THE CAMBRIDGE ECONOMIC HISTORY OF LATIN AMERICA

VOLUME I

The Colonial Era and the Short Nineteenth Century

VOLUME II

The Long Twentieth Century

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The Colonial Era and the Short Nineteenth Century

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Older, but now obsolete (Marxist) historiographies used to be preoccupied with Europe's very own precocious transition from feudalism to capitalism, whereas Weberians insisted (and insist) upon the particularity and superiorities system of Europe's competitive state system as well as its institutions and cultures. In this new metanarrative of a Eurasian world of surprising resemblances created by modern historical research, there are missing chapters on natural endowments and explanations for the distinctive character of European regimes for the production and diffusion of useful and reliable knowledge. Both before and after the Imperial Meridian, technology always mattered far more than commerce for the development of Europe's economic "progress" (which must include rising labor productivity) imputable to the diffusion of steam power, machinery, and better tools. True, all three were connected, but only tenuously, to European expansion and colonization overseas.

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AFRICAN CONNECTIONS WITH AMERICAN COLONIZATION

PATRICK MANNING

From the seventeenth to the nineteenth century, Latin America's colonial economy developed in interaction with African economies, and especially through ties to West and Central Africa. While every region of the African continent had connections to the economic history of Latin America, the trans-Atlantic interplay was strongest for the African coast and hinterland from Senegal to Angola. The dispatch of some ten million enslaved Africans to Latin America and the Caribbean stands out as the most striking element of the interregional relationship. The complete story, however, includes exchanges of plant and animal biota and technologies, as well as a wider range of demographic and commercial interactions. To understand the dimensions of this intercontinental exchange, one must account for the impact of Africa on the Americas, the impact of the Americas on Africa, any new phenomena that emerged from their interactions, and the temporal ups and downs in intercontinental contact. In addition to chronicling these flows and confrontations, this survey provides an opportunity for some comparison of the historiography of economic change for Latin America and for Africa from the sixteenth to the nineteenth century.[1]

Three points stand out for particular emphasis. First, for the period up to 1650, Africa and Latin America exerted profound influences on each other in their initial biological, economic, demographic, and cultural encounters. Second, for the period from 1650 to 1800, the Atlantic slave trade brought about substantial transformation in West and Central Africa and in parts

[1] For studies linking economic issues in Latin America and Africa, see Frederick Cooper, Allen F. Isaacman, and Florencia E. Mallon, *Confronting Historical Paradigms: Peasants, Labor, and the Capitalist World System in Africa and Latin America* (Madison, WI, 1993); Joseph C. Miller, *Way of Death: Merchant Capitalism and the Angolan Slave Trade, 1730–1830* (Madison, WI, 1989).

of Latin America. Third, during the nineteenth century, even with the independence of most of Latin America and the decline of the Atlantic slave trade, several new sorts of intercontinental connections arose.

THE REGIONS OF WEST AND CENTRAL AFRICA

The African connections with Latin America began, rather suddenly, at the turn of the sixteenth century. To provide a baseline for investigating those connections, this section reviews the economic geography of West and Central Africa, in topographical, linguistic, commercial, and geopolitical terms, as of about 1500.

LAND AND VEGETATION

The lands of West and Central Africa stretch in three broad belts from west to east.[2] The northern savanna is the largest and most populous of these belts. The equatorial forest lies astride the equator in the Congo River basin, and smaller patches of forest stretch along the West African coast from Nigeria to Guinea-Bissau. The southern savanna covers the southern half of Congo-Brazzaville and Congo-Kinshasa and extends into neighboring Angola and Zambia. In addition, the highlands of Rwanda, Burundi, and the Kivu region of Congo are a small but densely populated region of open, hilly grassland and regular rains. In 1880 the totality of these lands supported roughly fifty million people, almost all of them in rural settlements; the population in 1500 was perhaps slightly smaller. About thirty million lived in the northern savanna, some eight million lived in the southern savanna, and about twelve million lived in forest zones.[3] These great landscapes, and the many variations within them, reflected and in turn conditioned the rainfall, temperature, vegetation, animal life, and, above all, the forms of human habitation of each.

The northern savanna, a great expanse of grassland with trees dotting the river valleys and the wetter lands, is bounded to the north by the Sahara Desert and to the south by dense forest. This broad savanna is covered with fertile soil, but most crops must be grown during the short summer rainy season. The savanna stretches 3,000 kilometers from the coast of Senegal to Lake Chad in the center of the continent and another 3,000 kilometers to the Red Sea. The desert edge of the savanna, known as the Sahel (Arabic for coast, since the Sahara can be seen as a sea of sand), has short grass and fluctuating rains. In some years it could be farmed, in other years it was grazed, and in some years it had to be abandoned.

The northern savanna is often called the Sudan, from the Arabic term for "the land of the blacks." The Sudan is conventionally divided into three sections: the Western Sudan (the Senegal and upper Niger valleys), the Central Sudan (the lower Niger valley and the basin of Lake Chad), and the Eastern Sudan (the middle Nile valley). Most of the Western and Central Sudan is drained by the Niger River, which rises in the mountains of Futa Jallon in Guinea, flows northeast to the desert edge at Timbuktu, and then curves in a great bend to flow southeast. From its bend, the Niger flows across the savanna toward the coast where, after passing under the forest, it finally discharges its waters through a maze of creeks into the Bights of Benin and Biafra. Further east, in the very center of the continent, the Shari River rises just beyond the northern fringe of the forest and flows gently northward into the landlocked basin of Lake Chad. The lake, salty and shallow after millions of years of receiving the Shari, still supports a large fish population.

Each year, summer rains brought the savanna to life. Farmers, working with hoes, prepared the fields and planted millet and sorghum. Within two months of sprouting, millet stalks reached heights of two meters. These and other crops covered the landscape with a carpet of green. But after the millet harvest in September and the end of the rains in October, the savanna turned back to the brown, gray, and gold that dominated its colors for most of the year. In one sense the farmers of Senegal and the savanna stretching to the east were repeating an annual cycle that had been carried on for the thousands of years since millet had been domesticated. But the rains were not always regular, and in too many years they did not come at all. Farmers planned accordingly, and built the granaries whose conical forms became a dominant feature of savanna architecture.

The forest, which skips along the West African coast from Guinea-Bissau to Cameroon, with a breadth of 100 kilometers at most, expands to nearly 1,000 kilometers in breadth in Central Africa, and extends eastward over 2,000 kilometers from the Atlantic to the highlands of Kivu and Uganda.

[2] The principal general works on African history are Roland Oliver and J. D. Fage, eds., *The Cambridge History of Africa*, 8 vols. (Cambridge, 1975–84); and UNESCO, *General History of Africa*, 8 vols. (Berkeley, CA, 1981–93). For a recent geography of Africa, see A. T. Grove, *The Changing Geography of Africa*, 2nd ed. (London, 1993).

[3] The remainder of the African continent sustained perhaps another 50 million inhabitants.

The western portion of the equatorial forest is drained by the Ogowe River, which reaches the Atlantic in Gabon. The great majority of the equatorial forest is drained by the Congo River and its tributaries: the Ubangi in the north, and the Lualaba and the Lomami in the east. The Congo flows in a great semicircle through the forest and emerges into the southern savanna before flowing to the sea. Its level rises and falls in a complicated pattern in response to rains north and south of the equator. Forested areas have two rainy seasons each year, with the heavy rains in late spring and lighter rains in late summer. For the forest south of the equator, the spring rains begin in October, and the summer rains begin in February. Despite the luxurious and dense foliage of the rain forests, the underlying soils were poor and weak in nutrients. Winning a livelihood from this land required farmers to plan and to work energetically.

