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Geosciences, Environment and Man, by Hervé Chamley, 2003. Elsevier Science, P.O. Box 211, 1000 AE Amsterdam, The Netherlands; xvii + 527 pages; hardbound. \$165.00, ISBN 0-444-51422-8; \$70.00, ISBN 0-444-51425-2.

An intriguing title like the one of this book is only justified if the book meets the resulting expectations of the reader; that is, unfortunately, rarely the case. Here, however, one single author (erroneously indicated as the editor in the Elsevier catalogue) knows how to keep the readers' attention, indeed. Not because the book provides so much news, but because the various items are all the time dealt with from another angle than they commonly are. It is - as Chamley states in his introduction - the encounter between Man and the Earth that functions as the framework for the various chapters. But the book offers more than such a framework: it also provides interesting perspectives, sometimes entirely new perspectives, for Chamley is not afraid of approaching specific topics from an uncommon angle. Such new viewpoints turn often out to be rewarding, and they certainly are here.

It seems that Chamley has a similar daring attitude towards the unknown as the explorers who went to discover in the past few centuries whatever might be hidden in then still unknown continents. Proof is the last section of the epilogue, where Chamley states: "At the moment of writing a book on the evolution of man-environment interactions, it is difficult to dodge the question of the future. Escaping such a question seems particularly inappropriate in geoscience fields where researchers base their expertise on recent times for being able to better anticipate evolution in the near future." The final message is that "Geologists must progress in better understanding the functioning of natural and man-modified Earth environments", that "the concept of very long term sustainable development is ... crucial in the domain of Earth Sciences", and that earth scientists should put effort in emphasizing that "In the same way as the concept of inevitable risks in some natural environments should be better accepted, the reality of non-existent objective risk in other fields should be more reasonably considered and admitted."

These messages may seem a bit idealistic, and not every earth scientist might consider such a message as an appropriate guideline for how to live personally and how to work professionally. Those who have read the book will come to the conclusion, however, that Chamley is certainly not just an idealist, but that he has a profound knowledge of, and a good insight into, all the large-scale interactions between Man and his environment, that is, essentially, the Earth. He is aware of how small the influence of the individual human being on the environment is, but he recognizes - and emphasizes - also the threat of an ever growing population.

This discrepancy - the power of nature versus the limited possibilities of Man to defend himself against natural catastrophies on the one hand, and the helplessness of

nature when confronted with the rapid plundering by Man of the treasures that nature built up during geological times on the other hand - forms the backbone of the book. It seems only logical that, apart from a foreword in which a short introduction into the essential thoughts behind the book are presented - the book is subdivided into three parts: (1) Man facing Earth's hazards, (2) Exploiting geological resources, and (3) Earth facing Man's activities. It was already mentioned that there is also an epilogue. Those who might think that this book need not be read, should read at least this 12-page piece. It will convince them that it is worth to read the entire book. And who starts reading, gets easily lost: it is not just the wealth of information - however large and interesting - that holds the attention, but it is particularly the way in which at first sight unrelated pieces of geoscience information are shown to be interrelated and to form part of a much larger concept. Just these links that are shown to exist between so many topics make this book so fascinating.

It is tempting to go into detail about specific topics that are perhaps not entirely correct. I have edited two books about the technological and health aspects of the Chernobyl nuclear accident and I do certainly not agree with Chamley's statement that the causes of the accident have become known belatedly; this type of accident for this type of reactor had already been predicted in western literature in the 1950s, on the basis of what was then known about the reactor's technology. Where one single author covers so many different topics - ranging from tsunamis to hydrocarbon extraction, from Chernobyl to the desertification problems in the Sahel, and from the Acropolis Caryatids to El Niño - inaccuracies can, obviously, not be avoided completely. There are many details which seem to be not fully correct. Chamley is, however, not to be blamed for them; on the contrary, he is to be praised for his courage to tackle so many problems, and even more for finding out how closely interrelated many earth-scientific topics are. And, it should not be forgotten, how threatening Man's activities are for an Earth that offers such wonderful opportunities for an 'ever' lasting sustainable future. If only Man would gain the insight that some of his destructive activities cannot be undone so easily. This book should be considered as an important contribution to a world in which Man can learn to live with hazards, and to cooperate with Nature rather than to fight it.

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