

THE (NEW) SCIENCE OF RACE: COMMUNICATING AND CONSTRUCTING
BLACKNESS THROUGH GENETIC ANCESTRY TESTING

by

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ABSTRACT

Globally, millions of people have engaged in identity-seeking behaviors through direct-to-consumer (DTC) genetic ancestry tests (GATs). While current scholarship has shown that GATs can influence individuals' racial and ethnic identities, less research has theorized how GATs impact intrapersonal, interpersonal, and intercultural communication about race. This dissertation studies how GATs influence the way Blackness is defined, communicated, and negotiated. Specifically, I examine how Black people communicate about Blackness, family, ancestry, anti-Blackness, and data surveillance in the context of GATs. I bridge a micro level analysis of communication with a macro level critique of racial-genomic structures to explicate how GATs are arbiters of identity and tools for race-making that are impacted by industry interests in marketability and profit. I employ Critical Race Theory (CRT) and identity negotiation to analyze how GATs, via the rise of commercialized genomics industries, contribute to social constructions of race and racialized power dynamics. Methodologically, I partner CRT with a critique of GAT advertisements, an analysis of qualitative focus groups and interviews with self-identified Black GAT customers, and counterstorytelling. This study reveals how GATs and their surrounding discourses are used to sustain, resist, and negotiate dominant ideologies of Whiteness that re-entrench meanings of Blackness within science and industry logics. Thus, this project responds to the violent history of

racism in science by identifying GATs as a key site through which Western, European biotechnologies contribute to anti-Blackness in a postgenomic world.

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CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

“How Africa has been envisioned by its slave descendent diaspora is a topic of debate. At issue is the ethics of imagining Africa and diasporic connection: What is the substance of diaspora? Who in the diaspora gets to imagine “home”? How is it imagined and to what ends? Conceptions of Africa that underly diasporic consciousness have many sources, including artistic expressions, common experiences of oppression or redemption, communication practices, and today, even DNA.” –Alondra Nelson, The Social Life of DNA

Growing up in rural Southern Indiana, I was surrounded by other people’s histories that I could recount with more familiarity than my own. I knew the religious persecution of the Amish families who sold sweet corn in grocery store parking lots. I knew the accounts of the immigrant millworkers who mined Salem Limestone, the defining geological and economic feature of my hometown, Bedford. And I knew the stories of my White peers, whose families boasted Irish, German, and British ancestry. Yet, my own history and roots remained a mystery. In middle school, when an assignment required writing about my ancestors, the image and story that came to mind was a slave ship setting sail from a distant continent I knew little about. I was embarrassed to admit that I had no other narrative to offer other than the one that nobody—not even teachers—wanted to discuss. My history disrupted the ideas of U.S. exceptionalism we were taught and challenged the American Dream we were sold. From experience, I knew that the entirety of my history could be summarized in February through a few very uncomfortable lessons about slavery and the Civil Rights Movement.

Those classes left my teachers blushing, my peers giggling, and me wanting to disappear. Although my parents supplemented my education about Blackness to instill more pride in me, the overwhelming feeling surrounding my history was shame. I was not even able to identify where my ancestors were from as the assignment required.

When I asked my mom what to write, she said, “You should say you’re from Madagascar. People say Ma’dear’s mom was from there. She was light-skinned and had long hair.” Studying a picture of Ma’dear, Betty Rebecca Matilda McCoy Hall, who was my mother’s grandmother, I saw her features in the faces of her children and grandchildren. Her thick hair framed a face that looked lighter than mine and stretched down her back. Though I never met Ma’dear, I knew stories of her raising a dozen children and starting churches around the Midwest with her husband. That her mother, my great-great-grandmother was from Madagascar seemed as plausible as any other explanation of my African ancestry. I found the country on a map, learned how to pronounce “Malagasy,” the broad term for ethnic groups in Madagascar, and finished my homework.

