

Introduction to the first volume

The first volume of the textbook narrates a story that spans from 70,000 BCE till 1,000 CE, from the time in which *homo sapiens* successfully migrated from Africa and populated planet Earth, till the era of the empires that sprinkled across the world.

The story you are reading is one of the many stories we could tell about our planet and the humans that have lived on and transformed it. This story could be deeply changed by archaeological evidences that, through new discoveries, are able to rewrite our history continuously. Indeed, besides historians, archaeologists are very protagonists in writing this period of the history of humanity. When we try to understand the transformations occurred to humanity, above all from 70,000 BCE till 3,000 BCE, we should be acknowledged that this history can be changed by those who will take part to its writing after new discoveries and understandings.

In these pages, you will learn how our planet was deeply modified by the intervention of human beings, who moved across the world, creating a new relation with nature and its resources. Through this new interaction, humans have created different ways of survival and of living together. In around seventy thousand years, humans have contributed to the extinction of most of animal species on our planet, have burned an uncountable amount of forests and diverted watercourse, have transformed plants and animals through often violent domestication practices, have created houses and tools out of stones, have established different forms of living together, have found ways of controlling other human beings through coercion and violence, have generated myths and believes that kept humans together for thousands of years.

These impressive changes took millennia, in which humans moved across the planet acting as a frontier: a movement of expansion that thoroughly reshaped and reworked the environment and the resources encountered. Migration saved humans from scarcity of food and climate disasters, fostering connections between groups and circulating ideas and techniques, while trade established world networks of exchange and trust. From 70,000 BCE till 1,000 CE, humans' relation with planet Earth shifted from the appropriation of natural resources to forms of production, such as farming land and rearing animals. This major change led to an increasing difference between males and females that turned to be a structural inequality. With agrarian societies, humans shifted from an equal way of living to more hierarchical relationships based on the power of someone upon others, of an elite upon the commoners. Villages gave way to chiefdoms, cities and empires in which inequality was much higher than before.

In the first chapter, we are going to understand how and why humans moved out from eastern Africa and populated the whole planet, giving way to a frontier of expansion and a mass extinction of large mammals. This migration was possible thanks to population growth, climate change and the appearance of culture that changed forever our life. Our species lived hunting and gathering for a very long time during which humanity developed a remarkable multiplicity of lifestyles and technical knowledge, which was accompanied by a slow but constant demographic increase, although probably interrupted by a natural cataclysm. The ever-growing human groups progressively adopted more effective hunting techniques and mastered their body by their interaction with nature.

Around 70,000 years ago humans experienced a deep leap forward. What we know as culture allowed humans to change and manipulate the environment without biological mutations, through the use of knowledge, language and tools. After tens of thousands of years after *Homo sapiens* –the modern men- appearance, human was able to modify, control and destroy nature, to live in harsh climate conditions, to create refined hunting and farming tools, to cooperate together through strategies and to create and pass on ideas. All these changes have been possible by a collective learning process that made early communities dependent on knowledge and resources in order to exploit the natural environment. Our brain has not changed since then. Humans are endowed with culture, a system of ideas and knowledge about how the world is made that allows us to live in any environment, unlike other animals.

The groups of foragers created forms of social organization based on mutual support and reciprocity, and used migration as a strategy for survival moving to better lands when food became scarce: they were completely free to move. Appropriation and predation was the only way through which humans related to nature. When mobility and environmental conditions did not allow anymore this form of survival of human groups, the experimentation with plants developed by females turned to be one of the most long-lasting forms of production invented by humans in their whole history: agriculture.

In the second chapter, you will learn the story of agriculture and the ways in which humans started to work planet Earth after having populated it. Climate change, the extinction of large prey and population pressure may have caused foragers groups in some regions of the world to face up to a unique form of natural resource scarcity as they found themselves confined to isolated but resource-rich ecological zones near rivers, lakes and other aquatic systems. As populations increased and resources became scarce, many clans became sedentary and began to experiment with plant and animal domestication.

The result was the beginning of the transition from a hunting and gathering livelihood to agriculture that happened independently in six core areas of the world. Humans became farmers. In this chapter you will learn how humans domesticated different crops, and how from these core areas, agriculture spread rapidly to other regions through frontier expansion. This is the story of the migration and settlement of farmers into nearby sparsely populated or unpopulated territories with suitable environmental conditions for agriculture. In some cases, forager groups adopted agriculture from farmers. Population growth, climate change, and the evolution of farming technologies and agro-pastoral systems were key factors in this process of migration.

