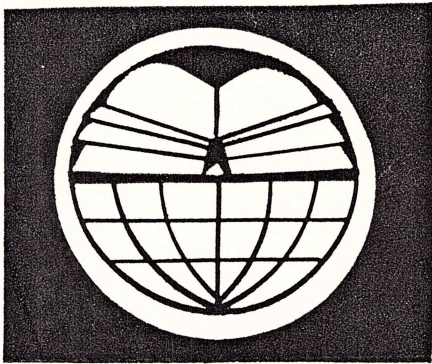


The World in Books



The twentieth century Doomsday Book

by Duncan Campbell

DOOMSDAY: BRITAIN AFTER NUCLEAR ATTACK. By Stan Openshaw, Phil Steadman, and Owen Greene. 296pp. Illustrated. Basil Blackwell. £4.95.

Doomsday is not another diatribe against nuclear weapons *per se*. Yet the authors' painstaking analysis of the likely course and consequences of a nuclear attack on the United Kingdom are a far more eloquent and effective warning about the perils of nuclear weaponry than many a protest speech. The key feature of *Doomsday* is a detailed analysis of 11 different potential nuclear attack patterns that might be selected by a strategic adversary. The analysis shows that government officials have long deluded the public and civil defence planners – and, in all probability, themselves too – about likely survival rates in Britain after nuclear attack.

In the current highly-charged debate about nuclear weapons and civil defence, officials and Ministers have recently tried to avoid making detailed statements about the effects of a nuclear attack. But in guidance circulars for local authorities they suggest that 'for planning purposes' survival rates of 75–90 per cent may be anticipated. Openshaw *et al* show that, under the weight of an attack which the government itself regards as typical, little over 30 per cent of the population will survive even the very first effects of nuclear attack.

The three authors have been prominently engaged over the last two years in a public dialogue with government scientists about the inadequacies of their technical analysis of nuclear weapons effects. *Doomsday* reaches very different conclusions from government studies because the authors use American Department of Defense data on weapons effects rather than British government figures, which are often ill-founded and highly optimistic.

The authors' approach is distinctly geographical and computational. The United Kingdom is divided into some 150,000 inhabited 1 km squares (using the National Grid). The population distribution is taken from the 1971 Census (suitable 1981 data is, even now, not yet available). On to this grid is superimposed the pattern of A-bomb and H-bomb bursts. The effects of each bomb vary according to their power, the height at which they explode, and the distance from the epicentre of the explosion. Then for each grid square, the magnitude of three key, immediate nuclear explosion effects are calculated: thermal radiation, blast, and radioactive fallout. The computational task involved is considerable.

Yet even such statistics of mega-death tell only a tiny part of the story. Despite its horror, *Doomsday* still understates the consequences of nuclear war by presenting only gross casualty levels. It complements the recent well-received report of the British Medical Association, which stressed the impossibility of providing medical treatment for the millions of severely injured survivors which the Steadman and Openshaw model also predicts.

One weakness of the present model, resulting from the shortage of suitable census data, is that it permits no population movement, so everyone is assumed to be at home at the time the attack occurs. Another new development needed is to look at longer term consequences of attack, examining whether even uninjured survivors would be likely to find food and escape disease.

Despite the cool authority of this book, one senses that scientific facts about the nature of a nuclear attack are not neutral in their effect, and that public desires for nuclear disarmament (of whichever character) is considerably enhanced by a specific awareness of what the bomb will do. No diatribe is needed when the facts speak so clearly for themselves.

Human geography from A to Z

by D. R. Diamond

THE DICTIONARY OF HUMAN GEOGRAPHY. By R. J. Johnston. 411 pp. Illustrated. Basil Blackwell. £27.50 (library edition), £4.95 (paperback). THE APPEARANCE of this, the paperback edition of the hardback version published in 1981, is to be greatly welcomed. Indeed, I cannot imagine any sound reason for the two-year delay other than a dilatory attitude by the publisher, since the 1981 edition was so well received; and rightly so. Not only is this a really reliable and up-to-date guide to the discipline of human geography, but it also possesses those outstandingly useful features of modern reference books, such as references to the academic literature, cross-referencing and suggestions for further reading.

Its value lies not only in its ease of use but even more in its actual content. It is very comprehensive (ranging from narrow technical terms like freight rates or gentrification to broad philosophical concepts like paradigm or phenomenology) and very thorough. Key terms from those social sciences that human geography has borrowed from, such as economics, sociology, and psychology are fully represented. Each entry is well researched, clearly expressed and adequately referenced and a crucially important feature, it has an index of real quality. To students and teachers and to professional geographers and curious laymen alike, this book has no rival as a safe, quick and readily available guide to the now very large, diverse and still growing subject of Human Geography.

British wetlands

by Michael Proctor

THE CENTURY BOOK OF MARSHES, FENS & BROADS. By Richard North. 192 pp. Illustrated. Century Publishing. £12.95.

THIS BOOK is an account of British wetlands for the general reader, by a journalist who has written widely on conservation and environmental matters. The introduction is followed by chapters on the Norfolk Broads, the Somerset Levels, the East Anglian Fenland, freshwater marshes and wet meadows, urban wetlands, acid bogs, estuaries and saltmarshes, and 'the conservation case.' Generally, each chapter sets out the relevant ecological background and conservation issues and problems, and paints a word-picture of some representative sites, ranging from Hickling Broad, Wicken Fen, the Silver Flowe and Blar nam Faileag to Moseley Bog

in Birmingham and Walthamstow Marshes.

This is a very personal, committed and sometimes passionate book. There are errors and omissions, and it would be easy to find fault in detail. Few botanists would now see mosses as particularly primitive, and *Sphagnum* and lichens were probably quite late on the evolutionary scene. More could have been said of the fascinating story of Medieval peat-digging in Broadland. Raised bogs are relegated to a half-page on Glasson Moss, with no mention of the beautiful raised bogs at Cors Tregaron NNR, and there is only the sketchiest mention of the splendid valley bogs of the New Forest. And why do authors and editors make such heavy weather of the simple convention that Latin names of animals and plants are printed in italic with an initial capital for the genus name?

But this does not set out to be a scholarly work. It gives the reader a wide-ranging, well-informed and first-hand view of British wetlands, and provides a good starting point from which to embark on more specialist books. The style is vivid and generally easy to read (though here and there almost as soggy as the subject matter!); the author succeeds well in conveying his own response to these often strangely but compellingly beautiful places. 'As they disappear . . . we lose a spiritual amenity as well as a wildlife resource of scientific interest.'

The last chapter leaves no doubt of the authors' commitment, and highlights a national scandal, that conservationists in Britain find themselves fighting with far-stretched resources not only against real economic pressures, but also against the pressures exerted (not least on farmers themselves) by agricultural subsidies. Richard North argues his case forcefully, but I think fairly. He has plenty of good words to say for those landowners, farmers, industries and public bodies who have found ways to reconcile scientific and aesthetic values with other uses of our limited resources of land.

Around the world the hard way

by R. I. G. Morrison

TO THE ENDS OF THE EARTH. By Ranulph Fiennes. 320 pp. Illustrated. Hodder and Stoughton. £12.95.

THIS SPLENDID book tells the story of the Transglobe Expedition 1979–82, an expedition which after seven years of incubation and planning, spent three further years in a successful surface circumnavigation