REVIEWS

'CYCLIC AND EVENT STRATIFICATION' (Eds.) G Einsele and A. Seilacher, Springer-Verlag, 1982, 536 pages Price $ 29.50.

This book is a collection of short papers and abstracts—an outcome of the symposium held at Tubingen in April 1980. It is divided into four parts—Part I—Limestone-Marl Rhythms and climate-controlled facies changes; Part IIA—Event Stratification, calcareous and quartz-sandy tempestites: Part IIB–Event Stratification—other event deposits; Part III—Cyclicity and Event Stratification in Black Shales. Part I consists of 10 papers spread over 157 pp; Part IIA consists of 18 papers spread over 228 pp; Part IIB consists of 4 papers spread over 39 pp; Part III consists of 11 papers accounting for 96 pp of text material. The book contains 536 pages and 180 figures, both drawings and photographs.

The first obvious comment for geologists reading this book is the problem of terminology. To begin with, even the title of the book contains poorly known terms such as 'event stratification'. Terms like 'Periodites' and 'Tempestites' used in the book would surely not be familiar to the ordinary field geologist. Furthermore, uniformity in the usage of various common terms by the authors of different papers has not been ensured by the Editors.

The book 'Cyclic and Event Stratification' is of value because of the current revival of interest in the concept of episodic sedimentation. Study of the first order cycles is based on the premise that sedimentation is an orderly, steady process. Going back further, the intrinsic complexities of the allocyclic controls of sedimentation—climate and tectonics—are not so well understood to interpret cyclicity in sedimentation on a simplistic basis. To quote from Dott's 1982 SEPM Presidential Address 'Instinctive abhorrence of unique events, and continuity is *assumed* first rather than discontinuity' (italics mine). To carry this point further sedimentologists are familiar with Zeller's production of close facsimiles of Pennsylvanian cyclothems by using the Lawrence, Kansas, telephone directory as a random—numbers table to generate synthetic vertical sections composed of three lithologic components.

Both topics—Cyclic and Event Stratification—have been dealt with in this book which focusses on the differences in stratification formed under ordinary day to day processes that acted uniformly through time, and those extraordinary processes which acted spasmodically. In the section on Limestone - Marl Rhythms, G. Einsele has provided an in-depth analysis of the causes and significance of the rhythms. The book ends appropriately with a fitting summary by Einsele and Seilacher on the 'Palaeogeographic significance of tempestites and periodites'.

Cyclic and Event Stratification is a timely volume for Stratigraphers and Sedimentologists who are now in the midst of examining the importance of Catastrophism/Actualistic Catastrophism/Episodic Sedimentation/Cyclic Sedimentation. It should be of value to most general geologists as well, because the topic of Stratification is so basic in any kind of geological investigation. In its paper back form with camera-ready format pages, the price of $ 29.50 is too high for individuals to afford in this country.

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