Years later my Great Aunt Louise, our family genealogist, told me that Madagascar was “a word-of-mouth thing” that involved as much speculation as the copy of *National Geographic* she has kept tucked in her house for decades. The issue has a feature on Indigenous Africans with a picture of a man who she said, “looks just like my daddy.” Hope kept her returning to the well-worn copy of the magazine over the years to examine someone whose eyes and mouth and nose look so similar to her deceased father’s, my great-grandfather. She was determined to reclaim a history that had been stolen from us and believed that article was the family’s key to the Motherland. Aunt

Louise has done a lot to document our genealogy, but the deeply felt loss of ancestral identity is not something she could overcome with genealogy classes at the library, carefully labeled pictures, and newspaper clippings. Absent the *National Geographic* article, little else could pinpoint geographic specificity about the “African” part of our “African-American” ethnicity. The rest of the family history is squarely on the other half of the hyphen, replete with the racial terror that is endemic to the United States’ ethos (Ore, 2019). When asked a single question about family lore, my aunt could talk for hours about how our family’s name was changed from Murdock to Neal because someone narrowly escaped a hanging by crossing state lines. Or she might mention her older sister, Frances, who died a few months before her 12th birthday from appendicitis because she couldn’t go to a White hospital. This is the history that feels the most real to me, because I, too, know the perils of living in this White supremacist nation that has always sought to exploit and subjugate me and my community. And, like every Black generation before me, I understand the resilience of my elders who built lives, families, and communities despite the trauma of everyday living.

While African American oral family histories are meaningful (Haley, 2002; Madison, 1993), there remains an enormous loss of generational knowledge due to slavery. For many Black families throughout the Americas, records grow increasingly scarce in close temporal proximity to the Middle Passage. Genealogists often call this the “brick wall,” a point at which a lack of slavery-era records means there is nothing else to find (Nelson, 2008, p. 764). The status of free or enslaved determined not only the path of a person’s life but also the extent to which their existence was documented for their descendants. For example, on my father’s side, my grandmother’s grandfather was born

into slavery and then his trail goes cold. In contrast, my grandmother's grandmother's line was preserved and documented because the legal status of "free people of color" was distinct from enslaved and free Black people. Their free papers granted them certain liberties, allowing them to buy land in central Indiana. The community became known as Roberts Settlement, one of the largest pre-Civil War Black settlements in the United States (Vincent, 1999). That the settlement survived, and even thrived, amidst the ever-present threat of White violence is a testament to the family's resilience. Their light skin positioned them closer to Whiteness, which afforded mobility, safety, capital, and remembrance in the form of land deeds, marriage licenses, and, ultimately, a historic settlement. Within my family history, proximity to Whiteness has advanced the preservation and transmission of genealogical memory, while proximity to Blackness has obstructed it due to the commodification of Black life. Whiteness, in this way, confers valuable benefits which can be passed down to descendants, a benefit that is kept through mechanisms of racialized exclusion (Harris, 1995). Spillers (1987) described how enslavement damaged the kinship relations of African people because familial relationships were superseded by White property rights when Black enslaved women gave birth. The effect of making Blackness a "property/kinless" condition endures throughout the African diaspora¹, as descendants are continually disconnected from ancestral knowledge and relationships (Spillers, 1987, p. 74). Racial slavery and colonization have made claiming ancestral homelands and familial genealogy impossible

¹ Throughout this project, I use the terms African diaspora and Black diaspora interchangeably, although not all African people are Black. Because the African diaspora is racialized through Blackness (Redmond, 2018) and the GAT industry interpellates Black customers via African ancestry, I reference Blackness through African-ness and vice versa.

for many African and African diasporic people living within and beyond the continent. With the loss of land and resources also came the profound rupture of languages, kinship relations, cultural values, spiritual practices, and more. White supremacy persists, in part, by leaving a historical archive that is nearly impossible to access outside of the lens of Whiteness and European colonization (Spivak, 1988). For Black and Indigenous people—and Black Indigenous people—accessing and practicing knowledges despite Whiteness’ attempts to erase them are continued acts of individual and collective resistance.²

Significantly, the GAT industry boom in recent decades promises to intervene in these historical patterns by restoring knowledge about people’s “origins,” “roots,” and “heritage.” The guarantees are especially enticing for Black families, like mine, who are unable to fully trace their ancestry. I am interested in genetic ancestry testing because of the dis/connections between Blackness, generational knowledge, and the promises of genomic science to restore the history that White supremacy destroyed. It intrigues me that the GAT industry has remarkably little to say about race explicitly; and yet, it seems

² In this study, I discuss the related yet distinct struggles of Black and Indigenous people under historical and ongoing White supremacist colonial violence. As King (2019) writes, “genocide and slavery do not have an edge...the violence moves as one” (p. x). However, the language we use to describe race and Indigeneity often bifurcates Indigenous and Black identity, when it is vital to remember that Black Indigenous people exist in Africa, North America, and throughout the world. Moreover, Blackness can be viewed through a lens of Indigeneity. I use “Indigenous (people) and Black (people)” to mark the distinct nature of our experiences and our differential constructions through scientific discourses, particularly within the U.S. context. I employ the language of the GAT industry when using “Indigenous African ancestry” to describe ancestry from peoples who are Indigenous, post-colonial inhabitants of Africa. At the same time, I recognize distinct constructions of Indigeneity within the African continent. Some African ethnic groups that companies use as reference groups (i.e. Indigenous African reference groups) hold the legal and political designation of Indigenous within their respective political systems and some do not.

