

Recent Trends in the Study of the Atlantic Slave Trade*

Herbert S. Klein
Columbia University

The Atlantic slave trade, despite its central importance in the economic and social history of Western imperialism, its fundamental role in the history of America and its profound impact on African society, remained one of the least studied areas in modern western historiography until the past quarter century. This late start was not due to any lack of sources, for the materials available for its study were abundant from the very beginning. Rather it was ignored because of its close association with European imperialism and a resulting lack of interest in a morally difficult problem and because of a lack of methodological tools by which to analyze the complex quantitative data.

In fact, the formal analysis of the Atlantic slave trade began in the 1780s at the very height of its momentum, when some 79,000 slaves were arriving in the ports of America each year. In an attempt to build a case against the forced migration of African slaves, English abolitionists tried to determine the basic dimensions of the trade, the patterns of mortality of slaves and crew and the relative economic impact of the trade on the African and American economies. Though the aim was to provide useful propaganda for their campaign, the abolitionists nevertheless did engage in some serious research. Equally, when the English Parliament began to impose the first formal constraints on the traders in the 1780s and 1790s, it initiated the systematic collection of statistical materials on the trade by British

* Paper presented for *Historia y Sociedad*, June 28, 1987. Not to be cited without author's permission.

government agencies, a service which the government would continue until the middle of the 19th century.¹

Along with these published sources, almost all European slaving nations kept detailed statistical records on 'he trade for tax purposes.² A good many private company records found their way into the national archives of Europe and America in the 19th century.³ Finally, in the late 18th and early 19th century commercial newspapers kept detailed records of African slaving ship arrivals and departures.⁴ From all these published and documentary sources, something like a third or more of the slaving voyages ever undertaken have left a written record.⁵

Yet after the 1810s, there remained little interest in analyzing the trade. The abolitionists had convinced their own governments to terminate the trade, and then proceeded to use force and coercion to

¹ Much of this quantitative material remained unpublished until quite recently. The major printed collection until the 1960s was the listing that the Foreign Office published for the trade from 1817 to 1843 and found in *Parliamentary Papers, 1845*, xlix (73), pp. 593-633. This dataset was originally used by Curtin in his 1969 work cited below, and was then updated by Klein on the basis of Rio de Janeiro newspapers and their port arrivals listing for the period to 1830, see Herbert S. Klein, *The Middle Passage. Comparative Studies in the Atlantic Slave Trade* (Princeton, 1978), chap. 4. This list has been further refined and completed with more information coming from the Public Record Office. See David Eltis, *Economic Growth and the Ending of the Transatlantic Slave Trade* (New York, 1987).

² Recent publications of new archival materials have included the monumental study of the French slave trade by Jean Mettas, *Répertoire des expéditions négrières françaises au xviii^e siècle* (2 vols., Paris, 1978-1984); and a more complete listing for Virginia by Walter Minchinton, et. al., *Virginia Slave Trade Statistics, 1698-1775* (Richmond, Va., 1984).

³ For the Dutch West Indies Company, see e.g. Johannes Postma, "The Dimensions of the Dutch Slave Trade from West Africa," *Journal of African History*, XIII, No. 2 (1972); for the Brazilian Monopoly Companies organized in the time of Pombal, see António Carreira, *As Companhias Pombalinas de navegação, comércio e tráfico de escravos...* (Porto, 1969). On the French and British Chartered Trading Companies, see Abdoulaye Ly, *La Compagnie du Sénégal* (Paris, 1958); and K.G. Davies, *The Royal African Company* (London, 1951).

⁴ An example of this is the collection of ship notices found in the newspapers of the port of Rio de Janeiro, see Herbert S. Klein and Stanley L. Engerman, "Shipping Patterns and Mortality in the African Slave Trade to Rio de Janeiro, 1825-1830," *Cahiers d'études africaines*, XV, No. 59 (1975).

⁵ Of all the trade routes, those which went to Spanish America are the least well documented. Some statistical materials can be found in the following works: Elena F.S. Studer, *La trata de negros en el Río de la Plata durante el siglo xviii* (Buenos Aires, 1958); Jorge Palacios Preciado, *La trata de negros por Cartagena de Indias* (Tunja, Colombia, 1973); Colin Palmer, *Human Cargoes, the British Slave Trade to Spanish America, 1700-1739* (Urbana, Ill., 1982); Bibiano Torres Ramírez, *La compañía gaditana de negros* (Sevilla, 1983) all of which concentrate on the 18th century. For earlier periods see Enriqueta Vila Vilar, *Hispano-América y el comercio de esclavos. Los asientos portugueses* (Sevilla, 1977) and María Vega Franco, *El tráfico de esclavos con América... 1663-1674* (Sevilla, 1984).

