Finding Oprah’s Roots, Losing the World: Beyond the Liberal Anti-Racist Genome

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In the summer of 2005, Oprah Winfrey announced during a trip to South Africa: "I went in search of my roots and had my DNA tested, and I am a Zulu."1 Oprah reported feeling “at home” in South Africa, and would go on to invest in the country, starting a leadership school for girls from disadvantaged backgrounds.2 Two years later, as part of her participation in Henry Louis Gates Jr.’s PBS series African American Lives, took a separate DNA test. The results showed no South African ancestry. Instead of Zulu, it suggested ancestral ties to the Kpelles from Liberia. Soon thereafter, a columnist for the U.K. newspaper the Guardian critiqued Oprah for taking James Frey, author of A Million Little Pieces (2003), to task for constructing an “autobiography” more based on fiction than fact, while she made claims “no less misleading” by continuing to embrace a Zulu identity (Younge 2006). A writer for BlackNews.com accused her of being “seduced by the myth of DNA testing” (Benjamin 2007).

In Oprah’s defense, she is not the only person to be tripped up by one of the 21st century’s premier markers of truth: DNA. In 2000, Henry Louis Gates Jr. took a genetic test from a company that informed him that his maternal ancestry most likely traced back to a Nubian ethnic group in Egypt. In 2005, he took a second genetic test that reported ‘European,’ and no ‘African,’ ancestry in his maternal line.3 Many others have experienced this precariousness of genetic revelations about the self: Zulu one day, Kpelles the next; African one day, European the next. What is going on here?

Contrary to Gates’ suggestion that the first company was telling him what they “thought [he] wanted to hear” (Nixon 2007), or the suggestion that Oprah had been seduced by a “myth,” I suggest that Oprah, Henry Louis Gates Jr., and the many others who have felt the truth of DNA

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slip beneath them, are experiencing “normal science.”

Scientists’ abilities to discern objects in the world (such as genetic variants) depend on their relations to complex and shifting economic and political orders. Many of the databases upon which genetic ancestry companies rely are proprietary (Bolnick et al. 2007). This limits the pool of DNA samples to which Oprah’s, Gates Jr.’s and anyone else’s DNA can be compared, and shapes the results they receive. If the company to which one sends their DNA does not have access to DNA samples identified as Zulu, they will have no chance of being told they are Zulu. Further, issues of national sovereignty and rights limit the information databases contain. Companies do not inform customers of genetic ancestry tests of these relations between epistemic, political and economic orders. Further, scholars such as Henry Louis Gates Jr. fail to interrogate them. Why?

The answer, I suggest, lies in the particular ways in which critical race theorists, population geneticists, and public officials have incorporated human genomics into Euro-American liberal approaches to anti-racism in these opening years of the new millennium. Marking a stark departure from late twentieth-century fears that human genomics would spark new forms of racism (Duster 1990), beginning in 2000, critical race theorists, such as Paul Gilroy and Henry Louis Gates, joined President Bill Clinton and leaders of the effort to sequence “the human genome” in arguing that human genomics would help combat racism (Gilroy 2000; Venter, 2000). Genomics, they argued, would act as a liberator of people—as an antidote to ideology—as long as it existed in an autonomous space, a space free of the constraints and biases introduced by undue concentration of power. Guided by this liberal vision, a new social contract for genomics formed in the first years of the 21st century: genomics should occupy an autonomous space; however, to occupy this space it must give back some of its power to “the people” —in particular, it must grant people new powers to govern genomic research.

In recent years, this new social contract has generated remarkable changes in the conduct of genomic research. Far from a science run by experts, today institutions that support genomic research—from public agencies like the U.S. National Human Genome Research Institute (NHGRI), to private companies like 23andMe, to non-governmental organizations such as the National Geographic Society—seek to include people in the design and regulation of their research. The days appear to be quickly passing in which scientists argue that theirs is a unique social institution, best governed by its own norms and values (Merton 1942). Instead, many organizers of today’s major scientific initiatives seek to incorporate broader societal practices.
and values of liberal governance—participation, inclusion, autonomy—into the design of their initiatives.

Human genomics has been at the forefront in this change in the governance of science. Organizers of the National Geographic’s Genographic project offer “participation kits” and jet travel designed to allow members of “the general public” to go “on their own genetic journey” and to “take part in a real-time scientific study.” 12 The new personal genomics company 23andme promotes a “new approach to genetic research” in which customers become “actively involved in research studies.” 13 Organizers of the International Haplotype Map (HapMap) Project, an international effort to sample and map human genetic variation, granted new powers to research subjects designed to enable them to shape and regulate the initiative (International HapMap Consortium 2004). Many prominent supporters of today’s human genomics initiatives celebrate the anti-racist and democratic potential of this transformation of genomic studies of human beings. Rather than divide us, they contend that today genomic studies of human differences bring us together as we collectively govern and learn about our common origins. 14

