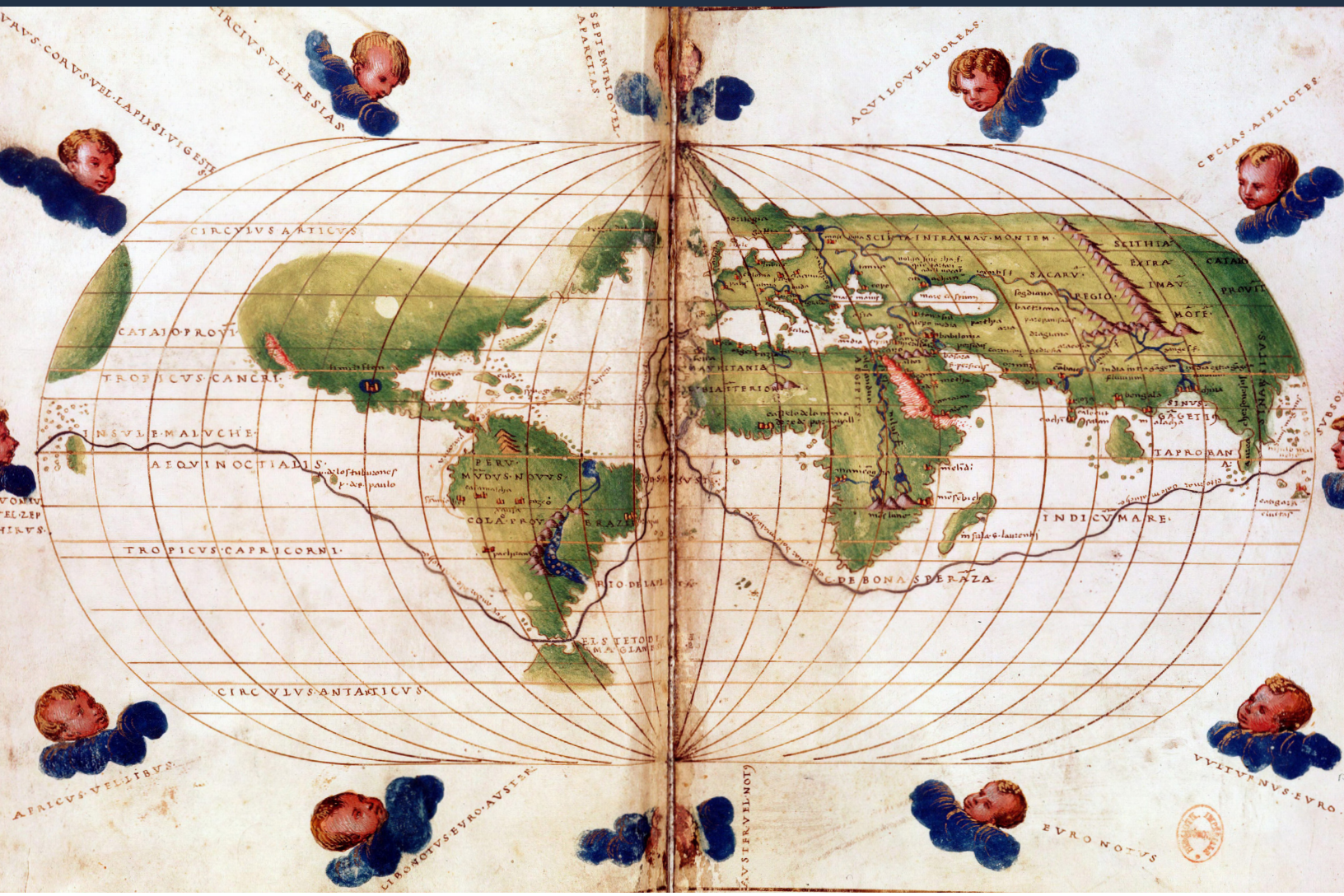


The Columbian Exchange

By Eman M. Elshaikh (adapted from Khan Academy)

Christopher Columbus was no tourist. His arrival in North America led to a system of exchange that fundamentally altered the environment, economic systems, and culture across the world.

