

procedure used has led to bad curvature, appearing as distorted print in a number of the articles.

Since it has often been remarked how expensive volumes of this type are, it should be pointed out that this volume is relatively inexpensive, indeed being less than one cent per page in the paperbound version.

Theory of Superconductivity. By J. R. Schrieffer. 282 pp. Benjamin, New York, 1964. \$10.00.

Reviewed by John E. Mansfield, Harvard University.

For those who like presentations of good theories by the originator, this volume will be a nice acquisition. The stress is on the fundamentals of soft superconductors. The treatment of pairing correlations is handled by several techniques; one is gratified that the clarity of presentation has not been destroyed by this, though elegance suffers a bit. A good-sized set of applications of pairing to a variety of nonsuperconductivity problems is very welcome. Some attention is given to phonon interactions in Green's functions.

Actually, superconductivity is relegated to the last eighty pages. This is really not a loss, as the weight given to the pairing approach in earlier chapters makes the going easy here and allows the author to proceed in his customary elegance. A long section on electromagnetic properties of superconductors is especially well done and gives a good sketch of the main results.

A somewhat more comprehensive index would make this an admirable textbook. The exemplary purpose of the Benjamin series is somewhat defeated by not having this volume available in paperback.

The Ambidextrous Universe. By Martin Gardner. 294 pp. Basic Books, New York, 1964. \$5.95.

Reviewed by L. Marton, National Bureau of Standards.

My first impression after reading Martin Gardner's new book was that I ought to write this book review in verse. To be precise, what I wanted to do is to follow the style and format of *The Walrus and the Carpenter* from Lewis Carroll's *Through the*

Looking Glass. My justification for doing so was twofold. First of all Gardner refers quite often to *Through the Looking Glass* in his new book, and, second, his style is sufficiently whimsical to justify the writing of the book review in the style of *The Walrus and the Carpenter*. I am sorry to report that I sadly failed in this task. My talents are not sufficient, and the few little attempts I made I had to throw away. You will have to content yourself with a review in prose.

Martin Gardner hardly needs an introduction to readers of *Physics Today*. I belong to the very numerous fans who look forward with great pleasure to his monthly column of mathematical puzzles and similar problems in the *Scientific American*. I must confess to a certain prejudice in favor of the book even before I started reading it. In the book he starts out with considerations of mirrors and mirror problems and leads us by easy stages into all considerations of symmetry in physics, chemistry, astronomy, biology, art, music, poetry, and even in magic. He writes in a deceptively easy style which makes the book exceedingly good reading for all kinds of audiences. If I say all kinds, I do mean from young to old because what appears to be at first a very easy introduction into the matter gradually develops into some very profound observations and ends up with problems of the conservation of parity. Toward the end of the book he comes to what he calls the "Ozma problem". The name derives from Project Ozma which was started in 1960 and which attempted to establish communications with other living creatures somewhere out in the universe. The problem which Gardner analyzes very thoroughly is how to convey certain notions to an entirely different civilization and whether there is a means to convey such notions as left and right, north and south, clockwise and counterclockwise. He points out in a very thorough and excellent analysis that until the advent of our new knowledge about nonconservation of parity, there was absolutely no way of conveying any of these ideas to somebody who was not actually cog-

nizant with the definition of these notions. These notions are entirely based on convention. For the first time, however, we possess means of conveying information about one experiment which would distinguish these conventional definitions and which we can relay without ambiguity.

All in all I am really happy that I had the opportunity of reviewing this book. It contains a certain number of very simple problems which make it useful as teaching material, and the simple illustrations by John Mackey are very nice. I recommend the book without any reservations.

The Theory of Analytic Functions. By A. I. Markushevich. Translation from the Russian. 374 pp. Hindustan Publishing Co., Delhi, 1963. \$10.00.

Reviewed by Dagmar Renate Henney, The George Washington University.

Markushevich, Marcouchevitch, Markuševič or whichever way the reader finds the author's name transcribed is one of the most popular Russian mathematicians. His popularity is of course well deserved and is exemplified in this book also.

The Indian version of his *Theory of Analytic Functions* is based on the Russian text which was first published in Moscow in 1944 and then complemented and revised for the 1961 edition. The book is intended as a textbook on the theory of analytic functions. As such it covers the syllabus of the physics-mathematics departments of the Soviet universities. It provides an excellent and detailed text for graduate students of various universities and technical institutes though the beginning of the book represents essentially an introduction to the general theory and a preparation for the study of special functions and of various recent developments. The author develops a multitude of examples, many of them of an applied nature. The proofs of the theorems are extremely lucid and precise, and the reader is reminded of Knopp's volume on the *Theory of Functions*, though Markushevich's text is much more advanced and gives more examples. It is also on a much higher level than, for example, the books by Franklin or Churchill on