Crops varied significantly among regions of the forest. In the most westerly regions, from Guinea-Bissau to Ivory Coast, the main crop was rice. This was not the paddy rice of Asian origin, but a rice native to Western Africa that was grown under rainfall. Further east, along the coast from Ivory Coast to Cameroon, the main crop was yams. Still further east, the forest peoples of the Congo and Ogowe basins lived primarily on plantains and bananas. The farmers of the forest region also grew a variety of other crops, and they raised small domestic animals, including poultry, goats, and sheep.

The mouth of the Congo River lies in the southern savanna, an expanse of grassland extending from the southern fringes of the equatorial forest, at some five degrees of latitude south, to the Namib Desert in modern Namibia, and ranging eastward to the great lakes. In the west, the lower Congo is fed by the Kasai and Kwango rivers. To the east, the Luapula River flows north across the savanna and feeds into the upper Congo. At the southern limit of Angola, the Kwanza River flows west from the highlands to the Atlantic. The millet-growing peoples of this savanna also herded cattle according to patterns similar to those of East Africa.

LANGUAGE

Of the African peoples in contact with Latin America, almost all were speakers of Niger-Congo languages.[4] This grouping – the largest of the four major language groups spoken in Africa – dominates the western, central, and southern portions of the continent. The current pattern of linguistic distribution shows that the Niger-Congo languages had become widespread in West Africa by 10,000 years ago, and spread further with the development of agriculture and other technologies.

[4] Joseph Greenberg, *The Languages of Africa* (Bloomington, IN, 1963); John Bendor-Samuel, ed., *The Niger-Congo Languages: A Classification and Description of Africa's Largest Language Family* (Lanham, MD, 1989).

Each of the major Niger-Congo subgroups left a substantial imprint in the Americas as a result of the slave trade. Here, the African homelands are listed from northwest to southeast:

- The Atlantic languages, centered in the modern countries of Senegal, Guinea-Bissau, Guinea, Sierra Leone, and Liberia.
- The Mande languages, spoken mainly in modern Mali but also in the surrounding countries.
- The Gur or Voltaic languages, spoken mainly in Burkina Faso but also in the surrounding countries.
- The Adamawa-Ubangi languages, spoken in the inland areas of Nigeria, Cameroon, Chad, and the Central African Republic.
- The Kwa languages, spoken in a band along the coast from Ivory Coast into Nigeria.
- The Benue-Congo languages, spoken in southeastern Nigeria, in Cameroon, and in lands from there east to the Indian Ocean and south to the tip of the continent.

These language groups reflect historical communities, so there is some correlation between language, habitat, and primary food crop. Rice is grown among speakers of Atlantic and Mande languages. Sorghum and millet are grown among all the savanna groups – Atlantic, Mande, Gur, and Adamawa-Ubangi. Yams are a principal food among speakers of Kwa and Benue-Congo languages, except that Benue-Congo speakers have now moved to a wide range of habitats. In West Africa, numerous migrations are revealed in the pattern of languages. For instance, cattle-keeping people speaking the Fulfulde language of the Atlantic group moved progressively east from their homeland in Senegal, occupying the best cattle ranges along the desert edge as far east as Cameroon.

The most spectacular migration, however, was that of Bantu speakers, who began migrating perhaps 5,000 years ago from what is now southeastern Nigeria, and who gradually colonized the great majority of the continent to the east and south. This series of processes, widely known as "the Bantu migrations," is often misunderstood as a relatively coherent and recent phenomenon. But the accumulation of linguistic and archaeological work shows that the overall pattern of linguistic homogeneity arose from a series of distinct migrations and patterns of gradual colonization that were widely separated in time. Local variations resulted from ecological differences and from the varying patterns of interaction and amalgamation of the migrants and colonists with local populations. Nonetheless, the result is considerable linguistic and cultural unity across the southern third of the African continent, in contrast to the much greater cultural variety in the northern half of the continent.[5]

Of the other major language families in Africa, only certain subgroups of the Afro-Asiatic languages had significant ties to the Americas: most notably, these include Arabic speakers from Morocco and the western Sahara and Hausa speakers of the central Sudan.[6]

POLITICS

The political units of West and Central Africa, although often elaborately structured, were fragmented. As of 1500, most people in West and Central Africa lived in states, but most were quite small. Larger units arose from time to time, and a few of them maintained their institutions for centuries. In the Wolof-speaking area of Senegal (in the West African savanna), the kingdom of Jolof broke up into several constituent states in the mid-sixteenth century. The kingdom of Mali, founded in the thirteenth century in the upper Niger valley, survived for three centuries. Songhai, downriver from Mali, created an immense empire during the fifteenth and sixteenth centuries, but it collapsed with the Moroccan invasion of 1591. The Mossi kingdoms of Burkina Faso, although smaller, maintained their existence from the time of Mali to the twentieth century. In what is today northern Nigeria, several states among the Hausa people – each centered on a walled commercial town – maintained a stable existence, along with the larger kingdom of

[5] Jan Vansina, *Paths in the Rainforests* (Madison, WI, 1990); Christopher Ehret, *An African Classical Age* (Charlottesville, VA, 1998).

[6] The major subgroups of Afro-Asiatic languages include the Chadic languages of the Lake Chad basin, of which Hausa is the most widely spoken language; the Berber languages of the Sahara and North Africa; the Cushitic languages of the Horn and Northeast Africa; and the Semitic languages. The Semitic languages, although centered in Southwest Asia, include two major language communities in Africa – speakers of Arabic in all of the Mediterranean littoral, the western Sahara, and the central and eastern Sudan, and speakers of Amharic and Tigrinya in Ethiopia and Eritrea. Aside from the Niger-Congo languages, the other major language groups of Africa are the Khoisan languages (spoken in southwestern Africa), the Nilo-Saharan languages (spoken in the middle and upper Nile valley and in the savanna and desert regions between the Nile and Lake Chad), and the Afro-Asiatic languages.

Borno, which had moved its center from the east bank to the west bank of Lake Chad.[7]

For the coastal and forested areas of West Africa, traditions of monarchy developed firmly but on a small scale, with two exceptions. Among the Yoruba-speaking peoples of modern Nigeria, Ife became the site of a major kingdom notable for its artistic achievement and its politico-religious prestige. Ife itself had declined by 1500, but the kingdom of Benin grew up among the neighboring Edo-speaking peoples. Although the *oba* of Benin had to be confirmed in office by the *oni* of Ife, by 1500 Benin was a major regional power, with influence several hundred miles to the west.[8]

The equatorial forest, lying eastward from the coasts of Cameroon and Gabon, provided a home for Bantu-speaking farmers and fishers who maintained small-scale polities. The noted historian Jan Vansina – working with materials collected in historical linguistic studies of Bantu languages – has reconstructed a long and complex tradition of political change among these peoples, as village-level organizations developed on principles of age-grade organization, patrilineage, matrilineage, or spiritual associations.[9]

In the southern savanna – mainly in modern Congo and Angola – larger polities developed. The kingdom of Kongo, when the Portuguese encountered it in the 1480s, was a large kingdom with a capital at Mbanza Kongo and several provinces. Relatively new kingdoms were then growing among the Kuba on the Kasai River, the Tyo just north of Kongo, and the Luba and Lunda near the copper- and salt-producing regions of the upper Congo basin. Larger still was the kingdom of Mwenemutapa among the Shona peoples of modern Zimbabwe, which had a tradition of massive construction in stone and a gold-mining industry linked to the Indian Ocean trading network.[10]

Identifying Africans by ethnicity, nation, region, state, or locality became a matter of some complexity as people began to move around the Atlantic in slavery and freedom. The term "Guinea" – from a Berber word for sub-Saharan West Africa – came to be widely applied to the whole west coast of

[7] Boubacar Barry, *Senegambia and the Atlantic Slave Trade* (Cambridge, 1988); Paul E. Lovejoy, *Transformations in Slavery: A History of Slavery in Africa* (Cambridge, 1983).

[8] Frank Willett, *Ife in the History of West African Sculpture* (London, 1967); A. F. C. Ryder, *Benin and the Europeans: 1485–1897* (New York, 1969).

