PART

III The Middle Passage

--- VARIETY OF OPINION ---

I was now persuaded that I had got into a world of bad spirits, and that they were going to kill me.

OLAUDAH EQUIANO

Here we have nearly one-third given apparently for the average loss on the passage, and this estimated by the slave-dealers themselves on the American side of the Atlantic.

THOMAS FOWELL BUXTON

One conclusion that might be drawn is that, in reducing the estimated total export of slaves from about twenty million to about ten million, the harm done to African societies is also reduced by half. This is obvious nonsense.

PHILIP D. CURTIN

Thousands of ship crossings have now been statistically analyzed, and none show a correlation of any significance between either tonnage or space available and mortality.

HERBERT S. KLEIN
It appears that over the three and a half centuries of the transatlantic slave trade, perhaps 15 per cent (or over 1.5 million) of those who embarked at the African coast died during the Atlantic crossing.

David Eltis and David Richardson

Olaudah Equiano

An African’s Ordeal

Few Africans who crossed the Atlantic on a slave ship had both the opportunity and the desire to write of their experiences. One who did was Olaudah Equiano (who also used the name Gustavus Vassa). Modern scholarship has questioned whether the vivid details he recounts of a passage in the 1750s from his home among the Igbo people of modern Nigeria to the West Indies are really personal reminiscences. Even if he enhanced his account with the recollections of others, it captures the horrors and suffering of the infamous Middle Passage of the three-sided trade linking Europe, Africa, and the Americas.

One day, when all our people were gone out to their works as usual, and only I and my dear sister were left to mind the house, two men and a woman got over our walls, and in a moment seized us both and, without giving us time to cry out, or to make resistance, they stopped our mouths, and ran off with us into the nearest wood. Here they tied our hands, and continued to carry us as far as they could, till night came on, when we reached a small house, where the robbers halted for refreshment, and spent the night. We were then unbound, but were not able to take any food; and, being quite overpowered by fatigue and grief, our only relief was some sleep, which allayed our misfortune for a short time. The next morning we left the house, and continued travelling all the day. For a long time we had kept to the woods, but at last we came to a road which I believed I knew. I now had some hopes of being...

delivered; for we had advanced but a little way before I discovered some people at a distance, on which I began to cry out for their assistance; but my cries had no other effect than to make them tie me faster and stop my mouth, and then put me in a large sack. They also stopped my sister's mouth, and tied her hands, and in this manner we proceeded till we were out of the sight of these people. When we went to rest the following night they offered us some victuals; but we refused them; and the only comfort we had was in being in one another's arms all that night, and bathing each other with our tears. But alas! We were soon deprived of even the smallest comfort of weeping together. The next day proved a day of greater sorrow than I had yet experienced; for my sister and I were separated, while we lay clasped in each other's arms: it was in vain that we besought them not to part us: she was torn from me, and immediately carried away, while I was in such a state of distraction not
to be described. I cried and grieved continually; and for several days did
not eat any thing but what they forced into my mouth. At length, after
many days travelling, during which I had often changed masters, I got
into the hands of a chieftain, in a very pleasant country. . . .

. . . I continued to travel, sometimes by land, sometimes by water,
through several different countries, and various nations, till, at the end
of six months after I had been kidnapped, I arrived at the sea coast. . . .

The first object which saluted my eyes when I arrived on the coast
was the sea, and a slave ship, which was then riding at anchor, and wait-
ing for its cargo. These filled me with astonishment, which was soon con-
verted into terror, which I am yet at a loss to describe nor the then feelings
of my mind. When I was carried on board I was immediately handled,
and tossed up, to see if I were sound by some of the crew; and I was now
persuaded that I had got into a world of bad spirits, and that they were
going to kill me. Their complexions too differing so much from ours, their
long hair, and the language they spoke, which was very different from any
I had ever heard, united to confirm me in this belief. Indeed, such were
the horrors of my views and fears at the moment, that, if ten thousand
worlds had been my own, I would have parted with them all to have ex-
changed my condition with that of the meanest slave in my own country.
When I looked around the ship too, and saw a large furnace or copper
boiling, and a multitude of black people of every description chained to-
gether, every one of their countenances expressing dejection and sorrow,
I no longer doubted of my fate; and, quite overpowered with horror and
anguish, I fell motionless on the deck and fainted. When I recovered a
little, I found some black people about me, who, I believed were some of
those who brought me on board, and had been receiving their pay; they
talked to me in order to cheer me, but all in vain. I asked them if we were
not to be eaten by those white men with horrible looks, red faces, and long
hair? They told me I was not; and one of the crew brought me a small
portion of spirituous liquor in a wine glass; but, being afraid of him, I
would not take it out of his hand. One of the blacks therefore took it from
him, and gave it to me, and I took a little down my palate, which, instead
of reviving me, as they thought it would, threw me into the greatest con-
sternation at the strange feeling it produced, having never tasted any such
liquor before. Soon after this, the blacks who brought me on board went
off, and left me abandoned to despair. I now saw myself deprived of any
chance of returning to my native country, or even the least glimpse of
hope of gaining the shore, which I now considered as friendly; and I even
wished for my former slavery, in preference to my present situation, which
was filled with horrors of every kind, still heightened by my ignorance of what I was to undergo. I was not long suffered to indulge my grief; I was soon put down under the decks, and there I received such a salutation in my nostrils as I had never experienced in my life; so that, with the loathsomeness of the stench, and crying together, I became so sick and low that I was not able to eat, nor had I the least desire to taste any thing. I now wished for the last friend, Death, to relieve me; but soon, to my grief, two of the white men offered me eatables; and, on my refusing to eat, one of them held me fast by the hands, and laid me across, I think, the window, and tied my feet, while the other flogged me severely. I had never experienced anything of this kind before; and, although not used to the water, I naturally feared that element the first time I saw it, yet, nevertheless, could I have got over the nettings, I would have jumped over the side, but I could not; and, besides, the crew used to watch us very closely who were not chained down to the decks, lest we should leap into the water: and I have seen some of these poor African prisoners severely cut for attempting to do so, and hourly whipped for not eating. This indeed was often the case with myself. In a little time after, amongst the poor chained men I found some of my own nation, which in a small degree gave ease to my mind. I inquired of them what was to be done with us? They gave me to understand we were to be carried to these white people's country to work for them. I was then a little revived, and thought if it were no worse than working, my situation was not so desperate: but still I feared I should be put to death, the white people looked and acted, as I thought, in so savage a manner; for I had never seen among any people such instances of brutal cruelty; and this not only shewn toward us blacks, but also to some of the whites themselves. One white man in particular I saw, when we were permitted [sic] to be on deck, flogged so unmercifully that he died in consequence of it; and they tossed him over the side as they would have done to a brute. This made me fear these people the more; and I expected nothing less than to be treated in the same manner.

The stench of the hold while we were on the coast was so intolerably loathsome, that it was dangerous to remain there for any time, and some of us had been permitted to stay on the deck for the fresh air; but now that the whole ship's cargo were confined together, it became absolutely pestilential. The closeness of the place, and the heat of the climate, added to the number in the ship, which was so crowded that each had scarcely room to turn himself, almost suffocated us. This produced copious perspirations, so that the air became unfit for respiration, from a variety of loathsome smells, and brought on a sickness amongst the slaves, of which
many died, thus falling victims to the improvident avarice, as I may call it, of their purchasers. This wretched situation was again aggravated by the galling of the chains, now become insupportable; and the filth of the necessary tubs, into which the children often fell, and were almost suffocated. The shrieks of the women and the groans of the dying, rendered the whole a scene of horror almost inconceivable. Happily perhaps for myself I was soon reduced so low here that it was thought necessary to keep me almost always on deck; and from my extreme youth I was not put in fetters. In this situation I expected every hour to share the fate of my companions, some of whom were almost daily brought on deck at the point of death, which I began to hope would soon put an end to my miseries. Often did I think many of the inhabitants of the deep much more happy than myself; I envied them the freedom they enjoyed, and as often wished I could change my condition for theirs. Every circumstance I met with served only to render my state more painful, and heightened my apprehensions and my opinion of the cruelty of the whites. One day they had taken a number of fishes, and when they had killed and satisfied themselves with as many as they thought fit, to our astonishment who were on the deck, rather than give any of them to us to eat, as we expected, they tossed the remaining fish into the sea again, although we begged and prayed for some as well as we could, but in vain; some of my countrymen, being possessed by hunger, took an opportunity, when they thought no one saw them of trying to get a little privately, but they were discovered, and the attempt procured them some very severe floggings.

