processes*, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1963, xiv + 230 pp., 24 cm. Price $9.00.

This book presents a systematic and thorough treatment of a class of Markov processes called "branching processes." The simplest example is the Galton-Watson process $Z = \{Z_n : n = 0, 1, 2, \cdots\}$, where $Z_0 = 1$ and the conditional distribution of Z_n, given $Z_{n-1} = k$, is that of the sum of k independent, identically distributed non-negative integer-valued random variables. In the classical interpretation, Z_n is the number of descendants in the nth generation of the progenitor ($Z_0 = 1$). The chapter headings are:

Chapter I.   The Galton-Watson branching process
Chapter II.   Processes with a finite number of types
Chapter III.   The general branching process
Chapter IV.   Neutron branching processes (one-group theory, isotropic case)
Chapter V.   Markov branching processes (continuous time)
Chapter VI.   Age-dependent branching processes
Chapter VII.   Branching processes in the theory of cosmic rays (electron-photon cascades)

The mathematical level required to read this book is about that of Feller, although there is frequent use of material that is found in books such as those by Doob and Loève. A large number of theorems, remarks, and examples are given without proof. Since there are no problems, these "loose ends" provide a perfect opportunity for the reader to check his comprehension of the material.

This book is highly recommended as an authorative and well written exposition by a significant contributor to this field.

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68[Z].—H. D. HUSKEY & G. A. KORN, editors, *Computer Handbook*, McGraw-Hill Book Company, Inc., New York, 1962, xviii + 21 (individually numbered) sections, 24 cm. Price $25.00.

The *Computer Handbook* presents the general principles of the design and utilization of both analog and digital computers. Sufficient detail is presented in both