BOOK REVIEWS

simplified by omitting the condition that it be a *continuous* linear functional on the space of "good functions." This definition is sufficient for the purposes of the book, and it avoids certain technical complications which would only hinder the intended reader. The basic operations on distributions are developed in addition to results concerning the identification of ordinary functions and distributions. No knowledge of the Lebesgue integral is assumed. Much of the theory in this chapter is illustrated with the delta function and its derivatives.

Chapter three is devoted to the study of several particular distributions which occur frequently in practice. There is also a brief account of the distribution interpretation of Hadamard's "finite part" of an improper integral and Cauchy's "principal value." This chapter closes with a short table of the Fourier transforms of the previously studied distributions.

In chapter four, the author employs a reformulation of the Riemann-Lebesgue lemma to obtain a systematic method for obtaining asymptotic estimates of Fourier transforms of functions with a finite number of singularities. The most interesting and instructive examples are to be found in this and the next chapter.

The final chapter is devoted to Fourier series. There are two important and useful theorems in this chapter. First, a necessary and sufficient condition is given for a trigonometrical series to converge to a generalised periodic function. Second, that there exists a unique Fourier series representation of any generalised periodic function which converges to the function, whose coefficients can be determined, and which can be differentiated term by term any number of times. In the final section of this chapter, a method is given for determining the asymptotic behavior of the Fourier coefficients of generalised periodic functions. The main results apply to generalised periodic functions with a finite number of singularities in the period. MILTON LEES

The mathematics of physics and chemistry. By Henry Margenau and George Moseley Murphy. 2d ed. Princeton, Van Nostrand, 1956. \$7.95.

Anyone who has read stories about the South Seas is aware that there is a language called Pidgin English (actually there are several kinds) which seems at first sight to be a clumsy and inept parody of English. It has, as a matter of fact, attained wide currency in some places, and is now recognized as being a genuine language in its own right, although somewhat limited in its vocabulary. Its repulsive