



## DNA ETHNICITY AS BLACK SOCIAL ACTION?

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How and why are insights and inferences from genetic science being applied to U.S. racial politics, particularly African American cultural practices aimed at social repair, broadly conceived?

Diasporic blacks in the United States are now engaged in a constellation of activities initiated by the discovery of information about their ancestral origins as inferred with the aid of genetic science. In some instances, they propel this information into a plethora of sociopolitical uses. As Dorothy Roberts notes in *Fatal Invention*, “One of the remarkable aspects of racial science and technology today is the support it has from opposing ends of the political spectrum. Both conservatives who espouse a color-blind ideology and liberals who believe in a postracial America have embraced both the science validating racial difference at the genetics level and the biotechnological solutions for inequality at the social level” (2012:288). Roberts continues, “Even some activists who oppose racism have adopted the view that race-based genetics and technology can be used as a tool.”

Reflecting more than the faddishness of all things genealogical today, the prevalence of reconciliation projects illustrates how overconfidence in genetics has been annexed onto long-standing, unresolved and, therefore, persistent debates about (U.S.) American belonging. In this so-called “postracial” moment, these undertakings reveal how race politics have taken a genetic turn with mixed results: On the one hand, DNA-driven reconciliation projects show how novel applications of genetic science may offer new avenues for social inclusion (or exclusion), and

new social roles. On the other hand, these efforts reveal the stakes of the misplaced hope that science can engender justice, guarantee recompense, or confirm identity.

Actors using genetics across the ideological spectrum are not necessarily guilty of self-delusion; rather, they apprehend the possibility of using genetics as a lever in a political climate that is increasingly numb to demands for social equality and racial justice. As sociologist Stephanie Greenlea contends—extending Eduardo Bonilla-Silva and Howard Winant’s conclusions about color-blind racial ideology into the realm of political action—today’s social justice movements “must now attend to [their] tasks in a context where erasures and silences on racism threaten to render the very basis of complaint invisible” (2013:4). In short, combating color-blind racism requires first the restoration of color-*vision*—the return of visibility of inequality; new (in)sight. In this “post-racial,” post-genomic moment, DNA offers the unique and somewhat paradoxical possibility of magnifying issues of inequality quite literally at a microscopic level, while generating large scales of social awareness. Inequities may then be challenged using more traditional strategies such as the courts and social movements. Thus, rejecting outright a reductive, essentialist understanding of race as a genetic fact does not, and perhaps should not, preclude exploration of the ways in which DNA analysis contributes to the politics of social justice and belonging. Here I briefly explore this “social life of DNA.”

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In 1991 archaeologists uncovered several graves on a plot in lower Manhattan. These burials were discovered in the course of the completion of a land survey conducted by a commercial archaeology company, on behalf of the U.S. General Services Administration (or GSA). The GSA—the federal agency tasked with oversight of the logistics of governance, from office supplies to real estate—planned to construct an office tower at the location that would house government bureaus. The unearthed burials confirmed that the planned construction site was also the location of the “Negros Burial Ground” or “Negro Burying Ground,” a former municipal cemetery for the city’s enslaved African population. The rediscovery of this colonial-era burial ground, with its promise of rare insight into the life and death of bondspersons in New York, was an occurrence of historical import.

Following exhumation, the contents of the gravesites were brought to the Lehman College (NY) laboratory for further investigation, where the method of analysis consisted primarily of osteology—the scientific measurement of the skeletal remains—and the broad classification of them into several categories,

including stature, age, sex, and race. This forensic approach was and remains standard practice among many physical anthropologists and was the perspective that the Lehman researchers brought to the research project. Other physical anthropologists, however, including those at Howard University who would become involved in the African Burial Ground project, found this forensic mode of analysis and interpretation inadequate to the historical significance of the cemetery. Detractors of the Lehman approach, including Michael Blakey, who would soon become the burial ground project's new research director, contended that the Lehman approach was unduly preoccupied with the gross racial classification of the sort also employed for criminal justice purposes. He further maintained that this methodology reduced the individuals in the burials to "narrow typologies" and thinly "descriptive variables," and thereby "disassociated" them from their "particular culture or history" (2004:20).

Local activists felt similarly. A group who referred to themselves as the Descendants of the African Burial Ground expressed their opposition to any forensic analysis of the remains that would yield classification of them solely by "skin color"; the activists argued that such an interpretation amounted to the "biological racing" of their ancestors' remains. (Mitchell and Happe 2001; La Roche and Blakey 1997). The community pushed for interpretive approaches that would generate more than racial classification of the skeletons.