to have everything to do with race and scientific racism. The color-line between White and Black worlds in the United States imposed by racism (Du Bois, 1903) was the reason I had seemingly unanswerable questions about my ancestry, to begin with. I was unable to access my ancestry in middle school because my ancestry is what racialized me as Black, whereas my White peers were able to know theirs because their ancestry racialized them as White. Those two processes were not separate but were mutually dependent—Whiteness preserving and reproducing itself (genealogically, materially, symbolically) by excluding Black people from the privileges of Whiteness. Genealogical memory constitutes part of the “rights to use and enjoyment” of Whiteness as property because it is a right from which people of color are excluded by virtue of their racialization (Harris, 1995, p. 1731). The GAT industry has almost nothing to say about these costly dynamics, though ancestry is political and is subject to the same systems of oppression—anti-Blackness, anti-Indigeneity, White supremacist heteropatriarchy—that shape us all.

When I took a 23andMe test in 2020, the advertising assured me of personalized results, crafted from the most elusive part of my being, my DNA. I shipped a vial of my spit to a laboratory and received a genetic profile touted as “the most complete genetic breakdown on the market, and the most comprehensive portrait of you yet” (23andMe, personal communication, February 16, 2020). I wondered if a simple test could meaningfully speak to my identity as a Black person or fill in the gaps my Aunt Louise has been unable to fill. Would it be valuable to claim my origins based on a company’s articulation of who I am? My results were as expected: 72% Sub-Saharan African and 25% European, with a mix of trace ancestry from other places (Figure 1.1). As I looked through the list of countries, nothing seemed worth calling home for. Literally. If I told

my Aunt Louise that the report said 27.4% Nigerian, I wasn't sure what she could or should do with the information. I was not disappointed, because my expectations for it were never high. Instead, I felt detached from the results that seemed like an insufficient "portrait" to capture a sense of myself or my place in the world. The report didn't seem to mean anything more than my aunt's cherished *National Geographic* clipping, which at least had a picture of a person with some visual resemblance to family. I had seen GAT commercials depict people immediately celebrating their newfound identities, but I didn't feel completed by my results; I was indifferent. The results said "African and European," which is nothing "African American" does not already convey. Instead of being revolutionary to my sense of self, the African and European countries were a hollow explanation that repackaged the same, old story of slavery through DNA, a pie chart, and a map. The commercialized genomic account could not reconcile the natal alienation of Black social death caused by slavery. Patterson (1985) argued that an enslaved person was a "socially dead person...alienated from all 'rights' or claims of birth" and cut from all living and ancestral relations (p. 5). A \$99 genetic report is an insufficient tool for fixing the lasting condition of social death.

This project emerged, in part, because I was intellectually curious about my apathetic response to 23andMe. My experience was anticlimactic and framed by my critical perspective on race. However, other Black people have found incredible value and meaning from GATs. I am interested in the diversity of responses that Black people have to these companies. Within our ranges of experience, I wondered, were there commonalities to be found? I am also interested in the way the companies, themselves, speak about and through race. What is the role of GAT companies in producing discourse

about race? Finally, I am interested in the intersections between these questions, which is, how do industry-produced discourses about race shape ideas of identity in Black customers' experiences.

My experience with 23andMe was both unique and common. It was unique because a sense of individualization is intrinsic to the direct-to-consumer (DTC) genetic ancestry testing industry. After all, there is only one me, and my genetic material is a combination of my parents' genes, and theirs is a combination of their parents' genes, and so on. Any enterprise involving DNA could be described, then, as hyper-individualistic. Yet at the same time that GATs make individual-level claims about identity, they also rely on discourses of community because they connect individuals to historical and contemporary groups of people. In my results, those communities are based in regions (e.g., Southern East Africa), nations (e.g., Nigeria, England), and, even, a county (e.g., Trelawney Parish, Jamaica), which are shown on a color-coded map of the world (Figure 1.2). Thus, my experience is quite common, as I share these reference groups with millions of people who have also taken 23andMe ancestry tests. When I log on to my account, I can access information about the populations to which I am connected, including their foodways, linguistic identities, and traditional practices. 23andMe presents this "portrait" of myself as a composite of peoplegroups with distinct histories and cultural politics of belonging. The company's discourse about my identity vacillates between the individual and community levels, but it avoids one salient component, my race. The industry's overreliance on the gene as a defining feature of social belonging creates a conspicuous rhetorical absence around race. When explaining how the company matches customers to genetic groups, 23andMe discusses "ethnic groups," "groups of