abolish the trade of other nations. At the same time, the termination of the Atlantic slave trade in the middle decades of the 19th century coincided with the European conquest and colonization of Africa, as well as the domination growing of imperialist and racist ideology in metropolitan thought. In this context there was little interest in discussing the slave trade, which was deemed by most writers to have been a necessary evil at worst, if not a positive benefit to the world through its supposedly "civilizing" efforts. It was not until the crisis of World War I that European intellectuals began to question the basic assumptions behind imperialism. In this debate, the Atlantic slave trade became one of the "crimes" of Western imperialism and could only be denigrated. It was from this perspective of paternalism that writers began to restudy European contact with the rest of the world. The result was a narrative filled with stories of violence and exploitation, based on a minimum of research and an ignorance of the archival sources. This literature created a series of myths about the costs of the trade, the pattern of shipping slaves across the Atlantic, the mortality they suffered and the ultimate gains and benefits to the Europeans. "Tight packing", "astronomic" mortality rates of 50% or more, "cheap slaves" bought for supposedly worthless beads and costless rum, and the so-called Triangle trade all were added to the crimes list, and it was even suggested that the profits of the trade provided the capital to finance the Industrial Revolution.⁶

But despite the dominance of this uncritical literature, which still survives in many of the history texts for secondary and university level courses, critical studies began to appear as early as the second decade of the 20th century. The first modern scholarly studies began with the work of a small group of dedicated French and North American scholars. Gaston-Martin and Père Rinchon in France and Elizabeth Donnan in the United States were the first to begin the systematic study of the trade, gathering together much of the archival material available on the trade in French and English archives. These scholars published a series of pathbreaking studies in the 1920s and 1930s.⁷ These collections, plus the impressive initial survey of

⁶ See e.g., D.P. Mannix and M. Cowley, *Black Cargoes: A History of the Atlantic Slave Trade, 1518-1865* (New York, 1962); and James Pope-Hennessy, *Sins of the Fathers: A Study of the Atlantic Slave Traders, 1441-1807* (London, 1967).

⁷ Dieudonné Rinchon, *La traite et l'esclavage des Congolais par les européens* (Brussels, 1929); Elizabeth Donnan, *Documents Illustrative of the History of the Slave Trade to America* (4 vols.; Washington, D.C., 1930); Gaston-Martin, *Négriers et bois d'ébène* (Grenoble, 1934).

Gaston-Martin, laid the foundations for the modern study of the slave trade in the post World War II period.⁸

But it was the growth of the new field of African History as well as the awakening of interest in Afro-American History in the 1950s and 1960s which finally opened up a major research effort in this area. Though many scholars were beginning to work on various aspects of the trade from the African, European and American perspective, it was the work of Philip Curtin which caused a major reorganization and rethinking of the entire experience. In 1969 he published his *The Atlantic Slave Trade: A Census*,⁹ which was an attempt to estimate the volume of the trade from the extant primary and secondary literature available. An original contribution to historical methodology as well as to the field of slave trade studies, Curtin's work attempted to estimate the total volume of the African slave trade to Europe, the Atlantic islands and America from the 1440s until the 1860s. This involved a careful scrutiny of all the published estimates—most of which were found to be wildly exaggerated—and a reconstruction with reasoned argument of all the known and estimated volume of migrants from all the regions of Africa. Though concentrating on the theme of the numbers of Africans shipped, Curtin was required to survey all of the issues which would eventually become basic themes in this important area of research. The demographic evolution of the American slave populations was a fundamental concern of Curtin, as was the mortality suffered in the Atlantic crossing, since these were the primary factors which permitted estimates of the numbers of Africans transported when no known figures were available. He also touched upon the problems of African population growth and European economic interests in the trade.

But it was his estimate of 8-11 million African transported which caused the most immediate response among scholars and generated a furious search for new numbers and new sources to refute the numbers arrived at in his work. It was this international search of the European, American and African archives for all the extant data on slave ship crossings that led to a new age of research and analysis of the Atlantic slave trade. Once this new body of materials was made available, many older debates could be directly addressed and new and more sophisticated questions raised about the economic, social and even political history of this first major oceanic human migration. This wave of scholarship resulted in a surprisingly large interna-

⁸ Gaston-Martin, *Nantes au xviiiè siècle. L'ère des négriers (1714-1774)* (Paris, 1931).

⁹ Published by the University of Wisconsin Press in Madison.

tional output of publications which have made this field one of the most active and productive in modern historical scholarship.¹⁰

The questions which have been addressed by this new scholarship can be grouped around a series of inter-related themes, and it is these issues and the debates which they generated that I would like to analyze in this essay. These questions concern the basic economics of the trade, its demographic impact and finally the causes and consequences of its abolition.

