

Jennifer Shennan and Makin Corrie Tekenimatang (eds). *One and a Half Pacific Islands: Stories the Banaban People Tell of Themselves.* Wellington: Victoria University of Wellington Press, 2005. Pp.264. bibliog., index. NZ\$39.95, ISBN 0-86473-523-5.

John Connell
Geosciences, University of Sydney

The migration of the Banabans from Banaba (Ocean Island) in the Central Pacific is one of the great and tragic stories of the contemporary Pacific era. This book has been published to mark the sixty years since the entire population was removed from their home island, now within the nation of Kiribati, to Rabi island in eastern Fiji. Virtually the entirety of Banaba then became a phosphate mine, much like its near neighbour, Nauru. The devastation of that mining produced a ravaged landscape that made return after closure unrealistic. Contemporary Banabans are thus mainly clustered in Rabi, where they have replicated the four Banaban villages on a very different island. Some have migrated to urban Fiji, where they are more obviously a tiny 'fifth ethnic minority' within that country, but a few hundred live on Banaba as a 'caretaker' population.

The book itself is composed of the various stories of the islanders from memories of their ancestors, including traditional stories and legends, lives before mining centred on agriculture, fishing and frigate birds, the devastation that mining wrought to their lives, the resurgence of life in Rabi, after a cold wet start when many elders died, and aspirations for the future. Some of the stories are written in the Banaban language, and are written by both 'elders' and 'youngsters'. It is well illustrated with photos of the narrators and of their contemporary lives and the past people and landscapes of Banaba.

The stories are quite diverse, from short descriptions of daily life on Banaba to the hopes and dreams of young people in contemporary Fiji. More than a third of the book is a compilation of stories from outsiders, from the log of Albert Ellis who discovered the value of phosphate mining in Banaba which he visited in 1900, to missionaries reflecting on the hardships of island life.

Most of the children, few of whom have experienced life outside the small island of Rabi, speak of their desire to gain an education and return to improve life on the island of Rabi, yet they also speak of older brothers and sisters who have moved on to Suva never to return. Elders are nostalgic about Banaba and their sovereignty over it, while the young look forward to modern lives. The young too are much more positive about Rabi, the only island most have experienced. Not all the stories are positive; some reveal the costs of cyclones and one talks of a failed suicide attempt while in the army.

Overall it constitutes a useful social history and a testimony to the struggles of the Banaba people as they look both forwards and, necessarily, backwards. *One and a Half Pacific Islands* is an elegant volume, a welcome addition to the very limited collection of writings on Banaba (which, annoyingly, the book makes no reference to) and a worthy addition to any Pacific collection.

Linda Stone and Paul F. Lurquin. *Genes, Culture and Human Evolution. A Synthesis.* Oxford and Malden, MA: Blackwell, 2005. pp. 314+xxi, four appendices, references, chapter notes, glossary and index. AU\$81.95 (Pb.), ISBN 1-4051-3166-7; AU\$182.00 (Hc.), ISBN 1-4051-5089-0.

Ben Marwick
Archaeology and Natural History, Australian National University

This book is important because it is the first textbook that uses evolutionary theory to combine the study of human culture and genetics at a level that is suitable for a general

introduction in undergraduate teaching. The authors, a cultural anthropologist (Stone) and a molecular geneticist (Lurquin), argue that the field of anthropology is at a turning point where observations in genetics and anthropology are becoming synthesised into a unified theory of human biological and cultural diversity. The contribution of this volume is to survey the various ways that genetics and anthropology have been and can be interwoven to contribute towards this synthesis.

The claim that the pivotal point of anthropology rests on incorporating genetic research might be overstated, but a more general momentum is gathering behind the need to incorporate Darwinian evolutionary approaches in anthropology. One of the earliest proponents of this way of thinking was L. L. Cavalli-Sforza who with Feldman produced the first major study along these lines in *Cultural Transmission and Evolution: A Quantitative Approach* (1981). Cavalli-Sforza's influence on Stone and Lurquin's work is pervasive with Cavalli-Sforza contributing the volume's introduction and receiving credit in the preface as a 'vital consultant'. The authors state that they were motivated to write this book after completing a scientific biography of Cavalli-Sforza, so this text could be seen as a technical primer on Cavalli-Sforza's work to accompany the biography.

The organisation of the volume is logical with the first five chapters providing compact introductions to the history of cultural evolutionary theory, human ancestry and palaeoanthropology, classical and molecular genetics, and using proteins and DNA from extant organisms to reconstruct their phylogenies. Much of this material resembles conventional text-book content on genetics and anthropology. What is notable here is that the material is well organised with informative headings, effective use of italicised and bold text, instructive illustrations and clear prose. It is not until the end of Chapter 5 and beyond that some engaging case studies of the interaction of culture and genes appear, beginning with an example of the co-evolution of lactose tolerance and dairy herding. This is an impressive and robust case study of convergent biological evolution due to strong selective pressure resulting from shared cultural traits.