Criticism of the "biological racing" of the remains also suggested clarion awareness, on the part of both activists and scholars, of the historic use of biometrics—that is, the use of scientific techniques to measure and analyze human bodies—to bolster scientific racism and thus the potential for flatly descriptive work to yield racist interpretations of the burials. For, as Stephen Jay Gould and numerous others have documented, the comparative "mismeasurement" of bodies, from lung capacity to crania to genes—with white bodies serving as the norm against which all others are measured—has long been employed to advance deliberate and erroneous claims about black inferiority. Against the backdrop of this bitter legacy of discriminatory biological research, supporters of Howard University's analytic method of interpretation sought to upend this history by using biometrics alongside other forms of both scientific and humanistic analysis, to glean new information about the embodied experience of slavery as well as about the particular African origins of some of the earliest black Americans. Indeed, for the self-named "descendent community," the rediscovery of the African Burial Ground represented a stirring possibility: a retreat from designation by "skin color" alone and the stigmatizing concept of race, for both their "ancestors" and themselves.

The eventual siting of the African Burial Ground research at Howard University—a historically black university—partly in response to pressure from the local community, therefore marked not only a new temporary home for the remains while they were being analyzed but, moreover, a fundamental change in the framing of how and why the research was conducted. If the question undergirding the investigations of Lehman lab could be summarized as “are these the bones of blacks?” (Mitchell and Happe 48), the Howard researchers, to the contrary, sought answers to a more extensive set of questions, including “what are the origins of the population, what was their physical quality of life, and what can the site reveal about the biological and cultural transition from African to African-American identities?” (La Roche and Blakey 86). In posing these questions about the remains, Blakey’s team hoped to use the rediscovery of these rare remnants of black colonial life as an opportunity to more fully detail knowledge about how those buried at the African cemetery in lower Manhattan lived and died.<sup>1</sup> At the Howard lab, in other words, the research orientation was shifted from an epistemology of racial classification to an epistemology of ethnicity (and therefore, also ancestry). Analysis of the remains was thus broadened to include a panoply of social and historical interpretation that might render “biological evidence of [the] geographical and macroethnic affiliations” of enslaved Africans in Colonial New York (Jackson et al. 2006).

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According to historian Michael Gomez, the Africans brought to the Americas as slaves during the Middle Passage had undergone a “transition, from a socially stratified, ethnically-based identity directly tied to a specific land to an identity predicated on the concept of race” (1998:154). In the process, he eloquently observes, they had “exchanged their country marks”—their myriad ethnicities—for a generic, collective racial category (12). Race would in subsequent years become a “master status” for African Americans—their most defining social category (Waters 1999:5).

Some social analysts debate the similarities and differences between “race” and “ethnicity.” In distinguishing “race” and “ethnicity” as the respective research orientations of the Lehman and Howard laboratories, I follow sociologists’ understanding that these categories are analytically distinct. Building on the work of Hebert Gans, sociologist Mary Waters has demonstrated how ethnic identity has shown it can involve a good deal of volition and vacillation, rather than being a hard-set “biological or primordial” category (1990). Historian Werner Sollors is more avid, calling ethnicity an “invention” (1989:ix–xx).

Yet this choice and flexibility, these “ethnic options” as Waters terms them, have historically been available primarily to whites in the United States. As she writes, “Black Americans . . . are highly constrained to identify as blacks, without other options available to them, even when they believe or know that their forebears included many non-blacks” (1990:18). So, the opening-up of ethnic options for African Americans that the African Burial Ground research represented was as rare an occurrence as the rediscovery of the historic cemetery.

Ethnicity is one way of articulating ancestry claims. As Waters argues, “ethnicity . . . involves the belief on the part of people that they are descended from a common ancestor and that they are part of a larger grouping,” whether or not it is true and regardless of how this lineage is garnered (1990:17). In this case, the scientific authority of forensic analysis carried out by the Howard team offered the hope of tipping the scale of black identity from tight ascription to slight volition.