In what follows, I begin to consider whether these recent transformations in human genomics bring us closer to the liberatory, anti-racist accounts that we desire. Let me be clear from the start that I think that the promotion of liberal democratic values and practices have in the past, and still today, often act as effective redresses to scientific powers. The formalization of the rights of human subjects in response to Nazi experimentation, eugenics, and the Tuskegee syphilis experiments often figure as exemplary cases (Annas and Grodin 1992). 15 However, I argue that human genomics presents us with a different problem of power and science. 16 Rather than fixed, top-down control, where the problem is one of scientists exploiting subjects, and excluding them from the power to design and regulate research, today many human genome scientists seek to distribute power to their research subjects. In these cases, subjects do not stand in a realm distinct from science, in a space where the relevant question is one of inclusion or exclusion. Instead, science and subjects form together: human genome scientists’ ability to conduct research depends on the active participation of its customers/research subjects; their subjects’ ability to self-identify and gain access to resources and care increasingly depend upon a form of biosociality constituted through producing and consuming genomic knowledge (Rabinow 1999; Taussig, Rapp and Heath 2003). In these contexts, where subjects do not seek to push back at scientists and their categories, but rather seek novel relations with them, I argue
that the problem is no longer one of scientific experts dominating people. Thus, solutions will not follow from creating autonomous spaces in which subjects make their own decisions about participation free from the undue influence of scientists.

Indeed, in the proliferating instances in which subjects incorporate technoscientific knowledge and practices into their own self-formation to gain recognition and resources in 21st century risk and knowledge societies, the distinctions between scientists and subjects, domination and liberation—distinctions that ground Euro-American liberal imaginaries and practices of freedom—elude discernment (Haran et. al. 2008; Herzig forthcoming).17 Drawing upon ethnographic study of late 20th and early 21st century efforts to build a liberal anti-racist genomics, as well as an analysis of media texts, in this essay I describe the novel problems and dilemmas that result—both for the production of credible liberal subjects, and for the creation of legitimate scientific objects.18 To do this, I offer three vignettes from contemporary efforts to construct an anti-racist, democratic genomics. The first describes the unexpected dilemmas created by International Haplotype Map Project organizers’ attempts to give new powers to research subjects. The last two chronicle the dilemmas created by efforts to figure genetic ancestry tests as anti-racist.

The Emergence of Liberal Anti-Racist Genomics: The Case of the International Haplotype Map Project

Concerns about the links between racism and the then new science of genomics arose in the early 1990s when the proposal of the Human Genome Diversity Project raised worries that studies of human genetic variation would once again reduce human beings to their genes in ways that would strip them of rights. At the same time alarm bells sounded throughout the nascent genomics community about the imminent publication of Herrnstein and Murray’s (1994) controversial bestseller, The Bell Curve: Intelligence and Class Structure in American Life (Reardon 2005). Human geneticists had done much work since WWII to distance the study of human genes from eugenics and Nazi science, including inventing a new name for their field—genomics. Would that work, and the possibility of a genomic account of human differences, be undone before the research had even really begun?

In the wake of this potential threat, scientists who study human genomes set out to correct the record. Critics, they argued, simply misunderstood projects like the Diversity Project: far
from advancing racism, they would counter socially divisive ideas of race through demonstrating that race was a social ideology, not a biological reality (Cavalli-Sforza 1994; Hotz 1995; Petit 1998). Yet, despite these claims, it soon become clear that researchers had no intention of abandoning racial categories. Instead, some prominent geneticists and epidemiologists began to argue that the view that “race” was biologically meaningless did not derive from an “objective scientific perspective” (Risch, Burchard and Tang 2002:1). A slew of reports followed that asserted the genetic reality of race, and linked race to disease susceptibility and drug response (Fischman 2003; Wade 2002). Such reports made clear that genome scientists would not be able to calm anxieties about the racist potential of their research through arguing that ‘race’ had no biological reality.

This failure of the first effort to calm worries about the racist potential of human genomics created an opening for transformation, and some remarkable things happened. Francis Collins, then director of NHGRI, began to invoke the work of Evelyn Brooks Higginbotham, Harvard Professor of History and African and African American Studies. The following Higginbotham quote appeared in every talk (three total) this author saw Collins give from 2001 onwards: “When we talk about the concept of race, most people believe they know it when they see it, but arrive at nothing short of confusion when pressed to define it” (Higginbotham 1992: 253). Rather than a rational truth that would set people free from racial categories, genome scientists began to admit that they too were perplexed. Further, they began to fund an unprecedented number of social scientists to help them with their conundrum.

But perhaps more remarkable, in one in one of the most striking examples of an effort to open up the hallowed doors of science to new entrants since AIDS activists gained seats at the NIH in the 1980s, organizers of the NHGRI-initiated effort to survey and map human genetic variation—the International Haplotype Map Project—promised potential research subjects key roles in research design and regulation. They would play a role in designing the consent forms. They would decide if and when they wanted to withdraw their samples. Finally, and most significantly, they would hold the final power to name their samples. As a “background and overview” document distributed at a September 2002 National Human Genome Research Institute council meeting states: “The communities themselves will ultimately decide the exact description or label by which they wish samples from their population to be identified” (Personal Communication with Jean McEwan, September 2002). In response, many who had once been
critical of previous efforts to study human genetic diversity—in particular, the Human Genome Diversity Project—agreed to help organize the initiative (Author’s field notes). It is easy to understand why: the offer to allow subjects to name themselves would appear to represent an example of people gaining power back from scientific experts in this most intimate domains of personal identity (Lee, Mountain and Koenig 2001). However, rather than successfully extend Euro-American liberal democratic practices of self-government into new domains, I argue that efforts to give HapMap subjects the right to self-identify begin to reveal some of the problems generated by liberal democratic concepts and practices in an age partially-defined by the co-constitution of biological and social order (Jasanoff 2004).