One day, when we had a smooth sea, and moderate wind, two of my wearied countrymen, who were chained together (I was near them at the time), preferring death to such a life of misery, somehow made through the nettings, and jumped into the sea; immediately another quite dejected fellow, who, on account of his illness was suffered to be out of irons, also followed their example; and I believe many more would very soon have done the same, if they had not been prevented by the ship’s crew who were instantly alarmed. Those of us that were the most active were in a minute put down under the deck; and there was such a noise and confusion amongst the people of the ship as I have never heard before, to stop her, and get the boat out to go after the slaves. However, two of the wretches were drowned, but they got the other, and afterwards flogged him unmercifully, for thus attempting to prefer death to slavery. In this manner we continued to undergo more hardships than I can now relate; hardships which are inseparable from this accursed trade.
An Abolitionist’s Evidence

Sir Thomas Fowell Buxton was a member of the British Parliament who turned his attention from domestic prison reform to the abolition of the slave trade. His major work, the African Slave Trade, was published in 1839, long after Britain had ceased carrying slaves but before other nations had done so. The grisly details of the slave trade Buxton gleaned from eyewitnesses and official sources were meant to keep up pressure on governments to end the trade. Note his mention of the abolitionist work of Olaudah Equiano (Gustavus Vassa) as an adult.

It was well observed by Mr. Fox, in a debate on the Slave Trade, that

True humanity consists not in a squeamish ear; it consists not in starting or shrinking at such tales as these, but in a disposition of heart to relieve misery. True humanity appertains rather to the mind than to the nerves, and prompts men to use real and active endeavours to execute the actions which it suggests.

In the spirit of this observation, I now go on to remark, that the first feature of this deadly passage, which attracts our attention, is the evident insufficiency, in point of tonnage, of the vessels employed, for the cargoes of human beings which they are made to contain. . . .

We have a faithful description of the miseries of the middle passage, from the pen of an eye-witness, Mr. Falconbridge. His account refers to a period antecedent to 1790. He tells us that

The men Negroes, on being brought aboard ship, are immediately fastened together two and two, by handcuffs on their wrists, and by irons riveted on their legs. . . . They are frequently stowed so close as to admit of no other posture than lying on their sides. Neither will the height between decks, unless directly under the grating, permit them the indulgence of an erect posture, especially where there are platforms, which is generally the case. These platforms are a kind of shelf, about eight or nine feet in breadth, extending from the side of the ship towards the

center. They are placed nearly midway between the decks, at the distance of two or three feet from each deck. Upon these the Negroes are stowed in the same manner as they are on the deck underneath.

After mentioning some other arrangements, he goes on to say,

It often happens that those who are placed at a distance from the buckets, in endeavouring to get to them, tumble over their companions, in consequence of their being shackled. These accidents, although unavoidable, are productive of continual quarrels, in which some of them are always bruised. In this distressed situation they desist from the attempt, and . . . this becomes a fresh source of broils and disturbances, and tends to render the situation of the poor captive wretches still more uncomfortable.

In favourable weather they are fed upon deck, but in bad weather their food is given to them below. Numberless quarrels take place among them during their meals; more especially when they are put upon short allowance, which frequently happens. In that case, the weak are obliged to be content with a very scanty portion. Their allowance of water is about half a pint each, at every meal.

Upon the negroes refusing to take sustenance, I have seen coals of fire, glowing hot, put on a shovel, and placed so near their lips as to scorch and burn them, and this has been accompanied with threats of forcing them to swallow the coals, if they any longer persisted in refusing to eat. These means have generally the desired effect. I have also been credibly informed that a certain captain in the Slave Trade poured melted lead on such of the negroes as obstinately refused their food.

Falconbridge then tells us that the negroes are sometimes compelled to dance and to sing, and that, if any reluctance is exhibited, the cat-o'-nine-tails is employed to enforce obedience. He goes on to mention the unbounded licence given to the officers and crew of the slavers, as regards the women; and, speaking of the officers, he says, they

are sometimes guilty of such brutal excesses as disgrace human nature.

. . . But . . . the hardships and inconveniences suffered by the negroes during the passage are scarcely to be enumerated or conceived. They are far more violently affected by the sea-sickness than the Europeans. It frequently terminates in death, especially among the women. The exclusion of the fresh air is among the most intolerable. Most ships have air-ports; but, whenever the sea is rough and the rain heavy, it becomes necessary to shut these and every other conveyance by which air is admitted. The fresh air being thus excluded, the negroes' rooms very soon grow intolerably hot. The confined air, rendered noxious by the effluvia exhaled from
Plan for the distribution of slaves in the British slave ship Brookes. (Peabody Essex Museum)
their bodies, and by being repeatedly breathed, soon produces fevers and fluxes, which generally carry off great numbers of them. During the voyages I made, I was frequently a witness to the fatal effects of this exclusion of the fresh air. I will give one instance, as it serves to convey some idea, though a very faint one, of the state of these unhappy beings. Some wet and blowing weather having occasioned the portholes to be shut, and the gratings to be covered, fluxes and fevers among the negroes ensued. My profession requiring it, I frequently went down among them, till at length their apartments became so extremely hot as to be only sufferable for a very short time. But the excessive heat was not the only thing that rendered their situation intolerable. The deck, that is, the floor of their rooms, was so covered with the blood and mucus which had proceeded from them in consequence of the flux, that it resembled a slaughter-house. It is not in the power of human imagination to picture to itself a situation more dreadful or more disgusting.

He proceeds to notice the case of a Liverpool vessel which took on board at the Bonny River nearly 700 slaves (more than three to each ton!); and Falconbridge says,

By purchasing so great a number, the slaves were so crowded, that they were even obliged to lie one upon another. This occasioned such a mortality among them, that, without meeting with unusual bad weather, or having a longer voyage than common, nearly one-half of them died before the ship arrived in the West Indies.

He then describes the treatment of the sick as follows:

The place allotted for the sick negroes is under the half-deck, where they lie on the bare plank. By this means, those who are emaciated frequently have their skin, and even their flesh, entirely rubbed off, by the motion of the ship, from the prominent parts of the shoulders, elbows, and hips, so as to render the bones in those parts quite bare. The excruciating pain which the poor sufferers feel from being obliged to continue in so dreadful a situation, frequently for several weeks, in case they happen to live so long, is not to be conceived or described. Few indeed are ever able to withstand the fatal effects of it. The surgeon, upon going between decks in the morning, frequently finds several of the slaves dead, and, among the men, sometimes a dead and a living negro fastened by their irons together.

He then states that surgeons are driven to engage in the “Guinea Trade” by the confined state of their finances; and that, at most, the only way in which a surgeon can render himself useful, is by seeing that the food is properly cooked and distributed to the slaves:
When once the fever and dysentery get to any height at sea, a cure is scarcely ever effected.

One-half, sometimes two-thirds, and even beyond that, have been known to perish. Before we left Bonny River no less than fifteen died of fevers, and dysenteries, occasioned by their confinement.