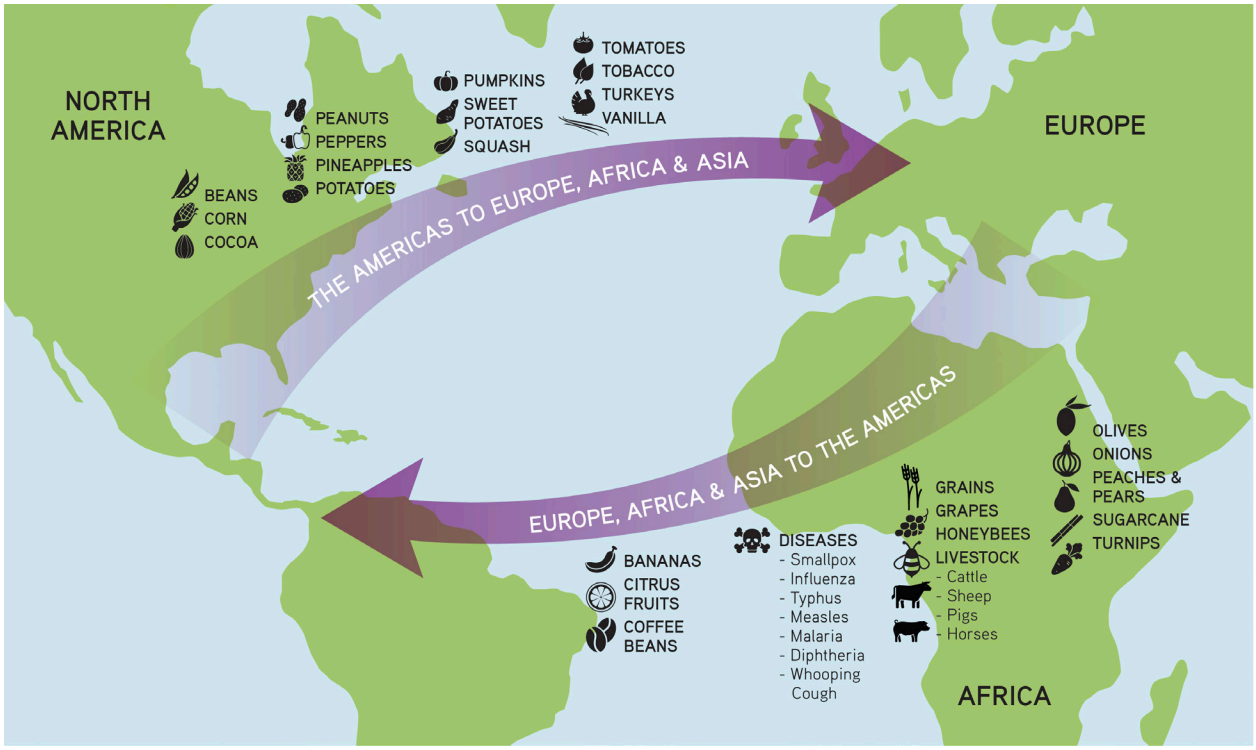
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Overview

"In fourteen hundred ninety-two, Columbus sailed the ocean blue." So begins a popular children's poem, which school children have recited for years while studying the voyages of the Italian explorer Christopher Columbus (1451-1506). Today, we know other Europeans reached Europe before Columbus, so why are Columbus' voyages considered so important?

Christopher Columbus' arrival in North America created important connections all over the world that still exist today. It also began a chain of events that dramatically changed the environment, economic systems, and culture across the world. This transfer of goods, people, microbes,[1] and ideas is often called the Columbian Exchange.

This exchange created new global networks and changed communities in the Americas. It created new networks of trade and exchange. The sharing of plants, animals, knowledge, and technology changed the world during the Columbian Exchange began a period of rapid cultural change.