**Obscuring Objective Referents**

Although this is not something HapMap organizers claimed, or perhaps even recognized, granting subjects the right to represent themselves enabled them to once again claim a space of objectivity for their work. With the “political” task of representation safely allocated to the research subjects, it became possible for Project organizers to imagine that they engaged in “precise,” and thus more objective, approaches to naming populations. Indeed, “precision” in naming populations formed the central principle of the Project’s “Guidelines for Referring to HapMap Populations in Publications and Presentations” (International HapMap Consortium 2005). Project leaders credited this innovation to social scientists who had sensitized them to the potentially harmful and “inappropriate over-generalization” produced by categories such as “Africans,” “Europeans” and “Asians.” Using “precise” geographic labels in place of “imprecise” racial ones, they argued, would help prevent HapMap data from being used to discriminate and stereotype, an achievement that would be particularly important “in places where members of the named populations or of closely related populations are minorities” (Ibid.).

There were things gained from this new commitment to “precision”: genome scientists learned that the “Yoruban” did not exist, Yoruba do; they became sensitized to the problem of generalizing. But there were also significant costs. The investment in a so-called precise and objective approach to naming rendered it impossible to refer to the politics of representation and group definition in which HapMap scientists engaged. Consider the following explanation one project organizer gave of the problem of describing the subjects of HapMap research:
Something that we always in the HapMap, in this Project, had to be very careful about is that we are not studying Africa, obviously, because Africa is a very diverse place with lots of populations. And that is why we tried to be very careful when we talk about the sample we did—which was from the Yoruba—that this is for the Yoruba, right. And it is not even all the Yoruba, it is the ninety DNA samples from the Yoruba we had.  

According to this HapMap organizer, the ninety people sampled in Ibadan, Nigeria only represented those ninety people. While I do not suggest that complete coherence is possible, I do contend that there is no coherence to be found in suggesting that the U.S. government spent millions of dollars to find something out about the genetic diversity of 90 people in Africa. They provided support to sample these ninety people because they thought it would reveal something about the diversity of a larger group of human beings. The critical questions are: How large of a group? What kind of a group?  

In practice, those who now use HapMap data do answer these questions. An article in a recent issue of *Nature* reported: “Proportionally more deleterious genetic variation in European than in African populations” (Lohmueller, et al. 2008). In the “Methods Supplement” for the paper, the authors are careful to use the “precise” language of “Yoruba in Ibadan, Nigeria (YRI)” and “Utah residents with ancestry from northern and western Europe (CEU).” However, the article that appears in the main pages of *Nature* reports findings about “European” and “African” populations. This paper is by no means unique. Far from “precise,” many genome scientists view the HapMap’s recommended labels as “politically correct,” and in practice generalize their findings to much broader groups. A commitment to “precision,” or what we might call *direct biology*—a biology free of representation—impeded HapMap organizers from recognizing and creating systems of accountability for the representations that in practice ordered their knowledge and technologies. In so doing, they jeopardized their ability to coherently describe the objective referents of their genomic analyses. 

*Research Subjects’ Loss of Agency*  

In addition to a loss of HapMap scientists’ ability to provide an account of their objects of study, the effort to defer all issues about groupness to their subjects also resulted in the loss of these subjects’ abilities to define themselves. Of course, this was not supposed to happen: project organizers precisely sought to give people the ability to name themselves. In practice, a
different reality emerged. As one social scientist who oversaw a HapMap community engagement explained:

INTERVIEWEE: The community was supposed to have input on the names—the labels. … So the first time I came back, [my community engagement coordinator] told me … ‘You know, they came up with these most amazingly creative names.’

AUTHOR: Like what?

INTERVIEWEE: Traditionally red ... which was red for blood, red for wine, and red for left wing. … I mean they came up—we had a list of about seven or eight fascinating names.

HapMap leaders in Washington, D.C., however, rejected all of these names. I asked why.

INTERVIEWEE: Too idiosyncratic, nobody would know what they were.

AUTHOR: Nobody meaning the scientists?

INTERVIEWEE: The scientists and the people online. They wanted some relationship with Europe.

In interactions with Project leaders in Washington D.C., what became clear to this engagement organizer was that HapMap designated communities would not have “the freedom” to choose their own names. Instead, they would be constrained by what genome scientists found sensible. And so they tried again. This time they suggested names that responded to HapMap scientists’ desire to have a reference to Europe. In the end, however, none of the names proved satisfactory, and the only thing “the community” chose was that in addition to English, their name would be printed in their native language. That this HapMap designated community could not freely choose their name did not upset the engagement organizer; afterall, “it was an experimental project and things change all the time.”

What did prove troubling to this engagement organizer was that the American project leaders in Washington insisted that there would be free choice even after it became clear that communities could not freely choose their identities.

Judith Butler, invoking Foucault, writes in On Giving An Account of Oneself: “a regime of truth offers the terms that make self-recognition possible. … This does not mean that a given regime of truth sets an invariable framework for recognition; it means only that it is in relation to this framework that recognition takes place or the norms that govern recognition are challenged and transformed” (2005:22). As Butler explains here, one recognizes and names oneself not in a
vacuum, but in relation to available frameworks for making truthful claims about the self. Most HapMap leaders failed to recognize this relational aspect of recognition, and persisted in their belief that true recognition for their research subjects would come from their existing in an autonomous space, free from HapMap scientists. Such a space, HapMap designated communities found, did not exist. Instead, they would receive recognition only from within a framework partially defined by these scientists’ regimes of truth. In other words, HapMap identified communities were not simply free to decide their names; however, they would have been more free if the conditions existed within which to understand their constraints.

