V2 Chapter 3 Primary Sources

José de Acosta, *The Columbian Exchange* (1590)

[Introduction] Coined by historian Alfred W. Crosby, Jr., the phrase "Columbian Exchange" refers to the global redistribution of plants, animals, and diseases that occurred in the sixteenth century following the initial contacts between European colonizers and the indigenous people of the Americas. In his scientific and historical work, *Natural and Moral History of the Indians* (1590), Father José de Acosta described for the curious Spanish crown the agricultural exotica of the New World as well as the Spanish attempts to introduce new plants to the Americas. **[end introduction]**

Source: José de Acosta, *Historian natural y moral de las Indias* (1590) [This document has been previously edited by Dr. Michael C. Scardaville, Associate Professor of History and Director of the Latin American Studies Program at the University of South Carolina, Columbia, SC.]

Turning to plants, I shall speak first of those which are more peculiar to the Indies and afterwards of those which are common both to those lands and to Europe. And because plants were created principally for the maintenance of man, and man sustains himself above all on bread, I should speak first of their bread. . . . The Indians have their own words to signify bread, which in Peru is called tanta and in other parts is given other names. But the quality and substance of the bread the Indians use is very different from ours, for they have no kind of wheat, barley, millet, panic grass, or any grain such as is used in Europe to make bread. Instead they have other kinds of

grains and roots, among which maize, called Indian wheat in Castile and Turkey grain in Italy, holds the first place.

And just as wheat is the grain most commonly used by man in the regions of the Old World, which are Europe, Asia, and Africa, so in the New World the most widely used grain is maize, which is found in almost all the kingdoms of the West Indies; in Peru, New Spain, the New Kingdom of Granada, Guatemala, Chile, and in all the Tierra Firme. In the Windward Isles, which are Cuba, Hispaniola, Jamaica, Puerto Rico, it does not seem to have been used in earlier times; to this day they prefer to use yucca and cassava, of which more later. I do not think that maize is at all inferior to our wheat in strength and nourishment; but it is stouter and hotter and engenders more blood, so that if people who are not accustomed to it eat it in excess they swell up and get the itch.

Maize grows on canes or reeds; each one bears one or two ears, to which the grains are fastened, and though the grains are big they hold a large number of them, and some contain seven hundred grains. The seeds are planted one by one. Maize likes a hot and humid soil. It grows in many parts of the Indies in great abundance; a yield of three hundred fanegas from a sowing is not uncommon. There are various kinds of maize, as of wheat; one is large and nourishing; another, called moroche, is small and dry. The leaves of the maize and the green cane are a choice fodder for their beasts of burden, and when dry are also used as straw. The grain gives more nourishment to horses than barley, and therefore it is customary in those countries to water their horses before giving them maize to eat, for if they drank after feeding they would swell up and have gripes, as they do when they eat wheat.

Maize is the Indian bread, and they commonly eat it boiled in the grain, hot, when it is called mote . . . ; sometimes they eat it toasted. There is a large and round maize, like that of the Lucanas, which the Spaniards eat as a delicacy; it has better flavor than toasted chickpeas. There is another and more pleasing way of preparing it, which consists in grinding the maize and making the flour into pancakes, which are put on the fire and are later placed on the table and eaten piping hot; in some places they call them arepas. . . .

Maize is used by the Indians to make not only their bread but also their wine; from it they make beverages which produce drunkenness more quickly than wine made of grapes. They make this maize wine in various ways, calling it azua in Peru and more generally throughout the Indies chicha. The strongest sort is made like beer, steeping the grains of maize until they begin to break, after which they boil the juice in a certain way, which makes it so strong that a few drinks will produce intoxication. In Peru, where it is called sora, its use is forbidden by law because of the terrific drinking it occasions. But the law is little observed, for they use it anyway, and stay up whole days and nights, dancing and drinking. . . .

