BOOK REVIEWS


The Geological Survey of India has earned the gratitude of earth scientists by preparing this author and subject index to the first 42 volumes of Indian Minerals, the Quarterly Journal of the Survey which started publishing in 1947. Citation are indexed according to the Geo-Ref Thesaurus. The whole exercise has been carried out with a view to help the researchers in getting at the information they want quickly. D. K. Nag, Assistant Librarian of the Survey who has compiled the index is to be complimented on this excellent piece of work carried out.

B. P. RADHAKRISHNA


This innocuous-looking little book may easily escape attention in a library (as it did of the present reviewer) since its title is deceptive and suggests a routine text relating to the application of fossils. It is anything but routine. The contradictions the author has spelt out in regard to handling and application of fossil data have indeed been experienced by several palaeontologists but few have ventured to 'question some of the methods traditionally applied' and propose 'theoretical' measures. The holotype concept for extant organisms may be a workable principle (it certainly is not a satisfactory representative of the species) but in the case of fossils, where time operates as an additional dimension, it negates the doctrine of evolution. A morphotype in time is part of a continuum and its threshold limits are arbitrarily fixed on the basis of specimens available at different stratigraphic levels. Repeated emendations of fossil species continuously widen its morphological as well as geographical scope while the original holotype remains unchanged making it more and more unrepresentative. Such an approach can hardly be objective.

The author has lucidly explained and graphically illustrated the various situations making his point that the traditional taxonomic system and its stratigraphic applications, in addition to being inaccurate, is inadequate for achieving greater resolution, as additional information becomes available through advanced instrumentation. Accordingly he has suggested an alternative system which he calls Palaontologic Data Handling Code (PDHC). Whether this system would be more objective, without making the study complicated and time-consuming, thereby defeating the purpose of its application, is yet to be determined. It cannot be, however, denied that the exercise is laudable and does stimulate rethinking. In that respect the author has been successful in his stated goal and the book may well prove to be a landmark in evolving a new code for handling palaeontological data.

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