## **BOOK REVIEWS**

## *Emmy Noether*, 1882–1935, by Auguste Dick, translated by H. I. Blocher, Birkhäuser Boston Inc., Cambridge, Mass., 1981, xiv + 193 pp., \$12.95.

This book is an excellent translation from the German book with the same title which appeared as a supplement ('Beiheft Nr. 13') of the Journal 'Elemente der Mathematik' in 1970. The author's 'Nachwort' followed by 'Zeittafel' was moved to the very beginning ('Acknowledgements' and 'Chronology'). The publication list and the list: 'doctoral dissertations completed under Emmy Noether' was moved to Appendix A, to be followed by the list of obituaries (Appendix B), and, in addition, by a list: 'Academic Ranks and Terms (with English equivalent or explanation)' as Appendix C and at the end a five page index of names. In between we find again the Introduction followed by a biography of Emmy Noether subdivided into: The Erlangen Period (1882-1915), The Göttingen Period (1915-1933), Bryn Mawr and Princeton (Fall 1933-Spring 1935), followed by the obituary of Emmy Noether by B. L. van der Waerden [Mathematische Annalen 111(1935), 469-474] in English translation and the Memorial Address 'Emmy Noether' delivered by Herman Weyl in Goodhart Hall, Bryn Mawr College, on April 26, 1935, and published in Scripta Mathematica 3(1935), 201-220. To this is added an English rendition of the Address delivered by the President of the Moscow Mathematical Society, P. S. Alexandrov, on September 5, 1935 (published in Proceedings of the Moscow Mathematical Society 1936, 2): 'In Memory of Emmy Noether'.

A large number of photos has been added to the English version.

Whenever I discuss Emmy Noether's life and work with my American colleagues invariably a number of questions turn up which deal with her as if she were a living person. Auguste Dick's book contains many valuable hints where to look for the answer, as will be evident from the following quotations.

Is it true that E. Noether 'converted' from purely formal algebra to 'modern' conceptual algebra?

(p. 16) 'Under Gordan's influence Emmy Noether wrote a paper based on the theory of invariants, entitled, On the construction of the system of forms for the ternary biquadratic forms ("Über die Bildung des Formensystems der ternären biquadratischen Form").'

(p. 17) 'The subject of this dissertation as well as its treatment correspond entirely to Gordan's interest. They do not indicate in any way the course that the author's thinking later took toward purely abstract algebra. Emmy Noether herself later referred to her thesis, as well as to several