

CHAPTER 14

Discussion

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The explanatory frameworks of this study are heavily influenced by our understanding of the historical expediencies of European economic exploitation and power, and the ways these imperatives came to be played out in the condition of Africans in the Atlantic World. Of course, imperatives of safety, profit, moral legitimacy and so forth were negotiated as Europeans wrestled with conditions they could not entirely control, including the needs and responses of Africans themselves. The “hows” and “whys” of the biological effects we have examined are largely explicable in terms of historical, political, and economic motivations, practices, and policies, as well as modes of resistance to them and other limiting factors, such as the natural environment. Why were babies dying? Slaveholders did not want them for economic reasons at this time and in this place. The evidence of growth delays in children suggests a lack of investment in them by those empowered to do so. Although African women also at times allowed their children to die rather than make them into slaves, at other times we see clear archaeological evidence (see *The Archaeology of the New York African Burial Ground*, Volume 2 of this series) of profound love of children, in this mortuary context. And in New York, there were few opportunities for family formation with men and women working and sleeping in isolated workshops and homes, respectively (see Medford, Brown, Carrington, et al. 2009b; Medford, Brown, Heywood, et al. 2009). The sex ratio, ages, and sources of new arrivals reflected English struggles to control Africans who rebelled and to capitalize on market availability and the price of captives. Sex ratio affects fertility, and the spread of diseases affects child mortality, particularly when females are disempowered as they were under American slavery. Each chapter has examples of biological effects of power and poverty. We will

not attempt to explain the more interesting details, which each author does best in his and her own words. This discussion is meant as a starting point for pulling together the shadowy evidence that human skeletons bear on 419 all-but-forgotten lives.

The Main Findings of Our Study

What are the findings of the skeletal biological research and what are the limitations and further implications of this work? As to the origin and affiliation of the persons buried in the New York African Burial Ground, the results of genetic analyses (see Chapter 5), coupled with historical and archaeological research, suggest that most individuals were derived from a variety of known states and empires mainly, but not exclusively, in West and West Central Africa.

Complementing the above, the preponderance of the ethnohistorical and chemical evidence indicates that most of the New York African Burial Ground individuals who died as adults were African-born, free people who were captured and who then underwent the Atlantic passage to subsequently die enslaved in New York. Conversely, those who died before their first 8 years of life were very likely to have been born in New York. Historical documentation suggests that some individuals, especially early in the eighteenth century, would have come from Africa to the Caribbean first and then to New York. Strontium isotope data (see Chapter 6) suggest that individuals among a small, tested sample may have grown up in the Caribbean.

Chapter 6 presented results from two chemical methods for assessing where individuals were born and grew up. In the case of strontium isotope analysis, individuals below the age of 8 years matched the

isotopic signature associated with Manhattan, whereas the majority of individuals over the age of 8 years did not. This was especially true for individuals with culturally modified teeth. Similarly for elemental signature analysis, young individuals clustered together, suggesting they were born in New York—adding support to our interpretation of the strontium isotope analyses. These conclusions, however, are based on the small sample of individuals whose chemistry was assayed. Notably, historical evidence points to 9 years as the youngest common age of forced migration from Africa to New York. The study of hypoplasia in the third molar (see Chapter 8) shows high stress that also seems associated with exposure to the slave trade and New York between 9 and 16 years of age. The convergence of these data seems important.

High lead levels in the teeth of individuals who were plausibly born in New York were an unexpected finding. Samples of enamel that were calcified during the first years of life were also taken using an innovative methodology and technology: laser ablation inductively coupled-plasma mass spectrometry. These results indicate that lead levels were probably high during breast-feeding and weaning. It is reasonable to speculate that lead absorption was an additional stressor that had a negative interaction with infant and childhood diets and illnesses. For example, a poor intake of calcium would have increased the absorption of lead, which then could have led to anorexia and decreased intake of food.