Falconbridge also told the Committee of 1790, that,

in stowing the slaves, they wedge them in, so that they had not as much room as a man in his coffin: that, when going from one side of their rooms to the other, he always took off his shoes, but could not avoid pinching them; and that he had the marks on his feet where they bit and scratched him. Their confinement in this situation was so injurious, that he has known them to go down apparently in good health at night, and be found dead in the morning.

Any comment on the statement of Falconbridge must be superfluous: he had been a surgeon in slave-ships, he was a respectable witness before the Committee of Inquiry in 1790, and gave the substance of this statement in evidence. And it ought to be borne in mind that he was an eye-witness of the scenes which he has described. His evidence is the more valuable, when it is considered that we have long been debarred from testimony equally credible and direct: as, since 1807, Britain has taken no part in the slave-traffic; and it has been the policy of the foreign nations who have continued the trade to conceal, as far as they could, the horrors and miseries which are its attendants.

Mr. Granville Sharpe (the zealous advocate of the negro) brought forward a case which aroused public attention to the horrors of this passage. In his Memoirs we have the following account taken from his private memoranda:

March 19, 1783. Gustavus Vas[s]a called on me with an account of 132 negroes being thrown alive into the sea, from on board an English slave-ship.

The circumstances of this case could not fail to excite a deep interest. The master of a slave-ship trading from Africa to Jamaica, and having 440 slaves on board, had thought fit, on a pretext that he might be distressed on his voyage for want of water, to lessen the consumption of it in the vessel, by throwing overboard 132 of the most sickly among the slaves. On his return to England, the owners of the ship claimed from the insurers the full value of those drowned slaves, on the ground that there was an absolute necessity for throwing them into the sea, in order to save the remaining crew, and the ship itself. The underwriters contested
the existence of the alleged necessity; or, if it had existed, attributed it to the ignorance and improper conduct of the master of the vessel. This contest of pecuniary interest brought to light a scene of horrid brutality which had been acted during the execution of a detestable plot. From the trial it appeared that the ship Zong, Luke Collingwood master, sailed from the island of St. Thomas, on the coast of Africa, September 6, 1781, with 440 slaves and fourteen whites on board, for Jamaica, and that in the November following she fell in with that island; but, instead of proceeding to some port, the master, mistaking, as he alleges, Jamaica for Hispaniola, ran her to leeward. Sickness and mortality had by this time taken place on board the crowded vessel: so that, between the time of leaving the coast of Africa and the 29th of November, sixty slaves and seven white people had died; and a great number of the surviving slaves were then sick and not likely to live. On that day the master of the ship called together a few of the officers, and stated to them that, if the sick slaves died a natural death, the loss would fall on the owners of the ship; but, if they were thrown alive into the sea, on any sufficient pretext of necessity for the safety of the ship, it would be the loss of the underwriters, alleging, at the same time, that it would be less cruel to throw sick wretches into the sea, than to suffer them to linger out a few days under the disorder with which they were afflicted.

To this inhuman proposal the mate, James Kelsal, at first objected; but Collingwood at length prevailed on the crew to listen to it. He then chose out from the cargo 132 slaves, and brought them on deck, all or most of whom were sickly, and not likely to recover, and he ordered the crew by turns to throw them into the sea. “A parcel” of them were accordingly thrown overboard, and, on counting over the remainder the next morning, it appeared that the number so drowned had been fifty-four. He then ordered another parcel to be thrown over, which, on a second counting on the succeeding day, was proved to have amounted to forty-two.

On the third day the remaining thirty-six were brought on deck, and, as these now resisted the cruel purpose of their masters, the arms of twenty-six were fettered with irons, and the savage crew proceeded with the diabolical work, casting them down to join their comrades of the former days. Outraged misery could endure no longer; the ten last victims sprang disdainfully from the grasp of their tyrants, defied their power, and, leaping into the sea, felt a momentary triumph in the embrace of death...

Such were some of the cruelties of the middle passage towards the end of the last century; and it might have been expected that, since that time, some improvement should have taken place; but it is not so: the treatment of slaves by the British, subsequent to the Slave Regulation Act, and down to 1808, was mildness itself, when compared with the miseries
consequent on the trade, and the system which has been pursued in the vain attempt to put it down, since that period to the present time. . . .

Since 1808 the English Government has, with various success, been indefatigably engaged in endeavouring to procure the co-operation of foreign powers for the suppression of the Slave Trade. In virtue of the treaties which have been entered into, many vessels engaged in the traffic have been captured; and much information has been obtained, which has been regularly laid before Parliament. A few of the cases which have been detailed will now be noticed, for the purpose of ascertaining whether the miseries which have been narrated have ceased to exist; or whether they do not now exist in a more intense degree than at any former period.

The first case I notice is that of the Spanish brig Carlos, captured in 1814. In this vessel of 200 tons, 512 negroes had been put on board (nearly 180 more than the complement allowed on the proportion of five slaves to three tons). The captor reported that

they were so miserably fed, clothed, &c., that any idea of the horrors of the Slave Trade would fall short of what I saw. Eighty were thrown overboard before we captured her. In many instances I saw the bones coming through the skin from starvation.

In the same year (1814) the schooner Aglae, of 40 tons, was captured with a cargo of 152 negroes (nearly four to each ton).

The only care seemed to have been to pack them as close as possible, and tarpaulin was placed over tarpaulin, in order to give the vessel the appearance of being laden with a well-stowed cargo of cotton and rice.

In 1815 a lieutenant of the navy thus describes the state of a Portuguese slaver, the St. Joaquim: he says,

That within twenty-two days after the vessel had left Mozambique thirteen of the slaves had died: that between the capture and their arrival at Simon's Bay, the survivors of them were all sickly and weak, and ninety-two of them afflicted with the flux; that the slaves were all stowed together, perfectly naked, and nothing but rough, unplanned planks to crouch down upon, in a hold situated over their water and provisions, the place being little more than two feet in height, and the space allowed for each slave so small, that it was impossible for them to avoid touching and pressing upon those immediately surrounding. The greater part of them were fastened, some three together, by one leg, each in heavy iron shackles, a very large proportion of them having the flux. Thus they were compelled, &c. (here a scene of disgusting wretchedness is described.)
The pilot being asked by Captain Baker how many he supposed would have reached their destination, replied, “About half the number that were embarked.”

We have next the case of the _Rodeur_, as stated in a periodical work, devoted to medical subjects, and published at Paris. This vessel, it appears, was of 200 tons burden. She took on board a cargo of 160 negroes, and after having been fifteen days on her voyage, it was remarked that the slaves had contracted a considerable redness of the eyes, which spread with singular rapidity. At this time they were limited to eight ounces of water a-day for each person, which quantity was afterwards reduced to the half of a wine-glass. By the advice of the surgeon, the slaves who were in the hold were brought upon deck for the advantage of fresh air; but it became necessary to abandon this expedient, as many of them who were affected with nostalgia threw themselves into the sea, locked in each other’s arms. The ophthalmia, which had spread so rapidly and frightfully among the Africans, soon began to infect all on board, and to create alarm for the crew. The danger of infection, and perhaps the cause which produced the disease, were increased by a violent dysentery, attributed to the use of rain-water. The number of the blind augmented every day. The vessel reached Guadalupe on June 21, 1819, her crew being in a most deplorable condition. Three days after her arrival, the only man who during the voyage had withstood the influence of the contagion, and whom Providence appeared to have preserved as a guide to his unfortunate companions, was seized with the same malady. Of the negroes, thirty-nine had become perfectly blind, twelve had lost one eye, and fourteen were affected with blemishes more or less considerable.