The cacao tree is most esteemed in Mexico and coca is favored in Peru; both trees are surrounded with considerable superstition. Cacao is a bean smaller and fattier than the almond, and when roasted has not a bad flavor. It is so much esteemed by the Indians, and even by the Spaniards, that it is the object of one of the richest and largest lines of trade of New Spain; since it is a dry fruit, and one that keeps a long time without spoiling, they send whole ships loaded with it from the province of Guatemala. Last year an English corsair burned in the port of Guatulco, in New Spain, more than one hundred thousand cargas of cacao. They also use it as

money, for five cacao beans will buy one thing, thirty another, and one hundred still another, and no objections are made to its use. They also use it as alms to give to the poor.

The chief use of this cacao is to make a drink that they call chocolate, which they greatly cherish in that country. But those who have not formed a taste for it dislike it, for it has a froth at the top and an effervescence like that formed in wine by dregs, so that one must really have great faith in it to tolerate it. In fine, it is the favorite drink of Indians and Spaniards alike, and they regale visitors to their country with it; the Spanish women of that land are particularly fond of the dark chocolate. They prepare it in various ways: hot, cold, and lukewarm. They usually put spices and much chili in it; they also make a paste of it, and they say that it is good for the chest and the stomach, and also for colds. Be that as it may, those who have not formed a taste for it do not like it.

The tree on which this fruit grows is of middling size and well-made, with a beautiful top; it is so delicate that to protect it from the burning rays of the sun they plant near it another large tree, which serves only to shade it; this is called the mother of the cacao. There are cacao plantations where it is raised as are the vine and the olive in Spain. The province of Guatemala is where they carry on the greatest commerce in this fruit.

The cacao does not grow in Peru; instead they have the coca, which is surrounded with even greater superstition and really seems fabulous. In Potosi alone the commerce in coca amounts to more than 5,000,000 pesos, with a consumption of from 90 to 100,000 hampers, and in the year 1583 it was 100,000. . . . This coca that they so greatly cherish is a little green leaf which grows upon shrubs about one estado high; it grows in very warm and humid lands and produces this leaf, which they call trasmitas, every four months. Being a very delicate plant, it requires a great

deal of attention during cultivation and even more after it has been picked. They pack it with great care in long, narrow hampers and load it on the sheep of that country, which carry this merchandise in droves, bearing one, two, and three thousand hampers. It is commonly brought from the Andes, from valleys of insufferable heat, where it rains the greater part of the year, and it costs the Indians much labor and takes many lives, for they must leave their highlands and cold climates in order to cultivate it and carry it away. Hence there have been great disputes among lawyers and wise men about whether the coca plantations should be done away with or no—but there they still are.

The Indians prize it beyond measure, and in the time of the Inca kings plebeians were forbidden to use coca without the permission of the Inca or his governor. Their custom is to hold it in their mouths, chewing and sucking it; they do not swallow it; they say that it gives them great strength and is a great comfort to them. Many serious men say that this is pure superstition and imagination. To tell the truth, I do not think so; I believe that it really does lend strength and endurance to the Indians, for one sees effects that cannot be attributed to imagination, such as their ability to journey two whole days on a handful of coca, eating nothing else, and similar feats. . . . All would be well, except that its cultivation and commerce endanger and occupy so many people. . . .

The Indies have been better repaid in the matter of plants than in any other kind of merchandise; for those few that have been carried from the Indies into Spain do badly there, whereas the many that have come over from Spain prosper in their new homes. I do not know whether to attribute this to the excellence of the plants that go from here or to the bounty of the soil over there. Nearly every good thing grown in Spain is found there; in some regions they do better than in

others. They include wheat, barley, garden produce and greens and vegetables of all kinds, such as lettuce, cabbage, radishes, onions, garlic, parsley, turnips, carrots, eggplants, endive, salt-wort, spinach, chickpeas, beans, and lentils—in short, whatever grows well here, for those who have gone to the Indies have been careful to take with them seeds of every description. . . .

The trees that have fared best there are the orange, lemon, citron, and others of that sort. In some parts there are already whole forests and groves of orange trees. Marveling at this, I asked on a certain island who had planted so many orange trees in the fields. To which they replied that it might have happened that some oranges fell to the ground and rotted, whereupon the seeds germinated, and, some being borne by the waters to different parts, gave rise to these dense groves. This seemed a likely reason. I said before that orange trees have generally done well in the Indies, for nowhere have I found a place where oranges were not to be found; this is because everywhere in the Indies the soil is hot and humid, which is what this tree most needs. It does not grow in the highlands; oranges are transported there from the valleys or the coast. The orange preserve which is made in the islands is the best I have ever seen, here or there.