Questions about the economics of the trade begin with the most fundamental one, which is who benefitted from the slave trade. Initially it was assumed in the traditional literature that the trade was a European monopoly from which the African received little compensation. Profits were astronomic, the argument ran, since slaves could be bought with cast-off, second-hand or shoddy European products, often at a fraction of their real value.¹¹

But from the earliest studies of Rinchon and Gaston-Martin, through the recent detailed analyses of provisioning costs,¹² it is evident that slaves purchased in Africa were not a low cost item. The value of the goods exported to Africa to pay for the slaves were costly manufactured products and were the single most expensive factor in the outfitting of the voyage, being more valuable than the ship, the wages for the crew and food supplies combined. Two thirds of the outfitting costs of the French slavers in the 18th century, for example,

¹⁰ Some of the conferences and volumes of collected essays on this subject include: Stanley L. Engerman and Eugene Genovese, eds., *Race and Slavery in the Western Hemisphere: Quantitative Studies* (Princeton, 1975); Henry A. Gemery and Jan S. Hogendorn, *The Uncommon Market: Essays on the Economic History of the Transatlantic Slave Trade* (New York, 1979); the special issue dedicated to the trade of the *Revue française d'histoire de Outre-Mer*, LXII, Nos. 226-227 (1975); Roger Anstey and P.E.H. Hair, eds., *Liverpool, the African Slave Trade and Abolition* (Liverpool, 1976); David Eltis and James Walvin, eds., *The Abolition of the Atlantic Slave Trade* (Madison, Wisc., 1981); with two new volumes shortly to appear: Barbara L. Solow and Stanley Engerman, eds., *British Capitalism and Caribbean Slavery* (Cambridge, 1987); and the papers of Nantes International Conference on the Slave Trade of 1985 to be edited by Serge Daget.

¹¹ So astronomic were these profits supposed to be, according to Williams, that they formed a crucial source for financing the rise of English industry. In this original and still significant thesis, Williams proposed a causal connection between the slave trade, American slavery and the industrialization of England. Eric Williams, *Capitalism and Slavery* (Chapel Hill, 1944).

¹² Dieudonné Rinchon, *Les armements négriers au xviii^e siècle* (Brussels, 1956); Jean Meyer, *L'armement nantais dans le deuxième moitié du xviii^e siècle* (Paris, 1969); Roger Anstey, *The Atlantic Slave Trade and British Abolition, 1760-1810* (London, 1975); Robert Louis Stein, *The French Slave Trade in the Eighteenth Century: An Old Regime Business* (Madison, 1979); Jay Coughtry, *The Notorious Triangle: Rhode Island and the African Slave Trade, 1700-1807* (Philadelphia, 1981); and finally Carreira, *As companhias pombalinas*.

were made up of the goods used to purchase the slaves.¹³ Secondly, African demands dictated European exports to the sub-Saharan region, and top on that list were fine woven East Indian textiles. So important and expensive were the Asian textiles in this trade, that the Europeans—especially the English—tried desperately to substitute cheaper European imitations, all to little avail. It was in fact their role as Asian trade ports, which explain why Liverpool and Nantes emerged as the premier slave trading ports of England and France respectively in the 18th century.

Next in economic importance after textiles were bar iron, agricultural tools, household implements, weapons, gunpowder, brandy, rum and other liquors, tobacco and a host of other relatively costly products.¹⁴ Even when Europeans used African products to purchase slaves, these in turn were purchased with European or Asian manufactured goods. All these goods were purchased by traders for hard currencies, which explains why crew wages, food supplies and even the ship itself made up such a minor cost of the outfitting and provisioning of such a slaving voyage.

Along with the myths about the cheap cost of slaves, the traditional literature stressed the dependent position of the African merchants in the trade. It was thought that prices demanded for slaves were low and invariant, that the trading was all dominated by the Europeans and that the Africans were passive observers to the whole process. But in fact, all studies show that the mix of goods which went to make up the price in each zone tended to vary over time and reflected changing conditions of demand and supply. Thus African merchants adjusted their demands for goods in response to market conditions.

Africans were also astute and persistent in preventing the Europeans from creating monopoly conditions. The European forts in West Africa and even the Portuguese coastal and interior towns in Southwest Africa were ineffective in excluding competing buyers from entering the local market. The forts exercised dominion for only a few miles

¹³ Meyer, *L'armement nantais*, pp. 161-163. Two independent sources (as presented in Klein, *Middle Passage*, p. 169) show that the outbound cargo for Africa on late 18th century ships amounted to 65% of total costs.

¹⁴ American based traders usually had less access to Asian textiles and European manufactures and had to rely on American products in demand in Africa—above all rum and tobacco—the two key goods transported by North American and Brazilian traders. See Jay Coughtry, *The Notorious Triangle*, pp. 80 ff.; Manoel dos Angos da Silva Rebelo, *Relações entre Angola e Brasil, 1808-1830* (Lisbon, 1970); and Pierre Verger, *Flux et reflux de la traite de nègres entre le golfe de Bénin et Bahia de Todos os Santos, du dix-septième au dix-neuvième siècle* (Paris, 1968).

inland and were more designed to fend off competitors than to threaten suppliers. As for the unique Portuguese settlements, these were unable to prevent the French and English from obtaining Congo and Angolan slaves on a massive scale. Yet these were supposedly domains totally monopolized by the Portuguese.

