

## Schoch, Robert M. (1989): *Stratigraphy: Principles and Methods*. Van Nostrand Reinhold, New York, 375 p.

Robert J. Fulton

Volume 44, Number 1, 1990

URI: <https://id.erudit.org/iderudit/032808ar>

DOI: <https://doi.org/10.7202/032808ar>

[See table of contents](#)

Publisher(s)

Les Presses de l'Université de Montréal

ISSN

0705-7199 (print)

1492-143X (digital)

[Explore this journal](#)

Cite this review

Fulton, R. J. (1990). Review of [Schoch, Robert M. (1989): *Stratigraphy: Principles and Methods*. Van Nostrand Reinhold, New York, 375 p.] *Géographie physique et Quaternaire*, 44(1), 108–108. <https://doi.org/10.7202/032808ar>

cepted geological timetable. It looks at the basic geological information used in stratigraphy and follows up with a philosophical discussion of stratification, unconformities, concepts of facies, and the difference between convention and scientific principle. Next it looks at codes and guides, how they control the way geology is done, the different approaches and roles of stratotypes, and the general procedures and conventions embodied in the stratigraphic guide and the North American code. The rest of the book discusses and describes various stratigraphic units and how they are defined.

The book is a rather unusual mix of philosophy, description, and criticism. Because of this mix it is not always easy to anticipate where a particular discussion is leading but the book does follow its own line of logic. In places, the coverage appears uneven with emphasis apparently placed on minor items while seemingly more important ones are largely ignored (in discussing the material basis of stratigraphy, 3 pages are devoted to composition and classification of rocks, 8 pages to seismic sections, and 16 pages to geophysical well logs). The author points out in the preface, however, that the book is not intended as a physical and historical geology text but emphasizes points which generally are new or not emphasized elsewhere.

Much of the book is devoted to reviewing, describing and comparing the International Stratigraphic Guide and the North American Stratigraphic Code and in this way is a unique and valuable contribution.

The author has several of his own points to make. One is that the code and guide lock stratigraphy into a straight jacket because they force a single view or philosophy of stratigraphy on the user. He contrasts this approach to that used in zoology where the nomenclature code concerns only the procedure for naming animals and says nothing about how animals should be classified. Another point is that defining unit boundaries is the prime emphasis of the code and the guide. In his opinion this places undue emphasis on fixing arbitrary timelines instead of on defining natural local rock units. His concern is that this could force all workers to use the same time units and close the door to future modifications. His suggestion for getting away from this is setting up type points which would not define unit boundaries but would fall someplace within the rock unit. This network of time points would serve as the basis for comparing the times at which different units were deposited.

This book is well written, well edited and concepts are described and presented simply with clear examples. Because it assumes the reader already has considerable knowledge

of geology and stratigraphy, the book is not a particularly good starting point for the budding geologist. It does, however, contain extensive references, an excellent index and includes the North American Stratigraphic Code as an appendix. Consequently, it is an excellent book for the advanced student and point of entry for the scientist who may not have been exposed to the problems and concerns of stratigraphic principles and methods or who wants a refresher course.

Robert J. FULTON  
Geological Survey of Canada

SCHOCH, Robert M. (1989): ***Stratigraphy: Principles and Methods***. Van Nostrand Reinhold, New York, 375 p.

This is not an ordinary geological textbook; it does not contain a single photograph and devotes almost as much space to discussion of the historical development and philosophy of the subject as it does to presentation of techniques and description. This is in line with the primary purpose of the book which is to "provide the reader with a taste or feel for stratigraphy, or more accurately what can be termed a stratigraphic philosophy".

The book begins with a definition of stratigraphy and a review of the development of stratigraphic thought and of our currently ac-