For some supporters of the analytic approach to the African Burial Ground remains, the stakes were very high, for this presented an opportunity to restore ethnic identities to a racialized (and racially subjugated) community. This course of racialization was, as Gomez writes, a “transition, from a socially stratified, ethnically-based identity directly tied to a specific land to an identity predicated on the concept of race” (1998:154). Although some enslaved Africans for some time would retain distinct practices and identities that reflected the perseverance of their “country marks,” they nevertheless were compelled by their states of bondage “to learn the significance of race,” and to learn of their racialized caste position in slave societies such as the United States. In walking a fine line in which they contested the “biological racing” of the remains, yet advocated for the use of similar scientific techniques toward the construction of fuller interpretations of the slave past, the activists and Howard researchers engaged in a quest for the reversal of the racialization produced by slavery—if not its enduring effects.<sup>2</sup> That is, they sought to restore pre-enslavement identity to the individuals interred at the burial ground.<sup>3</sup> This distinction between descriptive and analytical approaches to interpretation—between “biological racing” and the restoration of specific details of African origins—that was the backdrop for a novel interpretation of scientific testing that would be born out in genetic ancestry testing.

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The Blakey team did not use “race” as a sole category of analysis. Rather, they employed a broad range of analytic groupings. Perhaps most presciently, at the

Howard lab, the social and biological scientists analyzing the African Burial Ground remains also made use of “molecular genetic assessment,” or DNA analysis, in order to ascertain the possible regional and ethnic origins of the cemetery population using relatively new methods to infer human genetic diversity. Of particular interest to the researchers was the expectation in 1992 that there were clear distinctions between the genetic identities of social groups. Thus, although Blakey’s team opposed “biological racing” through osteology, they were open to thinking about this on a clinal basis; that is, from a perspective that considered genetic variation across a broad spectrum. Yet the Howard researchers held out the hope that there was “potential for determining the ancestries of the African Burial Ground populations.”<sup>4</sup>

In 1998, George Washington University graduate student Rick Kittles, who was not originally a member of the African Burial Ground research team but participated in the study from 1995 to 1999, embarked on a new wave of genetic analysis that would prove much more successful than that of his colleagues, and in time make important contributions to the use of DNA analysis to infer the ethnicity and origins of the burials. In order to examine the genetic data, Kittles needed to solve two problems: First, ancient DNA sequences are fragile and short in length, and Kittles would need to find a way to manipulate the short sequences that were available to him without destroying them. And, in order to interpret these sequences for ancestry with a measure of accuracy, he would need a substantial comparative reference database.

To solve the first problem, Kittles turned to technologies that allowed for the analysis of characteristic genetic markers in Y-DNA and mtDNA. Using a method that has since become commonplace, Kittles compared DNA from individuals found at the African Burial Ground with that of contemporary Africans. There remained the issue of a database. Since the few existing reference databases containing this information were not large enough to make reliable inferences about where in Africa buried individuals might have come from before arriving in New York, Kittles began to compile such a database using publicly available tissue lines from commercial companies such as the Coriell Institute—a U.S. biobank established in the early 1960s that now is the repository for tens of thousands of DNA samples—as well as by contributing samples he had obtained through his own research or that had been shared with him by colleagues. Using these techniques, Kittles hypothesized that the “macroethnic affiliations” of the burials he examined were from Western and Central Africa, with specific findings for some of the remains

coming from Benin (the Fulbe people), Niger (Hausa), Nigeria (Fulani), and Senegal (Mandinka).

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The Howard African Burial Ground study formally concluded in the fall of 2003, with the ritual reinterment of the remains of the 419 African individuals whose graves had been excavated. This included the commemoration of their lives and those of the scores of others—estimated at between 15 and 20 thousand in total—who had remained buried in the 6.6-acre cemetery. Ayo Harrington, chairwoman of the Friends of the African Burial Ground, envisioned that the significant site could be commemorated with a museum of African history that would also contain a “DNA bank,” collected from the burial remains and stored at Howard University, that could be used by descendants “to determine their origins.” Said Harrington, “If we could find one person who could one day go to that DNA bank, and it was determined that that person was a descendent, although we all are, it would just be something that folks would celebrate around the entire globe.”<sup>5</sup> Even Blakey, Kittles’s mentor-turned-critic, articulated this potential for DNA analysis:

The scientific research now underway constitutes yet another dimension of a long-standing human rights struggle among African Americans. . . . We seek to restore knowledge of the African-American origins and identities that were deliberately obscured in the effort to dehumanize Africans as ‘slaves.’<sup>6</sup>

Equality, rights, and ethics are not easily tethered to or readily settled with DNA evidence. Yet just a few years after the decoding of the human genome, even well-informed skeptics thought it held the potential to transform the terrain of social justice and human rights. Efforts to reclaim original identity through genetic technologies, however, while psychically beneficial, fail to significantly address persistent contemporary structural inequality. Moreover, the current preoccupation with the genetic resolution of social problems may contribute to a decline of already-corporatized and waning civil rights activism, to the further slide of citizenship prerogatives into consumption practices, and to the transposition of justice into technique.