The transition from hunting and foraging to farming was the most profound revolution in human history whose aftershocks continue in our contemporary world. The relation between nature and humans was not only based on appropriation of natural resources, but on production of new resources. Once agriculture became a prime source for survival in different parts of the world, there was simply no way back. This entailed a long chain of agricultural transformation, triggered by a set of often unrelated regional processes of change. The agricultural revolutions are one of the most ground-breaking game-changers in human history: just think that almost all of today's domestic crops and mammals originate from the era in which agriculture emerged as the predominant global food production system.

Farmers created a new social organization to distribute land, control natural resources and coordinate labor tasks needed for agricultural production. In the agricultural village a new way of living together emerged: disease and inequality made their appearance, so as a division of labor based on sex. The agricultural-based economic systems allowed the diversification of the economic activities, and the invention of new technologies for tilling more land that created food and raw material surpluses that facilitated urbanization, manufacturing and trade. Around 3,000 BCE, the intensification of the agricultural production, together with trade between villages created the base of the emergence of empires.

In the third chapter, you will learn how humans, after populating and working planet Earth started to conquer it through complex forms of social organizations. One more time, this transformation occurred independently from each other in different regions of the world. These large political centers were administrative units that developed in a limited area and gradually spread to other remote areas which were then under their control: these were the empires. In this textbook, empire and civilization are used as synonyms.

These empires had a large sphere of influence and controlled even few million humans through a central administration, a bureaucracy, a common belief (religion) and a formalized legislation. With the emergence of the first city-states and empires, also arose conflicts and wars over territory, resources, trade routes and populations. Indeed, empires developed expanding political

and territorial borders in order to include a heterogeneous population under their rule. Empire united humans of different ethnicity and culture, and lead to increasing inequality.

Empires imposed rigid hierarchies that organized societies and differentiated humans by social and sexual difference. Peasant work allowed for the necessary creation of surplus to free some humans from the constraint and fatigues of work: elite members, priests, merchants and soldiers fulfilled the upper level of societies. This structure was not passively accepted by lower classes, but we have the first testimonies of revolts, uprisings and also strike, coupled with daily forms of resistance.

The articulated structures of these empires led to the invention of ground-breaking innovation in the history of humanity, such as writing and coding systems, that were used to take trace of all transactions and possessions within the empires. Money improved and facilitated the exchange between empires in different continents that were developed through articulated systems of roads that crossed deserts and mountains.

However, just as quickly as empires seemed to form and grow, they stagnated, collapsed and ultimately fell after the turn of the second millennium CE CE. Environmental degradation and collapse were also connected to the growth of cities of dense populations and their increasing demands for natural resources, especially land.

The decline and failure of the empires led to new scenarios in which humanity witnessed the transformation of identities and, above all, of connections and growing interdependence.

This story begins imagining to live in a campsite...

CHAPTER 1.1 POPULATING THE EARTH

Humans as Hunter-Gatherers

70,000 BCE to 10,000 BCE

Imagine

Imagine that you are a bird flying over planet Earth around 12,000 BCE. You would see melting ice in North America and northern Eurasia where mammoths are grazing on plants, while the tropical areas are filled with a lush vegetation where live marsupial lions, dragon-like lizards, diprotodons, elephant birds and 150 kilos lemurs. If you keep flying over and circle the whole planet, you can see around 6 million humans.

Imagine that you are a twelve years old girl inhabitant of this world. You live in a small group of ten or twelve adults with their children in tents, and your life is largely mobile while there are few permanent settlements here and there. You wear clothing made from animal skins, which have been stitched together using bone needles. You are already skilled in using cords and threads fashioned from plant materials to make clothes, hats, belts and string skirts, and also weave baskets to carry things in. You spend your day gathering seafood and coastal resources, knapping the stone tools to make weaponry like axes, spears, machetes, hoe arrows and harpoons. You follow adults hunting and fishing so to learn how to get food in the environment you live in, and how to defend yourself from animals in order to survive. Your group has domesticated the dog that helps you hunting, but still you have to be a great runner to

escape from tigers chasing you. You gather with elderly to learn which plants and berries are edible, and which poisonous.

You could spend your entire life just knowing only the members of your group without meeting anyone else and that's why ideas and techniques spread very slowly. But you are part of a world already shaped on cooperation, so your group may trade seashells, obsidian, antlers, food and hunting tools. As travelling takes lifetime, it could happen that your entire life is spent to move from one place to another in search of food: your whole life devoted to walk kilometres. Those who are acquainted with engraving - probably they are mostly women - carved stones and transformed them into art: nude female figures are the first representations of you as human being, together with hands that are stencilled on cave walls. In this world there is no disproportion of wealth between humans as all members of your group place on each other to survive, so you all share equally almost everything. In four or five years, you will have your first child of four or five. After dying at 30 or 40 years old, possibly your body will be decorated with ivory beads and fox teeth and then buried.

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