

BOOK REVIEW

Geomorphology: A Canadian Perspective

by Alan S. Trenhaile. Third Edition. Published by Oxford University Press. 424 pp.

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The origin of Geomorphology can be referred to 2500 years ago when the ancient Greek, Roman, Arab and Chinese philosophers tried to comprehend the occurrence of earthquakes, volcanoes and the presence of seashells at high mountains elevations. Leonardo da Vinci, during the Renaissance, discussed the formation of valleys based on observation of natural processes. After catastrophism and uniformitarianism theories as explanations of the origin of Earth's relief, in the later part of the nineteenth century, geographical and geological surveys were carried out on the western United States giving important contributions to the development of geomorphological theory. Then, Davis, Penck, King had stated different models of landscape evolution. In the last few decades the Geomorphology has been dominated by the study of modern processes, their mechanics and rates of operations and on the behaviour of earth materials.

In that sense, Alan Trenhaile has written *Geomorphology: A Canadian Perspective*, a comprehensive introduction to geomorphology, the study of physical features of the surface of the Earth and how they evolve. It is a text focused for undergraduate Geography and Earth Sciences Canadian students in its third edition.

The book has a well-organized index which shows 16 chapters giving the book a logical structure. The first four chapters refer to the history of Geomorphology, the main forces in Nature, weathering and soils, and the physical background of Canada. The book as a whole refers to Canada, although the majority of the following eleven chapters refer to landforms and processes in general. Thus, slope forms, glacial, fluvial, coastal and karst environments are described with the inclusion of several formulae on sediment processes for an analytical basis. Finally, the last chapter involved the environmental geomorphology that attempts to examine interactions between people and their surroundings.

All chapters are well written in a comprehensive manner giving the students the scientific study of landforms and surface processes essential to their knowledge. There are numerous photographs and figures to illustrate the concepts. Although the book is intended to Canadian perspective (three chapters are related to glaciers, glacial sediment and glaciation of Canada), there are also other examples in the world. Since it is a practical textbook, at the end of each chapter there is a summary to reinforce key concept and also an extensive glossary of terms is included.

This third edition differs from the predecessors in several ways. The first chapter has been divided to better introduce the philosophical and methodological foundations of the subject and the nature of the forces that drive and resist change in the Earth's surface. The discussion of rivers includes two new sections on palaeohydrology and global rates of denudation. This edition also examines important phenomena elsewhere in the world, including the Fennoscandian ice sheet, the Indian Ocean Tsunami of 2004 and the hurricane that devastated New Orleans in 2005. All the chapters have been updated and more than forty new figures added.

Definitively, the book provides all the geomorphology and basic sedimentary principles with analytical discussions necessary to a whole comprehension of the Geomorphology. So, the book is worthy recommended to be read for Latin-American students, as it provides an outstanding coverage to introduce landform morphology and their processes of development.

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