[9] Vansina, *Paths.*

[10] Other large-scale states in existence in 1500 were to have little connection to Latin America. These included Burundi, Bunyoro, and other states in the great lakes region; the Ethiopian kingdom; and the Funj state of the middle Nile.

Africa and to its peoples. The term "Senegal" was applied in the eighteenth century to Wolof-speaking people from Senegal; the same region included people known as "Nard" (meaning Arabic-speaking Moors), "Pular" (meaning Fulfulde-speaking people), and "Bambara." The latter category refers in general to Mande-speaking peoples from the Niger valley, but it could refer more narrowly to the Mande group calling itself Bambara, or more broadly to other Mande-speaking populations of modern Guinea and Sierra Leone. Slaves embarked at the Gold Coast were commonly called "Coromanti," after the name of the coast, though many of them had been born in the interior in a quite different group. Slaves taken from Central Africa were commonly called "Kongo" no matter where they came from within the immense region from which captives were drawn. Rules of thumb can usually be worked out by scholars working on documents from Africa or the Americas, but it is worth emphasizing that the identities assigned to African individuals and groups could vary widely, depending on their place of origin, the points through which they passed, and their destination.

The geographic names of African regions changed with time and with the language and outlook of those recording the names. The region that is today the coast of Togo and Benin was known as "Costa da Mina" by the Portuguese because it was downwind from the fortress at Elmina, but it was known as the "Slave Coast" in the late seventeenth century when it became the principal region for export of slaves, and then the "Bight of Benin" in the nineteenth century.

DOMESTIC ECONOMIES

The domestic economies of West and Central Africa, around 1500, relied substantially on technology and organizational patterns known widely throughout the Old World, and especially its tropical regions.[11] Although local systems varied substantially because of ecology and cultural choices, the range of choices was widely shared. The principal field crops in the northern savanna were sorghum and millet, and millet alone in the southern savanna. Fields were prepared with iron hoes; they were planted, weeded, and harvested within four months; and the harvest was stored in granaries, usually elevated. Rice was grown as a major crop in the upper Niger valley and in the adjoining coastal regions; it was grown intermittently in other areas of West Africa. Yams of African origin were the principal crop in the forests and wet savannas of the Kwa and Benue-Congo language areas; yams were grown in mounds of earth, weeded repeatedly, and stored in racks after harvest. In the equatorial forest, yams had long since given way to plantains, which had arrived in the early centuries C.E. from Southeast Asia. Bananas and plantains had spread all across the African continent, and plantains proved to be especially favored in the equatorial forest, where they brought higher productivity and could be grown on fields where yams would not grow. Beans of various sorts grew widely, including African groundnuts.

West African farms included a number of tree crops: the oil palm in moist regions and the shea butter tree in drier regions, each providing cooking oil; and the African locust bean and cashew, pistachio, and citrus trees. Fibers came from cotton and the silk cotton tree (*kapok*) in West Africa and from raffia palms in Central Africa. The range of other fruits, vegetables, and condiments cultivated included several varieties of pepper.

Animal husbandry was a part of most farms, though there were also specialists. Sheep, goats, and cattle had been domesticated early on, though cattle were limited to the relatively dry areas outside the range of the tsetse fly and the sleeping sickness it brought. Specialist herders kept camels in and near desert areas, and cattle in the best grazing areas of the savanna. Donkeys were a widely used beast of burden in the West African savanna. Horses – though relatively small in number – were important and prestigious. Since they bred rather poorly in West Africa, horses were often imported from North Africa. By 1500, cavalry corps were essential for the armies of the northern savanna, and the *oba* of Benin, deep within the tsetse-fly zone, maintained a number of horses for prestigious display.

Fishing was a full- or part-time activity wherever possible, and the technology of fishing involved intricate and imaginative ways of capturing fish. Fishers in the ocean used small boats, lines, and nets. In rivers and lakes, fishers used lines, nets, traps, weirs, poisons, and such devices as digging trenches off waterways, trapping fish in them, and then harvesting the fish when they had grown to maturity. In the southern savanna, meanwhile, a tradition of beekeeping had developed, and for a time the region exported substantial quantities of beeswax.

[11] Because the availability of observations on African regions as of 1500 is uneven, analysts are often left with linking fragmentary evidence for 1500 to back-projections of observations made at later times. For an example of a debate over the use of such evidence on agricultural change between 1500 and 1700, see Jouke S. Wigboldus, "Trade and Agriculture in Coastal Benin c. 1470–1660. An Examination of Manning's Early-Growth Thesis," *A.A.G. Bijdragen* 28 (1986): 299–393; Patrick Manning, *Slavery, Colonialism, and Economic Growth in Dahomey, 1640–1960* (Cambridge, 1982).

African domestic economies relied on several sorts of manufacturing. Most basic was the mining and smelting of iron. Iron deposits are widespread in Africa, but they are generally of low yield, so the quantity of iron used in African societies never became large. But the technological skill of African smiths was high, and the iron implements they manufactured were of high quality. Copper mines in the southern savanna led to large-scale trade of copper goods in that region and smaller trades elsewhere. Gold was mined in the Bambuk region of Guinea, in the Bure region of Senegal, and in many parts of southern Ghana; goldsmiths created decorative items in these regions. Metal workers also worked in brass, creating the well-known lost wax sculptures of Nigeria and Benin, and the decorative gold weights of Ghana. Silver was rare in Africa, and little silver was imported into Africa until the nineteenth century.[12]

Other manufacturing activities included woodwork – the distinguished tradition in wooden sculpture throughout West and Central Africa makes clear this skill. Architecture included buildings in adobe, wood, stone, and thatch. Textiles were also widely developed, based on distinctive hand looms for West African cotton textiles, and on raffia textiles for central Africa. Textile manufacture was naturally accompanied by dyeing, notably in indigo. Pottery and basketry provided two further sorts of household industry, along with tanning and salt preparation.

The social organization of African economies did not rely on a high degree of specialization. Categories of age and gender defined duties in agriculture, animal husbandry, and manufacturing, though these differed from region to region: women did most agricultural work in the fields of Central Africa, whereas men did most field work in much of West Africa. Specialists in such craft work as blacksmithing, pottery, and textile manufacture usually carried on agricultural work as well. Among the Mande and Atlantic speakers, however, there arose endogamous castes limited to work in ironsmithing and other such tasks

Institutions of slavery and dependency were known in all areas of Africa, and were associated with warfare and famine. But the widespread existence of institutions of slavery does not mean that many Africans were held in slavery. John Thornton's widely circulated argument that Africans in the fifteenth century had numerous slaves, ready for sale, does not hold up to detailed scrutiny. Slave populations only became large when there existed

[12] Eugenia W. Herbert, *Red Gold of Africa: Copper in Precolonial History and Culture* (Madison, WI, 1984).

reasons to create them and the power to maintain them. The imperial state of Songhay was able to hold thousands of people in slavery to provision the palace in the sixteenth century, and the kingdom of Dahomey was able to control thousands of slaves in the nineteenth century to produce palm oil for export. But apart from these cases, it was rare to have either the concentration of state power or the market for slave produce that would provide the basis for a large slave population. All of Africa in the sixteenth century sold about 5,000 slaves per year for trans-Atlantic export, whereas in the late eighteenth century the same region sold over 75,000 per year. These figures strongly suggest that the rate of enslavement rose more than tenfold in the interim, and rose more in response to external demand than to a domestic proclivity to enslave.[13]

One of the disputes in African economic history is whether land or labor was in short supply. Some argue that the export of slaves indicates that labor was in surplus, in which case land must have been in short supply. Others argue that labor was in short supply, and that land was therefore more than ample. It is true that, generally, lineage and clan groups had control of land, and individuals could gain the right to use land but not to alienate it from the chief. But this common condition cannot be extended to the conclusion that Africans had no concept of land ownership. In practice, land markets showed up whenever land became valuable. Further, in areas of West Africa where Islamic law was in force, it applied the usual codes to ownership, inheritance, and sale of land.[14]

DEMOGRAPHY

Various estimates made over the course of the last several centuries have placed the population of the African continent in 1500 at roughly 100 million. This estimate, although more consistent than authoritative, would suggest for the year 1500 a population of fifty to sixty million for West and Central Africa – roughly comparable to the population of the Americas at the same time.[15] The population of West and Central Africa, although sparser than that of Western Europe, South Asia, or East Asia, was denser

[13] John Thornton, *Africa and Africans in the Making of the Atlantic World, 1400–1600* (Cambridge, 1992).