This case excited great interest, and several additional circumstances connected with it were given to the public. It was stated that the captain caused several of the negroes who were prevented in the attempt to throw themselves overboard, to be shot and hung, in the hope that the example might deter the rest from a similar conduct. It is further stated, that upwards of thirty of the slaves who became blind were thrown into the sea and drowned; upon the principle that had they been landed at Guadalupe, no one would have bought them, while by throwing them overboard the expense of maintaining them was avoided, and a ground was laid for a claim on the underwriters by whom the cargo had been insured, who are said to have allowed the claim, and made good the value of the slaves thus destroyed.
What more need be said in illustration of the extremity of suffering induced by the middle passage, as demonstrated by the case of the Rodeur? But the supplement must not be omitted. At the time when only one man could see to steer that vessel, a large ship approached,

which appeared to be totally at the mercy of the wind and the waves. The crew of this vessel, hearing the voices of the crew of the Rodeur, cried out most vehemently for help. They told the melancholy tale as they passed along,—that their ship was a Spanish slave-ship, the St. Leon; and that a contagion had seized the eyes of all on board, so that there was not one individual sailor or slave who could see. But alas! this pitiable narrative was in vain; for no help could be given. The St. Leon passed on, and was never more heard of!...

I will endeavour to give a summary of the extent of the mortality incident to the middle passage. Newton states, that in his time it amounted to one-fourth, on the average, of the number embarked.

From papers presented to the House of Lords, in 1799, it appears that, in the year 1791, (three years after the passing of the Slave Carrying Regulation Act,) of 15,754 negroes embarked for the West Indies, &c., 1378 died during the passage, the average length of which was fifty-one days, showing a mortality of 8¾ per cent.

The amount of the mortality in 1792 was still greater. Of 31,554 slaves carried from Africa, no fewer than 5,413 died on the passage, making somewhat more than 17 per cent. in fifty-one days.

Captain Owen, in a communication to the Admiralty, on the Slave Trade with the eastern coast of Africa, in 1823, states

That the ships which use this traffic consider they make an excellent voyage if they save one-third of the number embarked: some vessels are so fortunate as to save one-half of their cargo alive.

Captain Cook says, in the communication to which I have before alluded, as to the East coast traffic,

If they meet with bad weather, in rounding the Cape, their sufferings are beyond description; and in some instances one-half of the lives on board are sacrificed. In the case of the Napoleon, from Quelimane, the loss amounted to two-thirds. It was stated to me by Captains and Super-cargoes of other slavers, that they made a profitable voyage if they lost fifty per cent.; and that this was not uncommon.

Caldcleugh says, "Scarcely two-thirds live to be landed."
Governor Maclean, of Cape Coast, who has had many opportunities of acquiring information on the subject, has stated to me, that he considers the average of deaths on the passage to amount to one-third.

Captain Ramsay, R.N., who was a long time on service with the Preventive Squadron, also stated to me, that the mortality on the passage across the Atlantic must be greater than the loss on the passage to Sierra Leone, from the greater liberty allowed after capture, and from the removal of the shackles. He believes the average loss to be one-third.

Rear-Admiral Sir Graham Eden Hamond, Commander-in-Chief on the South American station, in 1834, thus writes to the British Consul at Monte Video:

A slave-brig of 202 tons was brought into this port with 521 slaves on board. The vessel is said to have cleared from Monte Video in August last, under a licence to import 650 African colonists.

The licence to proceed to the coast of Africa is accompanied by a curious document, purporting to be an application from two Spaniards at Monte Video, named Villaca and Barquez, for permission to import 650 colonists, and 250 more—to cover the deaths on the voyage.

Here we have nearly one-third given apparently for the average loss on the passage, and this estimated by the slave-dealers themselves on the American side of the Atlantic.

---

Philip D. Curtin

A Historian’s Recount

The horrors that abolitionists such as Equiano and Buxton catalogued remain central to our understanding of the Middle Passage, but many modern historians have worked hard to define what was typical of a slaving voyage. Philip Curtin’s immensely important 1969 study did much to start this trend by showing that the once accepted estimates of the size and destinations of the slave trade were of dubious accuracy. In the last part of this excerpt, this

historian of Africa and the Atlantic summarizes his recalculation of the origins, destinations, and overall size of the slave trade.

This book . . . seeks to explore old knowledge, not to present new information. Its central aim is to bring together bits and pieces of incommensurate information already published, and to do this for only one aspect of the trade—the measurable number of people brought across the Atlantic. How many? When? From what parts of Africa? To what destinations in the New World? . . .

This book is . . . written with an implicit set of rules that are neither those of monographic research, nor yet those of a survey. Historical standards for monographic research require the author to examine every existing authority on the problem at hand, and every archival collection where part of the answer may be found. This has not been done. The rulebook followed here sets another standard. I have surveyed the literature on the slave trade, but not exhaustively. Where the authorities on some regional aspect of the trade have arrived at a consensus, and that consensus appears to be reasonable in the light of other evidence, I have let it stand. Where no consensus exists, or a gap occurs in a series of estimates, I have tried to construct new estimates. But these stop short of true research standards. I have not tried to go beyond the printed sources, nor into the relevant archives, even when they are known to contain important additional data. The task is conceived as that of building with the bricks that exist, not in making new ones. This often requires the manipulation of existing data in search of commensurates. In doing this, I have tried to show the steps that lead from existing data to the new synthesis. Not everyone will agree with all the assumptions that go into the process, nor with all the forms of calculation that have been used. But this book is not intended to be a definitive study, only a point of departure that will be modified in time as new research produces new data, and harder data worthy of more sophisticated forms of calculation. It will have served its purpose if it challenges others to correct and complete its findings.

This point is of the greatest importance in interpreting any of the data that follow. One danger in stating numbers is to find them quoted later on with a degree of certitude that was never intended. This is particularly true when percentages are carried to tenths of 1 per cent, whereas in fact the hoped-for range of accuracy may be plus or minus 20 per cent of actuality. Let it be said at the outset, then, that most of the
quantities that follow are wrong. They are not intended to be precise as given, only approximations where a result falling within 20 per cent of actuality is a “right” answer—that is, a successful result, given the quality of the underlying data. It should also be understood that some estimates will not even reach that standard of accuracy. They are given only as the most probable figures at the present state of knowledge. These considerations have made it convenient to round out most quantities to the nearest one hundred, including data taken from other authors.

All of this may seem to imply estimates of limited value on account of their limited accuracy. For many historical purposes, greater accuracy is not required, and some of the most significant implications of this quantitative study would follow from figures still less accurate than these. Their principal value is not, in any case, the absolute number, an abstraction nearly meaningless in isolation. It is, instead, the comparative values, making it possible to measure one branch of the slave trade against another.

Some readers may miss the sense of moral outrage traditional in histories of the trade. This book will have very little to say about the evils of the slave trade, still less in trying to assign retrospective blame to the individuals or groups who were responsible. This omission in no way implies that the slave trade was morally neutral; it clearly was not. The evils of the trade, however, can be taken for granted as a point long since proven beyond dispute. . . .

The principal secondary authorities and the principal textbooks are, indeed, in remarkable agreement on the general magnitude of the [Atlantic slave] trade. Most begin with the statement that little is known about the subject, pass on to the suggestion that it may be impossible to make an accurate numerical estimate, and then make an estimate. The style is exemplified by Basil Davidson’s Black Mother, the best recent general history of the slave trade.

First of all, what were the round numbers involved in this forced emigration to which the African-European trade gave rise, beginning in the fifteenth century and ending in the nineteenth? The short answer is that nobody knows or ever will know: either the necessary records are missing or they were never made. The best one can do is to construct an estimate from confused and incomplete data.

. . . For the grand total of slaves landed alive in the lands across the Atlantic an eminent student of population statistics, Kuczynski, came
to the conclusion that fifteen millions might be “rather a conservative figure.” Other writers have accepted this figure, though as a minimum: some have believed it was much higher than this.

Roland Oliver and J. D. Fage in their _Short History of Africa_, the most widely-read history of Africa to appear so far, are less concerned to express their uncertainty, and they too come to a total estimate in the vicinity of fifteen million slaves landed. They go a step farther, however, and subdivide the total by centuries.