_Accountability_

Finally, the HapMap’s attempt to grant “people” powers of self-definition and control resulted in an inadvertent lack of accountability for the effects the Project’s ordering practices would have on who could be a people in the first place, and who could have a voice (and thus, very likely, resources) in a post Hap-Map world. Consider the case of the HapMap’s Community Advisory Groups (CAG). These novel governing bodies formed on the principle that “communities” had the right to not only name “their samples,” but also to regulate their use (Consortium 2004:473). Such a system makes sense if science and representation exist in autonomous spaces, and people do the work of representation independent of scientists producing knowledge. Under such conditions, people make up and name themselves, and then scientists study them. However, in practice genome scientists do not produce knowledge about human beings who come pre-ordered into clear groups, but rather participate in processes that decide which human collectivities can be recognized and understood: “ninety people in Ibadan, Nigeria”; “Yoruba”; “Africans”? Again, the recent Nature paper constitutes “Africans” as the relevant collectivity. In such a case, a Community Advisory Group made up of members of a Yoruba community in Ibadan, Nigeria have the power to decide what research is done on those designated as “Africans.” Yet on what grounds?

Questions such as this one remain unaddressed by organizers of the International Haplotype Map, and already are leading to challenges to the legitimacy of the CAGs (Author’s field notes). Operating within a liberal framework that assumes people exist prior to any attempt to know and govern them, such questions about the role scientific practices play in constituting “people,” and those who could legitimately represent them, never arose. This rendered the Project susceptible to unwittingly re-inscribing racial categories (such as “African”). Instead of a
progressive anti-racist approach to knowing and governing humans, failure to recognize the co-
constitution of subjects and regimes of truth initiated the all too familiar pattern in which Euro-
American liberal democratic practices of freedom (in this case, self-determination) participate in
unacknowledged constructions of race (Stoler 1995).

**The Incorporation of Liberal Anti-Racist Genomics: Emerging Dilemmas**

In the last two years, these problems created by efforts to configure genomics as a liberal anti-
racist practice have gained new urgency as such efforts have become not just the project of
national governments, but of major media corporations, such as National Geographic (through its
Genographic Project), and genetic ancestry companies, such as Henry Louis Gates’ AfricanDNA
(Bolnick, et al. 2007). In all of these cases, DNA is figured as that which offers people—all
people—the chance to recover ancestors. Ties to these ancestors often have been lost through
painful and violent events—most notably, the Middle Passage and the slave trade. Genetic
ancestry tests promise traces, if only molecular traces, to lost family members and homelands
(Gates 2007). They also provide information useful for defining the self in an increasing number
of contemporary contexts where essential knowledge and resources come only after sorting
oneself into racial and ethnic categories. Thus, far from an oppressive stripping of the ability to
define oneself, promoters of genetic ancestry tests claim that knowledge about their genomes
will promote the ability of subjects to understand and define themselves in a manner that will
empower them. Genomics is certainly placing these powers of representation in the hands of the
people, but is it the people that anyone intended?

**DNA: Power to Which People?**

In April of 2006, the *New York Times* reporter Amy Harmon reported on two adopted
twins, Anthony and Matthew Moldawer, who had “always thought of themselves as white”
(Harmon 2006). Then, at the encouragement of their father, a business executive in Silver
Spring, Maryland, one of the twins took a genetic ancestry test. The tests reported back that
Anthony and Matthew were eleven percent “North African” and nine percent “Native
American.” These results, Mr. Moldawer observed, came too late to be helpful for college
admissions, but might prove helpful in obtaining financial aid. Being the father of three college-
aged children, he explained, “any advantage we can take we will” (Harmon 2006).
This case would appear to represent a blatant abuse of affirmative action policies. However, given the current efforts to reconfigure human genomics as a democratizing anti-racist force, perhaps the Moldawers should not be blamed. Today, public and private institutions confidently invest billions of dollars into genomics partially because considerable funds went into building ethical apparatuses designed to ensure that human genomics—unlike its predecessor, human genetics—fosters the autonomy of both science and individuals. Given this broader context, the Moldawers’s attempt to take advantage of their genetic results might be viewed as consistent with their pursuit of a liberal democratic right of autonomy. However, such a case should alert us to some of the dilemmas created by the distinction between the self and powerful others, subjective knowledge and objective knowledge, upon which such a right depends. Such distinctions might have been adequate, and indeed vital, for discerning and addressing problems faced in cases such as Nazi science, the Tuskegee Syphilis Experiment, AIDS research and the medical control of women’s bodies (Jones 1981; Boston Women’s Health Collective 1973; Epstein 1996). In these cases, where power can be said to be centralized and fixed in others (e.g., in the Public Health Service or in pre-dominantly white heterosexual scientists)—cases we might describe, borrowing language from Foucault, as “states of domination”—giving power back to people to create their own identities and knowledge made sense, and proved at least partially effective (Foucault 2003 [1994]: 35). However, in the case of genomic ancestry tests, where people who are the objects of study increasingly participate in the design and conduct of studies, what might giving power back to the people entail? Further, what does a legitimate identity consist of? Must it be free of expert “objective” knowledge? Can it be shaped by the results of a genetic test? If Andrew marks African American on his college application, will we accept that as Andrew’s legitimate voice, defining who he is? On what grounds do we decide? Does life experience any longer provide us with a trusted and stable enough ground?

