



Networks

Networks Frame Introduction

We already know that we humans create and live in different communities. But we also share ideas, material goods, and other things (including people) among communities. Sometimes we share across vast distances. This sharing happens through systems called networks. In general, humans have built larger and larger networks over time, leading up to the global exchange of ideas through the internet. But very small networks, often within this bigger pattern, are also still important today.



0:01

*“A person is a person
through other people”
-Zulu Philosophy
Bob Bain, PhD, University
of Michigan*

Humans are social animals. We need contact with other humans to live and to thrive. Over time, our species has developed patterns of connections between and among people and their communities. We call these our networks of interaction. Networks link populations of people, enabling people living in different communities to move and share ideas, material goods, crops, animals, pathogens, and even people. We communicate across and through our networks.

00:50

*World map; arrows
pointing to represent our
networks of interaction*

Sometimes, what moves through and across networks are physical items, such as clothing or food. Sometimes they're concepts, like mathematics or ideas of what's in the universe. At times, networks encourage and enable cooperation and prove to be mutually beneficial. At other times, networks allow competition, violence, disease, and decay to spread. For good or bad, progress or decline, our networks of interaction have been among the most enduring and significant features of our lives. They are a central factor in understanding historical change and how the present came to be.

Developing a brief but big picture of major changes in human networks over our very long history might help us as we study the human past, connect the past to the present, and face the future.

01:39

*The Networks frame
through the Eras
Era 2 Early Humans*

(music playing) So, how might we frame this story? We might begin by pointing to the early networks our nomadic hunter-gatherer ancestors developed. They created local networks of interaction, supported by shared language or systems of communication, a story we begin to explore in Era Two. These language networks made possible the exchange and then collection of ideas. They helped our earliest ancestors to survive and thrive in new environments, and thus spread humanity around the world.

02:14

*Animation showing the
spread of populations
throughout the world*

As people settled down into more permanent communities, their population grew. The number of people with whom they interacted grew, too. You will investigate this transition that began about 8,000 years ago in Era Three. These now-sedentary people built village networks using new technologies of communication, such as writing, and new means of transportation, such as boats and roads.

*A clay tablet with
language symbols on it;
ruins of an early road; an
early map*

As populations continued to grow, some villages became cities. Metropolitan networks emerged and connected villages and farms to cities. Eventually, these networks connected cities to each other. Few communities lived in total isolation.

03:00

Now, that was particularly true for large-scale agrarian or farming societies, which developed as settled populations continued to grow and became denser in particular areas or regions. You will explore this process in Era Four. You'll study how people intensified and consolidated their interactions with other agrarian societies and metropolitan areas. They developed long-distance routes of exchange across vast regions in Afro-Eurasia, Oceania, Australia, and Meso-America. These larger, "Old World" networks across Afro-Eurasia and the Americas meant that fewer and fewer humans lived in isolation. Although these networks sometimes collapsed, people rebuilt and restructured them.

03:46

Map showing “The Voyage of the ‘Victoria’”

A drawing of a man reading a newspaper, black-and-white photographs of an early telephone; a steamship; a train

Starting about 500 years ago—during Era Five in our course—oceanic travel connected those previously disconnected Old-World networks. The networks came together to form the first truly global networks of interactions.

Now, this happened slowly at first, as the regions and communities of the world developed loose connections. Ideas, material goods, and people could now move around the globe, but they did so quite slowly. However, in the past 200 years—as you’ll see in Era Six—new technologies, such as newspapers, telegraphs, and then telephones, helped spread ideas rapidly. Steamships and trains moved people and goods faster and further than ever before. These innovations and inventions tightened up the loose global networks, connecting more and more people, more and more communities.

04:39

Time-lapsed video of a metropolitan area showing many cars and people moving throughout an intersection

Now, this has continued into the present. Now, the new global internet helps us share ideas, plans, and news with millions of people almost instantaneously. New innovations in transportation move people and goods anywhere in the world within days, if not hours. It appears as if we’re living in one vast global network of interconnection today—an issue you’ll consider in Era Seven. For the first time, historians speak of humans living in a network—singular—rather than networks plural.

05:13

Using the Networks Frame

(music playing) We have created a tool that we call the Network frame to help you remember and use this Big Story. Use this frame to help you think about changes in the human past and to situate events in the present. Use it to think about how or if these increasingly rapid and complex networks changed who we are.

05:37

Text bubble: Do connections improve our world?

Does our global network give us meaning? Does being connected elevate us? Has it allowed us to create a shared sense of who we are? Or are we, in some ways, adrift in the vastness of our worldwide web? Answering these questions requires us to understand how networks have shaped and been shaped by people across the global past. Understanding the history of networks, in turn, can help us to make sense of the world that we live in today.