

Columbian Exchange

*We are crushed to the ground; we lie in ruins.
There is nothing but grief and suffering in
Mexico and Tlatelolco, where once we
saw beauty and valor.*

—from “Flowers and Songs of Sorrow,” anonymous
Aztec poet, (c. 1521–1540)

Essential Question: What were the causes of the Columbian Exchange and its effects on the Eastern and Western Hemispheres?

As the excerpt from the poem above suggests, initial contact and the subsequent conquest and colonization of the Americas proved disastrous for the native peoples. Overpowered by superior weapons and decimated by disease, many native populations declined, dissipated, or were forced to submit to new rulers and a new religion.

Although European conquest seriously damaged entire native societies and their ways of life, eventually new ways of life developed out of the interaction of three broad traditions of culture: indigenous American, European, and African. In the process, the Eastern and Western Hemispheres became linked in a new way, sharing disease, foods, and animals. For the role Christopher Columbus played in establishing the link, these interactions became known as the **Columbian Exchange**.

The Columbian Exchange had far-reaching effects beyond dramatic changes in population and biodiversity. It also contributed to a changing global economy, sometimes with unintended consequences. For example, Spain successfully mined silver in the Americas. However, this silver sparked inflation in Spain, which contributed to the downfall of the Spanish Empire.

Diseases and Population Catastrophe

Until the arrival of Columbus, the peoples of the Western and Eastern Hemispheres had been almost completely isolated from each other. For that reason, the indigenous people of the Americas had no exposure—and therefore no immunity—to the germs and diseases brought by Europeans. Although European horses, gunpowder, and metal weapons helped conquer indigenous Americans, disease was responsible for the majority of deaths.



Spanish soldiers, called **conquistadores**, such as Francisco Pizarro and Hernán Cortés, brought **smallpox** with them. Smallpox pathogens are spread through the respiratory system. When Europeans, who were largely immune after millennia of exposure in Afro-Eurasia, had face-to-face contact with indigenous populations, they infected these populations with the deadly disease.

As colonists began to settle in the Americas, so did insects, rats, and other disease-carrying animals. Measles, influenza, and malaria, in addition to smallpox, also killed many native peoples of the Americas.

The indigenous population of the Americas fell by more than 50 percent through disease alone in less than a century. Some American lands lost up to 90 percent of their original populations. It was one of the greatest population disasters in human history.



Source: Wikimedia Commons

Deadly diseases such as smallpox that came from Europe spread rapidly in the Americas.

Animals and Foods

Germ and disease transmissions were only one part of the Columbian Exchange. Another major component of the exchange was the sharing of new crops and livestock in both directions. Before the exchange began around 1500, Mesoamerican peoples consumed very little meat. Although contemporary Mexican food sold in the United States is reliant on pork, beef, and cheese, the indigenous people of Mexico knew nothing of pigs or cows until Europeans introduced them. These animals, along with Mediterranean foods such as wheat and grapes, were introduced to the Western Hemisphere and eventually became staples of the American diet.

Another domesticated animal the Europeans brought to the Americas, the **horse**, transformed the culture of the American Indians living in the Plains region. With the arrival of the horse, Indians could hunt buffalo on horseback so efficiently—and over a larger region—that they had a surplus of food. That

efficiency gave them more time for other pursuits, such as art and spirituality. However, competition and even armed conflict among tribes increased, with those having the most horses having the most power.

At the same time, European explorers took back Mesoamerican **maize** (corn), potatoes, tomatoes, beans, peppers, and **cacao** to their home countries, where people started to grow them. Potatoes became so popular in Europe that they are often thought of as being native to certain regions, such as Ireland. The introduction of these vegetable crops caused tremendous population growth in Europe in the 16th and 17th centuries.

Cash Crops and Forced Labor

People themselves also became part of the exchange. The coerced arrival of enslaved Africans to the Americas brought biological and demographic changes. For example, Africans brought **okra** and **rice** with them to the Americas. Tobacco and cacao produced on American plantations with forced labor were sold to consumers in Europe, Africa, and the Middle East.

Even though slave traders kidnapped millions of Africans from their homelands, populations actually grew in Africa during the 16th and 17th centuries. That population growth happened because of the nutritious foods that were introduced to the continent. Yams and manioc, for example, were brought to Africa from Brazil.

The Lure of Sugar While Spain and Spanish America profited from silver, the Portuguese empire focused its endeavors on agriculture. Brazil, the center of the Portuguese-American empire, with its tropical climate and vast tracts of land, was perfect for **sugarcane** cultivation. As disease had decimated the indigenous population, however, there were not enough laborers available to do the cultivation. Moreover, many of the people who were forced to labor in the sugar fields escaped to the uncharted Brazilian jungle. In response, the Portuguese began to import enslaved people from Africa, especially from the Kongo Kingdom and cities on the Swahili coast.

Slavery Sugar's profitability in European markets dramatically increased the number of Africans captured and sold through the **transatlantic slave trade**. Sugar cultivation in Brazil demanded the constant importation of African labor. African laborers were so numerous in Brazil that their descendants became the majority population of the region. Slave importers sent more than 90 percent of slaves to the Caribbean and South America. Only about 6 percent of slaves went to British North America. Until the mid-1800s, more Africans than Europeans went to the Americas.

Slaves often died from backbreaking working conditions, poor nutrition, lack of adequate shelter, and tropical heat and the diseases that accompanied such heat. Sugar plantations processed so much sugar that they were referred to as **engenhos**, which means "engines" in Portuguese. Because of the engenhos' horrible working conditions, plantation owners lost from 5 to 10 percent of their labor force per year. Slavery is discussed in more detail in the Topic 4.4.