[14] Henry A. Gemery and Jan S. Hogendorn, "The Atlantic Slave Trade: A Tentative Economic Model," *Journal of African History* 15, 2 (1974): 233–46; Patrick Manning, *Slavery and African Life* (Cambridge, 1990).

[15] A. M. Carr-Saunders, *World Population* (New York, 1934).

than that of the Americas or of other regions in Eurasia. Furthermore, there is every reason to believe that the region's population had been growing slowly in previous centuries: the language distributions suggest no recent large-scale migrations, and available information on agricultural and other technology suggests that there had not been any great recent technological advances.[16]

Much of West and Central Africa had a monetized economy by 1500. The upper Niger valley used two currencies – gold and cowrie shells. The gold was produced within the region in the mines of Bambuk and Bure and, at a further distance, in the Akan area of the Gold Coast. Gold circulated as gold dust rather than as coins and was exchanged both by weight and by volume. For smaller transactions, cowrie shells circulated in the upper Niger valley. Cowries, harvested especially in the Maldive Islands off the coast of South India, were used as money in many areas of the Indian Ocean. They came to West Africa by a route that took them up the Red Sea to Cairo, across the Mediterranean to Morocco, and across the desert to Mali. In other parts of Africa, silver and gold coins served as money on the Swahili coast, local *nzimbu* shells served as money on the Angolan coast, and cloth and copper bars, crosses, and wire served as money in other regions.[17]

A regular system of long-distance trade linked the Niger valley across the Sahara to North Africa, exchanging gold, cowries, salt, horses, and slaves. Within the northern savanna, a dense network of trade moved such commodities as kola, leather goods, textiles, fish, and grains; the Niger itself was a major axis of such commerce. In Central Africa, copper trading networks crossed the interior. The Congo and its tributaries supported trade in fish and other products. Systems of local markets are presumed to have existed for the region in 1500, though they were not described until later, One such system was the interlocking network of markets on a four-day calendar along the West African coast.

Interpretations of African economies in early modern times have tended to alternate between continental generalizations and descriptions of localities, and to focus on links of Africa to external (Islamic or European) influence, rather than on their connections among African regions.[18] Over

[16] Few records have yet been developed to convey African expectation of life in the sixteenth century. Louise Marie Diop-Maes has relied on a range of evidence to argue for a much larger African population in earlier times. See Diop-Maes, *Afrique Noire: Démographie, sol, et histoire* (Paris, 1996).

[17] Jan Hogendorn and Marion Johnson, *The Shell Money of the Slave Trade* (Cambridge, 1986).

[18] For exceptions, see Ralph Austen, *African Economic History* (London, 1987), and Anthony G. Hopkins, *An Economic History of West Africa* (London, 1973).

the long term, the connections among African regions are unmistakably clear, as shown in the distribution of languages and the spread of iron, bananas, and many other aspects of material culture. But short-term, large-scale commercial caravans or road construction were not greatly in evidence. As examples of regular communication from region to region, one can note the river trade in the Niger, the lagoon trade from Benin as far west as the Volta River in modern Ghana, and the fishing trade and migration along the Congo River.

INITIAL CONNECTIONS: 1450–1650

In the era from 1450 to 1650, the Atlantic ceased to be a barrier, and became a fluid linkage of previously isolated lands. The Atlantic world in its early days differed dramatically from the world of the Indian Ocean in the same era. For the Indian Ocean, a system of exchange had developed over two millennia of connections. The arrival of the Portuguese modified, but did not transform, that system. For the Atlantic, ships under numerous European flags created a whole new set of interactions and connections. In the first stage, European voyagers established connections with the Atlantic islands and Africa; by 1492 there were a substantial number of African workers in Portugal, most of them slaves, and a plan was being hatched for conversion of the Kongo kingdom to Christianity. In the second stage – after the voyages of Columbus – the eastern Atlantic as a whole made its impact felt on the Americas.[19]

Portuguese trade with the Atlantic islands focused on gathering and agriculture. Trade with the African mainland focused, whenever possible, on gold, as well as on labor for agricultural work, and luxury goods such as pepper. The search for gold led the Portuguese to construct Elmina Castle on the Gold Coast in 1481, which resulted in a substantial and profitable flow of gold to the Portuguese treasury. The search for labor led the Portuguese to seize and purchase captives in Senegal, Upper Guinea, Benin, and Kongo. The kingdom of Benin, which was content to trade in pepper with Portugal, managed to withdraw from the export of slaves by 1530. The efforts of the Kongo king to halt the sale of slaves were not successful, and Portuguese planters on the island of São Tomé built a

[19] For an excellent description of the early days of the Atlantic world, see Thornton, *Africa and Africans*, 13–42.

profitable set of sugar plantations. Portuguese merchants were also looking for other trades to carry. Observing the cowrie trade to West Africa, they began carrying cowries from the Maldives to the West African coast by 1517. Portuguese terms for the various units of cowrie currency up to a *cabeça* of 4,000 shells were adopted into the languages of the West African coast from the Niger to the Gold Coast.

Meanwhile, in both Peru and Mexico, the discovery of huge silver deposits brought silver shipments to Spain. By 1571 the Manila galleons had begun to carry silver to the Philippines, from which it rapidly passed to China. The Chinese demand for silver kept the price high. Portuguese adventurers searched in vain for silver mines in Africa. The African connection to this silver boom was indirect: Indian textiles were bought with silver by Portuguese merchants and then went to Africa for the purchase of slaves who worked as artisans in the silver mines. Thus, by the end of the sixteenth century, the three great oceans and five continents were united – mostly by the flow of silver – into a single system.[20]

The initial destinations of the African slave trade focused on the Atlantic islands and the Iberian peninsula rather than the Americas. In an extension of the system of mutual raids and slaveholding that prevailed in the Mediterranean, Africans went in largest numbers to destinations in the eastern Atlantic until about 1570, after which the colonial system in the Americas expanded enough to raise demand for the shipment of slaves.[21] Trans-Atlantic deliveries of slaves went first to the Spanish Caribbean, then to Mexico, and by the mid-sixteenth century, to Peru and Brazil. Most captives crossing the Atlantic in these days were from West Africa. Bowser's excellent work on Peru indicates that over half the slaves reaching Peru in this era were from Senegambia and Guinea-Bissau, roughly 10 percent were from the eastern coast of West Africa, and about one third were from Angola. Aguirre Beltrán's scantier returns on Mexico indicate the reverse, with a larger proportion coming from Angola. Males were more numerous than females among the newly arriving captives, but the proportion of females in these early times was larger than it was to be in later centuries.[22]

[20] Dennis O. Flynn and Artúro Giráldez, "Born with a 'Silver Spoon': The Origin of World Trade in 1571," *Journal of World History* 6 (1995): 201–22.

[21] Manuel Lobo Cabrera, *La esclavitud en las Canarias orientales en el siglo XVI: Negros, moros y moriscos* (Gran Canaria, 1982).

[22] Frederick P. Bowser, *The African Slave in Colonial Peru, 1524–1650* (Stanford, CA, 1974); Aguirre Beltrán's figures are reported in Colin A. Palmer, *Slaves of the White God: Blacks in Mexico, 1570–1650* (Cambridge, MA, 1976).