people with known and shared ancestry,” “ethnic and ethnolinguistic groups,” and “genetic groups” (23andMe, 2022c). These are positioned as objective facts, able to be discerned through the company’s technoscientific prowess. 23andMe does not address how each of these constructions are racialized or how customers understand them through the lens of race. Because Blackness remains a defining feature of my lived experience, any portrait that omits it is necessarily incomplete. Moreover, any discourse about people of color that omits race or attempts to transcend race is unable to fully contend with the realities of our globalized and racialized world (Joseph, 2012; Squires, 2014). The GAT industry’s rhetorical silence around race allows the power of whiteness to be invoked through the industry while omitting its explicit terminology (Crenshaw, 1997). Whiteness is, indeed, a strategic rhetoric (Nakayama and Krizek, 1995) that moves through the GAT industry in ways that obscure its own presence.

Despite abstaining from racial terms and oddly appearing colorblind, 23andMe creates a rhetoric of identity that participates in race-making. GATs play a large societal role in the “new biopolitics of race” (Roberts, 2012, p. xi) that develop from linkages between genetics and race in the postgenomic age. Postgenomic indicates both a temporal marking (after the decoding of the human genome and the subsequent proliferation of genomic industries) and a structural shift in which the “geneticization of life” (Benjamin, 2009, p. 342) overlays transnational politics of social life. If I had not yet disclosed my race as Black and my ethnicity as African American, readers might have already guessed based on my 23andMe results. In the United States., 72% Sub-Saharan African³ says

³ The term “Sub-Saharan” has been rightfully critiqued for the way it intentionally separates the few Arab countries that make up North Africa from the majority of the countries (below the Saharan desert) that make up “Black” Africa (Karimi, 2010). I use

something about my likelihood of being Black because of the way Blackness signifies Indigenous African ancestry and the continent of Africa signifies Blackness. 25% European might also say something about my race, as Europe is the progenitor of Whiteness as an identity and a logic (Du Bois, 1903). To me, these percentages signify the anti-Black and White supremacist violence from which I descend and against which I currently struggle. The discourses of GATs and race are entwined, and my GAT results invoke questions about my race. If I am Black, what kind of Black am I? Dark-skinned Black? Mixed race Black? “Regular Black-Black?” (McMillan, 2020). These questions signify how racialization is inherent to our understandings of ancestry, lineage, geography, and family, even when those stories are told through DNA. Because race is an overarching system of hierarchical classification in the United States and the world, (Omi & Winant, 2015), it is impossible as a person of color to un-see the way race maps onto the geographical markers 23andMe uses to describe my ancestry. Race is always already present in my ancestry composition. Despite the ironic colorblindness displayed in the GAT industry, my Blackness already arrived and never left.

The GAT industry is interesting because of its paradoxes: Genetic ancestry purports to be colorblind but is inherently racialized; genetic ancestry is a tool for Black family knowledge but also harmfully reproduces scientific racism. The questions, frustrations, and doubts I experienced while taking a GAT happen at much larger scales around me, as millions interact with these companies in a myriad of contexts, including but not limited to family gatherings, social media, commercials, legal cases, and news

Sub-Saharan when using the language supplied by GAT companies or participants in the study.

stories. Active social media communities on Facebook, Reddit, and Discord form around specific GAT companies or shared DNA markers. Genetic genealogy TV shows have thrived, including *Finding Your Roots with Henry Louis Gates, Jr.* (2012-present), *Who Do You Think You Are?* (2010-present), *Faces of America with Henry Louis Gates, Jr.* (2010-2011), *The Generations Project* (2010-2012), and *Genealogy Roadshow* (2013-2016). When people learn of my research area, they often disclose narratives of their own genetic ancestral discoveries. For example, one woman told me that through a test, she learned that her father was not her biological father. Or, they know of some newsworthy stories about hidden adoptions, racial passing, legal battles, or cold cases. The story of the law enforcement catching the Golden State Killer by using a genetic genealogy database is well known. The FBI uploaded a suspect's DNA to GEDmatch, allowing them to find and arrest him via his relatives' genetic information in the database (Kaiser, 2021; Zhang, 2019). This project emerged out of the many GAT discourses I encounter in everyday life. If GATs allege to answer the question, "Who am I?" I turn the question back to the GAT industry, asking: Who are you? Why do you choose to reproduce dominant logics of colorblindness and scientific racism? What does it mean for Black identities and Black bodies to be read through your logics and ideologies? And how are you consequentially shaping the way people understand and communicate about Blackness?