Peaches and apricots also have done well, although the latter have fared better in New Spain. . . . Apples and pears are grown, but in moderate yields; plums give sparingly; figs are abundant, chiefly in Peru. Quinces are found everywhere, and in New Spain they are so plentiful that we received fifty choice ones for half a real. Pomegranates are found in abundance, but they are all sweet, for the people do not like the sharp variety. The melons are very good in some regions, as in Tierra Firme and Peru. Cherries, both wild and cultivated, have not so far prospered in the Indies. . . . In conclusion, I find that hardly any of the finer fruits is lacking in those parts. As for nuts, they have no acorns or chestnuts, nor, as far as I know, have any been grown over there

until now. Almonds grow there, but sparingly. Almonds, walnuts, and filberts are shipped there from Spain for the tables of epicures.

By profitable plants I mean those plants which not only yield fruit but bring money to their owners. The most important of these is the vine, which gives wine, vinegar, grapes, raisins, verjuice, and syrup—but the wine is the chief concern. Wine and grapes are not products of the islands or of Tierra Firme; in New Spain there are vines which bear grapes but do not yield wine. The reason must be that the grapes do not ripen completely because of the rains which come in July and August and hinder their ripening; they are good only for eating. Wine is shipped from Spain and the Canary Islands to all parts of the Indies, except Peru and Chile, where they have vineyards and make very good wine. This industry is expanding continually, not only because of the goodness of the soil, but because they have a better knowledge of winemaking.

The vineyards of Peru are commonly found in warm valleys where they have water channels; they are watered by hand, because rain never falls in the coastal plains, and the rains in the mountains do not come at the proper time. . . . The vineyards have increased so far that because of them the tithes of the churches are now five and six times what they were twenty years ago. The valleys most fertile in vines are Victor, near Arequipa; Yca, hard by Lima; and Caracaro, close to Chuquiavo. The wine that is made there is shipped to Potosi and Cuzco and various other parts, and it is sold in great quantities, because since it is produced so abundantly it sells at five or six ducats the jug, or arroba, whereas Spanish wine (which always arrives with the fleets) sells for ten and twelve. . . . The wine trade is no small affair, but does not exceed the limits of the province.

The silk which is made in New Spain goes to other provinces—to Peru, for example. There was no silk industry before the Spaniards came; the mulberry trees were brought from Spain, and they grow well, especially in the province called Misteca, where they raise silkworms and make good taffetas; they do not yet make damasks, satins, or velvets, however.

The sugar industry is even wider in scope, for the sugar not only is consumed in the Indies but is shipped in quantity to Spain. Sugar cane grows remarkably well in various parts of the Indies. In the islands, in Mexico, in Peru, and elsewhere they have built sugar mills that do a large business. I was told that the Nasca [Peru] sugar mill earned more than thirty thousand pesos a year. The mill at Chicama, near Trujillo [Peru], was also a big enterprise, and those of New Spain are no smaller, for the consumption of sugar and preserves in the Indies is simply fantastic. From the island of Santo Domingo, in the fleet in which I came, they brought eight hundred and ninety-eight chests and boxes of sugar. I happened to see the sugar loaded at the port of Puerto Rico, and it seemed to me that each box must contain eight arrobas. The sugar industry is the principal business of those islands—such a taste have men developed for sweets!

Olives and olive trees are also found in the Indies, in Mexico, and in Peru, but up to now they have not set up any mills to make olive oil. Actually, it is not made at all, for they prefer to eat the olives, seasoning them well. They find it unprofitable to make olive oil, and so all their oil comes from Spain.

Questions for Discussion:

1. Two of the products of the Americas—cacao, from which chocolate is made, and coca, the source of cocaine—were known for their miraculous properties. How does Acosta describe them and why would they be part of a culture of superstition?

