

The first chapter by Gill provides a detailed overview of the history of the research focusing on the 1981 Easter Island Anthropological Expedition. The stated aims of the research project were to investigate the origins of the people, collect anatomical, demographic, and paleopathological information from the skeletal remains, and record cultural information to better understand their burial practices. The excavation seasons, sites, antiquity, and sample sizes are described. Chapter 2 by Pietruszewsky and Douglas serves as an excellent introduction to the book, presenting a thorough review of past Polynesian and Pacific skeletal biology focusing on questions of origins and also touching on recent work on health, disease, and lifestyle. Chapter 3, by Lipo and Hunt, presents a synthesis of the chronology for Rapa Nui using a carefully constructed ranking method of reliability for radiocarbon dates, which supports a later initial colonization after AD 1220.

The next six chapters provide thorough analyses of skeletal metric and non-metric variables to assess questions of origins and intra-population variation. Chapter 4 by Gill and Stefan presents the basic descriptive skeletal biology of the people using metric analysis of the skull, selected postcranial measurements, and non-metric traits. Chapter 5 by Stefan is a multivariate statistical analysis of craniometric variation of prehistoric Rapa Nui samples with comparisons to prehistoric Polynesians to test models of origins, migration, and evolution of these people. The author states that an advantage of this study is the incorporation of population genetic models to identify micro-evolutionary forces acting on the past Rapa Nui populations. Chapter 6 by Chapman presents a summary of the non-metric traits from Rapa Nui. The author argues for an East Polynesian settlement with limited gene flow from South America. Chapter 7 by Furgeson and Gill investigates discrete cranial trait variation within groups from Easter Island to determine if there are morphological differences between tribal groups. Unsurprisingly, the results highlight limited regional variation. Chapter 8 by Gill presents continuous non-metric traits (i.e. traits that have no measurement boundaries and that need to be scored subjectively) with the aims of adding further to the documentation of the facial and cranial morphology, and testing South American genetic admixture and intertribal endogamy. Chapter 9 by Stefan and Rozen assesses non-metric traits in the dentition, finding limited intra-island variation. In Chapter 10, Harrison and Harper assess pelvic metric variability and sexual dimorphism for the prehistoric Rapa Nui individuals and compares these data to historical North American data.

Chapter 11 by Hagelberg provides a review chapter of genetic studies on living inhabitants and other East Polynesians that assess questions of origins of the Rapa Nui people. In Chapter 12, Dudgeon et al. present their work on human aDNA using microsatellite DNA fragment analyses to assess interaction between sites and clan divisions. Chapter 13 by Owsley et al. is an assessment of skeletal trauma exploring questions of social change related to social collapse, which were interpreted in the context of archaeological evidence and oral traditions. Chapter 14 by Owsley et al. is a demographic analysis of the modified crania and illustrates design motifs.

Chapter 15 by Gill presents an analysis of Rapa Nui skeletal morphology with Paleoindian remains, arguing for a close relationship between the populations and for a “two-wave” hypothesis of New World settlement, one over land, and one by sea potentially from East Asia. Chapter 16 by Gill and Stefan reviews the main findings of the book and places these findings within the context of archaeological theories of origins and dispersal.

This book is invaluable in providing a thorough analysis and synthesis of models for settlement of Rapa Nui and I believe that the data compiled in this book will be useful for future comparative skeletal variation research. This book is certainly a product of its time when there was a focus on adult skeletal measurement and trait appearance in physical anthropology. Recent paleodietary evidence published by Commendador et al. (2013) and Tromp and Dudgeon (2015) is extending our knowledge of past diet and resource use on Rapa Nui. Future research on the paleodemography of the sample, and health and disease from both subadult and adult individuals would be useful to further assess adaptation of these people to the natural and social environment. Evidence for health assessed in conjunction with dietary data, and archaeological data on mortuary treatment could offer a more holistic view of the past by contextualizing these people in their natural, social, and cultural environment.

References

- Commendador, A.S., J.V. Dudgeon, B.P. Finney, B.T. Fuller & K.S. Esh. 2013. A stable isotope ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) perspective on human diet on Rapa Nui (Easter Island) ca. AD 1400–1900. *American Journal of Physical Anthropology* 152(2):173–185.
- Tromp, M. & J.V. Dudgeon. 2015. Differentiating dietary and non-dietary microfossils extracted from human dental calculus: the importance of sweet potato to ancient diet on Rapa Nui. *Journal of Archaeological Science* 54:54–63.