
A virus, Mr Anderson. Human beings are a disease, a cancer of this planet.’ [Agent Smith to Neo, The Matrix, 1999, The Wachowski Brothers]

What can human evolutionary biogeography tell us about conservation or sustainability and therefore why should readers of Oryx be interested in this book? For two reasons: understanding the past is never analogous with predicting the future but this book provides elegant, accessible evidence for why, when and how humans spread over the face of the planet, and secondly it illustrates the risks that invasive species (e.g. humanity) pose to the survival of indigenous species as well as to themselves.

Alexander Harcourt has written a history of humanity’s peopling of the globe, integrating the ethnographic with the ecological. The theoretical basis of the book is that physical, physiological and cultural adaptations among humans result from selection in the context of local environments. Harcourt is careful not to equate physical diversity among humans with selection for genetic variation; he discusses traits of culture (using language, which will no doubt strike cultural evolutionists as simplistic) as a means of illustrating spatially or geographically shared traits rather than causal modes of selection. As a synthesis of human evolution alongside historical and modern distributions and current adaptations, this book brings together the evolutionary/biological nature of humans with their behavioural practices—where and how we live.

The book is phylogenetically comprehensive, moving in Part I from the biogeography of primates to ‘out of Africa’ dispersals of early Homo sapiens to various new worlds. Recent genetic and archaeological evidence for the peopling of the Pacific is summed up as ‘the situation is … complex’—as is true of many of Harcourt’s arguments—but he makes an excellent effort to untangle complexities such as why genes linked to men and women seem to have moved differently and distinctly. Chapter 3 (Climate and hominin evolution and dispersal) can be read as an example of how to critically and statistically integrate fossil and archaeological evidence with changing climates over evolutionary time.

In Part II, interactions between humans and their environments that result in adaptations—to temperature, climate, elevation, nutrition and pathogens—and that influence our population sizes and structures, are set out. When and why these effects (e.g. Bergman’s and Allen’s rules, which predict size and shape adaptations to cold and latitude) operate in human populations are covered in detail. Chapter 6 (Use of area) has an excellent discussion of island miniaturization and includes the vexed Homo floresiensis of Indonesia as an example of our lack of understanding of the nature of human adaptability or of the processes of island biogeography. This chapter exemplifies the challenges posed by Harcourt: how do we start to rethink our explanations for human (linguistic, cultural) diversity on the basis of the biology of non-humans? Biogeography of variation in human diets is covered in Chapter 7, using examples of genetic markers for highly derived and specialized enzymatic capacities for digestion, along with some of the problems that ensue for the metabolism of prescription drugs. This chapter could have been expanded as there are potential implications for meeting human nutritional needs in the future. Part II is a comprehensive, interesting and well-structured approach to human biology as well as human distributions and numbers.

The final part covers the way human cultures compete, expand and go extinct, and the logic of these arguments is extended to the species that threaten humans (pests, parasites, pathogens), and the ways humans threaten others. This is a concise section, which could easily have been expanded into another book, but the focus remains on key elements of evolutionary significance, both for humans and the other species we have wiped out or transplanted along our way. Throughout this book a lay reader will find much of general evolutionary and ecological interest, while a specialist will also appreciate the excellent diagrams which re-figure in an accessible fashion data that are scattered throughout a voluminous literature (as evidence, the reference list is 56 pages and 861 separate articles and books!). Harcourt should be congratulated on writing a lucid book of the kind of a family of concepts that seek to combine research and various other ways of learning as well as seek out collaborative actions among diverse stakeholders operating at multiple scales of decision-making and action.

Further, they state that they see adaptive collaborative approaches as a suite of strategies, rather than an absolute approach, which are employed to learn and meddle through complex systems to generate and facilitate innovations on various aspects of resource governance and management.

And therein lies the rub. The editors’ multiple contributions to this publication suffer from an excess of jargon wrapped up in long and complex sentences. Perhaps this is inevitable given the subject matter. Indeed, in her chapter entitled The ups and downs of social science team mystification their natural science colleagues. She reports this as one of the major challenges to the adoption of adaptive collaborative approaches within the Center for International Forestry Research. Less forgivable are the typographical and editorial errors in the introductory chapter (and elsewhere) that in themselves may be enough to put the reader off delving deeper into the subsequent contributions. That would be a real shame given that there is much material of real interest here.

Chapter 2 provides a review of the conceptual basis of adaptive collaborative approaches and is therefore, perhaps unavoidably, dense. Things then get more interesting with chapters describing the lived experience of researchers and practitioners experimenting with these approaches in practice. Carol Colfer’s contribution is a reassuringly frank and personal reflection on the issues underlying conflicts and collaborations between social and natural scientists within an international research institute. Helpfully she identifies four criteria for success, including identifying a problem of sufficient significance that participants are motivated to act, the importance of excellent facilitation skills, the