Rationale

By 2019, an estimated 26 million people had taken genetic tests through the top 4 largest personal genetics companies in the world: Ancestry, FamilyTreeDNA, MyHeritage, and 23andMe (Regalado, 2019). No longer fringe products, GATs are part

of a market worth an estimated \$487 million that is projected to reach over \$1095 million in 2026 (Research and Markets, 2021). GATs have become ubiquitous cultural products through advances in biotechnologies, popular demand, and everyday familiarity. The pharmaceutical industry, privately funded research, and state-led science initiatives have advanced genotyping technologies which, in turn, exponentially decreased the price of GATs and increased their commercial availability (Bandelt et al., 2008). GATs have emerged as highly marketable racial and relational projects impacted by industry interests in profit. By individualizing and commercializing explanations of ancestry and health, the GAT industry has transformed the way its customers interpret their lives through their genes. Further, GATs circulate within public discourse and culture, shaping the way people understand and communicate about identity, including race, ethnicity, indigeneity, and ancestry.

Research documents that GATs inform individuals' racial and ethnic identities (Foeman et al., 2015; Nelson, 2016) and that GATs are paradoxically used for both racist and anti-racist ends (Donovan et al., 2018; Foster, 2016; Panofsky & Donovan, 2019). However, less research has theorized the relationship between the GAT industry, communication, and (anti-)Blackness. Anchored by research in critical/cultural communication, interpersonal communication, and science and technology studies (STS), this interdisciplinary critical race project deconstructs how GATs influence contemporary meanings of Blackness. Recent societal surges in awareness about anti-Black racism, such as renewed attention to the Black Lives Matter movement, demonstrate a need to understand how Black identity is constructed and interpreted (Chang et al., 2020; Edgar & Johnson, 2020). Moreover, statements authored by scientists and advocates have urged

the National Institutes of Health and scientists to confront the use of race as a construct in (medical) science (Kaiser, 2021; Yudell et al., 2020). For instance, in 2020, amid the coronavirus pandemic, prominent scholars and practitioners called for “the director of NIH to lead education efforts directed at both scientists and the public about the nature of human genetic diversity and the ongoing need and obligation to confront racism in science” (Yudell et al., 2020, p. 1313). The following year, the NIH recently released a statement apologizing for “those individuals in the biomedical research enterprise who have endured disadvantages due to structural racism” (Kaiser, 2021, p. 997).⁴ Anchored by these imperatives, I interrogate how the scientific racism of GATs manifests through dataveillance and anti-Blackness, and I examine how Black people engage with these technologies.

Rather than viewing GATs as inconsequential entertainment, I argue that the GAT industry is a vital contemporary site in which race-making occurs. Science as a discipline and industry created race by rationalizing racial difference and hierarchy in terms of biology (English, 2018). This continually re-secures lasting rhetorical and epistemological connections between the social fiction of race and the material body. GATs, which rely on the body (genes) to inform the social (identity) are thus implicated in the social construction of race. Scholars and activists from myriad disciplines and communities have critiqued the GAT industry for decades (Indigenous Peoples Council on Biocolonialism, 2000, 2006; TallBear, 2013) because of these antiquated connections. Yet, GATs persist, seemingly offering colorblind genetic explanations of human relations

⁴ The former NIH director who released this statement was Francis Collins, who was also the leader of the Human Genome Project.

through genomic testing and statistical analyses. Terms like “genetic ethnicity,” “biogeographic ancestry,” and “genetic ancestry” permeate GAT discourse, while “race” is suspiciously absent. Despite corporations’ attempts at colorblind logics, race remains central to genomic technologies, even when they are un/intentionally designed to be race-neutral (i.e., colorblind) or beyond race (i.e., post-racial) (Roberts, 2012). Moreover, critical race scholars have long argued that colorblindness readily lends itself to colorblind racism (Bonilla-Silva, 2018; Herring et al., 2004). I align with scholars like Mills (2011), Marable (2015), and Fields and Fields (2014) who argue that race and racism matter because of their material, economic, social, and metaphysical consequences. Race is an essential area of inquiry because it “has become the template of both difference and inequality” (Omi & Winant, 2015, p. 106) from which all other forms of inequity are based. GATs should be part of racial inquiry because they produce and maintain race and racism in genomic terms.

