ments. "Society," he said, "can never be greatly improved, until such time as most of its members choose to become theocentric saints."

This remark comes in *Grey Eminence* (1941), one of his most absorbing books, where his gifts are deployed in a study of Father Joseph, a Capuchin monk who became adviser to Cardinal Richelieu. Between them, Father Joseph and Richelieu prolonged the Thirty Years War, causing millions of deaths by torture, famine, disease and the usual appurtenances of war. Politics betrays the nationalistic religion, and vice versa.

The best of Huxley is scattered everywhere, perhaps most thickly in collections of essays; of the essay form he is one of the century's masters. "Adonis and the Alphabet" (1956) is a perfect example. The erudition, never obtrusive, carries us from psycho-industrial power, dirt and spirituality, population pressures, to Martian language and literature, and much else besides.

The Human Situation (1978) collects lectures delivered at Santa Barbara in 1959. They provide witty, learned summaries of Huxley's thinking on many subjects, answering such questions as:

## **Discerning relationships**

John F. Y. Brookfield

Molecular Markers, Natural History and Evolution. By John C. Avise. Chapman and Hall: 1994. Pp. 511. £75, \$89.95 (hbk); £24.99, \$37.50 (pbk).

DNA and proteins provide the most accurate guides to the phylogenies of living organisms. They allow the estimation of relationships between species, and between populations and individuals within species. They fail only when the concept of phylogeny itself fails, such as in dichotomies between trees of genes and species. In this important new book, Avise describes the uses of molecular techniques in answering some of the central questions of the population biology of diverse organisms. The first part deals with the methodology of various types of protein and DNA assays, and the ways in which either qualitative or quantitative data on genetic divergence can be used in phylogeny estimation. The second discusses the kinds of questions that molecular studies of variability have been able to answer. Examples range, with increasing genetic divergence, from studies of clonality, through kinship and speciation, to estimation of interspecific phylogenies. The closing chapter addresses the use of molecular tools in conservation genetics. The examples, many derived from the author's research team, are diverse and

"How should we be related to the planet on which we live? How are we to develop our industrial potentialities?" No better handbook to our ongoing civilization could be devised.

Huxley's continuing influence was summed up by Isaiah Berlin: "He was the herald of what will surely be one of the great advances in this and following centuries — the creation of new psychophysical sciences, of discoveries in the realm of what at present, for want of a better term, we call the relations between body and mind."

Almost everything Aldous Huxley wrote was adversely criticized at one time or another. Everyone spoke well of the man himself. His gentleness, sweetness and humour were remarked on by all those fortunate enough to know him.

Brian Aldiss is a novelist and critic who lives in England. His latest novel, Somewhere East of Life, was published by HarperCollins on 1 August.

■ All of Huxley's works (47 books) are available in the United Kingdom from Flamingo, a paperback imprint of Harper-Collins.

unfailingly interesting. The book is accurate and well written, and fulfils an important need as an undergraduate text.

I have misgivings about the field of molecular natural history itself, however. Pure biological research has simultaneously followed two distinct traditions. One of them involves the exhaustive cataloguing of organisms, their natural history and relationships. The other tradition, usually adopted by evolutionary and other geneticists, asks profound questions about model biological systems to discover general principles. The molecular tools developed in the latter endeavour can also be applied to the other organisms, but this conjunction of breadth of questions with depth of techniques can create an experimental programme that involves doing all of the experiments on all of the organisms. This task is impractical and there is no good reason for doing parts of it. For example, phylogeny estimations based on morphology have usually turned out to be correct, so further molecular checking could have a low priority. The studies in the many references here emphasize that molecular natural history is still natural history; real inductive generalizations across taxa are still required.

John F. Y. Brookfield is in the Department of Genetics, University of Nottingham, Nottingham NG7 2UH, UK.

## Dynamism and youth

Tom Spencer

**Oceanic Islands.** By Patrick D. Nunn. Blackwell: 1994. Pp. 413. £90, \$99 (hbk); £29.99, \$41.95 (pbk).

JUST as huge areas of the Earth, such as the 165 million km<sup>2</sup> of the Pacific Ocean, are usually squeezed into the last page of an atlas, so island geology, geomorphology and, to a lesser extent, biogeography rarely take scientific centre stage. Yet islands have a strong intellectual pedigree (one thinks of Darwin and Daly and, more recently, Menard and McArthur and Wilson) and, through their variations in origin, evolution, size and position, they offer ways of calibrating and testing theories of ocean geophysics and ecological processes. The remarkable reevaluation in plate-tectonic terms of ocean basins as units of great dynamism and youth rather than areas of enormous antiquity and stability requires a corresponding reassessment of why islands form where they do, how they evolve into characteristic landscapes and acquire particular assemblages of species, and when and why they disappear. Such studies can now take advantage of the great advances that have been made in the past three decades in ocean-floor geophysics, palaeoclimatology, palaeoceanography and biochemical biogeography.

Oceanic Islands makes a brave stab at this modern synthesis. Using a rather loose definition of 'oceanic' and primarily concentrating on islands of  $50-5,000 \text{ km}^2$ , Patrick Nunn proceeds from a discussion of island formation and evolution in a plate-tectonic context, through island tectonics, climates, landscapes, coral reefs and sea-level changes, to island biotas and their disruption by human activity. The spread of subject matter is remarkably diverse and the geographical range global, although not unsurprisingly the author's field experience of the islands of the southwest Pacific features prominently. On the textbook spectrum from the encyclopaedic to the slim thematic volume (exemplified in this field by H. W. Menard's Islands (Scientific American Library/W. H. Freeman, 1986)) the book sits at the specialized end, although often only in the case studies does the complexity of disentangling tectonic, eustatic and climatic factors become totally clear. Some of the tables throw together in a rather uncritical way all the information that is available on a particular subject -Late Holocene sea-level evidence for example - which leads to some mindbending problems of interpretation and often simply illustrates the variations in