Table 2.1. *Annual rate and overall volume of slave exports: 1450–1650*

	Est. captive arrivals per year, 1450	Est. captive arrivals per year, 1650	Est. cumulative total of captive arrivals, 1450–1650
WEST AFRICA			
To Sahara	2,800	4,900	875,000
To Atlantic and Europe	880	100	168,000
To Spanish America	0	2,300	123,000
To Brazil	0	1,200	70,000
Non-Spanish Caribbean	0	600	23,000
TOTAL WEST AFRICA	3,680	9,100	**1,259,000**
CENTRAL AFRICA			
To Atlantic and Europe	0	400	124,000
To Spanish America	0	1,300	90,000
To Brazil	0	2,400	180,000
Non-Spanish Caribbean	0	0	0
TOTAL CENTRAL AFRICA	0	4, 100	**393,600**

Sources: Philip D. Curtin, *The Atlantic Slave Trade: A Census* (Madison, WI, 1969); Ivana Elbl, "The Volume of the Early Atlantic Slave Trade, 1450–1521," *Journal of African History* 38 (1997): 31–75; Ralph A. Austen, "The Trans-Saharan Slave Trade: A Tentative Census," in Henry A. Gemery and Jan S. Hogendorn, eds., *The Uncommon Market: Essays in the Economic History of the Atlantic Slave Trade* (New York, 1979), 23–76.

American-born populations of African ancestry developed progressively. The largest number of second-generation slaves and free people of color came from unions of Africans. From the beginning, however, mulatto children grew from unions of African women and Iberian men. After more than twenty years of slave imports, it was possible to have adult mulatto women who, in unions with Iberian men, could have carterón children; these, after another twenty years, would be ready to bear children. The social categories of mulatto and quadroon thus developed, with a lag, in each area of Old World settlement. Mulatto and quadroon women faced alternatives (if not always choices) in setting up families with a person of color or with a white. Thus, within half a century, a society beginning with three discrete racial types could develop into a cosmopolitan and elaborately hierarchical social order.

One key element of the hierarchy was the range of sexual access. Women were perpetually in short supply in colonial society; this was true for every color, but least so for women of mixed race, all of whom were locally born and thus equal in number to the men of their color. But because white men had the monopoly of access to white women, and had access to mulatto and black women by virtue of their social power, mulatto and especially black men were far more likely to remain childless. This process was one reason that the steady import of slaves from Africa was not sufficient to keep the black population of the Americas growing as rapidly as the white and mixed populations. A mixed-race population grew, at a far slower rate, in Africa as well. Mixed-race populations in Africa were overwhelmingly free and tended to specialize in trade, whereas mixed-race populations in the Americas included large numbers of slaves and tended to specialize in artisanal work.[23]

Philip Curtin estimated that 125,000 captives were transported to the Americas in the sixteenth century, and another 360,000 in the first half of the seventeenth century, for a cumulative total of half a million. By 1650, something over 100,000 people of African descent lived in the Americas, representing 2 percent of the total population. But they were the majority of the two major cities – Mexico and Lima – and were perhaps majorities in the port cities of Veracruz, Callao, and Cartagena, and in the Caribbean as a whole. Even in thinly populated Brazil, Africans were probably over 2 percent of the population.[24]

In disease, Africans were perhaps as influential as Europeans in serving as hosts to the infectious agents that decimated the American population. The major diseases of the American demographic collapse were known in Africa as well as in Europe. Diseases of the tropical lowlands, notably malaria, were more deadly in Africa than in Europe, and spread in the Americas with migration. Smallpox, however, may have been a different case. It seems less than certain that smallpox was firmly established in West Africa before the fifteenth century; smallpox epidemics and religious cults built around protection against smallpox were common in later centuries. It may be that smallpox spread to Africa at the same time as it spread to the Americas. More generally, it is possible that African mortality rose in the fifteenth and sixteenth centuries with increased external contacts.

The numbers of Africans and Europeans migrating to the Americas up to the mid-sixteenth century were roughly equal, as measured by the

[23] These considerations are underscored in my unpublished research on eighteenth-century Louisiana.
[24] Curtin, *Atlantic Slave Trade.* See also Paul E. Lovejoy, "The Volume of the Atlantic Slave Trade: A Synthesis," *Journal of African History* 23 (1982): 473–501.

populations of European and African descent in Lima and Mexico City in 1650. Europeans went in larger proportions to the rural highland areas, whereas Africans went in larger proportions to the Caribbean lowlands. In the early colonial period, Africans in slave status performed much of the work of constructing the new colonial order.[25] The skills of African workers were central to building the colonial economy in such areas of work as agriculture, animal husbandry, mining, metalwork, textile production, basketry, woodwork, construction, and boat handling.

African foodstuffs reached the Caribbean and Brazil, especially as provisions for maritime voyagers. Whereas millet and sorghum seem not to have taken significant hold in the Americas, yams, taro, and other tubers grown by African farmers came to the Americas. So also did such tree crops as plantains, bananas, oil palms, raffia palms, and coconut palms. The impact of the Americas on Africa in this era was probably somewhat lesser. American crops moved rapidly to Africa, but it took one or two centuries before their influence became significant.

THE SLAVE-TRADE ERA: 1650–1820

The Dutch wars with the Spanish and Portuguese, and the Portuguese revolt against Spain, provided a military indication of change in the Atlantic world. The steady rise of the sugar trade provided a commercial indication of the same change. And the further expansion of the slave trade provided a demographic indication of the changing times. The *asiento* for Spanish slaves now passed from the Portuguese to the Dutch and then to the English, and the slave trade to the Spanish and especially to the inland areas became a smaller portion of the total. With the rise of sugar production, the destinations of slaves became concentrated along the Caribbean and Brazilian coasts.

The Dutch, with a fleet based in Pernambuco, seized Elmina castle from the Portuguese in 1637, and began to develop control of the trade in both gold and slaves. The Dutch were frustrated in their attempt to take Angola from the Portuguese, but began steady slave trading in nearby Loango. After being driven out of Pernambuco in 1654, Dutch colonists moved to the Caribbean and assumed the role of brokers rather than planters: they held the *asiento* from 1662 to 1713 and provided slaves to the expanding

[25] Bowser, *The African Slave*; Palmer, *Slaves of the White God.*

Table 2.2. *Annual rate and overall volume of slave exports: 1650–1820*

	Est. captive arrivals per year, 1650	Est. captive arrivals per year, 1820	Est. cumulative total of captive arrivals, 1650–1820
WEST AFRICA			
To Sahara	4,900	7,400	1,105,000
To Atlantic and Europe	100		600
To Spanish America	2,300	10,000	794,000
To Brazil	1,200	3,800	623,000
Non-Spanish Caribbean	600	7,000	3,152,000
TOTAL WEST AFRICA	9,100	28,200	**5,674,000**
CENTRAL AFRICA			
To Atlantic and Europe	400		5,100
To Spanish America	1,300	10,000	77,500
To Brazil	2,400	30,000	3,135,700
Non-Spanish Caribbean	0	7,000	942,000
TOTAL CENTRAL AFRICA	4,100	47,000	**4,160,300**

Sources: David Eltis, *Economic Growth and the Ending of the Transatlantic Slave Trade* (New York, 1987); Paul E. Lovejoy, "The Volume of the Atlantic Slave Trade: A Synthesis," *Journal of African History* 23 (1982): 473–501; Patrick Manning, *Slavery and African Life* (Cambridge, 1990).

new English and French colonies. English, French, and Danish trading companies followed the Dutch in setting up forts and lodges at key points along the African coast in the late seventeenth century. In addition to the growing Caribbean demand for slaves, the Brazilian market also expanded. Sugar producers in Bahia organized voyages to the Gold Coast and the Bight of Benin, offering Bahian tobacco in exchange for slaves. And the discovery of gold in Minas Gerais in the 1680s created a demand for slaves from West Africa and Angola.[26]

As slave purchasers assembled on the West African coast, warfare began to expand among groups in the Bight of Benin, especially the Gbe-speaking populations of modern Benin and Togo. The troops in the growing armies carried firearms purchased with slave exports. The expansion of trade and

