## **BOOK REVIEWS**

uniform, if and only if it is unitarily invariant, i.e.,  $\alpha(UAV^*) = \alpha(A)$ for  $A \in \Re$  and any unitary operators U, V on  $\mathfrak{H}$ . Every unitarily invariant crossnorm on  $\Re$  can be defined in a simple manner in terms of a symmetric gauge function on the linear space  $\Re$  of infinite sequences of real numbers having only a finite number of nonzero terms. Let  $\Re(\alpha)$  denote the normed linear space obtained by defining a unitarily invariant crossnorm  $\alpha$  on  $\Re$ , and let  $\Re_{\alpha}$  denote the metric completion of  $\Re(\alpha)$ . It turns out that  $\Re_{\alpha}$  may be identified with a minimal norm ideal of  $\mathfrak{A}$  and that every minimal norm ideal can be obtained in this way.

Some of the material (e.g., the theorems  $\mathfrak{C}^* = (\tau c)$  and  $\mathfrak{C}^{**} = \mathfrak{A}$ , the relationship between the unitarily invariant crossnorms on  $\mathfrak{R}$  and the symmetric gauge functions on  $\mathfrak{A}$ ) may be already found in the author's earlier book, *A theory of cross-spaces* (Princeton University Press, 1950), but their inclusion makes the present book self-contained. This monograph, written in great clarity, is an excellent exposition of the author's study of spaces and ideals of completely continuous operators. It should be of interest to those working on theory of operators or Banach algebras.

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Analytic functions. By R. Nevanlinna, H. Behnke, H. Grauert, L. V. Ahlfors, D. C. Spencer, L. Bers, K. Kodaira, M. Heins, and J. A. Jenkins. Princeton, Princeton University Press, 1960. 7+197 pp. \$5.00.

At first glance it would appear that this book has no other motivation than the transcription of the principal addresses of the 1957 Conference on Analytic Functions. This would put it in the same category as the 1953 Brussels Colloquium and reports of other colloquia. A glance through the table of contents reveals an article on complex spaces, two articles on the moduli of Riemann surfaces, an article on perturbation of structure and others. It seems to be a random collection of papers on function theory.

If this were the case, a review here of this book would be as ludicrous as a review of vol. 71 of the Transactions. But such is not the case. The book stands as an exposition of complex analysis in the last decade and treats well and fully the lines of research developed in that period. The majority of articles meets the needs of those with an outside interest in complex analysis who are curious to understand the new results and techniques. More important, the new student of complex analysis is presented with the tools and bibliography which he needs and cannot find elsewhere. From the point of view then, of