Infographic showing the transfer of goods and diseases from the Columbian Exchange. By BHP, CC BY-NC 4.0.

As people learned about new products, they began producing, distributing, and consuming products in new ways. For example, the rise of plantation farming and cash crops pretty much re-invented the economy. This changed the social and economic organization of the Americas, including the rise of the Atlantic slave trade and other labor systems.

The Columbian Exchange also had some unintentional but devastating results due to the transfer of diseases. In the Americas, millions died from disease, which caused massive demographic (population) shifts. This in turn affected the environment and economic systems.

1 Microbes are living things too small to be seen with the naked eye. They're in the air, and they're crawling all over you right now, but don't panic because most are harmless or even good for you. The bad ones, though, can carry diseases through bacteria and viruses. The people, plants, and animals that were moved around during the Columbian Exchange unknowingly brought new microbes to places that had no defenses against them.

The spread of disease

Possibly the most dramatic, immediate impact of the Columbian Exchange was the spread of diseases like smallpox. Before the Europeans arrived, indigenous populations thrived across North and South America. There were between 35 million and 75 million people[2] living in the Americas, some of whom lived in large urban areas like Tenochtitlan and Cusco. These cities were some of the largest in the world.

Most people in the Americas were unable to fight off Afro-Eurasian diseases. There were three main reasons for this. First, there wasn't much genetic diversity in the small group of humans that initially crossed over from Asia. Second, indigenous Americans had few domesticated animals, which are the source of many human diseases. Finally, as a result of this lack of diseases, indigenous Americans did not have immunities that those in Afro-Eurasia had built up over generations.

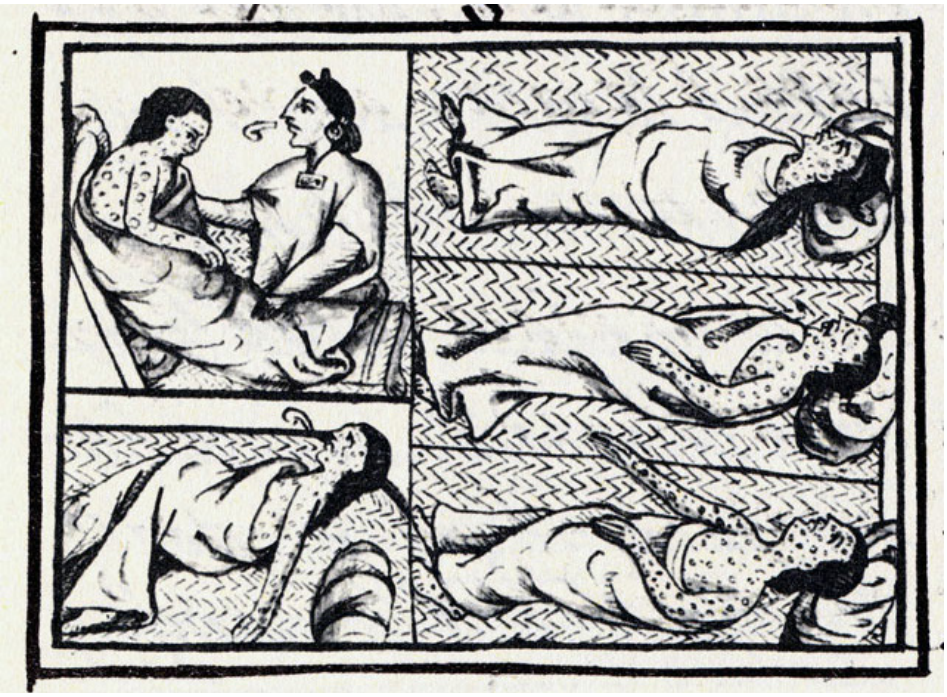


Illustration from the sixteenth-century Florentine Codex compiled by Bernardino de Sahagún showing the effects of small pox on indigenous populations. By Bernardino de Sahagún, Public domain.

