

## Part 3.

# Human population history and structure

In Part 3 we turn our attention to **human population structure and history**<sup>f</sup>.

We discuss how concepts from population genetics, combined with modern genomic technologies, have rewritten our understanding of human history and prehistory. Genetics provides insights that are completely distinct from the classical approaches in paleontology, archaeology, and history.

In this section of the book we will emphasize **inference**: how can we apply population genetics to modern genetic data to learn about structure and history?

We'll use these principles to discuss key **examples**: archaic hominids and their relations with modern humans; deep population structure in Africa and the (relatively) recent origin of non-Africans; to the migrations of Pacific Islanders in the last millennium.

Specifically, we will cover the following:

Chapter 3.1: **Population structure**: the genetic structuring of modern human populations, resulting from ancestry, drift, and mixture.

Chapter 3.2: **Inference of population histories**: a tour of how we can use genetic variation in modern humans to reveal the history of our species.

Chapter 3.3: **Ancient DNA**: how new technologies for retrieving DNA from bones have reshaped our understanding of human prehistory.

<sup>f</sup> I expect to release this section in late 2023/ early 2024 –JKP.