It should be stressed that trading was a complex affair, involving everything from fixed coastal fort or port locations to open boat traders who sailed the rivers and coastal waters. African traders up and down the coast also varied considerably, from mulatto middlemen, to state trading monopolies, to noble or royal trading arrangements. Some states were strong enough to heavily tax the trade, in other areas a free market existed. But everywhere it was the Africans who controlled the volume of slaves and determined the type of slaves who would be offered. And it was they who determined the prices.

If trading was profitable at the micro-level of the individual, or group, or class trading, there does of course remain the question of the societal costs of the trade. The slave raids against agriculturalists and subsequent abandonment of good crop lands, the stress on defense or militaristic activity and the draining of young adults from the labor force all had their long term economic costs. But for those engaging in the trade, and for the vast majority of Africans who consumed the imported Asian and European goods, the trade was a profitable activity, whatever its long term consequences for economic development.

It was assumed in the traditional literature 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's accounts aptly prove.¹⁵

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's crossings have now been statistically analyzed and none show a correlation of

¹⁵ Robert Stein estimated that "the death of each slave on a 300-slave expedition theoretically cut profits by .67 percent, and the average mortality rate of 10 to 15% reduced gains by 20 to 30 percent." Stein, *The French Slave Trade*, pp. 141-142.

any significance between either tonnage or space available and mortality.¹⁶

This does not mean that slaves were traveling in luxury. In fact they had less room than did contemporary troops or convicts 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 safely cross the Atlantic. 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%. 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 the mean figure. But in the post-1700 period both the mean rates dropped, and the variation around the mean declined. By mid century the mean stood at *ca.* 10% and by the last quarter of the century all trades were averaging a rate of 5%. Moreover the dispersion around these mean rates had declined and two thirds of the ships were experiencing the mean rate or below.

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 all nations. By the second half of the 18th century slave ships were averaging 200 tons among all European traders, a tonnage which 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 (European goods to Africa, slaves for America and sugar for Europe all on the same voyage) is largely a myth. The majority of American crops reached European markets in much larger and especially constructed West Indian vessels designed primarily

¹⁶ For the most recent survey of this question see Charles Garland and Herbert S. Klein, "The Allotment of Space for African Slavers Aboard Eighteenth Century British Slave Ships", *William & Mary Quarterly*, XLII, No. 2 (1985).

for this shuttle trade; the majority of slavers returned 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 one and a half slaves per ton, and while there was some variation in crew size and ratios, all slave trade ships had crews double or more needed to man the vessel, and thus double or more of 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—building temporary decks for their housing and dividing them by age and sex. Almost all Europeans adopted smallpox vaccination at about the same time, all carried large quantities of African food provisions to feed the slaves, and all used the same methods for daily hygiene, care of the sick, etc. 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.¹⁷

While these firmly grounded statistics on mortality certainly destroy many of the older themes on “astronomic” mortality and “tight-packing”, there does remain the question of whether a 5% mortality for a thirty to fifty day voyage for a healthy young adult is high or low. If such a mortality had occurred among young adult peasants in 18th century France it would be considered an epidemic rate. Thus while 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, while troop, immigrant and convict mortality rates in the 18th century approached the slave death numbers, in the 19th century they consistently fell to below 1% for trans-Atlantic voyages. For slaves, however, these rates never fell below 5% for any large group of vessels surveyed. There thus seems to have been, paradoxically, a minimum rate due to the tight conditions of transport, which the Europeans could never reduce.¹⁸

Death in the crossing was due to a variety of causes. The biggest killers were gastrointestinal disorders, which were often related to

¹⁷ For a detailed discussion of these questions and materials on mortality, see Klein, *Middle Passage*, chaps. 4, 7 & 8.

¹⁸ This may explain the recent findings from some 92 selected voyages in the 1790s showing a correlation between “crowding” and mortality due to gastrointestinal diseases. Richard H. Steckel and Richard A. Jensen, “New Evidence on the Causes of Slave and Crew Mortality in the Atlantic Slave Trade,” *Journal of Economic History*, XLVI, No. 1 (1986).

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 which 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 which prevented even experienced and efficient captains from eliminating very high mortality rates on any given voyage.

While 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 which developed in the late 18th and 19th 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 carrying together of slaves from all types of different epidemiological zones in Africa guaranteed the transmission of a host of local endemic diseases to all those who were carried aboard. In turn, this guaranteed the spread of all major African diseases to America.¹⁹

As studies from all trades have shown, there was a consistent bias against women and children. Women represented on average a third to a quarter of the Africans forced to migrate, and children represented on average about 10% or under. Though there were fluctuations both over time and space, in general it would appear that these figures were surprisingly consistent. To many researchers this suggested special American demand factors which could explain this lack of random selection. This was combined with a contemporary discussion quite extensive in the 18th and 19th century literature about the good or bad qualities of different African groups in terms of working habits. But just as the perception of European dominance has been challenged in terms of purchasing slaves and their cost, so too have

¹⁹ See e.g. Kenneth F. Kiple and Virginia I. King, *Another Dimension to the Black Diaspora: Diet, Disease and Racism* (Cambridge, 1981); Kenneth F. Kiple, *The Caribbean Slave: A Biological History* (Cambridge, 1984); and Frantz Tardo-Dino, *Le collier de Servitude: La condition sanitaire des esclaves aux antilles françaises du XVIIe au XIXe siècle* (Paris, 1985).

recent studies questioned American demand factors as the primary influence in determining the type of slaves transported.

