

★ Columbus Comes upon a New World

The stage was now set for a cataclysmic shift in the course of history—the history not only of Europe but of all the world. Europeans clamored for more and cheaper products from the lands beyond the Mediterranean. Africa had been established as a source of abundant slave labor for plantation agriculture. The Portuguese voyages had demonstrated the feasibility of long-range ocean navigation. In Spain a modern national state was taking shape, with the unity, wealth, and power to shoulder the formidable tasks of discovery, conquest, and colonization. The dawn of the Renaissance in the fourteenth century nurtured an ambitious spirit of optimism and adventure. Printing presses, introduced about 1450, facilitated the spread of scientific knowledge. The mariner's compass, possibly borrowed from the Arabs, eliminated some of the uncertainties of sea travel. Meanwhile, across the ocean, the unsuspecting New World innocently awaited its European “discoverers.”

Onto this stage stepped Christopher Columbus. This skilled Italian seafarer persuaded the Spanish monarchs to outfit him with three tiny but seaworthy ships, manned by a motley crew. Daringly, he unfurled the sails of his cockleshell craft and headed westward. His superstitious sailors, fearful of venturing into the oceanic unknown, grew increasingly mutinous. After six weeks at sea, failure loomed until, on October 12, 1492, the crew sighted an island in the Bahamas. A new world thus swam within the vision of Europeans.

Columbus's sensational achievement obscures the fact that he was one of the most successful failures in history. Seeking a new water route to the fabled Indies, he in fact had bumped into an enormous land barrier blocking the ocean pathway. For decades thereafter explorers strove to get through it or around it. The truth gradually dawned that sprawling new continents had been discovered. Yet Columbus was at first so certain that he had skirted the rim of the “Indies” that he called the native peoples Indians, a gross geographical misnomer that somehow stuck.

Columbus's discovery would eventually convulse four continents—Europe, Africa, and the two Americas. Thanks to his epochal voyage, an interdependent global economic system emerged on a scale undreamed-of before he set sail. Its workings touched every shore washed by the Atlantic Ocean. Europe provided the markets, the capital, and the technology; Africa furnished the labor; and the New World offered its raw materials, especially its precious metals and its soil for the cultivation of sugar cane. For Europeans as well as for Africans and Native Americans, the world after 1492 would never be the same, for better or worse.

★ When Worlds Collide

Two ecosystems—the fragile, naturally evolved networks of relations among organisms in a stable environment—commingled and clashed when Columbus waded ashore. The reverberations from that historic encounter—often called the **Columbian exchange** (see Figure 1.2)—echoed for centuries after 1492. The flora and fauna—as well as the peoples—of the Old and New Worlds had been separated for thousands of years. European explorers marveled at the strange sights that greeted them, including exotic beasts such as iguanas and “snakes with castanets” (rattlesnakes). Native New World plants such as tobacco, maize, beans, tomatoes, and especially the lowly potato eventually revolutionized the international economy as well as the European diet, feeding the rapid population growth of the Old World. These foodstuffs were among the most important Indian gifts to the Europeans and to the rest of the world. Perhaps three-fifths of the crops cultivated around the globe today originated in the Americas. Ironically, the introduction into Africa of New World foodstuffs like maize, manioc, and sweet potatoes may have fed an African population boom that numerically, though not morally, more than offset the losses inflicted by the slave trade.

In exchange the Europeans introduced Old World crops and animals to the Americas. Columbus returned to the Caribbean island of Hispaniola (present-day Haiti and the Dominican Republic) in 1493 with seventeen ships that unloaded twelve hundred men and a virtual Noah's Ark of cattle, swine, and horses. The horses soon reached the North American mainland through Mexico. Over the next two centuries, they spread as far as Canada. Southwestern Indian tribes like the Comanche, Apache, and Navajo swiftly adopted the horse; northern tribes like the Lakota, Shoshone, and Blackfeet somewhat later. Horses transformed newly mounted cultures into highly mobile, wide-ranging hunter-warrior societies that roamed the grassy Great Plains in pursuit of the shaggy buffalo and that suppressed unmounted peoples like the Paiute. Columbus also brought seedlings of sugar cane, which thrived in the warm Caribbean climate. A “sugar revolution” consequently took place in the European diet, fueled by the forced migration of millions of Africans to work the canefields and sugar mills of the New World.