These questions about the constitution of the legitimate voice of a subject connects to questions about what constitutes the legitimate voice of scientific authority: Is the DNA test that Andrew took legitimate? Can genetic ancestry tests, tests based on databases shaped by particular economic and political orders, ever be legitimate? On what grounds?

In an increasing number of contexts, these questions about the sources of scientific and political legitimacy pose novel challenges for constituting expertise, experience, and self-
identification. First, how should institutions that allocate resources regard so-called subjective acts of identification that incorporate the result of genomic tests? Bruce Poch, Vice President and Dean of Admissions at Pomona College, answers quite simply: colleges and universities will not, and should not, consider these tests. In a letter to the editor of the New York Times Poch wrote: “The grasp for any presumed advantage in college admissions has led to the specter of DNA sampling to find some genetic connection to a historically underrepresented racial group. But please know that most colleges will not consider this meaningful in their selection process.” “Race and ethnicity,” he continued, “do still generally connect directly to a set of life experiences” (Poch 2006, emphasis added). This sounds clear enough, but how in practice does Poch propose to ensure that people draw on life experiences, and not genetic tests, to determine what box they check for race and ethnicity? Further, for how long will one be able to draw such a clear line between a genetic test and a life experience? Henry Louis Gates Jr., in his book Findings Oprah’s Roots, Finding Your Own, writes that “the genetic and the genealogical” can combine to give African Americans “a sense of place, a sense of rootedness” that they need “to go forward as a people” (2007: 17). Genome scientists, and now some doctors, predict that one’s DNA will soon help determine the drugs and medical treatment one receives (Pollack 2002). In these and other cases, scholars, scientists and medical professionals predict that DNA can and should shape one’s life experience. Consequently, it is not unreasonable to think that in the not too distant future DNA tests will shape self-understandings and experiences. What then will be the place of experience and self-determination in the liberal project of freeing individuals from control by authorities—including scientific authorities?

Second, how should these hybrid forms of expertise be used? It would not appear that the Moldawers seek to use their genetic ancestry tests to determine membership in a social or cultural collectivity, such as “African American” or “Native American.” Rather than access to membership in a collectivity, they seek access to resources: namely, financial aid for a college education or better medical care (Harmon 2006). Cheryl Harris (1993) illustrated how race can operate as property. Although she made the case for whiteness, the Moldawer case indicates that non-white racial categories also have value. The question becomes who has the right to claim ownership to these valuable racial categories. In the Moldawer case, this question is not decided through collective mobilization, but through individuals (such as the Moldawers) negotiating their claims to racial identification. It is, I suggest, an example of the individualization of race—
a process by which individuals, and not social groups, become positioned as the arbiters of the value and uses of racial identification (Beck and Beck-Gernsheim 2001).

With the increased popularity of genetic ancestry testing, we can expect that cases of individuals using genetics to negotiate entrance into new racial categories will become more frequent. Thus, genomics may become an important site through which to think about the effects of individualization on the meaning and place of racial categories in the American polity. Already in the United States, the use of conventional rights-based categories of race to ameliorate inequality and discrimination faces increasing scrutiny. Recently, the Wall Street Journal reported that for whites, Barack Obama’s ability to secure the Democratic nomination for president (and later the presidency itself) indicates that the United States has produced “enough equality and opportunity” (Kaufman 2008). In a growing number of high profile media spaces, genomics joins the Obama presidency as that which demonstrates the end of race and racism in the United States. Thus, it is not unlikely that genomics also will join the Obama administration as phenomena invoked to challenge the legitimacy of social policies designed to address racism, such as affirmative action.

Finding Oprah’s Roots, Losing the World
Genomics is indeed linking people together who were once torn apart by the ravages of colonialism and racism. However, as the cases of the International Haplotype Map initiative and genetic ancestry tests demonstrate, in so doing genomics does not reveal authentic lost parts of the self so much as it is making up new kinds of selves. These selves form not on their own, but in intimate relations with geneticists (Rabinow 1990; Taussig, Rapp, Heath 2003). As the case of the Moldawers makes clear, these selves reveal the limits of Euro-American liberal democratic understandings of autonomy and self-determination. I conclude by considering what possibilities exist for addressing these limits, and who bears responsibility for the dilemmas that result. To do this, I return to the controversy over Oprah’s use of genomic information and James Frey’s (ab)use of memoir. I do so not to enter the frey over whose account of self proved more morally pernicious, but rather to consider the possibilities and limits of the two liberal technologies for narrating the self at play in these cases: memoir and genomics. As we will see, while memoir offered Frey a way to recover a personal truth and some credibility, genomics
placed Oprah at the precarious limits of Euro-American liberal democratic imaginaries where truth and credibility break down.