Clearly the timing of the migration of these Africans and the places to which they were delivered were determined to a significant extent by American conditions. An American region, even with the credit universally supplied by all traders, could not enter the trade without a crop marketable in Europe. Equally, the actual movement of slaves across the Atlantic was seasonal in nature, owing both to prevailing currents and winds which influenced the crossing, and the seasonality of American demand considerations. Though the sailings from East Africa around the Cape of Good Hope were more dependent on local weather conditions, the West African routes seemed to respond to planters harvesting needs in America.

If seasonality in the movement of slaves was influenced by American demand factors, the nationality, sex and age of the slaves entering the trans-Atlantic trade were primarily determined by African conditions. All studies show that except for the Portuguese in Angola and Mozambique, Europeans had little idea of the nature of the societies they were dealing with. In most cases Africans were simply designated by the ports from which they were shipped rather than by any truly generic language, group or national identity. Most traders had no conception of what went on even a few miles inland from the coast and even those who established forts and fixed settlements essentially dealt with only local governments. While Europeans fought among themselves to protect a special section of the West African coastline, interlopers from both other European and other African groups went out of their way to guarantee that no monopolies were created. Attempts by any one African group to monopolize local trade, often led to the opening up by their competitors of new trading routes. Some American planters may have thought "congolese" hard working, and others thought them lazy, but it made little difference what they wanted. They got whatever group was then entering the market in Africa. A few American ports had close contact with a given region of Africa over a long period of time, the case of Salvador in Bahia with the Bight of Benin being the best known. On a few occasions, such as the collapse of a large state or after a major military defeat, whole nations of well defined and clearly delineated groups entered the slave trade and were known by their proper names in America. But these cases were the exception rather than the rule.

The sexual imbalance in the departing Africans was also more determined by African supply conditions than by American demand. Though there was a price differential between males and females in America, this was insufficient to explain the low ratio of females in

the slave trade.²⁰ Women performed almost all the same manual tasks as men on the plantations of America and in fact made up the majority of most field gangs in sugar, coffee and cotton.²¹ Nor did they experience any differences in mortality in the Atlantic crossing than men, which might have explained European reluctance to ship them. The answer appears to be that Africans simply presented far fewer women for sale in the coastal slave markets than they did men.

African women, both free and slave, were in high demand locally, and it was this counter demand which explains why fewer women entered the Atlantic slave trade. In some African societies women were highly valued because they were the means of acquiring status, kinship and family. One of the distinguishing features of Western African societies was their emphasis on matrilineal and matrilocal kinship systems. Since even female slaves could be significant links in the kinship networks, their importance in the social system was enhanced. Also slave women were cheaper to acquire than free local women in polygynous societies and were therefore highly prized in societies that practiced this marriage arrangement. Even more important was the widespread West African practice of primarily using women in agricultural labor. For all of these reasons women had a higher price in local internal African markets than did men.²²

Aside from the high incidence of males, the trade also exhibited a very low incidence of children. Although children suffered no higher mortality rates in crossing than any other groups of slaves, their low sale prices and their costs of transportation (equal to adults) discouraged slave captains from purchasing them. Also it seems that children were more prized than adult males in the internal slave trade and may not have appeared on the coast in great numbers because of local supply considerations.

All of these biases in the age and sex of the migrating Africans 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

²⁰ For a survey of American slave prices by sex, see Manuel Moreno Fraginals, Herbert S. Klein and Stanley L. Engerman, "Nivel y estructura del precio de los esclavos en las plantaciones de Cuba en la segunda mitad del siglo xix: un estudio comparado," *Revista de Historia Económica* (Madrid) I, No. 1 (1983).

²¹ For 19th century Jamaica see Barry W. Higman, *Slave Population and Economy in Jamaica, 1807-1834* (Cambridge, 1976), pp. 161, 194, 197; for 18th century Saint Domingue, see Gabriel Debien, *Les esclaves aux antilles françaises* (Basse-Terre and Fort-de-France, 1974), chapter viii.

²² Herbert S. Klein, "African Women in the Atlantic Slave Trade," in Claire Robinson and Martin A. Klein, eds., *Women and Slavery in Africa* (Madison, 1983); and David W. Galenson, *Traders, Planters and Slaves: Market Behavior in Early English America* (Cambridge, 1986), pp. 105 ff.