Enamel hypoplasia data in Chapter 8 suggest that infant and childhood health were worse for individuals who were born in New York and died in childhood than for individuals who were more likely to have been born in Africa but who died as adults. Enamel hypoplasia frequencies representing malnutrition and disease events in childhood were extraordinarily high for children born in New York when compared to samples from other archaeological sites. A similar trend was shown for infectious disease (Chapter 10). An analysis relying on age-differentiated samples showed that older persons who were most likely to have spent childhoods in central and West Africa had the fewest hypoplasias even when occlusal wear was controlled. An analysis comparing individuals with and without culturally modified teeth showed a similar trend, but the difference was not statistically significant. Planned is a far more rigorous test, comparing enamel defects among a large sample (approximately 200) of individuals whose places of birth can, as we predicted in 1993, be shown on the

basis of their chemical signatures, of the differences in childhood health in New York, Africa, and the Caribbean. The scientific results of this test would shed light on the human cost of enslavement. Our data do make clear, however, that those who died as children and were buried in the New York African Burial Ground can be frequently characterized by delayed growth and development due to a combination of nutritional, disease, and probable work-related stresses (see Chapter 12).

Infant mortality was high and estimated to be much higher than in the English population of New York City. Infants, especially newborns, and weaning-age children, had especially high levels of new infection, anemia, and other indicators of poor nutrition such as growth retardation and stunting. Low frequencies of pathology, especially active lesions, in children relative to adults may indicate that those who died as children tended to die of acute disease and/or nutritional stresses without bearing extended morbidity and recovery from disease. As is frequently the case among diverse human societies, older children were the healthiest persons in the population.

Late adolescents and young adults (15–25-year-olds) also experienced distinctively early and high mortality when compared either to their English contemporaries or to later African American populations. But might this not be partly an artifact of the immigrant nature of those populations? Among Africans, high mortality in those ages reflects the proportionately large number of adolescents and young adults who were forced to migrate to New York and then to die young, becoming numerically prominent among the buried. Generally, adolescents are expected to show low mortality that rivals that of older children. Females also had high rates of active infection during these ages, unlike males. Adolescent females, young women, infants, and young children were distinctively exposed to new active infection relative to healed lesions, although adolescent females and young women also had substantial evidence of healed lesions, unlike infants (see Chapter 10). Oral health related to constraints upon menu and hygiene was also generally poor (Chapter 9).

Throughout the eighteenth century, the size of the New York African population remained fairly constant despite continuous importation—nor had the African population increased by virtue of fertility, which was actually below replacement values (see Chapters 7 and 13). This lack of natural increase is consistent with severely exploited enslaved populations in the

Caribbean, a trend that is associated with an open transatlantic trade in human captives in which the large supply renders the enslaved disposable.

The New York population was probably not exposed to syphilis for very long, unlike Caribbean populations whose low fertility has been partly attributable to the introduction of the venereal disease and high sex ratios. Life expectancy was low, and few Africans lived to old age. Yet, the instability of the population with regard to migration makes the interpretation of life tables somewhat problematic. The percentage of New York African Burial Ground individuals living beyond 55 years is similar, however, to census data from municipal records (between 1 and 3 percent). This observation is consistent with the study of the Newton Plantation in Barbados, demonstrating comparability between skeletal and archival data on adult mortality, unlike the fragile skeletal remains of infants that underrepresent mortality by virtue of their rapid decay in the ground or selective interment. The English community, who would have presumed to own these Africans, exhibited opposite mortality trends, with many times more English males and females living to old age. Young English men, however, were well represented among the dead, most likely owing to ages of migration, interpersonal violence, trauma, and stressful conditions as seems the case for even younger African men, women, and adolescents.

Both African men and women experienced elevated work stresses, with some differences in the distribution of load-bearing—toward the upper spine in women and the lower spine in men. The overlap in evidence of muscle hypertrophy in the limbs and degenerative joint disease across gender is perhaps more impressive than the differences (see Chapter 11). It is clear that most men and women were exposed to arduous work for extended periods of time.

New York Africans are among highly stressed populations examined by paleopathologists over broad spans of time and space. The physical effects of slavery in New York resemble those of southern plantations and were not in any sense benign. Comparisons with other studies must be considered to be approximate because of the differences in diagnosis, scoring, and data recovery protocols with which the field of skeletal biology continues to contend. However, every effort has been made to put these comparisons forward, with the necessary qualifying information, for a fair evaluation of their meaningfulness. Comparisons between the New York African Burial Ground and other archaeological sites can be most directly made

in relation to our own previous projects, such as the FABC, for which we directed the methodology (see Chapter 8).