[26] Johannes Menne Postma, *The Dutch in the Atlantic Slave Trade, 1600–1815* (Cambridge, 1990); A. J. R. Russell-Wood, *A World on the Move: The Portuguese in Africa, Asia, and America, 1415–1808* (New York, 1993); C. R. Boxer, *The Portuguese Seaborne Empire* (New York, 1969); Boxer, *The Dutch in Brazil, 1624–1654* (New York, 1957); Colin Palmer, *Human Cargoes: The British Slave Trade to Spanish America, 1700–1739* (Urbana, IL, 1981).

warfare was such that by the end of the seventeenth century, slave exports from this region rose to 15,000 per year (meaning that 2 to 3 percent of the population was deported each year in chains), and remained at that level for the forty years from 1690 to 1730. West of the Bight of Benin, the Gold Coast underwent a parallel but less devastating transformation. In the late seventeenth century, firearms and warfare expanded, and the numerous small towns with their manufacturing centers gave way to dispersed settlement. The kingdom of Denkyera expanded, gaining control over neighboring states, and selling captives on the coast. By 1700, a defensive coalition organized by Asante overturned Denkyera and established an imperial hegemony over much of the Gold Coast.[27]

For these two regions, and for the African coast in general, the price of slaves rose by a factor of four in the course of the thirty years from 1690 to 1720. The magnitude of the price increase is confirmed in at least three ways: by the prime cost to English merchants buying slaves with goods loaded in England; by the local price of slaves in cowrie currency; and by a shift in the flow of gold. In the last case, the Gold Coast, in addition to its long-term exports of gold, had imported slaves since the sixteenth century. Portuguese and local merchants had brought slaves from the Kingdom of Benin to the Gold Coast, where some of them were put to work as miners. But, by the end of the seventeenth century, the price of slaves had risen so high that Gold Coast merchants were now exporting slaves and were accepting payment in Brazilian gold. Thus, more gold was flowing into the region than out. The expansion of the slave trade caused a decline in population and the development of new types of inequality in the affected areas of Africa.

In the case of Gold Coast, by 1730 the export of slaves had risen to 7,000 per year. Since control of the coastal region by Asante was secure, most of the slaves exported came from areas further inland. In the Bight of Benin, the kingdom of Dahomey expanded greatly in the 1720s, conquering both Ardra and Savi and moving in the direction of the regional hegemony achieved by Asante. However, the larger inland empire of Oyo sent its cavalry to disperse Dahomey's forces in several campaigns, forcing Dahomey to render tribute from 1734 to 1818. The result, with Dahomey and its local enemies each in existence, was continuing warfare throughout the eighteenth century, and a steady devastation of the region.

[27] Robin Law, *The Slave Coast of West Africa, 1550–1750* (London, 1991); Manning, *Dahomey*; Ray A. Kea, *Settlements, Trade, and Polities in the Seventeenth-Century Gold Coast* (Baltimore, 1982).

By the 1730s, an average of 45,000 slaves per year were sent across the Atlantic from a growing range of African ports. The Bight of Benin, despite exhaustion from four decades of warfare and deportation, still led all other regions in slave exports with about 10,000 per year. Slaves from this region went to Brazil, to French territories, to Dutch colonies and secondary markets, and to the English, who settled them in the Caribbean and sold a portion to the Spanish. Population was declining rapidly in the Bight of Benin, but was also beginning to decline in Gold Coast, Senegambia, and the Bight of Biafra.

The estimates of the volume of the Atlantic slave trade, and the related task of estimating the demographic impact of slave trade on Africa, have involved much indirect analysis, requiring as much modeling as enumeration. These areas of demographic estimation thus share some of the methodological challenges of estimating American populations in the sixteenth century and before. Each of these fields of analysis would probably benefit from more comparison and cross-checking with the other.[28]

The pattern of exporting twice as many men as women from Africa had several consequences. First, there developed a substantial shortage of adult men, leaving women to take on new types of work – and giving those men who remained in Africa more women to choose from. Second, the expansion of systems of slave catching meant that many of the women (and some of the men) remaining in Africa were in slavery. A system of female-based slavery spread over much of the coastal region of West and Central Africa in the eighteenth century. Third, the expanding system of female enslavement led to higher prices for women in African markets; men received higher prices in European markets. As a result, few women from interior areas arrived in the Americas. The women captured along the coast might be sold to European merchants, but women captured in interior areas were sold in local markets. Those who walked the long distances from the interior to be sold at the coast were almost all men, whereas at the coast both male and female captives might be sold to the Europeans. As a result, the African females in the Americas were generally from the coastal peoples – including Wolof, Susu, Ardra, Yoruba, Ibo, and Kongo. The men might be from either the coast or the interior. Throughout West and Central Africa

[28] Patrick Manning, "The Impact of Slave Trade Exports on the Population of West and Central Africa, 1700–1850," in Serge Daget, ed., *De la traite à l'esclavage*, 2 vols. (Paris, 1988), vol. 2, 111–34; Manning, *Slavery and African Life*; David Eltis and others, *The Trans-Atlantic Slave Trade: A Database on CD-ROM* (Cambridge, 1999).

in the period from 1730 to 1850, males averaged about 80 per 100 females among adults.[29]

With the higher prices and developing shortage of captives in the Gold Coast and the Bight of Benin, English and French merchants looked to the Bight of Biafra, where the ports of Calabar and Bonny funneled 5,000 captives per year in the 1710s, and 10,000 per year by the 1750s. Most of these were Igbo-speaking people from the densely populated immediate hinterland of those ports. The system for collecting and transporting captives in the Bight of Biafra was distinctive, and relied on the specific circumstances of this highly commercialized but politically decentralized region. Most victims were seized not in military campaigns or in large raids, but in individual kidnappings and in delivery of individuals to courts and religious oracles as the price of holding proceedings there. The Aro – a clan that controlled the prestigious oracle of Arochukwu – served both as religious leaders and as directors of a slave-trading network. Individuals seized or purchased by them were taken to Calabar, Bonny, or smaller ports of the region, sold to brokers there, and later sold again to European purchasers. This system of enslavement continued to grow during the late eighteenth century until, in some years, over 20,000 people were sent across the Atlantic each year. This resulted in a sharp decline in the region's population. British purchases of slaves in the Bight of Biafra declined in the 1790s and virtually halted after 1807, which eased the pressure on the region's population. But other purchasers came forth to replace the British, and exports continued at a rate of about 12,000 per year, bringing further population decline until the late 1830s, when treaties with the British ceased the export of slaves from the Bight of Biafra.[30]

In the early eighteenth century, the Senegambia region also became involved in the rapidly growing exports of slaves, although at a lower rate. Here, slaves were purchased mostly by French merchants and taken to the Caribbean colonies and the newly expanding Louisiana colony. Although most of these slaves were labeled as "Senegal" – meaning that they were Wolof-speaking people from the coastal region – a growing minority were known as "Bambara" – meaning that they were captives of the newly expanding Segu polity of Mamari Coulibaly, a leader of freebooting warriors who turned raiding into the basis for a substantial state. Those captured

[29] Manning, *Slavery and African Life.*

[30] David Eltis and David Richardson, "West Africa and the Transatlantic Slave Trade: New Evidence of Long-Run Trends," in Eltis and Richardson, eds., *Routes to Slavery* (London, 1997), 16–35; Douglas B. Chambers, "'My Own Nation': Igbo Exiles in the Diaspora," in *Routes to Slavery*, 72–97.

in the domains of the Segu state were sent for sale either to the coast, or into the Sahara and to North Africa. As a result, the population of the Western Sudan probably declined from the early eighteenth century until 1750, when the volume of slave exports from the region declined.[31]

The Upper Guinea coast – ranging from modern Guinea-Bissau through the Ivory Coast – was one of the regions involved at an early stage in the sale of slaves to Portuguese merchants. There, export of slaves declined to a low level for the seventeenth and mid-eighteenth centuries, but leapt to above 15,000 per year in the late eighteenth century before declining to a level that enabled population growth to keep up with the loss of captives.