*Frey’s Million Little Pieces*

Consider Frey’s response to his critics. Employees at Frey’s rehabilitation center challenged claims he made in *A Million Little Pieces*—in particular, claims that he suffered extreme physical abuse at the center, resulting in repeated broken noses and vomited blood. The employees countered that this kind of abuse could not have occurred: any violent behavior would have met with a discharge; broken noses and vomited blood would have led Frey to an emergency room, not a night on the center’s common room floor (Wyatt 2006). Frey responded by admitting that he had “embellished” the truth. Further, in a “Note to the Reader” added to the beginning of his book, Frey expresses “great regret” for writing about the person he had created in his mind to “help [him] cope,” and not the person who went through the experience. Yet, ultimately, he defends his embellishments:

> Memoir allows the writer to work from memory instead of from a strict journalistic or historical standard. It is about impression and feeling, about individual recollection. The memoir is a combination of facts about my life and certain embellishments. It is a *subjective truth*, altered by the mind of a recovering drug addict and alcoholic. Ultimately, it’s a story, and one that I could not have written without having lived the life I did. [Frey 2006b, emphasis added]

Like Bruce Poch, the Dean of Admissions at Pomona College, here Frey invokes the liberal belief in the authenticity and legitimacy of life experience. It might not ground objective truth, but it can authorize subjective truth.

*Oprah’s Million Little Pieces*

Many found Frey’s response adequate. Indeed, far from being ruined, he is now the best-selling author of *Bright Shiny Morning* (2008). However, I suggest the case of Oprah’s DNA cannot be resolved so easily. Given the multiple claims that DNA reveals to people “who they are and where they came from,” Oprah understandably might have turned to geneticists to arrive at some “objective truth” about herself and her origins. In practice, however, she too found herself disaggregated into “a million little pieces”—the number of genetic variants that now fit on one DNA chip—and the task of discerning the meaning and validity of her own million little bits presented a far more complex task than the one Frey confronted.
First, Oprah would not appear to have recourse to the concept of “subjective truth”: Oprah did not write the account of her Zulu origins; instead she gave her DNA to geneticists in order that they might provide her an objective account of her origins. A subjective account would not do, as it is exactly the ability of genomic practices to filter out subjectivity that grounds beliefs that it will produce truth, not ideology, and thus anti-racism, not racism. As already noted, this Euro-American liberal understanding of genomics inhibits accounting for the material and symbolic conditions that shape genomic explorations of human origins and identity: the economic and political conditions that shape what genetic samples are available for study, as well as the categories available to categorize those samples. Unlike Frey’s account of himself, genomic accounts of selves are not allowed to depend upon, or account for, such limits and constraints. They are merely supposed to reveal the truth; end of story.41

This creates a crisis of credibility for Oprah that cannot be resolved, as it could be for James Frey, through appealing to discourses about the authenticity of life experience. Oprah’s claim to be Zulu derives not from her life experience (conventionally considered the domain of subjective truth), but genomic data (conventionally considered the domain of objective truth). Thus, when a new genetic test “reveals” that Oprah has no Zulu ancestry, it is not geneticists who are held accountable for not revealing the truth about their genetic tests (e.g., their dependency on complex and intermingling political, economic and epistemic orders); it is Oprah who is held accountable for her “misleading” practices of self-identification (Younge 2006).

In this case, as in the case of the HapMap community engagements, a Euro-American liberal approach that locates the power to self-identify with the individual serves to undermine conditions for objectivity, agency, and accountability. Specifically, it allows genome scientists to continue to offer their subjects new powers of self-identification, while remaining unaccountable for the uncertainties and often dis-empowering effects of these new powers. It places the blame for these new uncertainties and injustices introduced by genomic constructions of race and ethnicity on individuals—Oprah, the Moldawers—while making it difficult for genome scientists to recognize and respond to the role their ideas and practices play in re-making racial and ethnic categories, even when these scientists explicitly set out to do this work of recognition (as in the HapMap case). This difficulty recognizing and responding to the ordering practices of genomics can in turn undermine genome scientists’ ability to talk with precision about their objects of study. Operating within a liberal framework that casts truth as the antidote
to ideology, and genomics as a purveyor of truth about the self, to date these dilemmas largely have escaped the attention of most critical scholars of race.\textsuperscript{42}

**Genomic Anti-Racism: Beyond the Limits of Liberalism**

To respond to these dilemmas, and to forge more viable practices of objectivity, agency and accountability, liberal imaginaries and practices that act to separate out science from power must be replaced by efforts to map and respond to the particular ways in which practices for forging genomic knowledge entail political, economic and ethical practices that foster some lives (such as the Moldawers), and not others (arguably, those such as Oprah’s). HapMap organizers made important first efforts to fight this modern predilection to purify—in this case, science from the rest of society (Latour 1993).\textsuperscript{43} However, their efforts faltered as they failed to recognize that the problem human genomics poses is not the liberal one of undue concentration of power, as some recent work has suggested (Palmié 2007). Thus, their efforts to relinquish power through democratizing their practice proved unsatisfactory, both to HapMap scientists and to their subjects.