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 male and females in the original immigrant cohort, let alone create a generation greater than the total number who arrived from Africa. Those American regions which experienced a heavy and constant stream of African slaves would thus find it difficult to maintain their slave populations, let alone increase their size, without the resort to more migrants. Once the African migration stopped, however, it was possible for the slave populations to begin to rise 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 18th and 19th century. As the demand for American products grew on European markets because of the increasingly popular consumption of tobacco, cotton, coffee and above all sugar, the need for workers increased and this could only be met by bringing in more Africans. Though some 2.2 million slaves had been shipped before 1700, it was not until the early 18th century that slaves became Africa's largest "export". It was in the 18th and the first half of the 19th century that four-fifths of all slaves were transported to America.

But the relative growth of the American population due to the impact of the slave trade was not uniform across all colonies or republics. The United States stands out as a relatively unique experience, whose slave population grew at unusually high positive rates from the early 18th century onward. While the relative marginality of North American exports to European markets explain the relatively low volume of migration of African slaves, and the consequent earlier domination of native born slaves in the work force, the ultimate population explosion can only be explained by more complex demographic variables. The U.S. slave growth rate exceeded what would be achieved in the 19th century by other slave societies which finally found themselves with a dominant creole or native born slave population.

Initial claims by North American historians for better "treatment" of U.S. slaves have been rejected by demographic historians. It is evident that the period of potential fertility of slave women in all

America was approximately the same. Since the length of fertility (determined by the ages of menarche and menopause) is directly related to differing health conditions, food supplies and work experience, a lack of difference leads to a rejection of the better treatment argument. Recent scholars have argued that the primary difference is to be explained by shorter periods of lactation, with the U.S. slaves adopting the Northern European scheme of breast feeding children for only one year, and the slaves of the rest of the Americas maintaining traditional African practices of breast feeding for two years. The contraceptive aspects of on-demand breast feeding in turn explain the longer child spacing of the non-U.S. slaves. This spacing in turn explains the higher number of children born to fecund slave women in the United States.²³

The treatment argument does not simply disappear over the issues of growth, however, since it is evident that all life tables produced for slaves in 19th century America show that U.S. slaves lived longer than their counterparts in the rest of the Americas. The average life expectancy of slave males was in the upper 20s in Brazil, for example, and in the mid 30s for the U.S. Discounting for the high rates of infant mortality, the comparable life expectancies of those reaching five years of age, was in the mid 30s for the Brazilians and lower 40s for the U.S. slaves. At first glance this would appear to support the "better treatment" argument. But in fact, it would appear that the same difference could be found among free coloreds and whites in all American societies. That is, white Brazilians lived comparatively shorter lives than white North Americans. Thus it was the general differences in overall health conditions which explain the comparative differences in life expectancies, and not the special treatment afforded slaves.

In no case, however, were any American slaves in any slave society to experience the so-called "average 7 years" of life that the contemporary 18th and 19th century literature mentioned. 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 a low life expectancy. Yet all recent studies

²³ Herbert S. Klein and Stanley L. Engerman, "Fertility Differentials between Slaves in the United States and the British West Indies: A Note on Lactation Practices and their Implications," *William & Mary Quarterly*, XXXV, No. 2 (1978).

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.²⁴

This digression on comparative growth rates and life expectancies shows how extensive are the ramifications from the new research on the slave trade. Equally pervasive have been the new debates about the overall economic benefits of the slave trade to the Europeans themselves. These debates began with Eric Williams and have continued on into the most current journal articles. The discussion can be divided into three general questions; was the slave trade profitable at the firm level and were these profits excessive; what impact did the slave trade have on the economic growth of Europe; and finally, what impact did the slave trade and slave labor have on American economic growth?

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% rate obtained was considered a good profit rate at the time, but not out of the range of other contemporary investments. But if profits were not "astronomic", was the trade an open one, or a restricted one which created concentrated oligopolistic profits which could then possibly serve as a fundamental source for capital investments in the European economy? It has been suggested that high initial costs of entrance, plus the long time period needed to fully recover profits (up to five years on a typical slaving voyage) meant that only highly capitalized firms could enter the trade. Most merchants spread their costs around by offering stock in slaving voyages and otherwise trying to insure themselves from catastrophic loss on one or more lost voyages. But the costs of entrance, the experience of contacts and the international nature of the complex negotiations suggest that there were limits on the number of merchants who could enter the trade. While this specialization seems to have taken place (and there are cases of quite major houses operating in both England and France) it is also impressive just how many independent merchants participated in the trade and how many ships were outfitted for the trade in any given year.²⁵

²⁴ See Jack E. Eblen, "On the Natural Increase of Slave Populations. The Example of the Cuban Black Population, 1775-1900," in Engerman & Genovese, eds., *Race and Slavery*; and Barry W. Higman, *Slave Populations of the British Caribbean, 1807-1834* (Baltimore, 1984).

²⁵ Thus, for example, to move the 79,000 slaves per annum in the 1780s (the highest decadal figure of the trade), required the use in any year of some 263 ships.