For the Central African regions of Loango and Angola, slave exports were large and grew throughout the eighteenth century. Slaves coming from an extensive hinterland would go to either of these coastal nodes of export. Most of the slaves exported from the Loango coast came from the Congo River basin, walked overland from the head of navigation at Malebo Pool (near modern Brazzaville), and were embarked at the port of Loango in the Vili Kingdom (near modern Pointe Noire). Most slaves shipped from the Portuguese colony of Angola were embarked at Luanda after being drawn from regions throughout modern Angola. The export volumes – averaging roughly 15,000 slaves per year for each of these stretches of the coast for all of the eighteenth century – were sufficient to bring a substantial decline in population for the Loango hinterland and a lesser but still important decline in population for Angola.[32]

As significant as the number of persons sent to the Americas was their distribution by age and sex. The distribution focused heavily on young adults, with roughly twice as many males as females being sent. The number of children set on board slave ships was small, and the number who arrived in the Americas was even smaller, indicating that mortality rates were high for children in transit, and that few small children were captured. Because larger numbers of males than females were taken from Africa, the adult population remaining in Africa included far fewer males than females. Nevertheless, the number of females deported in slavery was too large for

[31] Richard Roberts, *Warriors, Merchants, and Slaves: The State and the Economy in the Middle Niger Valley, 1700–1914* (Stanford, CA, 1987); Barry, *Senegambia*; Philip D. Curtin, *Economic Change in Precolonial Africa: Senegambia in the Era of Slave Trade* (Madison, WI, 1975).

[32] The Portuguese also exported slaves from Benguela, south of Luanda. For an important analysis of the distinctive patterns of slave trade in Luanda, see Miller, *Way of Death*. On the Loango coast and hinterland, see Phyllis Martin, *The External Trade of the Loango Coast* (London, 1972), and Robert Harms, *River of Wealth, River of Sorrow: The Central Zaire Basin in the Era of the Slave Trade and Ivory Trade, 1500–1891* (New Haven, CT, 1981).

those who remained to sustain the population. In the most severely affected areas of Africa, the population declined by as much as 2 percent per year or more; and in those same areas, the adult male population may have been no more than 50 percent of the adult female population.[33]

Africans bought a wide range of goods in exchange for the captives they sold, but took cash for captives in many parts of the coast. "Cash" included some silver and gold coin, but usually meant other currencies. For the Bight of Benin, cowrie currency composed 20 to 35 percent of the value of all imports during the eighteenth century. The result was a substantial expansion of the money supply, and an expansion of the cowrie currency zone from the coast to the upper Niger valley in the interior.[34] In the Bight of Benin, brass *manillas* had been purchased from the Portuguese in earlier times, and were imported in greater amounts in the eighteenth century with the rise of slave exports. In Angola and Kongo, much of the imported cloth was used as currency rather than being used in dress. Copper, iron bars, wire, and even bottles of gin served as currency. All of these currencies had luxury value in addition to their value as currency. Cowries were widely used as personal decoration, just as silver and gold, although widely used in jewelry, maintained their value as money.

Philip Curtin and Alfred Crosby each tentatively speculated that the spread of maize and manioc might have increased food output enough to offset the loss of population through the slave trade.[35] Their speculation is unconfirmed, however, and seems implausible when compared to other crop movements. The adoption of the potato in northern Europe did not occur until the late eighteenth century, though the adoption of maize in north China seems to have occurred earlier. The impact of maize and manioc in Africa depends on how rapidly the new crops spread among African farmers, and on whether farmers were, in fact, more productive. It seems easier to demonstrate that maize and manioc were adopted by farmers in areas of intensive slave trade – maize in the Bight of Benin, manioc in Angola – because of their advantage in storage over competing crops. That is, they could provide food for populations on the move. In addition, by the nineteenth century, farmers in the northern savanna had taken up peanuts, pineapples had spread to humid zones, and tomatoes and chile peppers had spread to many regions in Africa. With the movements in

[33] Manning, *Slavery and African Life*.

[34] Hogendorn and Johnson, *Shell Money*; Manning, *Dahomey*.

[35] Curtin, *Atlantic Slave Trade*; Alfred W. Crosby, Jr., *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, CT, 1972).

food came exchanges in culinary techniques. African-style stews appeared all along the American littoral, though the ingredients included items such as peanuts and maize that had come from the Americas to Africa.

In sum, the export of slaves from West and Central Africa rose after 1650 to unprecedented levels of human migration. As indicated in Tables 2.1 and 2.2, the arrivals of African captives in distant lands reached about 1.6 million persons in the period between 1450 and 1650, and rose to nearly ten million persons in the period between 1650 and 1820.[36] The trans-Saharan portion of this slave trade grew in absolute magnitude, yet fell in relative terms from half of the total from 1450 to 1650 to just over 10 percent of the total from 1650 to 1820. Emigration from West and Central Africa was roughly comparable to European emigration from 1450 to 1650, and greatly exceeded European emigration from 1650 to 1820.[37] The results of African forced migration were sufficient to cause the populations of West and Central Africa to decline from the early eighteenth to the mid-nineteenth century. During this time African labor was especially significant in the Caribbean and in colonial and early imperial Brazil.

AN INDUSTRIALIZING WORLD: 1820–1850

Another great wave of changes surged through the Atlantic world at the turn of the nineteenth century. The Haitian revolution, the broader antislavery movement, and other movements for social equality and local autonomy changed the shape of economic relations. Latin American countries gained political independence and sought to follow independent economic policies. The trans-Atlantic slave trade was abolished by stages between 1807

[36] Philip Curtin's 1969 estimate of just under 10 million arrivals of African trans-Atlantic captives for the whole Atlantic slave trade has been raised in subsequent analysis by about 1.5 million. The figures in Tables 2.1 and 2.2 are estimates of those arriving in their lands of destination: to these figures must be added the deaths of those in transit. The latter are estimated at roughly 20 percent of those voyaging across the Atlantic in the period 1450–1650, and 15 percent of those voyaging in the period 1650–1820. Related demographic losses to Africa included the export of captives across the Sahara with its attendant loss in transit, and the mortality due to enslavement within sub-Saharan Africa. Curtin, *Atlantic Slave Trade*; Lovejoy, "Volume of the Atlantic Slave Trade."

[37] Further, after 1820 an additional 1.8 million captives reached the Americas; most of these came from Central Africa. David Eltis has noted that European-descended populations exceeded African-descended populations by 1840, even though many more Africans than Europeans had migrated to the Americas. David Eltis, "Free and Coerced Transatlantic Migrations: Some Comparisons," *American Historical Review* 88 (1983): 251–80. See also Nicholas Canny, ed., *Europeans on the Move: Studies on European Migration, 1500–1800* (London, 1994).

and the 1850s. (The emancipation of slaves took place more slowly than the abolition of the oceanic slave trade: it proceeded in stages, from abolition in 1777 in the North American state of Vermont to the 1930s in some parts of Africa.) In the northern African savanna from Guinea to Cameroon, a series of Muslim-led revolutions created powerful states – most importantly the Sokoto Caliphate in Northern Nigeria, founded in 1804. The wars of these theocratic states led to the expanded capture and sale of prisoners, and brought some of the combatants and their disputes to the Americas. The collapse of the Oyo empire in 1830 – a result of the expansion of the Sokoto Caliphate – led to a succession of civil wars among the Yoruba peoples. This in turn led to the sale of many war captives abroad, and to the dispersal of Yoruba language and culture throughout the Atlantic.