Experiences from the HapMap, as well as those emerging in genetic ancestry testing, make clear that a simple impulse to democratize genomics can no longer serve—either for genome scientists or their ethnographers—as the imaginative limit of what constitutes an antibracist genomic future. Despite greatly opening up our understanding of “types of agency” available to individuals within what might look at first glance as simple eugenic control, ethnographic and sociological studies still too often imagine that genomics offers “on the one hand … reductive determinism” and “on the other hand, democratic possibilities” (Taussig, Rapp, Heath: 60-62). Although rarely explicitly embraced as a goal, “a democratic society of free and equal individuals” still operates as the imagined alternative to new forms of reductionism and racism engendered by genomic practice (Palmié 2007: 215). Yet, as the cases presented in this paper demonstrate, Euro-American liberal democratic practices do not exist as an outside to human genomics; rather, today they play fundamental roles in its constitution. At the same time, genomic practices refigure the constitution of a democratic act. In such a moment, efforts to forge antibracist futures hinge not on casting human genomics as a dominating present to which democracy is offered as the liberatory future, but rather through
clarifying the novel problems of race and racism that confront us as human genomics and democracy get re-made together in these opening years of the 21st century.

Achieving this will require novel relations between genome scientists, political theorists, critical race theorists and critical scholars of science and technology. How these relations can be forged is the subject of new work, and worthy of greater attention (Fortun and Fortun 2005; Marks 2007; Rabinow 2008). These novel relations are critical to moving beyond simple (and, indeed, dangerous) liberal values of autonomy, inclusion and participation and autonomy as the “imaginative limits” of anti-racist genomics (Herzig forthcoming). This we must do if we are to understand the problems of epistemology and governance present at this historical conjuncture—one defined by globalization and emergent forms of technoscience—where relations, and not distinct autonomous entities, form the primary sites of agency.
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1 See http://news.bbc.co.uk/2/hi/africa/4096706.stm (accessed September 7, 2008)


4 Thomas Kuhn introduced the idea of “normal science,” calling attention to the place of things usually not thought to be a part of science in the very heart of everyday, indeed normal science. See Kuhn (1962).

5 An additional set of issues surround genetic ancestry tests reinvesting meaning in large African groups such as “Zulu” and “Yoruba” (Rotimi 2003).

6 Many tribes in the United States, for example, have refused to provide population geneticists with DNA samples (Reardon 2005).

7 However, in November of 2008, the American Society of Human Genetics issued a statement calling for those in both “science and the academy” to make more transparent “the limitations” of genetic ancestry testing, and to foster relationships between genome scientists and those who have “expertise in historical, sociopolitical and cultural contexts” (American Society of Human Genetics 2008). This represents a promising first step in addressing the issues raised in this essay, although significant challenges to starting this dialogue remain, some of which are outlined in this essay, as well as in Lee et. al. (2009).

8 Instead, Gates went on to start his own company, AfricanDNA, which distinguishes itself from others by being “the first company dedicated to offering both genetic testing and genealogical tracing services for African Americans” (see https://www.africandna.com/News.aspx, accessed July 1, 2008). Gates believes
uncertainly in genetic ancestry tests can be addressed through integrating historical knowledge with genetic knowledge. This additive model of truth (history plus genetics equals truth) fails to take into account that both forms of knowledge are shaped and constrained by economic, political and social conditions.

9 For liberalism in the Euro-American context, the problem of power is often understood to be one of the undue and arbitrary concentration of power. For an elegant summary of this notion of power, see Starr 2007.

10 I use quotes here to indicate that who “the people” are cannot be assumed, but is at stake in this liberal approach. All subsequent uses of “the people” or “people” in this essay should be understood to contain this same problem of contested meaning.

11 By using the language of “social contract for genomics,” I invoke the idea of the “social contract for science” which emerged following World War II. Scholars of science policy used this term to describe the terms under which “society” would support “science,” and science’s reciprocal responsibilities with respect to society. David Guston (2000) recently critiqued this idea, arguing that it rests on the flawed idea that science and society are separate entities. The new social contract for genomics suffers from this same assumed division.


14 “You and I, in fact everyone all over the world, we're literally African under the skin; brothers and sisters separated by a mere two thousand generations,” writes the geneticist Spencer Wells, lead scientist on National Geographic’s Genographic Project. “Old-fashioned concepts of race are not only socially divisive, but scientifically wrong” (http://www.ngeo.com/xpeditions/lessons/09/g912/genographic5.html, accessed July 29, 2009). The Museum of the African Diaspora (MoAD) in San Francisco and AfricanDNA promote a similar view. On April 20, 2008, MoAD sponsored an event on human genomics entitled “Human Migration from Africa.” As the title indicates, the museum hoped that genomics might promote the idea that we all share a common origin: Africa (http://www.moadsf.org/visit/calendar.html, accessed July 29, 2009). AfricanDNA makes the same point through invoking the perceived authority of geneticist Spencer Wells (http://www.africandna.com/history.aspx, accessed June 24, 2008).

15 Informed consent rights did not arise in the U.S. until the breaking of the news about the Tuskegee syphilis experiment in the 1970s. These new rights are granted to individuals, but are arbitrated by a new
set of experts: bioethicists and members of Institutional Review Boards. Thus, even in this case a simple liberal model of individual empowerment proves inadequate. For a further elaboration of these points, see Reverby forthcoming.

16 I thank Steve Epstein for challenging me to think about the problems posed by the (at least) two forms of power at play in scientific studies of race: structural forms of power that lend themselves to liberal Marxist critiques of power, and constitutive forms of power that lend themselves to Foucauldian forms of critique (Epstein 2006).

17 I do not see the problem that genomics poses as one of attaining too much power to define the world (Palmié 2007). Instead, genomics challenges us to understand the specific problems posed by the co-constitution of technoscientific and social order in an age marked by the increased salience of technoscience (Jasanoff 2004; Abu El-Haj 2007; Rose 2007).