The total is again given as a minimum, and it is clearly derived from R. R. Kuczynski. Indeed, Professor Fage gave the same breakdown in his _Introduction to the History of West Africa_ and in his _Ghana_, where the citation of Kuczynski is explicit. The estimate is repeated by so many other recent authorities that it can be taken as the dominant statement of present-day historiography. Some writers cite Kuczynski directly. Others, like Robert Rotberg in his _Political History of Tropical Africa_, strengthen the case by citing both Kuczynski and a second author who derived his data from Kuczynski. Rotberg, however, improved on his authorities by raising the total to “at least twenty-five million slaves,” an increase of two-thirds, apparently based on the general assurance that the fifteen-million figure was likely to be on the low side. Another alternative, chosen by D. B. Davis for his Pulitzer-Prize-winning _Problem of Slavery in Western Culture_, is not to bother with Kuczynski (who wrote, after all, more than thirty years ago), but to go directly to a recent authority—in this case to the words of Basil Davidson quoted above.

Since Kuczynski is at the center of this web of citations, quotations, and amplifications, it is important to see just how he went about calculating his now-famous estimates. The crucial passage in _Population Movements_ does indeed present a general estimate of fifteen million or more slaves landed in the Americas, and it includes the distribution by centuries. . . . But Kuczynski himself shows no evidence of having made any calculation on his own. He merely found these estimates to be the most acceptable of those made by earlier authorities, and the particular authority he cited is none other than W. E. B. Du Bois.

Du Bois was, indeed, an eminent authority on Negro history, but Kuczynski’s citation does not lead back to one of his works based on historical research. It leads instead to a paper on “The Negro Race in the United States of America,” delivered to a semi-scholarly congress in London in 1911—a curious place to publish something as important as an original, overall estimate of the Atlantic slave trade—and in fact the
paper contains no such thing. Du Bois’s only mention of the subject in
the place cited was these two sentences:

The exact number of slaves imported is not known. Dunbar estimates
that nearly 900,000 came to America in the sixteenth century, 2,750,000
in the seventeenth, 7,000,000 in the eighteenth, and over 4,000,000 in
the nineteenth, perhaps 15,000,000 in all.

The real authority, then, is neither Kuczynski nor Du Bois, but
Dunbar. Though Du Bois’s offhand statement was not supported by
footnotes or bibliography, the author in question was Edward E. Dunbar,
an American publicist of the 1860s. During the early part of 1861, he
was responsible for a serial called The Mexican Papers, devoted to fur-
thering the cause of President Juárez of Mexico and of the Liberal Party
in that country. The Liberals had just won the War of the Reform
against their domestic opponents, but they were hard pressed by Euro-
pean creditors and threatened with possible military intervention—a
threat that shortly materialized in the Maximilian affair. Dunbar’s prin-
cipal task was to enlist American sympathy, and if possible American
diplomatic intervention, in support of Juárez’ cause. But Dunbar was a
liberal, by implication an anti-slavery man in American politics, and he
published The Mexican Papers during the last months of America’s drift
into civil war. It was therefore natural that he should write an article
called “History of the Rise and Decline of Commercial Slavery in
America, with Reference to the Future of Mexico,” and it was there that
he published a set of estimates of the slave trade through time. . . . He
remarked that these were only his own estimates, and he made the fur-
ther reservation (so often repeated by his successors) that they were
probably on the low side. . . .

The sequence is an impressive tower of authority, though it also sug-
gests that even the best historians may be unduly credulous when they
see a footnote to an illustrious predecessor. Basil Davidson should have
identified the original author as “an obscure American publicist,” rather
than “an eminent student of population statistics,” but the ad hominem
fallacy is present in either case. Dunbar’s obscurity is no evidence that he
was wrong; nor does Kuczynski’s use of Dunbar’s estimates make them
correct. The estimates were guesses, but they were guesses educated by
a knowledge of the historical literature. They earned the approval of later
generations who were in a position to be still better informed. Even
though no one along the way made a careful effort to calculate the size
of the trade from empirical evidence, the Dunbar estimates nevertheless represent a kind of consensus.

It is now possible to look at the long-term movement of the Atlantic slave trade over a period of more than four centuries. [Figure 1] sums up the pattern of imports for each century, while [Figure 2] shows the same data [by destination]. Together, these data make it abundantly clear that the eighteenth century was a kind of plateau in the history of the trade—the period when the trade reached its height, but also a period of slackening growth and beginning decline. The period 1741–1810 marks the summit of the plateau, when the long-term annual average rates of delivery hung just above 60,000 a year. The edge of the plateau was reached, however, just after the Peace of Utrecht in 1713, when the annual deliveries began regularly to exceed 40,000 a year, and the permanent drop below 40,000 a year did not come again until after the 1840s. Thus about 60 per cent of all slaves delivered to the New World were transported during the century 1721–1820. Eighty per cent of the total were landed during the century and a half, 1710–1850.

The higher rates of growth, however, came at earlier phases of the trade. The highest of all may have been an apparent growth at the rate of 3.3 per cent per year between the last quarter of the fifteenth century and the first quarter of the sixteenth, but the data for this early period are too uncertain for confidence in this figure. In the smoothed-out long-term annual averages of the graph, the growth of the trade was remarkably constant at a remarkably uniform rate over more than two centuries. Two periods of stability or possible decline occur, one between the first and second quarters of the sixteenth century and again between 1601–25 and 1626–50. Aside from these periods, the growth rate was an overall 2.2 per cent per year in the last half of the sixteenth century and the first quarter of the seventeenth, and at about the same rate during the equivalent period a century later. But during the first four decades of the eighteenth century, the growth rate was 0.7 per cent.

These trends are not surprising. They run parallel to the growth of the South Atlantic System traced in the literature on qualitative evidence. The nineteenth-century portion of the curve is less predictable from the present literature, but hardly surprising. The slave trade began to decline in the 1790s—not after 1808 with the legal abolition of the British trade. . . . One of the common older views of the slave trade holds that a last burst of imports took place between about 1802 and
1807, as planters sought to fill out their slave gangs before the trade became illegal. This pattern may be true of imports into the Anglo-Saxon territories, but not for the slave trade as a whole. Instead, the general trend shows a drop to the 1810’s, then a rise in the 1820’s. At first glance, the removal of British shipping from the trade in 1808 made no difference at all in the totals transported.

But this interpretation is probably mistaken. In the eighteenth century, warfare was the really important influence on the short-run rise and fall of the slave trade. There is no reason to expect this pattern to have changed at the end of the century. The drop of the 1790’s seems to be accountable to the Napoleonic Wars, and it continued into the decade of the 1800’s. After the wars, and especially after such a long period of warfare, an enormous backlog of demand would be expected, and the trade might well have shot up to meet that demand—had it not
been for British abolition and the early work of the anti-slave-trade patrols at sea. The trade recovered somewhat in the 1820’s, but the recovery was drastically dampened by the anti-slavery movement and by the shifts to new carriers (like Spain) and new sources (like Mozambique). In short, the quantitative impact of British abolition on the trade as a whole is obscured by other influences, but not completely missing.

The present projections also suggest a solution to some of the nineteenth-century controversies that still influence historical literature. Fig. [1]… shows a high and sustained level of annual average import from the 1810’s through the 1840’s—not a sharp drop as a result of abolition, nor yet a boom carrying the slave trade to new heights in the 1830’s. Although an annual average export in excess of 135,000 a year is still mentioned by some authorities, it is clearly based on the Foreign Office estimate of 1848, apparently made without sufficient evidence and with a clear political interest in trying to show Parliament that the anti-slavery blockade had been effective. If the estimates here are correct, it was effective in diverting about 8 per cent of the trade, perhaps
in keeping the trade from going even higher; but the trade nevertheless continued, at a level about a third less than its eighteenth-century peak. It was sustained first by the postwar boom of the 1820's, then by the sugar boom in Cuba and the coffee boom in Brazil. Really significant decline came only with the 1850's, when Brazil, the largest single importer, dropped from the trade. Steep as the final decline of the 1850's and 1860's appears to have been, the rate of import in the 1860's, the last important decade of the trade, nevertheless exceeded the rate for any period before the seventeenth century.