Following a chapter on the concepts and methods of analysis of human genetic diversity, there is a chapter on cultural evolution. This is perhaps one of the first undergraduate textbooks to survey this relatively unfamiliar frontier of anthropological theory since the term 'cultural evolution' ceased its exclusive association with Lewis Henry Morgan, Leslie White and Julian Steward. This chapter shows that rough but illuminating analogies can be drawn between cultural and biological evolution but notes that there is still little agreement on the best way forward. The concepts of niche construction, cultural transmission and cultural drift are presented while the frothy debates surrounding the meme concept are sensibly side-stepped. As might be expected, the authors are most sympathetic to the dual transmission theory of Cavalli-Sforza and Feldman, which presented as a limited analogy of genes/ideas, genetic mutations/cultural innovations and natural selection/cultural selection. Cultural selection is defined as 'human acceptance or rejection of innovations'. The authors acknowledge the work of Boyd and Richerson on their taxonomy of selective processes that emerge from population-level effects created by the evolved components of human psychology and cognition (e.g., prestige-biased and conformist biased transmission). This is an important difference from the approach of Cavalli-Sforza and Feldman because Boyd and Richerson's work is more theorised and includes evolutionary processes unique to cultural transmission that are not simple analogies from biological evolution. In recent cultural evolutionary studies it is clear that Boyd and Richerson's work is now more influential than Cavalli-Sforza and Feldman (especially in quantitative studies), so the survey in this volume seems a little biased. Durham's work is also noted, which is an

important contribution that responds to criticism that cultural evolutionary approaches—especially Boyd and Richerson's—do not take account of inequalities of power. Durham's argument that people are subject to degrees of social and political constraint on the cultural variants they can choose amongst is a significant development towards the inclusion of meaning and ideology in cultural evolutionary theory.

Following this are chapters on the geography of human genes and linguistic correlations (Chapter 8, borrowing heavily from the work of Cavalli-Sforza et al. 1988. 'Reconstruction of human evolution: bringing together genetic, archaeological, and linguistic data', *National Academy of Sciences*. 85: 6002-6006), the prehistory of human genes (Chapter 9, demonstrating, amongst other things, the African origin of modern humans at 150-100,000 years ago and that Neanderthals and modern humans are different species), the history of expansions of humans out of Africa (Chapter 10, according to the timing of mutation in the Y chromosome and mtDNA), the Neolithic transition in Europe and the people of the Americas (Chapter 11, concluding that Neolithic culture spread from the Middle East and Native Americans are of Asian origin), genes, kinship and human identity (chapter 12), cultural clines, clades, cycles and waves (Chapter 13, well illustrated with examples including the use of hot spices in world cuisines as a clinal phenomenon and Cavalli-Sforza's qualitative cladistic analysis of world religions) and genes in culture and medicine (Chapter 14, they draw out important implications of the intersection of genetics and anthropology in medicine, surveying Darwinian medicine, bioethics, reproductive technologies, genetic engineering and the evolutionary future of humans). The volume concludes with a hope that future anthropologists will overcome the resistance to scientific modelling and will apply scientific quantitative reasoning to problems of human culture. In fact this kind of work is already well underway by anthropologists such as Joe Heinrich, Richard McElreath and Rob Boyd (and has practical applications in economics, business management and understanding terrorist networks) but these are not cited in this volume.

To summarise, this volume is significant because it makes recent developments in the study of evolution in general, and of humans and culture in particular, readily accessible to undergraduate readers. The scope of the volume suffers from its concentration on the work of Cavalli-Sforza and neglect of more recent quantitative studies of cultural evolution. Nevertheless, it will be a useful text for lecturers who wish to expose students to what is likely to become an increasingly influential approach to understanding human cultural change.

Reed L. Wadley (ed.), *Histories of the Borneo Environment: Economic, Political and Social Dimensions of Change and Continuity*. Leiden: KITLV Press, 2005. Pp.315, glossary, index. US\$35.00 (Pb.), ISBN 90-6718-254-0.

Jennifer Alexander
Australian National University

Environmental history has been one of the major themes of research published by the KITLV in Leiden under the EDEN project. The papers in this edited volume, the first in the series to focus on Borneo island as a whole (Indonesian Kalimantan, the Malaysian states of Sarawak and Sabah and the independent kingdom of Brunei), strategically examine diverse environmental histories extending and developing themes adopted from earlier publications from the project.

During the final decades of the twentieth century the island of Borneo underwent dramatic environmental transformations: vast areas of land were clear-felled of native