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Entire holomorphic mappings in one and several complex variables, by Phillip A. Griffiths, Ann. of Math. Studies, no. 85, Princeton Univ. Press, Princeton, N. J., 1976, x + 99 pp., $11.50 (cloth) and $4.50 (paper).

This little book is based on the fifth set of Hermann Weyl lectures, which Phillip Griffiths delivered at the Institute for Advanced Study in the Fall of 1974. And although the notes, because of their informal nature, have some unclear moments they also capture a broad and enthusiastic modern perspective on a very classical field.

The history of the subject begins with E. Picard's finding in 1879 that if f is a nonconstant entire function of one complex variable, then the range of f can omit at most one finite complex number w. This sensational result attracted much attention from E. Borel, J. Hadamard, G. Valiron and many others around the turn of the century. However, Rolf Nevanlinna's study, *Zur Theorie der meromorphen Funktionen* [**21**], in 1925 completely revolutionized the subject. In this article, he developed his own so-called first and second fundamental theorems, which form the basis of all further research in value-distribution theory. Indeed, as Weyl himself has written (albeit 34 years ago [**30**, p. 8]): 'the appearance of this paper has been one of the few great mathematical events in our century.' And within the next few years, Nevanlinna's brother Frithiof and student Lars Ahlfors had obtained their own derivations of the fundamental Nevanlinna theorems. The echoes of these techniques (especially those of Ahlfors) reverberate clearly in this book.

The elegance and depth of this theory have naturally led to attempts to obtain analogues for higher dimensions. The general problem is to consider a nondegenerate holomorphic mapping

$$f: C^n \to M \tag{1}$$

with M a compact complex manifold of dimension m (one can also consider more general domains than C^n). Success here, of course, has come more slowly; in addition to the bibliographical notes appended to each of the chapters in the book under consideration, we refer to [**12**] for developments before 1969 and W. Stoll's recent survey article [**27**].

Instead of asking only how many points of M are covered by f and how often, situation (1) allows us, in addition, to consider the covering properties of any collection V_k of k-dimensional analytic subobjects.

$$V_k \subset M \qquad (k \leqslant m). \tag{2}$$

The first substantial body of results without $\min(m, n) = 1$ in (1) is due to Stoll and his associates (cf. [**25**], [**26**]), and, in particular, Stoll has obtained first and second fundamental theorems which anticipate many of those presented in Griffiths' book.

Stoll's proofs (especially of his second fundamental theorem [**25**]) are based on the so-called associated maps of Ahlfors and Weyl [**3**], [**30**]. A decade later, R. Bott and S. S. Chern introduced a different perspective in these matters, and obtained a new first fundamental theorem. Their point of view has had a profound influence on Griffiths.