

# The Geographical magazine

Founded by Michael Huxley in 1935

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<b>Cover:</b>	Lebanese army on patrol. Photograph: Robert Cockburn		

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## The nature of change

IN RECENT YEARS science has been pervaded by new ideas about change. It is perhaps less of a scientific revolution than a growing sense that nature does not alter or develop in quite the way that we thought it did.

In the 1970s there was 'catastrophe theory', Professor Rene Thom's intriguing observation on the mathematics of sudden change. There were also new perspectives on evolution and palaeontology and it was argued that species did not evolve and develop in quite the steady progress that was originally suggested.

The study of landforms and the landscapes which they create is inevitably affected by this kind of thinking. In the earth sciences the way in which things change has been under considerable scrutiny for some time now. Results from deep sea drilling programmes, new skills by which past environments are inferred from varying kinds of geological record and the ability to computer-analyse large amounts of data using sophisticated techniques have combined to provide a different view of the way in which the earth changes its shape.

Today's students of landforms find that old ideas about how landscapes develop are no longer so convincing. The

steady and inexorable alteration of the earth's surface is not so satisfactory as a general model of change. A modern alternative suggests that change may be more accurately described as a series of sudden events, with long periods between when nothing much happens.

At a time when geomorphologists are beginning to operate with a new frame of reference regarding change, THE GEOGRAPHICAL MAGAZINE presents an important new series, *Dynamic Earth*. The series is edited by Professor J. B. Thornes of Bedford College, University of London and Dr Vince Gardiner of Leicester University. In coming months they and a carefully selected team of expert authors will review the science of geomorphology, introducing its basic topics in the light of new research.

Why *dynamic earth*? Because that word sums up the nature of the planet on which we live. In 200 million years' time it is said that the geography of this world will have changed, completely altered by continental drift, mountain building and the forces of erosion. That's a long time, far beyond the scale of human perception, but the estimate, based on current processes, indicates an earth alive through change.