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The African Burial Ground project established the groundwork for the “social life of DNA” in at least three ways. One foundation established through the

African Burial Ground project was technical: Although the remains excavated at this site were analyzed using several methodologies, they were most notably evaluated with a then-relatively novel use of genetic analysis. Second, research on the recovered cemetery became a paradigm for how genetics could be used to constitute identity and reconstruct the past. Although studies of ancient genes (aDNA) had been conducted in the late 1980s—beginning with geneticist Bryan Sykes and colleagues' important *Nature* paper demonstrating the ability to amplify DNA obtained from bone, in addition to the Jefferson-Hemings case—the African Burial Ground project was among the first and most public uses of these techniques in the United States. Here, more specifically, genetic comparison was used to infer the ancestral associations and ethnic affiliations of the individuals buried at the site. A third way in which the recovery and study of this cemetery was significant for the wider scope and broader use of genetics is that it was generative of subsequent, related endeavors in commercial realms.

The African Burial Ground project facilitated the formation of African Ancestry, Inc., one of the earliest genetic ancestry testing ventures. More to the point, this company was erected partly from the genetic studies on the lower Manhattan gravesite remains when Kittles, who was then a geneticist working on the Howard research team, converted these techniques from a research enterprise into a business one. However, the company's founding and subsequent business practices are occasionally controversial, obscuring the social, scientific, and political developments in which it has played a role.

Commercial genetic analysis is typically and aptly regarded as an offshoot of the cutting-edge Human Genome Project that was completed in 2002. However, an origin story for genetic testing that begins with supercomputing or single nucleotide polymorphisms (or "snips") can only partly account for why this analysis became widely popular and, moreover, became important in African-American cultural politics. The controversy that transpired over excavation methods and research priorities at the centuries'-old African Burial Ground, on the other hand, reveals how genetic information would come to be seen as the building blocks for reconciliation projects related both to the history of chattel slavery and the future of American racial politics. The supplementary "genealogy" for genetic ancestry testing elucidates why and how this form of DNA analysis took a particular course toward social and political utility and why claims of racial essentialism brought against the consumers of genetic genealogy testing may actually miss the mark.

## NOTES

1. This difference in research interpretation also reflected a wider scholarly debate over whether archaeology was best conducted through a forensic framework or an anthropological one. See, for example, Sherwood L. Washburn. "The New Physical Anthropology," *Transactions of the New York Academy of Science*, Series 2, 13(1951): 298–304 and Diana B. Smay and George J. Armelagos, "Galileo Wept: A Critical Assessment of the Use of Race in Forensic Anthropology," *Transforming Anthropology* 9 (2000): 19–40.
2. Proponents of the Howard framework for analyzing the burial remains wanted not simply a shift in register from a racialization to ethnicization but also a break from the residual stigma of "race" and resuscitation from the deracination of social death. See Orlando Patterson, *Slavery and Social Death: A Comparative Study*. Cambridge, MA: Harvard University Press, 1982.
3. One criticism the latest form of genetic determinism in the 21st century is that these tests effectively reify racial essentialism. See Troy Duster, "Race and Reification in Science," *Science* 307 (18 February 2005): 1050–1051.
4. F.L.C. Jackson, A. Mayes, M.E. Mack, A. Froment, S.O.Y. Keita, R.A. Kittles et al. "Chapter 5: Origins of the New York Burial Ground Population: Biological Evidence of Geographical and Macroethnic Affiliations Using Craniometrics, Dental Morphology, and Preliminary Genetic Analysis," in ed. Edna Greene Medford, *The New York African Burial Ground: History Final Report*. U.S. General Services Administration, November 2004, 150.
5. Harrington quoted in Chaka Ferguson, "A Year after Reburial of Slaves, Debate over Memorial," *SignOn San Diego*. October 2, 2004. <http://www.signonsandiego.com/news/nation/20041002-1016-africanburialground.html>. Accessed October 11, 2004.
6. Blakey, Michael. "The New York African Burial Ground Project: An Examination of Enslaved Lives, A Construction of Ancestral Ties," *Transforming Anthropology* 7(1998): 53–58.

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