In some respects, such as the absence of natural population increase, African New Yorkers resemble the mean conditions of workers on Caribbean and Louisiana sugar plantations and South Carolina, during a time when open transatlantic trade made it easier to replace dead workers than would be the case after the 1808 cessation of a legal African supply. African New Yorkers were in a quite different geographical setting than the more familiar plantation economies. They were, nonetheless, part of that larger, slavery-fueled, Atlantic World economy, owned and managed by the same colonial European captors as in the British West Indies and the South.

New Problems and Solutions

Some interesting points have been learned as a project, in moving away from racist and inhumane anthropological practices of the past. Those practices are not as readily escaped as some of us had believed, even though we were willing to confront problems head-on. Every effort to make comparisons with other skeletal populations attempted to drag us back to race. Whether DNA, dental morphology, or craniometry, the comparative data of anthropologists tended to have taken perfectly good measurements of specific ethnic, linguistic, or historically particular regional groups and then aggregated them into sub-Saharan, West African, black, white, or some other pseudobiological category. Such essentially racial categories are irrelevant to ascertaining the more specific African geographical regions and the historically relevant cultural groups within such regions, with which a skeleton's biological distinctiveness is associated. Sometimes where specific groups were available for comparison, they had no direct relevance to the early colonial American experience. There are few biological data available on eighteenth-century English, Dutch, Seneca, Delaware, Bakongo, Akan, or Yoruba, specifically. A case in point is the Gold Coast (Akan) crania that we measured at the American Museum of Natural History, thanks to the collegial aid of Dr. Ian Tattersall. They had apparently not been of much interest to previous researchers, yet this comparative sample cannot be neglected for assessing cranial affinities of the African Diaspora. Interestingly, no English sample was available for comparison from the same museum. The craniometric database gratefully received from

Dr. W. W. Howells had no British, Irish, or Dutch (we used the Scandinavian sample). Indeed, it seems that with racial thinking any conveniently measured or sampled Eastern European, Southwestern Native American, or sub-Saharan African has been allowed to suffice as a surrogate for any other specific population on those continents. The race concept has allowed this kind of loose thinking to persist and even to pass as rigor when such categories are permitted to define research questions. The research team's use of comparative databases is still imprecise and includes some lumped groups and historically implausible parental samples of cranial measurements. We, nonetheless, believe these data are far less muddy in this regard than usual and we will continue to refine them.

The dearth of DNA data from state-level central African societies, but sufficient Pigmy and Khoi San samples, communicates much concerning how many physical anthropologists and geneticists view the significance of Africa. We encourage our colleagues to obtain disaggregated data (or to disaggregate secondary data ourselves) to restore culturally and genetically identifiable populations from the lumped, racialized constructions that obscure the historically real populations to which we want to assess American relationships. The team's collaborators at the University of Maryland are taking another strategy, teaming with African nations using sampling methods that are more useful to us in order to obtain proper comparative data. By discussing the range of cultural historical groups who were imported, we have begun to establish the range, if not the specific, nonracial identities of New York African Burial Ground individuals.

By addressing questions raised by African American community members and scholars, we have begun to identify highly consequential voids in the corpus of anthropological knowledge. The work initiated by this research project, under Dr. Fatimah Jackson's leadership, toward the establishment of African genetic databanks in Cameroon and elsewhere, has been an unanticipated outcome of our observations. In order to make comparisons of New York African Burial Ground remains to African cultural groups that would result in accurate population affiliations, a more complete set of genetic data needs to be created on descendants of the state-level societies that had been involved in the trade of human captives. A similar case can also be made of European and Native peoples who contributed to early North American colonial history and the genome. The public interest in this research question also spurred interest

in the possibility of tracing living African Americans' ancestry. The possibility of recovering some of the identity and intercontinental ties that slavery destroyed in order to dehumanize blacks seems an outstanding use of a very different anthropology than we have seen before. The New York African Burial Ground Project has resolved significant methodological and technical problems with both chemical sourcing and DNA affiliation studies. Yet it is not currently possible to reliably determine a dead or living person's African ethnic ("tribal") ancestry on the basis of DNA. No one has yet published controlled studies to support such a claim.

