cussion of the French school of permutation analysis, such as the Cartier-Foata theory of permutations of a multiset, the work of A. Jacques on planar graphs and symmetric groups, and the Foata-Schützenberger theory of Eulerian numbers.

Chapter 5 is devoted to the famous Pólya theorem on enumeration under group action, including the generalization due to deBruijn. Besides the usual applications to counting graphs, coloring cubes, etc., an unusual application is given to the enumeration of knots. There is a minor error on p. 170—$S_n \otimes S_n$ is not the group connected with directed graphs.

The above survey of topics points out the magnificent job Berge has done in sifting out from the vast literature of combinatorics the most interesting, elegant and important results connected with enumeration. Anyone who reads this books will not only derive many hours of fascination and enjoyment, but will also have a much better grasp of the meaning of the current combinatorial revolution. To paraphrase from the Foreword, Berge's book will go a long way toward unknotting the reader from the tentacles of the Continuum and inducing him to join the Rebel Army of the Discrete.

RICHARD STANLEY

Modular Lie algebras by G. B. Seligman. Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 40. Springer-Verlag Inc., New York, 1967. ix+165 pp. $9.75.

This book is the first to be devoted to Lie algebras over fields of characteristic $p>0$, the so-called modular Lie algebras of the title. Other recent books, such as Jacobson's *Lie Algebras*, are concerned with Lie algebras over an arbitrary field to the extent to which the theory for characteristic 0 may be generalized to arbitrary fields. However, there are significant differences between Lie algebras of characteristic 0 and those of characteristic $p>0$. This is the first book in which the latter are studied in a systematic way.

Complex and real Lie algebras, because of their use in the study of Lie groups, comprise a classical subject with which many mathematicians are acquainted. The extension of classical results to Lie algebras over an arbitrary field began in the 1930's and contributed to the further development of the theory. Crucial differences between Lie algebras of characteristic 0 and of characteristic $p>0$ were recognized early. In the late thirties and early forties a number of significant papers by Jacobson, Zassenhaus and others on Lie algebras of prime characteristic were published. But the difficulties encountered in the study of these algebras appeared intractable, and