Growing Cash Crops The Spanish noticed Portugal's success with plantation agriculture and returned to the Caribbean to pursue **cash crop** cultivation, such as sugar and tobacco. Cash crops are grown for sale rather than subsistence. Soon, sugar eclipsed silver as the main moneymaker for the European empires. (Connect: Write a paragraph comparing the economic practices of Spain in the Americas and Portugal in South, Southwest, and Southeast Asia. See Topic 4.2.)

African Presence in the Americas

African cultures were not completely lost once captives arrived in the Americas. In fact, during the **African Diaspora** (dispersion of Africans out of Africa), enslaved Africans retained some aspects of their cultures.

Languages With a few exceptions, Africans were not able to transplant their languages to the Americas. The captives were forced away from their communities, and they soon found themselves on ships among captives from all across West Africa (and, on some slave ships, from across East Africa as well).

Since captives were taken from myriad African cultural groups, most did not share a common language. Understandably, they found it difficult, if not impossible, to communicate en route. Because of their linguistic isolation on the ships and in the Americas, most Africans lost their languages after a generation. In spite of this forced isolation from their cultures, West Africans managed to combine European colonizers' languages (English, Spanish, French, or Portuguese, for example) with parts of their West African languages and grammatical patterns to create new languages known broadly as **creole**.

Because the Caribbean islands had a larger concentration of enslaved Africans than did North America, creole languages dominate there even today. In the United States, which had a smaller percentage of Africans in comparison to the total population, few examples of creole languages exist. One notable exception is the Gullah or Geechee language of coastal South Carolina and Georgia, in places where slaves once composed 75 percent of the population.

Music Africans brought their music with them. The syncopated rhythms and percussion they used influenced later styles. These include gospel, blues, jazz, rock and roll, hip-hop, rap, samba, reggae, and country music.

One reason many African descendants maintained their musical traditions was because enslaved Africans in America used them as a means of survival, singing tunes from home to help them endure long workdays as well as to communicate with other slaves, such as when planning an escape. They blended European Christian music with their own religious songs, known today as Negro spirituals—essential elements of American folk music history. Enslaved people also invented the banjo, which is very similar to stringed instruments found in West Africa.

Food In addition to rice and okra, Africans brought their knowledge of how to prepare these foods. The dish known as **gumbo**, popular in the southern United States, has roots in African cooking. With influences on language, music, food, and much more, African culture has had a profound and lasting impact on life in the Americas.

Columbian Exchange: Eastern Hemisphere to Western Hemisphere		
Type of Exchange	Examples	Effects on the Western Hemisphere
Crops	<ul style="list-style-type: none"> • Sugar • Wheat • Barley • Okra • Rice • Oranges * Grapes • Lettuce • Coffee 	<ul style="list-style-type: none"> • Deforestation to make way for sugar, wheat, barley, okra, rice, and other crops • Soil depletion from growing the same crops repeatedly on the same land
Animals	<ul style="list-style-type: none"> • Horses • Oxen • Pigs • Cattle • Sheep • Goats • Mosquitoes • Rats • Chickens 	<ul style="list-style-type: none"> • Overgrazing by cattle, sheep, and goats • Soil erosion because of overgrazing • Spread of diseases from mosquitoes, rats, and livestock
People	<ul style="list-style-type: none"> • Europeans • Africans 	<ul style="list-style-type: none"> • Racial diversity • Chattel slavery • Social structures based on race and ethnicity
Diseases	<ul style="list-style-type: none"> • Smallpox • Measles • Typhus • Bubonic plague • Influenza 	<ul style="list-style-type: none"> • Spread of disease • Millions of deaths among Native American populations
Technology and Ideas	<ul style="list-style-type: none"> • Alphabetic writing • Firearms 	<ul style="list-style-type: none"> • Improved communication • New methods for hunting and warfare



Columbian Exchange: Western Hemisphere to Eastern Hemisphere		
Type of Exchange	Examples	Effects on the Eastern Hemisphere
Crops	<ul style="list-style-type: none"> • Potatoes • Maize • Manioc • Tobacco • Cacao • Peanuts 	<ul style="list-style-type: none"> • Better nutrition • Increase in population • Greater wealth
Animals	<ul style="list-style-type: none"> • Turkeys • Llamas • Alpacas • Guinea pigs 	<ul style="list-style-type: none"> • More diverse diet • New types of textiles
Diseases	<ul style="list-style-type: none"> • Syphilis 	<ul style="list-style-type: none"> • Increased health risks
People	<ul style="list-style-type: none"> • Native Americans 	<ul style="list-style-type: none"> • Ethnic diversity
Technology and Ideas	<ul style="list-style-type: none"> • Rubber • Quinine 	<ul style="list-style-type: none"> • Rubber was first used as an eraser • Quinine provided a treatment for malaria

Environmental and Demographic Impact

Contact between Afro-Eurasia and the Americas brought dramatic changes to both. Most changes resulted from the Columbian Exchange. In addition, though, Europeans used agricultural land more intensively than did American Indians. For example, colonists cut down trees to clear areas for planting crops, and they created large fields that they cultivated year after year. As a result, deforestation and soil depletion became problems in the Americas. In addition, Europeans often lived in more densely populated communities than did American Indians. This increased the strain on water resources and created more concentrated areas of pollution.

KEY TERMS BY THEME		
ENVIRONMENT: Disease smallpox ENVIRONMENT: Animals horse GOVERNMENT: Empire conquistadores	ENVIRONMENT: Foods maize cacao okra rice sugarcane CULTURE: African creole gumbo	ECONOMY: Exchanges Columbian Exchange transatlantic slave trade engenhos cash crop SOCIETY: Population African Diaspora