Continuously, we have been asked by reviewers, overseers, and audience members about comparisons of the New York African Burial Ground sample to colonial European-American samples. For some, this was a critically important question, one that would validate or invalidate the findings of the New York African Burial Ground Project research. From the very beginning, the project sought comparative European-American colonial skeletal and historical cemetery samples. The search was basically unsuccessful; first, apparently European-American populations are rarely disinterred and/or studied; second, when European-American populations are excavated, they are predominantly from poorhouses or almshouses. We considered these populations inappropriate comparisons for establishing the relative conditions of enslaved Africans and colonial Europeans, despite the encouragement from some government oversight agencies and their consultants for us to pursue those comparisons.

Poorhouse or almshouse samples are primarily composed of the insane, sick, aged, lame, blind, chronically intemperate, and indigent (e.g., Elia 1991; Lanphear 1988). In most studies, the greater proportion of inmates was there for intemperance. To argue that these represent the laboring lower classes of Euro-Americans does not seem plausible. In fact, many if not most were social outcasts, not the class of Europeans who were bound to indentured servitude and who would have been a reasonable comparative sample. Some portion of the laboring lower social classes is probably represented in poorhouse and almshouse samples, but those segments have not been distinguished from the insane, infirm, and nonlaboring inmates. Inmates of these institutions, at a minimum, experienced similar exposure to infectious diseases and poor nutrition as did enslaved people. Nevertheless, the lower classes and/or social outcasts are not socially, biologically, or political-economically com-

parable to the people interred in the African Burial Ground. The latter are representative of the average or vast majority of Africans in New York; the former represents a small minority of unrepresentative Europeans and Americans, even for the nineteenth-century context from which these collections usually derive. A consequence of comparison would be to artificially produce a closer proximity between the conditions of enslaved Africans and free Europeans than is justified. Our solution has been to use cemetery death records for Trinity Church Yard, and these are qualified as evidence of the mortality of those who would have presumed to own Africans in New York, given the high proportion of landowning Englishmen in that congregation. This seems fair until a sample of the majority European population in colonial New York City has been excavated and made available for study using methods comparable to ours.

It should also be noted, with regard to such comparisons as these, that those who were enslaved had no designated social class. Even their membership in the human race was being intensely debated and contested during their lives in New York. Chattel does not have a social class.

Interestingly, only one anthropologist has asked us about the health status of contemporaneous skeletal populations in Africa itself and was quite disappointed when the response was that none had been sufficiently studied and reported (see Chapter 2). What would their lives, health status, and mortality have been if those who made up the New York African Burial Ground population, and others like them, had not been

captured and enslaved? That is the question for many people ultimately impacted by these consequences.

Finally, the project may have helped improve African American interest in archaeology, and archaeologists' and physical anthropologists' interest in ethics. These would be good things, and we hope to have contributed to it. It seems true, however, that these groups still remain at a distance.

Along with the history and archaeology reports, the skeletal biology report is part of a trilogy that should be read together. These reports document the first historical anthropological efforts to tell in detail the story of the eighteenth-century enslaved African American population of New York. In this report, we have been able to reinsert into the historical record, with solid evidence, some of the trials and transformations of this diverse group of individuals. Their bones and teeth speak eloquently of their lives before death, bearing witness to the stresses of malnutrition, infection, poor medical care, lead pollution, overwork, and injury. Individuals came to New York via diverse routes and from diverse areas. Some were born into slavery, but most adults probably were not. Unfortunately, the hardships they endured rival those confronted by and imposed on any other group. Nevertheless, the enslaved Africans of New York rebelled against, survived, endured, and built the material foundation of the financial capitol and capital of the Western world. By the evidence thus ascertained, let these reports put to rest any assumption that this achievement came without the extraordinary abuse and work of Africans in eighteenth-century New York.