Unwittingly, the Europeans also brought other organisms in the dirt on their boots and the dust on their clothes, such as the seeds of Kentucky bluegrass, dandelions, and daisies. Most ominous of all, in their bodies they carried the germs that caused smallpox, yellow fever, and malaria. Old World diseases quickly devastated the Native Americans. During the Indians'

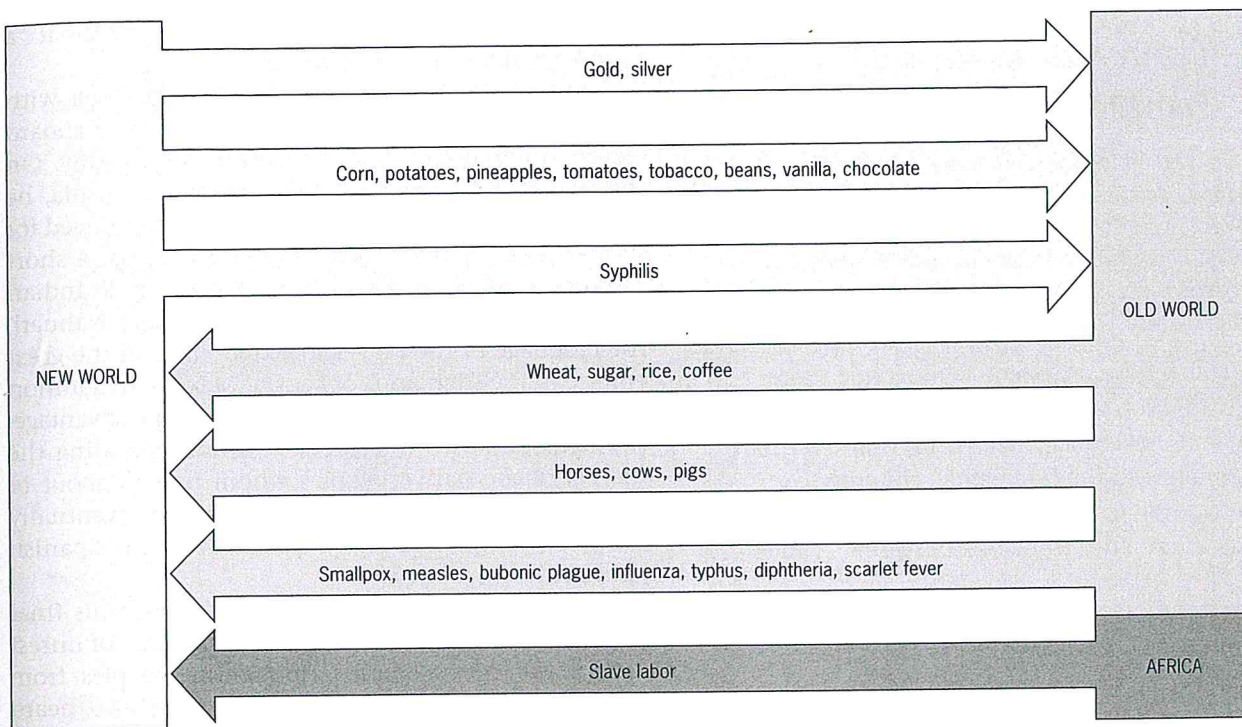


FIGURE 1.2 The Columbian Exchange

Columbus's discovery initiated the kind of explosion in international commerce that a later age would call "globalization." © 2016 Cengage Learning

millennia of isolation in the Americas, most of the Old World's killer maladies had disappeared from among them. But generations of freedom from those illnesses had also wiped out protective antibodies. Devoid of natural resistance to Old World sicknesses,



The Granger Collection, NYC

The Scourge of Smallpox These scenes of Aztec Indians afflicted with smallpox contracted from the Spaniards were drawn by a native artist to illustrate Father Bernardino de Sahagun's remarkable sixteenth-century treatise, "General History of the Things of New Spain," a pioneering work of ethnography and anthropology.

Indians died in droves. Within fifty years of the Spanish arrival, the population of the Taino natives in Hispaniola dwindled from some 1 million people to about 200. Enslavement and armed aggression took their toll, but the deadliest killers were microbes, not muskets. The lethal germs spread among the New World peoples with the speed and force of a hurricane, swiftly sweeping far ahead of the human invaders; most of those afflicted never laid eyes on a European. In the centuries after Columbus's landfall, as many as 90 percent of the Native Americans perished, a demographic catastrophe without parallel in human history. This depopulation was surely not intended by the Spanish, but it was nevertheless so severe that entire cultures and ancient ways of life were extinguished forever. Baffled, enraged, and vengeful, Indian slaves sometimes kneaded tainted blood into their masters' bread, to little effect. Perhaps it was poetic justice that the Indians unintentionally did take a kind of revenge by infecting the early explorers with syphilis, injecting that lethal sexually transmitted disease for the first time into Europe.

★ The Conquest of Mexico and Peru

Gradually, Europeans realized that the American continents held rich prizes, especially the gold and silver of the advanced Indian civilizations in Mexico and