

**Greek Mathematical Philosophy.** BY EDWARD A. MAZIARZ and THOMAS GREENWOOD. Frederick Ungar Publishing Co., N.Y. (1968). xiii + 271 pp.

While from time to time in the history of mathematics the ties between mathematics and philosophy which often go unnoticed have made themselves felt more strongly than usual, it was particularly in the period where Greek thought began to flourish for the first time that these connections were of fundamental importance. In fact, the separation of philosophy, mathematics, the sciences etc. into separate disciplines represents already a rather late stage of development. Yet looking back we tend to write—perhaps we should better say: to construct—isolated histories of philosophy, of mathematics, of science and so on, selecting only the facts we consider important in the history of the single discipline in which we happen to be most interested.

The authors' aim was to give "a broad cultural view of the mutual interrelation and development of mathematics with philosophy in Greek Thought". At a time where the study of the history and philosophy of science is being established at an increasing number of universities this book should be very seasonable. It offers an elementary, very clearly written account of the interwoven history of the early mathematics and philosophy, beginning with Thales and the Pythagoreans (Part I), the time of Plato (Part II), that of Aristotle (Part III), and it ends with a discussion of the Euclidean synthesis (Part IV). In these latter parts the influence of Platonic and Aristotelean thinking on the development of mathematics and the sciences since the Middle Ages is considered, too. While conflicting issues between the specialists on Greek thought are not always passed over in silence, emphasis was obviously placed on a presentation that is not overburdened with technicalities. The book is equipped with a selected bibliography (references to the source material being given in footnotes) and an index. It should prove of special value in connection with courses and seminars on the history of Greek mathematics and philosophy.

C. J. SCRIBA,  
BERLIN

**A History of Vector Analysis. The Evolution of the Idea of a Vectorial System.** BY MICHAEL J. CROWE. Univ. of Notre Dame Press, Notre Dame, London (1967). xii + 270 pp.

This book is a welcome addition to studies on special branches of mathematical development during the 19th century. The subtitle perhaps describes even better than the title what it is about: it traces the evolution (understood in a broad sense) of the ideas that led to the modern vector system. This evolution, if viewed as such, occurred by way of thesis, antithesis (of little influence) and—after a transitional