

ing $r \rightarrow 1$ " before the third display this passage to the limit does not seem to occur until the fourth display. Also, on a slightly different level, on page 122 in the asymptotic relation (6.6) the author has replaced the term $\log \beta_n$ by $-(1 - \beta_n)$, yet when he applies the result on page 130 he has just to reverse this process. Finally on page 139 there is no discussion of the determination of $\arg f(z)/z$ in the inequality (6.21) and a similar condition obtains in several places afterwards.

As far as the choice of contents is concerned, in view of the obvious limitations, the reviewer regrets only that the author was not able to include some of his more recent results on asymptotic bounds for the coefficients. Also in chapter four he tacitly restricts the discussion of circular symmetrization to domains not containing the point at infinity which excludes the possibility of some applications to meromorphic functions.

The author makes no pretensions of biographical completeness. However there are several references he might well have added. One is to Faber's paper of 1920 in which a symmetrization method was first applied to the study of univalent functions. Another is to R. M. Robinson's paper of 1942 in which Löwner's method was extensively exploited.

JAMES A. JENKINS

An introduction to combinatorial analysis. By John Riordan. New York, Wiley, 1958. 10+244 pp. \$8.50.

This is the first book on combinatorial analysis in forty-three years; the last was MacMahon's two-volume treatise in 1915-1916. It is, therefore, a very welcome arrival on the mathematical scene. Much of the material appears in book form for the first time. The emphasis throughout is on the methods of finding the number of ways in which a certain operation can be performed. Unsolved combinatorial problems are in abundance. For example it is not even known for $n=8$ how many distinct latin squares of order n there are, i.e., the number of distinct square matrices of order n containing the numbers from 1 to n in each row and column. Some mathematicians feel that combinatorial analysis is not a branch of mathematics but rather a collection of clever but unrelated tricks. This book successfully refutes that viewpoint.

The subject is, without doubt, one of the hardest in which to write an effective exposition. The reason for this is the fact that so much of the material occurs in an isolated fashion in so many different applications both to pure and applied mathematics and to other