2. Does Acosta's description of maize offer clues about its value as a potential food crop in Europe?

3. What was the potential for European plants to be cultivated for commercial use in the Indies?

Fray Juan de Torquemada on the *Cocolitzli*

[Introduction] Fray Juan de Torquemada (1562–1624) was a Franciscan friar who spent much of his life in what is now Mexico. He wrote a monumental survey of the history and culture of the native cultures of Mexico called the *Indian Monarchy*. He also wrote about the process by which the Indians converted to Christianity and about life in New Spain, as Mexico was then called. The following is an account of a 1576 outbreak of *cocolitzli*. Cocolitzli was an infectious disease that struck repeatedly in the century after the Spanish conquest of Mexico. **[End introduction]**

Source: https://www.dhr.history.vt.edu/modules/us/mod01_pop/pdfs/11.pdf

In the year 1576 a great mortality and pestilence that lasted for more than a year overcame the Indians. It was so big that it ruined and destroyed almost the entire land. The place we know as New Spain was left almost empty. It was a thing of great bewilderment to see the people die.

Many were dead and others almost dead, and nobody had the health or strength to help the diseases or bury the dead. In the cities and large towns, big ditches were dug, and from morning to sunset the priests did nothing else but carry the dead bodies and throw them into the ditches without any of the solemnity usually reserved for the dead, because the time did not allow otherwise. At night they covered the ditches with dirt. . . . It lasted for one and a half years, and with great excess in the number of deaths. After the murderous epidemic, the viceroy Martin Enriquez wanted to know the number of missing people in New Spain. After searching in towns and neighborhoods it was found that the number of deaths was more than two million.

Questions for Discussion

1. Another description of the same epidemic is found in the Evidence and Interpretation feature in this chapter. How similar are the two descriptions? Does this tell you anything about why historians have so much trouble figuring out what modern diseases these epidemics correspond to?

2. Does this passage suggest that these epidemics may have had effects on the Indian population beyond their obvious demographic effects?

New People in the Americas

Ritual Drinking Vessel with Inca-Spanish Colonial Decoration

[Introduction] Humans were part of the Columbian Exchange. While only a few American Indians ended up in Europe or Africa, many Africans and Europeans found themselves in the Americas. The drinking vessel here shows an Inca notable preceded by a European trumpet player and an African drummer. It dates from the middle of the seventeenth century and is one of the earliest-known depictions of an African by an American Indian artist. **[End Introduction]**

Find the graphic here:

https://www.britishmuseum.org/collection/object/E_Am1950-22-1

Questions for Discussion:

1. Much of this chapter has been devoted to talking about the European colonization of the Americas in the aftermath of epidemics that left Indian populations depleted and their confidence sapped. Does this image challenge that bleak view at all?

2. What, from the artist's perspective, seem to be the main differences between the European and the African in this image? What does this tell us about how at least some Indians thought about the relationship between Europeans and Africans in the New World?

An Account of an Epidemic In New Zealand

[Intro]The islands of the Pacific came into regular contact with Europeans later than the Americas. Once they did encounter Europeans, their experience of European disease was as destructive as it had been for American natives in earlier centuries. This is an account from the early nineteenth century in which a Maori explains what the coming of Europeans meant for

native New Zealanders. The Maori are the Polynesian people who colonized New Zealand about 900 years ago. The *rewharewha* was probably influenza.**[end intro]**

Source: http://rsnz.natlib.govt.nz/volume/rsnz_37/rsnz_37_00_000660.html

"Friend, I will now tell you of the first sign of the white man which came to us. It was the *rewharewha*, the disease that slaughtered the Maori people, until thousands were represented by hundreds, and hundreds by tens. When attacked by that disease, for one night and one day might man look upon the world of life: then death came. Men did not die singly, but in tens, and twenties, and thirties. Day by day and day by day they died. No effort was made by the survivors to mourn for the dead, or to carry out our ancient burial customs, for a great fear was upon them. And the hearts of the living breathed not as they looked upon the multitude of the dead. So the children of Paerangi went down to Hades. Then the survivors fled to the ranges, and a war party which came to attack the fort found only the dead therein, many of whom they ate."

Questions for Discussion:

1. Do you see similarities between the tone of this document and that of Fray Juan de Torquemada?

2. Clearly, the demographic effects of this epidemic were obvious to the Maori. Does this account seem more concerned with population loss or with the cultural collapse associated with epidemic?