This debate on the relative rates of merchant participation and control have generated a lively analytical literature.²⁶ In this debate, however, no current scholars have been able to show that the gains from the trade were directly invested in the earliest Industrial enterprises of Great Britain. All the studies of the sources of Industrial capital in England suggest local origins from agriculture and/or European commerce.²⁷ Nevertheless, the Williams thesis has come in for some support on the question of Africa as a market for European manufactures, especially of the more basic sort. It has been suggested that the French armaments industry was completely dependent on the African trade (which was paid for by slave exports) during times of European peace. Several other industries on the continent and in England can also be shown to have been highly dependent on the African market. Since much of early industrial activity involved production of cruder and popularly consumed products, it can be argued that the African market played a vital part in sustaining the growth of some of Europe's newest infant industries.²⁸ This commerce has yet to be fully studied, but it has led to a serious re-evaluation of the role of European exports to Africa in this crucial period of the early Industrial Revolution.

A sub-theme of this debate about the use of slave trade profits has only just been suggested in the literature. This concerns the role of profit for American merchant participants in the trade: the West Indians, the North Americans (above all the New Englanders) and especially the Brazilians. In terms of volume and capital generated, there is little question that few regions compare to those of Bahia, Rio de Janeiro and Rhode Island. The number of ships provisioned for the African trade in these areas suggests a major growth of local capital. Who these merchants were and what their relationship was to both the plantation economy and the new industrial mills is still to be analyzed.²⁹

²⁶ See Joseph E. Inikori, "Market Structure and the Profits of the British African Trade in the late 18th Century," *Journal of Economic History*, XLI (1981). A critique of this position is found in two articles by B.L. Anderson and David Richardson, "Market Structure and Profits of the British African Slave Trade in the Late 18th Century," *Journal of Economic History*, XLIII (1983) and *ibid.*, XLV (1985).

²⁷ See Stanley L. Engerman, "The Slave Trade and British Capital Formation in the Eighteenth Century: A Comment on the Williams thesis," *The Business History Review*, 46 (1972).

²⁸ Pierre Boule, "Slave Trade, Commercial Organization and Industrial Growth in Eighteenth Century Nantes," *Revue française d'histoire de Outre-Mer*, LIX, no. 214 (1972); and "Merchandises de traite et développement industriel dans la France et l'Angleterre du xviii^e siècle," *ibid.*, LXII, nos. 226-227 (1975).

²⁹ The best study to date is that of Coughtry, *The Notorious Triangle*. Nothing

More developed is the debate concerning the role of slave labor in the American economy and the fundamental question of the relative efficiency of African slave labor versus comparable free labor. This debate has centered on the work of Robert Fogel and Stanley Engerman,³⁰ and has resulted in a reconsideration of the Adam Smith model of the supposed inefficiency of slave labor. The organization of workers into supervised gangs; the extraordinarily high rates of economically active to dependent population (over 80% of the slaves were economically active on plantations compared to some 50-60% among contemporary peasants); the systematic use of coercion to force higher productivity; and the lack of sexual division of labor in the field, all more than compensate for the higher level of incentive provided by free wage labor. Thus it can be argued, that slave labor was not a negative drain on otherwise limited American capital resources, but in fact was the best investment to which that capital could have been put in the pre-industrial period of agricultural development.

The final major concern in recent studies of the slave trade, remains the traditional one about the causes and consequences of its abolition. It is well known that the campaign to abolish the Atlantic slave trade, which began in the last quarter of the 18th century, is considered to have been the first peaceful mass political movement based on modern political propaganda in English History, if not that of Europe itself. The traditional literature viewed this campaign as a moral crusade which was achieved at the economic cost of profits and trade.³¹ Once having abolished this trade to the English colonies in 1808, the British then attempted to force all the other major European slaving countries to desist in the trade. This campaign in turn was a costly one in terms of lost trade, alienation of traditional allies and the very high costs of naval blockade.³²

Though English statesmen and writers portrayed their campaign as a moral one from the beginning, there was already a large contemporary literature attacking their motives. Cubans, Spaniards and

comparable yet exists for Brazil, though there are some suggestive ideas given in Lul. Felipe de Alencastro, "Le commerce des vivants: Traite d'esclaves et 'Pax Lusitana' dans l'Atlantique sud," (Thèse de Doctorat, Paris X, 1986).

³⁰ Robert W. Fogel and Stanley L. Engerman, *Time on the Cross, The Economics of American Negro Slavery* (2 vols., Boston, 1974); also see Paul David et. al., *Reckoning with Slavery. A Critical Study in the Quantitative History of American Negro Slavery* (New York, 1976) for some of the criticisms on this issue.

³¹ The standard works include F.J. Klingberg, *The Anti-Slavery Movement in England* (New Haven, 1926); and R. Coupland, *The British Anti-Slavery Movement* (London, 1933).

