

between the development of individual oceanic island volcanoes, and the growth of oceanic plates. The same authors also speculate that some ophiolite complexes in Kamchatka represent obducted remnants of the Hawaiian-Emperor volcanic chain, where its northward extension appears to have been involved in subduction.

Minor quibbles include the poor quality of the field photographs in an otherwise excellent account of the Josephine ophiolite; the lack of any diagrams in the valuable review article on the volcano-tectonic setting of oceanic lithosphere generation; and the frequent perpetuation of the unfortunate term 'sheeted dykes'—a tautology if ever there was one.

Overall, this compilation provides a stimulating basis for further research, and if it adds up to slightly less than the sum of its parts, this is surely a reflection of the current state of the ophiolite/oceanic crust debate, in which the detailed complications outweigh the overall simplicity of the concept.

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Freeth, S. J., Ofoegbu, C. O. and Onuoha, K. M. (eds.) *Natural Hazards in Western Central Africa*. Braunschweig/Wiesbaden, (Vieweg & Sohn). 1992. vi + 174 pp. Price DM 88.00.

Before the Lake Nyos gas release that killed some 1700 people in 1986, western central Africa was not considered an area of high risk from major natural disasters. However, based on the oral history of western Cameroon, spectacular 'misbehaviour' of lakes recurs in legends of the local tribes, suggesting that that type of phenomenon was well known in the past. With the rise in population around these lakes, it is clear that increasing attention should be paid to the hazards presented by the rapid expulsion of toxic gases from lakes.

Some two-thirds of the book are devoted to a discussion of the causes and results of the Lake Nyos disaster. Also discussed in short sections are the hazards from earthquakes, and landslides and erosion. Seismically, this area is relatively stable; but, earthquakes do occur, such as the 1939 Accra earthquake which killed 16 people. The effects of slope failure, on the other hand, are considered to be an increasing problem.

Most of the material about Lake Nyos is the subject of a thematic edition of the *Journal of Volcanology & Geothermal Research* published in 1986; thus a full description and discussion of this topic by the authors of chapters in this book is already available. In addition, the chapter on seismic monitoring of Lake Nyos is almost word for word, the same as a chapter by the same authors in *Geo Hazards Natural and Man-made*, published by Chapman & Hall, also in 1992. Even within the book under review, there is an undesirable degree of repetition which should have been edited out. Considering that the Cameroon Volcanic Line runs straight through the area under discussion, it is surprising that volcanic activity, other than gas emissions, gets only the briefest of mentions as a hazard in the region.

As the editors rightly point out, more people died as a result of catastrophic natural disasters in this area during the 1980s than in the whole of recorded history. A contributory factor is the increase in population causing people to live in areas of potential hazard such as the area around Lake Nyos, previously unoccupied. Indeed this is a world problem recognised by the United Nations in the International Decade of Natural Disaster Reduction. As a new contribution to the discussion which could help mitigate the risk posed by natural disasters, this book does not achieve its objective.

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