The long boom in international trade under the aegis of British commerce and finance brought about the substantial expansion of slavery in some parts of the Americas and Africa. Cuban sugar and Brazilian coffee relied heavily for their expansion on newly imported African slaves coming mostly from Angola and the Bight of Benin. In Africa, slave workforces and free peasants produced peanuts, palm oil, palm kernels, coffee, and cotton for export, plus textiles, leather goods, and grains for domestic consumption. Late in the nineteenth century another American crop, cacao, began its spectacular expansion in the fields of the Gold Coast, and thereafter in Nigeria and the Ivory Coast.

In the formerly Spanish colonies, slaves gained emancipation in a complex linkage of nationalism and human rights. Slave imports ended (except in Venezuela and Texas); slaves gained emancipation in Mexico by 1829 (except for slaves imported to Texas by colonists from the United States), and in Peru and Venezuela, through a series of partial steps, by 1854. Slave imports ended in 1808 for the British Caribbean and in about 1830 for the French territories, and continued until after 1850 in the Spanish Caribbean and Brazil.

Slave exports across the Atlantic declined from an average 75,000 per year in the late eighteenth century to an average 55,000 per year in the early nineteenth century. For the Senegambia in the early nineteenth century, slave exports fell to 2,000 per year, and exports from the Gold Coast were even lower. Exports from the Upper Guinea Coast averaged 4,000 per year. Exports from the Bights of Benin, Biafra, and Loango each averaged 10,000 per year. Though the population continued to decline, the exports of slaves were lower than in previous years. Arrivals of African captives in the Americas after 1820 are reliably estimated to have totaled nearly 1.8 million people.[38]

Slave prices paid on the African coast declined as Atlantic demand diminished and as the cost of circumventing the British antislaving squadron grew. For those areas that pulled out of the Atlantic slave trade, prices fell, and a new system of slavery emerged. With lower prices, African purchasers could buy more slaves. Captives were now both male and female, and new institutions of slavery – more like those of plantation slavery in the Americas – arose. The female-based, household-centered system of slavery for the eighteenth century turned into a class-based system of slave villages in the nineteenth century. Slaves now produced grains, textiles, dyes, and other goods for the market, and provided personal service for the masters.[39] The masters were now landowners as well as owners of human capital.

However, for Angola the old system continued and expanded its influence in the nineteenth century. Slave exports from Angola, destined for Rio and Cuba, rose to an average near 20,000 per year for the first half of the nineteenth century. Only after 1850 did the bleeding of the region's population end, and only then was it possible to turn slave labor to expanding the commercial farms that had become prominent in West Africa. Meanwhile, slave exports from Mozambique also rose to an average of over 10,000 per year up to 1850.[40]

AFRICAN GROWTH, TRANSFORMATION, AND STAGNATION

African and Latin American economic experiences became tied in an inverse relationship through their participation in the Atlantic economy. The accompanying figures, although they are not precise, indicate the connections and the divergences of the two regional economies. The catastrophic decline in Amerindian populations continued for more than a century and a half; in the eighteenth century the population began to grow from its low level both locally and through immigration. The point to emphasize here is that the collapse of population in the Americas led to a demand for labor that eventually caused population decline in Africa. Meanwhile, overseas

[38] Eltis, *Economic Growth*, 249.
[39] Lovejoy, *Transformations in Slavery*; Manning, *Slavery and African Life*.
[40] Jan Vansina, *Kingdoms of the Savanna* (Madison, WI, 1966); Manning, *Slavery and African Life*.

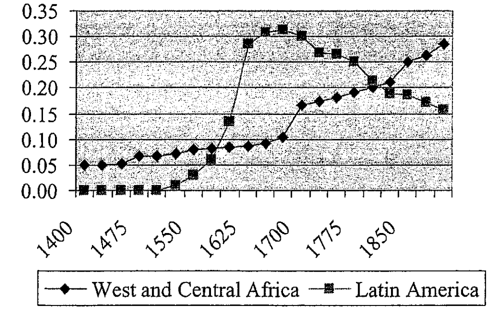

Figure 2.1. Exports per capita in British pounds of 1800.
Note: Figure 2.1 is a heuristic representation and is not based in any detail on primary data. Export values are assumed to be the current FOB value of continental exports: principally silver and sugar from Latin America, and slaves from Africa. Export values are divided by estimates of continental population to yield the per capita export values shown, in British pounds of 1800. It would be of interest to attempt an empirical calculation of the variables sketched here.

trade grew in value on both sides of the Atlantic, with such occasional rapid changes as the opening of American silver trade in the late sixteenth century and the dramatic rise of prices for slaves in Africa at the turn of the eighteenth century. Combining figures for population and export value permits estimation of the value of exports per capita. Per capita exports, sketched in Figure 2.1, peaked for Latin America in the early eighteenth century mainly because population had fallen so low. Similarly, African export value per capita rose in the eighteenth century as populations declined and slave prices rose.

The continental patterns of gross domestic product were even more clearly inverse, as sketched in Figure 2.2. GDP, consisting mainly of output for local consumption but including a growing proportion of exports, fell for over a century in Latin America with population until the eighteenth century, when it began to rise. For Africa, GDP declined at a slower rate for a century after the early eighteenth century before growing again. These comparisons serve to highlight the impact of each continent on the other.

African and Latin American economies both grew as the nineteenth century progressed, especially as measured by the volume of their international trade. Although trade of the regions with each other was progressively cut off, their trade with the world through European merchants grew substantially. The development of steamships tended to concentrate trade in the

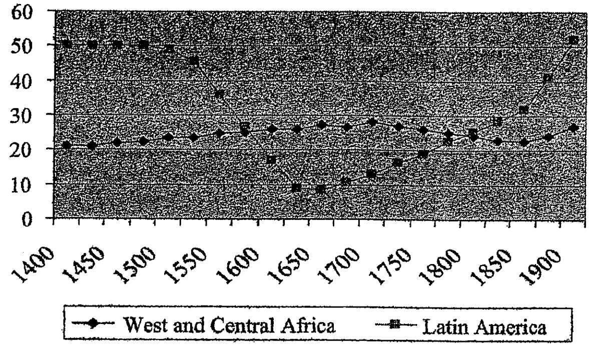

Figure 2.2. GDP in millions of 1800 British pounds.
Note: Figure 2.2 is a heuristic representation and is not based in any detail on primary data. Output for domestic consumption is to be assumed a constant per capita local output for populations in Africa and Latin America. Exports are assumed to be the current FOB value of continental exports, as in Figure 2.1. GDP is then taken as the sum of the value of domestic consumption and exports for each of the two regions, in millions of 1800 British pounds. As with Figure 2.1, it would be of interest to attempt an empirical calculation of the variables sketched here.

ports of the North Atlantic so that the direct links of ports on opposite sides of the South Atlantic declined. Silver finally became important as coinage in Africa, but through trade with the British in the era after Chinese demand for silver had declined. For Latin America, the nineteenth century led into an era of neocolonial dependency and peripheral industrial transformation; for Africa, the experience was to be colonial rule and direct extraction by European powers.

Overall, the fluctuations in population and output in Latin America were far greater than those in Africa, but a significant portion of the change in each can be explained by connection to the other. African social structure underwent transformation in each century in response to changes in the slave trade. In the Americas, the African-descended population had reached roughly 2 percent of the total population in 1650, and had expanded to something over 15 percent by 1820.[41] Trade between the two regions grew steadily until the early nineteenth century. Thereafter, with the halt to African migration and the great expansion in European migration to the Americas, the population of African descent in the Americas fell almost to 10 percent by 1960.

[41] I believe these estimates are minimal; detailed analysis may show the African-descended portion of Latin American populations to have been higher.

As late as the 1890s, small vessels were still leaving the port of Lagos (now the capital of a British colony) and carrying textiles, casks of palm oil, and kola nuts to Salvador, where they served the market of Yoruba-descended people of Bahia. Overall, however, the imposition of colonial rule on Africa resulted in a near total halt in the close ties of trade and migration that had linked the two coasts of the South Atlantic for over three centuries. Only with the independence of African countries in the 1960s did the ties of commerce and migration begin to expand again.