

## ECON 460: Women, Work, and the World Economy

### Reading Guide: *Who We Are and How We Got Here*

I hope you enjoy reading Professor David Reich's fantastic book. Your responses to the discussion questions will help you complete the Reading Response exercise in gradescope after you finish reading.

1. You can skim Chapter 1 ("How the Genome Explains Who We Are") to give you some background on DNA, genomics, and the early history of humanity. After you finish reading, answer the following questions:
  - (a) Who is **Mitochondrial Eve**, and why is she significant? When and where did she live?
  - (b) Does the genetic evidence suggest that there was one important genetic mutation that led to the emergence of modern humans?
  - (c) What is a **population bottleneck**, and when did a population bottleneck occur after the separation of ancient African populations from ancient non-African populations that migrated into Eurasia?
2. Skim Chapter 2 ("Encounters with Neanderthals") and then answer the following questions:
  - (a) Who were the **Neanderthals**? When and where did they live? How are they different from **early modern humans** and humans that are alive today?
  - (b) What is the four population test, and how can it be used to understand the ancient history of early modern humans?
  - (c) How do we know that Neanderthals interbred with early modern humans?
  - (d) On page 41, Professor Reich states: "If the ancient DNA studies of the last few years have shown anything clearly, it is that the geographic distribution of people living today is often misleading about the dwelling places of their ancestors." What does he mean by this, and what evidence supports this conclusion?
3. Skim Chapter 3 ("Ancient DNA Opens the Floodgates") and then answer the following questions:
  - (a) Who were the **Denisovans**? When and where did they live, and why are they an important part of the story of early modern humans?
  - (b) Which modern populations have the highest and lowest proportions of Neanderthal ancestry?
  - (c) Which modern populations have the highest and lowest proportions of Denisovan ancestry?

- (d) What is a ghost population, and how do we know that ghost populations once existed?
4. Skim Chapter 4 (“Humanity’s Ghosts”) and then answer the following questions:
- (a) Do genetic clusters of populations that we see today reflect deep splits of our genetic tree in the past? Why or why not?
  - (b) Who were the **Natufians**? When and where did they live, and what do they tell us about the ancient past?
  - (c) What are the five great events in the history of European hunter-gatherers, and why is each of them significant?
5. Read Chapter 5 (“The Making of Modern Europe”) carefully and then answer the following questions:
- (a) What do we know about the spread of agriculture into Europe, and the interactions between the first European farmers and the hunter-gatherers that predated them?
  - (b) What are the **Indo-European languages** and why are they important to the history of European culture?
  - (c) Who were the **Yamnaya**? Where did they first appear, and what are the distinguishing features of Yamnaya culture?
  - (d) How are Yamnaya culture and **Corded Ware** culture connected?
  - (e) What role did the Yamnaya play in the emergence of modern European culture? Which European countries’ populations have the highest proportions of Yamnaya ancestry today?
  - (f) How did the **Bell Beaker** cultural phenomenon differ from the Corded Ware cultural phenomenon?
  - (g) What does the ancient history of Europe suggest about the connections between genetics, language, and culture?
6. Read Chapter 6 (“The Collision the Formed India”) carefully and then answer the following questions:
- (a) What is the **Indus Valley Civilization**?
  - (b) Which major language families are spoken by individuals living in South Asia today? What is the geographic distribution of these language families, and what might that tell us about the cultural history of South Asia?
  - (c) What does mitochondrial DNA suggest about the ancient history of the ethnolinguistic groups present in South Asia today?

- (d) How does evidence from mitochondrial DNA contradict evidence from Y chromosomes, and what does that tell us about the population history of South Asia?
  - (e) Who are the Ancient North Indians in the Ancient South Indians? How do they differ, and where is Ancient North Indian and Ancient South Indian ancestry most prevalent today? What does this tell us about inequality and population mixture in the ancient past?
  - (f) What can genomics tell us about the caste system?
  - (g) What are the parallels between the ancient history of Europe and the ancient history of South Asia?
7. Read Chapter 10 (“The Genomics of Inequality”) carefully and then answer the following questions:
- (a) What do we learn from comparisons of Y chromosome and mitochondrial DNA types in modern populations?
  - (b) How does Professor Reich define **sex bias**, and what does it tell us about gender relations, power, and inequality in the past?
  - (c) What is the genomic signature of inequality?
  - (d) What is a **star cluster** and what does it tell us about demographic history?
  - (e) What does ancient DNA tell us about gender relations 5,000 years ago in Bronze Age Eurasia?
  - (f) What are other examples of contexts where evidence of sex bias can provide insights into power relations in the distant (or not-so-distant) past?