It would be premature to generalize about the impact of the slave trade on African societies over these four centuries. On the other hand, historians have already begun to do so. The range of opinion runs the gamut from the view that the slave trade was responsible for virtually every unfavorable development in Africa over these centuries, to the opposite position that even the slave trade was better than no trade, that it was therefore a positive benefit to the African societies that participated. Since the results of this survey could be brought into the argument on either side, it is appropriate to enter a few caveats.

One conclusion that might be drawn is that, in reducing the estimated total export of slaves from about twenty million to about ten million, the harm done to African societies is also reduced by half. This is obvious nonsense. The demographic consequences of moving any number of people from any society can have meaning only in relation to the size of the society, the time-period concerned, the age and sex composition of the emigrants and of the society from which they depart. Until we know at least the size of the African population that supplied the slaves, the demographic implications of the ten-million estimate are just as indeterminate as those of the twenty-million estimate. As for the social or political consequences of the slave trade to African societies, these would not necessarily vary directly with the number exported.

At best, the export data of the slave trade can be suggestive. If the dominant African pattern at the height of the slave trade was that of the militarized, slave-catching society, systematically preying on its neighbors, the export projections should show a relatively large and continuous supply of slaves from these hunter societies; and the slaves themselves should have been mainly from the less organized neighbors. This pattern does not emerge clearly from the slave-export data of eighteenth-century Africa. Some ports, notably the city-states of the Bight of Biafra, did produce a continuous supply that may imply slave-catching as an economic
enterprise. Elsewhere, the rapid shift in sources of supply from one region to another suggests that by-product enslavement was the dominant feature, or that, if systematic slave-hunting were tried, it could not be maintained.

These weaknesses of quantitative evidence are important to keep in mind, if only because of a popular tendency to regard numbers as more "scientific" and reliable than other kinds of data. A great deal more could nevertheless be profitably done with the quantitative study of the slave trade. More and better samples of slave origins and better data on the numbers carried by the trade at particular times should make it possible to project the annual flow of slaves from particular societies, to take only one example. Even if the dimensions of the slave trade outlined here were as accurate as limited sources will ever allow — and they are not—still other dimensions of far greater significance for African and Atlantic history remain to be explored.

Herbert S. Klein

Profits and Losses

A professor of Latin American history at Columbia University, Herbert Klein summarizes a generation of research by scholars inspired by Curtin's statistical approach. Klein finds that the financial profits and the losses of human life associated with the slave trade, although substantial, were much smaller than the rough guesses of earlier historians. Like Curtin, he finds careful measurement a more useful tool than moral outrage in discovering the trade's secrets.

In recent decades there has been a fundamental change in the study of the Atlantic slave trade. From almost total neglect, the trade has become an area of major concern to economists and historians who have dedicated themselves to analyzing the African experience in America.

Especially since the publication by Philip Curtin of his masterly synthesis *The Atlantic Slave Trade: A Census* in 1969, a massive amount of archival research has resulted in publications both of collections of documents from all the major archives of Europe, America, and Africa and of major works of synthesis on the demography, politics, and economics of the slave trade.

From the work of the European economic historians, it is now evident that slave trade profits were not extraordinary by European standards. The average 10 percent rate obtained in studies of the eighteenth-century French and English slave traders was considered a good profit rate at the time but not out of the range of other contemporary investments. From a recent detailed study of the nineteenth century, it would seem that profits doubled in the next century largely as a result of rising slave prices in America, which in turn were due to the increasing suppression of the trade by the British navy. On average (except for some extraordinary voyages to Cuba in the 1850s), the rate of profit for nineteenth-century slavers was just under 20 percent. Thus, while profits in the special period of suppression in the nineteenth century were quite high, even these profits were not astronomic.

The conceptions prevalent in the popular literature about the relative costs of African slaves have their corollary hypotheses about the economics of their transportation. It was assumed that the low cost of the slaves made it profitable to pack in as many as the ship could hold without sinking and then accept high rates of mortality during the Atlantic crossing. If any slaves delivered alive were pure profit, then even the loss of several hundred would have made economic sense. But if the slaves were not a costless or cheap item to purchase, then the corresponding argument about “tight packing” also makes little sense. In fact, high losses on the crossing resulted in financial loss on the trip, as many ship accounts aptly prove.

Even more convincing than these theoretical arguments against reckless destruction of life is the fact that no study has yet shown a systematic correlation of any significance between the numbers of slaves carried and mortality at sea. Thousands of ship crossings have now been statistically analyzed, and none show a correlation of any significance between either tonnage or space available and mortality.

This does not mean that slaves were traveling in luxury. In fact, they had less room than did contemporary troops or healthy being transported. It simply means that after much experience and the exigencies of
the trade, slavers only took on as many slaves as they could expect to cross the Atlantic safely. From scattered references in the pre-1700 period it seems that provisioning and carrying arrangements were initially deficient. But all post-1700 trade studies show that slavers carried water and provisions for double their expected voyage times and that in most trades they usually carried slightly fewer slaves than their legally permitted limits.

This increasing sophistication in the carrying of slaves was reflected in declining rates of mortality. In the pre-1700 trade, mean mortality rates over many voyages tended to hover around 20 percent. In turn this mean rate reflected quite wide variations, with many ships coming in with very low rates and an equally large number experiencing rates of double, or more than double the mean figure. But in the post-1700 period the mean rates dropped, and the variation around the mean declined. By mid-century the mean stood at about 10 percent, and by the last quarter of the century all trades were averaging a rate of about 5 percent. Moreover the dispersion around these mean rates had declined, and two-thirds of the ships were experiencing no more than 5 percent variation above or below the mean rate.

These declines in mortality were due to the standardization increasingly adopted in the trade. First of all there developed a specialized and specifically constructed vessel used in the slave trade of most nations. By the second half of the eighteenth century slave ships were averaging two hundred tons among all European traders, a tonnage that seemed best to fit the successful carrying potential of the trade. Slave traders were also the first of the commercial traders to adopt copper sheathing for their ships, which was a costly new method to prolong the life of the vessels and guarantee greater speed. It should be stressed that these slave trade vessels were much smaller ships than Europeans used in either the West Indian or East Indian trades. This in turn goes a long way to explaining why the famous model of a triangular trade, long the staple of western textbooks, is largely a myth. This myth was based on the idea that the slave ships performed the multiple tasks of taking European goods to Africa, transporting slaves to America, and then bringing back the sugar or other slave-produced American staple for Europe all on the same voyage. In fact, the majority of American crops reached European markets in much larger and specially constructed West Indian vessels designed primarily for this shuttle trade; the majority of slavers returned to Europe with small cargoes or none at all; and in the largest
slave trade of them all—that of Brazil—no slavers either departed from or returned to Europe.

All traders carried about two and a half slaves per ton, and although there was some variation in crew size and ratios, all slave trade ships carried at least twice the number of seamen needed to man the vessel, and thus double or more than that of any other long-distance oceanic trade. This very high ratio of sailors to tonnage was due to the security needs of controlling the slave prisoners. All the European slave traders were also using the same provisioning, health, and transportation procedures. They built temporary decks to house the slaves and divided them by age and sex. Almost all Europeans adopted smallpox vaccinations at about the same time, all carried large quantities of African provisions to feed the slaves, and all used the same methods for daily hygiene, care of the sick, and so on. This standardization explains the common experience of mortality decline, and it also goes a long way to rejecting contemporaneous assertions that any particular European trader was “better” or more efficient than any other.