So, when the indigenous Americans first encountered Europeans, they also encountered measles, chicken pox, and other unpleasant illnesses for the first time. Huge numbers of people in the Americas died from European diseases. Between 1492 and 1650, the population of indigenous Americans decreased rapidly.

Disease outbreaks resulted in massive population shifts, which affected both the environment and the economy. A loss of people helped forests grow back, but it also caused a labor shortage. That need for labor contributed to the rise of the Atlantic slave trade, which brought African diseases like malaria to the Americas.

In contrast, very few diseases traveled from the Americas to Afro-Eurasia. There is limited information about diseases in the Americas prior to the Columbian Exchange.

2 Population estimates for the Americas before the arrival of Europeans vary a great deal. This is mainly due to the fact that there were no written records of population at this time. Some historians estimate the population could have been as high as 112 million while others claim that it could be as low as 8 million. These differences are further addressed in the article later in this lesson: "The Disastrous Effects of Increased Global Interactions".

From east to west

Diseases caused the population of the Americas to decrease, making it possible for European settlers to rapidly change the territories in which they settled. They often did this by using the labor of enslaved Africans. European settlers brought many plants and animals from Afro-Eurasia to the Americas. It's important to note that before all this, the only domesticated animals in indigenous American communities were llamas and alpacas and some small animals. There were no other large mammals in the Americas suitable for domestication.

Europeans brought horses, cattle, and pigs, among others. These animals changed agricultural practices and transportation. Horses had a huge effect on indigenous Americans economies and cultures. Buffalo hunting became more efficient on horseback. Cattle became important in indigenous American society for meat, hide, and transportation. Europeans also brought wheat, sugar, bananas, and other crops, which changed how crops were made and sold. Wheat was a very successful key crop, and it was later exported in large quantities from the Americas.

Crops are for eating, but crops grown for selling are called cash crops. Many Europeans wanted to get rich by selling cash crops grown in the Americas, like sugar, coffee, and cotton.

People demanded more of these crops, so some Europeans began growing huge amounts of them. They needed a huge number of workers, so Europeans' began bringing enslaved peoples from other places. Spanish settlers used a type of enslavement called the encomienda to control the indigenous American labor force. However, they lost many workers to disease. Europeans dealt with that problem by forcibly bringing enslaved people from West Africa to the Americas to work on plantations. Over the next few hundred years, more than twelve million enslaved people were brought to the Americas through the Atlantic slave trade system. You will learn more about plantations and the slave trade later in this era.

From west to east

Plants from Afro-Eurasia (the "Old World") did not really affect the diets of indigenous Americans. However, plant from the Americas (the "New World", to the Europeans) transformed life in Europe, Asia, and Africa. It is difficult to imagine Italian food without tomatoes or Indian food without chili peppers. However, those plants didn't exist in those places before the Columbian Exchange. Plants changed food and culture, but they also changed the environment and the way goods were produced and distributed. This is because many of the new crops such as potatoes and maize could feed people easily, and Europeans began growing more of them.

Potatoes and other crops from the Americas did well even in rough environmental conditions. The potato, for example, thrived even in the freezing temperatures of northwestern Europe. It became a common food of the people in places like Ireland, and often caused population growth and the growth of cities.

The Columbian Exchange completely changed the world. People began producing and distributing goods differently, as millions of people moved from Afro-Eurasia to the Americas, both willingly and forcibly. Goods—many of which were produced in the Americas by African and indigenous peoples—were distributed around the world. These goods continued to move around growing networks, which created the webs of exchange that shape the world we live in today.

As people moved from East to West, they formed new communities in the Americas, many of which were organized by new systems of labor. At the same time, existing communities in the Americas were devastated by disease or had to move.

Eman M. Elshaikh

The author of this article is Eman M. Elshaikh. She is a writer, researcher, and teacher who has taught K-12 and undergraduates in the United States and in the Middle East. She teaches writing at the University of Chicago, where she also completed her master's in social sciences and is currently pursuing her PhD. She was previously a World History Fellow at Khan Academy, where she worked closely with the College Board to develop curriculum for AP World History.

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