18 By liberal anti-racist genomics I mean a form of genomics that is shaped implicitly and explicitly by longstanding liberal democratic ideals of inclusion, participation and autonomy, and is invoked in discourses of anti-racism. In the last five to ten years, this form of genomics has grown in prevalence and authority, particularly in the realm of human genomics.

19 For a critical exploration of the “democratic” potential of AIDS activists’ efforts to shape AIDS research, see Epstein 1991.

20 For a description of the controversies and worries sparked by the Diversity Project, see Reardon 2005.

21 The following three sections draw upon research is part of a three year study funded by the U.S. National Science Foundation called The Paradoxes of Participation: The Status of ‘Groups’ in Liberal Democracies in an Age of Genomics. This study entails a multi-sited ethnographic study of ‘democratization-in-action.’

22 Previously, genome scientists used the category “Yoruban,” including in the proof-of-principle paper for the HapMap. See Gabriel. et. al. 2002.

23 Interview with HapMap organizer, September 5, 2006. All interviews were conducted in confidentiality, and the names of authors are withheld by mutual agreement.

24 Indeed, even the scientist quoted above who was so careful to speak only of the ninety samples of Yoruba cited scientific studies backing up the idea that these ninety people would represent larger geographical groups of human beings (Interview with HapMap organizer, September 5, 2006).


26 Indeed, another prominent organizer argued that the Project’s desire not to define and represent groups distinguished it from the much maligned Diversity Project: “We were mindful of the fact that how you
define these groups is a very controversial topic, but the goal wasn’t to define the groups. I think that’s the difference between the Human [Genome] Diversity Project: the focus was not to characterize the groups qua groups; the goal was to build a medically useful tool” (Interview with HapMap organizer, October 30, 2006).

Karen Barad makes a similar point about the conditions for objectivity: “The correct identification of the objective referent of scientific practices of theorizing and experimenting requires an accounting of the ethical (as well as the epistemological and ontological) concerns” (2007:37).


This is the obverse of Palmié’s claim that genome scientists cannot make meaningful claims without referring to “historiographic literature and popular imagination” (Palmié: 209), and Montoya’s claim that “[s]ociopolitical registers of race and ethnicity are conscripted into the production and consumption of biomedical knowledge” (Montoya 2007: 101).

For an extended discussion of the problems of governance created by the Community Advisory Boards, see Reardon 2007.

Drawing upon the work of Kate O’Riordan, here I use the term “incorporation” to describe the multiple textures of individuals’ consumption of genomic knowledge (O’Riordan n.d.).

Personal genomics company 23andme, for example, offers “personal” information about risk for diseases, but only after selecting an “ethnicity” (https://www.23andme.com/you/journal/psoriasis/overview/ (accessed July 29, 2009).

Some now argue that there are contexts in which the answer should be ‘no.’ Kimberly Tallbear, for example, warns that using genomics to establish who is “Native American” or “indigenous” threatens to “cede intellectual and moral authority to scientists” (2007:422).

Over 15 years ago, Joan Scott alerted us to some of the problems of grounding our claims to knowledge in “experience.” See Scott (1992).

Alondra Nelson’s ethnographic work suggests that DNA tests are already shaping the self-understandings (Nelson 2008).

Genomics plays out some of the problems that fifteen years ago Joan Scott found lurking in the move to ground claims to knowledge in “experience.” See Scott 1992.

Ulrich Beck and Elisabeth Beck-Gernsheim use the term individualization to describe the constitution for the first time in history of the individual, and not social groups, as the unit of social reproduction (xxi).
There is already a precedent for this. In 1995, Newt Gingrich, then speaker of the U.S. House of Representatives, argued that genomics demonstrated that race did not exist, and thus neither should affirmative action (Gingrich 1995).

See, for example, claims made on the websites describing the BBC documentary Motherland: A Genetic Journey and National Geographic’s Genographic Project: http://www.rootsforreal.com/motherland_en.php and https://genographic.nationalgeographic.com/genographic/participate.html (accessed March 19, 2009). Despite these claims, subjects in research projects and documentaries such as Motherland creatively work with genealogical information (including genetic genealogical information) to “weave their own ancestry narratives” (Nelson 2008: 762). Here I am concerned with how individuals, like Oprah, are held to account for these acts of “affiliative self-fashioning” (Ibid.).

For an account of how scientific research might benefit from understanding the role of stories in the constitution of science, see (Wald 2006).

For important exceptions, see the work of Duana Fullwiley (2007), Evelynn Hammonds (N.d.), Rebecca Herzig (in press), and Alondra Nelson (2008), Lundy Braun et al. (2007).

For a description of other liberal purification practices, particularly in the context of the Protestant Reformation, see Keane 2007.

My call here is kindred to Kim and Mike Fortun’s call for anthropologists to “engage the sciences as a domain in which ethics is worked out,” and not just a domain of domination (Fortun and Fortun 2005: 50), and Jonathan Mark’s recent observation that now is the time, “if ever there was a time,” for biological and cultural anthropologists to work together (Marks 2007: 234).

Here I join Rebecca Herzig in exploring exactly what liberal “emancipatory” practices, such as self-identification, now entail in the context of genomics and biomedicine (in press).