Although these firmly grounded statistics on mortality certainly destroy many of the older beliefs about “astronomic” mortality and tight packing, there does remain the question of whether a 5 percent mortality rate for a thirty- to fifty-day voyage for a healthy young adult is high or low. If such a mortality rate had occurred among young adult peasants in eighteenth-century France, it would be considered an epidemic rate. Thus, although Europeans succeeded in reducing the rate to seemingly low percentages, these rates still represented extraordinary high death rate figures for such a specially selected population. Equally, although troop, immigrant, and convict mortality rates in the eighteenth century approached the slave death numbers, in the nineteenth century they consistently fell to below 1 percent for transatlantic voyages. For slaves, however, these rates never fell below 5 percent for any large group of vessels surveyed. There thus seems to have been a minimum death rate caused by the close quarters during transport, which the Europeans could never reduce.

Death in the crossing was due to a variety of causes. The biggest killers were gastrointestinal disorders, which were often related to the quality of food and water available on the trip, and fevers. Bouts of dysentery were common and the “bloody flux” as it was called could break out in epidemic proportions. The increasing exposure of the slaves to dysentery increased both the rates of contamination of supplies and the
incidence of death. It was dysentery that accounted for the majority of deaths and was the most common disease experienced on all voyages. The astronomic rates of mortality reached on occasional voyages were due to outbreaks of smallpox, measles, or other highly communicable diseases that were not related to time at sea or the conditions of food and water supply, hygiene, and sanitation practices. It was this randomness of epidemic diseases that prevented even experienced and efficient captains from eliminating very high mortality rates on any given voyage.

Although time at sea was not usually correlated with mortality, there were some routes in which time was a factor. Simply because they were a third longer than any other routes, the East African slave trades that developed in the late eighteenth and nineteenth centuries were noted for overall higher mortality than the West African routes, even though mortality per day at sea was the same or lower than on the shorter routes. Also, just the transporting together of slaves from different epidemiological zones in Africa guaranteed the transmission of a host of local endemic diseases to all those who were aboard. In turn, this guaranteed the spread of all major African diseases to America.

Along with the impact of African diseases on the American populations, the biases in the age and sex of the migrating Africans also had a direct impact on the growth and decline of the American slave populations. The low ratio of women in each arriving ship, the fact that most of these slave women were mature adults who had already spent several of their fecund years in Africa, and the fact that few children were carried to America were of fundamental importance in the subsequent history of population growth. It meant that the African slaves who arrived in America could not reproduce themselves. The African women who did come to America had lost some potential reproductive years and were even less able to reproduce the total numbers of males and females in the original immigrant cohort, let alone create a generation greater than the total number who arrived from Africa. Even those American regions that experienced a heavy and constant stream of African slaves still had to rely on importation of more slaves to maintain their slave populations, let alone increase their size. Once that African migration stopped, however, it was possible for the slave populations to begin to increase through natural growth, so long as there was no heavy out-migration through emancipation.

It was this consistent negative growth of the first generation of African slaves which explains the growing intensity of the slave trade to
America in the eighteenth and early nineteenth centuries. As the demand for American products grew in European markets because of the increasingly popular consumption of tobacco, cotton, coffee, and above all sugar, the need for workers increased and this could be met only by bringing in more Africans. It was only in the case of the United States that the growth of plantation crop exports to Europe did not lead to an increasing importation of African slaves. This was largely due to the very early North American experience of the local slave population achieving a positive growth rate and thus supplying its increasing labor needs from the positive growth of its native-born slave population. Although most demographic historians have shown that the Creole slave populations had positive growth rates from the beginning and that it was the distortions of the African-born cohorts that explain overall decline, more traditional historians have tried to explain the increasing demand for slaves as due to the low life expectancy of the Afro-American slave population. Much cited is the contemporary belief found in the planter literature of most colonies that the Afro-American slave experienced an average working life of “seven years.” This myth of a short-lived labor force was related to the observed reality of slave population decline under the impact of heavy immigration of African slaves. Observers did not recognize the age and sexual imbalance of these Africans as a causal factor for the negative population growth of the slave labor force. Rather, they saw this decline as related to a very high mortality and low life expectancy. Yet all recent studies suggest both a positive rate of population growth among native-born slaves and a life expectancy well beyond the so-called average seven working years in all American societies.

The average life expectancy of slave males was in the upper twenties in Brazil, for example, and in the mid-thirties for the United States, which might suggest an average working life of at least twenty years in Brazil and twenty-five years in the United States. But this average figure, of course, takes into account the very high infant mortality rates. For those slaves who survived the first five years of life—and these are the only ones we are concerned with here—the comparable life expectancies was [sic] in the mid-thirties for the Brazilians and lower forties for the U.S. slaves. This suggests that the average working life was, at a minimum, twenty-five years for Brazilian slaves and thirty years for the U.S. ones—both figures far from the supposed seven-year average postulated in most histories.
The Achievements of the “Numbers Game”

Massive new research set off by Curtin’s recalculations culminated in the publication on CD-ROM of a vast database of nearly 30,000 slaving voyages. In the next reading, two of the database’s international team of researchers, David Eltis of Queens University (Canada) and David Richardson of the University of Hull (U.K.), reassess scholarly understanding of the Middle Passage. Their evidence confirms the general accuracy of Curtin’s census, refines many of his calculations, and reduces his margins of error. In particular they show that deaths on Middle Passage voyages were much lower than Buxton and other abolitionists had estimated.

Despite a major research effort in the last few decades, less is known about the movement of African peoples to the New World than the much smaller movement of their European counterparts before the mid-nineteenth century. Given that the record keepers were Europeans who regarded Africans as outsiders, it is likely that we shall never have as much information on the personal lives of individual Africans making the Atlantic crossing as we do of Europeans. But on the identities of large groups entering the African stream as well as the size and demographic characteristics of these groups, the picture is much less discouraging. Indeed, in a few years it may well be the case that in these areas, and in the early modern period at least, we will actually know more about these aspects of African than of European transatlantic migration. As knowledge of the patterns of the trade is basic to evaluations of the cultural implications of long-distance movements of people, this is an exciting prospect. One of the developments that has made it possible is, of course, the computer revolution and the related, but ultimately more

important, explosion in archival research that has occurred since the late 1960s.

Historians are sometimes prone to exaggerate the significance of published works, but the largest single influence over the exploitation of the archives was arguably the publication in 1969 of Philip Curtin’s Census of the Atlantic slave trade. It was a landmark in the historiography not just of the slave trade but in the larger fields of slavery and migration. Drawing almost exclusively on previously published work, Curtin provided the first detailed assessment of the overall volume of the transatlantic traffic in enslaved Africans between 1500 and 1867. His estimates of the trade—up to 11.8 million slaves embarked at the coast of Africa and 9.4 million arrivals in the Americas—was substantially lower than most of the figures previously assumed by historians, some of which were several times greater than those calculated by Curtin. Curtin’s book provided, however, more than a reassessment of the overall dimensions of the Atlantic slave trade, valuable though that was. In the course of producing his census, he also generated data on temporal changes in the scale of the trade in slaves; on mortality levels of slaves in the Atlantic crossing or middle passage; on the numbers of slaves carried by different national carriers; and on shifts in the geographical distribution of slave departures from Africa and of slave arrivals in the Americas. In each of these areas, Curtin’s findings represented a major advance on existing knowledge of the transatlantic slave trade.