³² L. Phillip LeVeen, *British Slave Trade Suppression Policies, 1821-1865* (New York, 1977) examines the economic costs of this effort. For detailed recent analyses of

Brazilians, the objects of most of the post-1808 attacks by the British abolitionists, argued that the 19th century campaign was motivated by fears of competition, especially after the abolition of slavery in 1834 when sugar became a free labor crop in the British West Indies. The Latins argued that it was to keep their more efficiently produced slave products off the European market by driving up their labor costs which motivated these anti-slave trade campaigns. This argument was taken up by later historians of the West Indian economy who argued that the post-abolition plantation system was inefficient and in serious economic trouble.³³ Eric Williams and others further argued that it was economic motivation that explained the well-springs of the British abolition campaign against the foreign slave traders, since the British West Indian plantations could not compete with the French, Spanish and Brazilian ones.

In contrast to this economic causal model, recent scholars have argued that the late 18th and early 19th century economy of the British West Indies was in fact a thriving one. Even after abolition of the trade, the older and newer islands were competitive on the European market and it was only slave emancipation itself which sent a shock wave through the local economy. Though the campaign for abolition is no longer seen as simply a great moral crusade by any major group of scholars, the economic determinism argument of Williams and his supporters is being challenged.³⁴

As is obvious by now, the questions of the trade quickly lead to more complex debates, many of which are still far from settled. Other areas of research which could develop from the new research have yet to be explored. Thus the lively debate of Afro-American cultural origins, much discussed from the American viewpoint, has yet to be fully integrated with the new findings from the study of the trade. From the detailed work of Debien and other French scholars, as well as the careful reconstructions of Curtin, Lovejoy and others, we now have a reasonably clear idea of which groups participated in the trade and which ones settled which regions of America. But as yet, nothing

the complex maneuverings of the Brazilian and Spanish governments to defend their trades see, David R. Murray, *Odious Commerce. Britain, Spain and the Abolition of the Cuban Slave Trade* (Cambridge, 1980); Arturo Morales Carrión, *Auge y decadencia de la trata negrera en Puerto Rico (1820-1860)* (Río Piedras, 1978); and Leslie Bethell, *The Abolition of the Brazilian Slave Trade* (Cambridge, 1970).

³³ L.J. Ragatz, *The Fall of the Planter Class in the British Caribbean, 1763-1833* (New York, 1928).

³⁴ See Anstey, *The Atlantic Slave Trade and British Abolition: the two works by Seymour Drescher, *Econocide: British Slavery in the Era of Abolition* (Pittsburgh, 1977); and *Capitalism and Anti-Slavery* (New York, 1986); and David B. Davis, *Slavery and Human Progress* (New York, 1984).*



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like the quality of the synthesis first suggested by Herskovits has yet been attempted.³⁵

It should also be stressed that many of the issues which I have presented are far from resolved in one way or the other. A lively industry has developed critiquing the numbers provided by Curtin.³⁶ Equally, much new research is emerging on the questions of health and the transmission of disease. The debate continues on the causes of mortality in the trade,³⁷ and finally there remains the long term debate concerning the impact of the slave trade on Africa.³⁸ Computer simulations of population loss, and models of regional settlements and abandoned villages, and re-estimates of total population figures and long term growth rates have created a whole new field of pre-colonial African demographic studies.³⁹

But whatever the current state of the debate or the level of closure of any particular argument, it is obvious that the nature of our understanding of the scale, importance and impact of the Atlantic slave trade have been profoundly changed by the recent massive research effort which has taken place in the past twenty-five years.⁴⁰

³⁵ Melville J. Herskovits, *The Myth of the Negro Past* (New York, 1941).

³⁶ Much of this new literature is summarized in Paul E. Lovejoy, "The Volume of the Atlantic Slave Trade: A Synthesis," *Journal of African History*, XXII, no. 4 (1982); and in David Eltis, "The Nineteenth Century Transatlantic Slave Trade: An Annual Time Series of Imports into the Americas broken down by Region," *Hispanic American Historical Review*, 67:1 (1987).

³⁷ Aside from the works cited above, a recent survey will be found in Raymond L. Cohn and Richard A. Jensen, "The Determinants of Slave Mortality Rates on the Middle Passage," *Explorations in Economic History*, 19 (1982).

³⁸ A useful set of papers on this topic by Inikori, Patrick Manning and John Thornton is found in Christopher Fyfe and David McMaster, eds., *African Historical Demography*, II (Edinburgh, 1981).

³⁹ See, e.g., the interesting work of Patrick Manning, "The Enslavement of Africans: A Demographic Model," *Canadian Journal of African Studies* 15 (1981); and "The Impact of Slave Exports on the Population of the Western Coast of Africa, 1700-1850," Paper presented at the International Colloquium on the Slave Trade, Nantes, July 1985.

⁴⁰ Though no definitive study has yet appeared covering all of these topics, recent surveys of the trade have finally begun to incorporate much of this new research. See Hubert Deschamps, *Histoire de la traite des noirs* (Paris, 1971); Pierre Pluchon, *La route des esclaves, négriers et bois d'ébène au xviiiè siècle* (Paris, 1981); James A. Rawley, *The Trans-Atlantic Slave Trade* (New York, 1981); and Françoise Renault et Serge Daget, *Les traites négrières en Afrique* (Paris, 1985).