

When Columbus brings together the continents, there's a wave of interconnection that ripples across the world. But the first, most important part of it involves the creatures that come along with Columbus, creatures that he didn't even know about, and those are microorganisms. When Columbus came, he brought horses, and sheep, and goats, and wheat, and other crops to plant, but he also brought, unknowingly, measles, and small pox, and malaria, and a whole host of diseases that existed in Europe, and Asia, and Africa but did not exist in the Americas. And this microbiological wave rippled across the Americas. It was as if all the suffering and death that had happened in the past however many millennia in Europe and Asia, and Africa from these diseases was compressed into about 150 years in the Americas. And during that 150 years, somewhere between two-thirds and 90% of the original inhabitants of the Americas died. It was the worst demographic catastrophe in human history. There's been nothing like it before or since. And the result of this calamity goes a long way towards explaining why small groups of Europeans, poorly equipped Europeans, at the end of very long supply chains, were able to establish themselves and even thrive in landscapes that were completely unfamiliar to them. Native people in the Americas were almost uniquely vulnerable to European diseases for two reasons, both of which are deeply rooted in biology. The first is that, although scientists disagree on how people came to the Americas from Asia and when exactly it happened, they do agree that it was only a small group that initially populated the Americas. And as a result, the tens of millions of native people who existed in the Americas at the time of Columbus, who existed in this broad band stretching from Hudson's Bay all the way to Tierra del Fuego, were much more closely related to each other than with that same group would have been in Europe or Asia or Africa. And as a result, they didn't have the full panoply of immune responses that are available in a much more genetically diverse group, and so they were... they were more vulnerable to European diseases that way. They did not have the same defenses as a population. The second reason, perhaps, is even more important. By a quirk of history, there were very few domestic animals in the Americas at the time of Columbus. There were no cows, there were no sheep, there were no goats, there were no horses, nor were there any analogs to those creatures. And as a result, none of the familiar farm animals that existed in Europe, and Asia, and Africa existed in the Americas. And the reason this is important is that most of the great killers in human histories-- small pox, measles, influenza and so forth-- exist because animal diseases mutated and, as scientists say, jump the species barrier, and became human diseases. And so because native people did not have domestic animals, they didn't have these kind of diseases, they just didn't have communicable diseases. And so Europeans knew that when somebody got sick you had to quarantine them. Native people without this experience didn't know this. When somebody got sick, everybody rushed to comfort them. They would infect all the people in the village, the whole village would get sick. People would panic, flee, go to the next village, infect that village. And these diseases exploded like chains of firecrackers across the Americas. That massive wave of death was but one part of the ecological convulsion that was set off by Columbus' first voyage across the Atlantic in 1492. That voyage forever brought together the scattered pieces of the world. It recreated Pangaea and, for better and worst, created the interconnected world we live in today.