The radical nature of Curtin’s revision of the most frequently cited of the earlier estimates of the magnitude of the Atlantic slave trade provoked a lively and, at times, heated debate. Most discussion centred on the last two centuries of the trade, for which records are most abundant and when the movement of African slaves across the Atlantic was unquestionably at its height. Disagreements continue over estimates of the scale of slave shipments by some countries. Consequently, the “numbers game” relating to the volume of the Atlantic slave trade is likely to remain a significant historical industry for some time to come. The latest estimates tend, nevertheless, to corroborate Curtin’s overall assessment of the trade, at least for the period from 1650 to 1870, though they also suggest that he probably overestimated slave shipments before 1700 and underestimated them in the nineteenth century. On the basis of the most recent surveys, it appears that some 10.1 million people left Africa for America in 1660–1867, most of them carried in British, Portuguese, and French ships. This is close to Curtin’s assessment which suggested that
between 1650 and 1870 some 10.5 million entered the transatlantic traffic, with some 8.9 million surviving the Atlantic crossing. Assuming that, at most, one million slaves were shipped from Africa before 1650, then the most recent evidence suggests that perhaps 11 million Africans were forced to leave their homeland for America between 1500 and 1870.

Further refinements of estimates of the magnitude of the Atlantic slave trade will doubtless occur. But an important by-product of these efforts to quantify the trade has been the discovery of new records in Europe and America relating to the shipping and sale of African slaves. Such records have generally been regarded as the most reliable sources for gauging the dimensions of the trade in slaves. The discovery and analysis of such records has, therefore, been a major feature of debates since 1969 over the volume of the slave trade.

It is sometimes suggested that recent quantitative approaches tend to sanitize the slave trade and need to be balanced by placing a greater emphasis on the personal experiences of the slaves themselves. There are, of course, autobiographies of African slaves, such as that of Olaudah Equiano (or Gustavus Vassa). Moreover, some historians have sought to draw individual and collective portraits of the lives of slaves, whether during the course of their enslavement or on American plantations. We welcome such research. But we also believe that it is difficult to assess the significance or representativeness of personal narratives or collective biographies, however detailed, without an understanding of the overall movement of slaves of which these individuals’ lives were a part. The reconstruction of slaving voyages and, even more importantly, the creation of a single, consolidated data base of voyages offers the best means available for charting the routes to slavery of Africans forced into exile from their homelands. In other words, voyage histories, when combined, represent a powerful tool for understanding the African diaspora and the contribution of Africans to the creation and development of the transatlantic world between 1500 and 1850.

Since 1992 several scholars have collaborated in seeking to build an integrated and consolidated data set of transatlantic slaving voyages. Hosted by the W.E.B. Du Bois Institute of Harvard University, the project has brought together a number of published and unpublished data sets and, through consultation of previously unused records, has also enhanced existing sets and created additional ones. With the exception of some 571 voyages which were undertaken between 1595 and 1640, almost all the voyages included in the Du Bois Institute set
were undertaken between the mid-seventeenth century and 1870. As yet, therefore, this data set contains little information about the Atlantic slave trade during its first century, but it does cover the years when the transatlantic traffic in slaves was at its peak. Overall, the set currently includes records of over 26,000 slaving voyages or probably more than two-thirds of those undertaken after 1650. This represents the largest data set for any area of transatlantic migration or trade currently available or, indeed, of any pre-nineteenth century migration anywhere. It is not overstating its significance, therefore, to suggest that, when more widely accessible, it will be relevant to the work of all scholars interested in the African diaspora and the African-American heritage. It will, moreover, help to illuminate the human experience of the victims of this tragic chapter in modern history.

From the Du Bois Institute data, it appears that between 1662 and 1867 over four out of five slaves left Africa from just four regions—the Gold Coast, the Bights of Benin and Biafra, and West-Central Africa. The data also permit even more disaggregated analysis of departures by providing details of shipments by ports. This shows that, just as slave ship departures from Europe and the Americas were concentrated at relatively few ports, so large proportions of the slaves exported were shipped at a small number of outlets in Africa. Prominent among these were Cape Coast Castle and Anomabu on the Gold Coast; Whydah in the Bight of Benin; Bonny and Calabar in the Bight of Biafra; and Cabinda, Benguela, and Luanda in West-Central Africa. The history of those ports in this period was clearly dominated by slave trafficking. On the American side, arrivals of slaves were more dispersed geographically; nevertheless, some 40 per cent of slaves landed in Brazil, over 20 per cent in the British Caribbean, about 17 per cent in the French West Indies, and over 10 per cent in the Spanish islands. Overall, this preliminary analysis suggested that over 90 per cent of the slaves arriving in the Americas between 1662 and 1867 disembarked at places in the Caribbean islands and Brazil. Even though the United States had a substantial slave population by 1810, arrivals in mainland North America constituted probably no more than 7 per cent of the total. The main findings of this paper related, however, not to Africa and America separately, but rather to the intensity of the links between particular regions in the two continents.

Some attempt to trace connections between regions of departure and arrival of slaves was made by Curtin, but the Du Bois Institute data
allow one to trace in detail the principal routes to New World slavery followed by Africans. . . . For instance, with the exception of Bahia, which largely drew on slaves from the Bight of Benin, slaves from West-Central Africa dominated arrivals in South America. In the West Indies, St Domingue also depended heavily on slaves from south of the equator, but elsewhere in the Caribbean slaves from West Africa dominated arrivals. Moreover, within the Caribbean, the proportions of slaves entering particular colonies or groups of colonies from individual sub-regions of West Africa were uneven. Thus, the Gold Coast seems to have supplied a disproportionate share of slaves arriving at Barbados, Surinam, and the Guyanas, while the Bight of Benin played a similar role in the case of the French islands outside St Domingue. In the other major Caribbean islands—Jamaica and the British Leeward Islands—the Bight of Biafra was easily the largest source of supply of slaves. Significantly, it appears that slaves from Senegambia and Sierra Leone represented a relatively small share of arrivals at the major American destinations. As the middle passage from these regions to the West Indies was shorter than that from the four regions to the south, this is striking and, together with the Bight of Benin’s dominance of slave arrivals at Bahia, should caution one against assuming that geography and transport costs were of overwhelming importance in shaping the patterns of transatlantic slave routes. . . .

The Du Bois Institute data set not only allows us to begin to identify the principal transatlantic slave routes, but also offers closer investigation of the experiences of slaves in the Atlantic crossing or so-called “middle passage.” This aspect of the slave trade has, quite rightly, consistently attracted attention since the late eighteenth century when the British Parliament first debated the appalling conditions endured by enslaved Africans in the Atlantic crossing. For many, the term middle passage has become synonymous with the cruelty and inhumanity of the traffic. Modern quantitative study of the middle passage was initiated by Curtin who relied heavily on data for eighteenth-century Nantes ships and figures generated by the British Foreign Office for 1817–43 in order to explore trends in shipboard mortality of slaves. Since Curtin’s initial work, large amounts of new data have been unearthed, with the result that the Du Bois Institute data set now contains vastly more evidence on slave mortality than was available to Curtin. . . .

. . . [I]t appears that over the three and a half centuries of the transatlantic slave trade, perhaps 15 per cent (or over 1.5 million) of those
who embarked at the African coast died during the Atlantic crossing. At
the peak of the trade in 1760–1810 losses of slaves on the Atlantic voy-
age perhaps averaged 6,000–8,000 a year. Clearly, for a large number of
those bound for sale in the Americas—the great majority, it should be
noted, aged under twenty-five—the route to slavery ended either before
leaving the African coast or in mid-ocean.

... Mortality rates on slave ships were highly unpredictable between
one voyage and the next and added to the uncertainties surrounded to
the trade. ... However, ... slave mortality rates tended to decline in
the long run, ... mortality varied by region of trade in Africa—ships
from the Bight of Biafra having the worst record—and ... in the late
eighteenth century, the British appear to have been the most efficient in
keeping slaves alive. The last finding may partly be ascribed to Parlia-
mentary measures after 1788 to regulate slave-carrying and improve con-
ditions on board ship. But the general trend in mortality seems to have
reflected, in part at least, a more widespread capacity among carriers to
shift the overall distribution of mortality rates by reducing the incidence
of shipboard epidemics through technical and other changes.