

The development of populations over time, and, on longer timescales, the evolution of species, are both influenced by a complex of interacting, underlying processes. Computer simulation provides a means of experimenting within an idealised framework to allow aspects of these processes and their interactions to be isolated, controlled and understood.

In this book, computer simulation is used to model migration, extinction, fossilisation, interbreeding, selection and non-hereditary effects in the context of human populations and the observed distribution of fossil and current hominoid species. The simulations described enable the visualisation and study of lineages, genetic diversity in populations, character diversity across species and the accuracy of reconstructions, allowing new insights into human evolution and the origins of humankind for graduate students and researchers in the fields of physical anthropology, human evolution and human genetics.



Cover illustration: drawn by Erika Oller © Charles Oxnard.
Reproduced with permission.

KEN WESSEN has Ph.D.s in both theoretical physics and human evolution and has worked as a postdoctoral researcher in computer visualisation. Currently he works in quantitative finance, and is an adjunct lecturer in the School of Anatomy and Human Biology at the University of Western Australia.



CAMBRIDGE
UNIVERSITY PRESS
www.cambridge.org