Situated in the critical/cultural paradigm, I argue that genomic technologies are inherently racial because they operate through dominant racial logics. I partner CRT with qualitative methods to theorize how GATs shape perceptions of race at the micro level and partake in the ideological and discursive realms of White normativity at the macro level. Some hold the belief that we live in a post-racial world, meaning society has moved beyond the problem of race and racism is a relic of the past (Goldberg, 2015). GATs challenge post-racialism by re-biologizing race and reifying connections between race and science (Omi, 2010). If racialization secured human hierarchy through the fiction of a superior, biologically distinct White race (Krimsky et al., 2011; Saini, 2019), GATs revitalize racial difference in terms of genetic distinction. In turn, genetic

distinction further naturalizes racial difference and hierarchy. GATs are implicated in centuries-long discourses that blend arguments of nature and culture to validate ideas of race (Hall, 2021). As a result of corporate influence and commercialization, GATs are now part of the current racial formation (Omi & Winant, 2015). By this, I mean that GATs are a key component of sociohistorical processes that produce, transform, and destroy race in ways that reproduce and/or challenge anti-Blackness. Communicatively, GATs function as a discursive medium through which race-making occurs because they apply genomics to racial processes of “making people up” (Omi & Winant, 2015, p. 106). Therefore, it is imperative to understand how these popular tests influence the way people define, experience, and communicate about race. I interrogate how GATs produce paradoxical discourses that invite feelings of community, pride, and connection for Black people while simultaneously reproducing harmful scientific racism that “justifies” anti-Black aims for those in political power. My analyses carve academic trajectories for scholars and activists to humanize the Black experience and challenge anti-Blackness by demonstrating how the commodification of the genome perpetuates racial logics that sustain White supremacy.

Following Bell’s (1991) argument of racial permanence, I, too, believe that “Racism is Here to Stay” (p. 79) and that genomics—or any other means—are unable to “fix” race. Genomics as a field is ill-equipped to address racism—the system of social, legal, economic, and civic subjugation and double standards built to protect Whiteness and sustain the dominant racial hierarchy (Fields & Fields, 2014; Omi & Winant, 2015). Yet, genomics is sometimes presented as an a-political, scientific answer to the political and irrational problem of race. For example, Oni-Orisan et al. (2021) argue that scientists

should substitute biogeographic ancestry for race in medicine and science. Teteh et al (2020) similarly suggest that genetic ancestry be used in biomedical research rather than self-identification of race, which is based on skin pigmentation. In these instances, genomic discourses are a prevalent means for re-interpreting race through a genomic lens. If more institutions replicated the substitution of biogeographic ancestry for race for which they advocate, we would not see a decrease in racist praxes or racial hierarchy, rather a masking of them. The ideologically consistent, yet discursively different ways that we naturalize race within the body have historically led to genocides, chattel slavery, human rights abuses, and related systems of exploitation. Yoking race to science has disguised race as an objective biological category (Roberts, 2012), making it difficult, if not impossible, for humans to ever the hierarchical concepts of negative difference written onto our bodies. Biological definitions of race have largely been retired in recent decades. Famously, after the decoding of the human genome, former president Bill Clinton declared that “all human beings, regardless of race, are more than 99.9 percent the same” (Clinton, 2000, p. 1). But this declaration did not sever the rhetorical and epistemological ties between race and genetics that have continued to evolve. As Hall (2021) asserted, “[race’s] biological, physiological, or genetic definition, having been shown out the front door, tends to sidle around the veranda and climb back in through the window” (p. 360). Genomics are the window through which discourses of racial biological difference are produced today. GATs and the corporations who produce and profit from them offer a way for biological discourses of race to persist within common vernacular in reductive and dangerous ways.

Responding to the need for critical/cultural inquiry on race and science (Kaiser, 2021; Yudell et al., 2020), this project centers Blackness with an emphasis on Black people and the narratives we tell about our identities amid the contemporary remnants of scientific racism. To center our voices, I examine two data sets. The first is a set of GAT advertisements. The second is a set of focus groups and interviews with self-identified Black GAT customers. By Black, I mean participants who belong to the African diaspora and may identify with labels including but not limited to African descended, Afro Latinx, African American, Afro Caribbean, Afro-Indigenous, multiracial, and biracial. I partner Critical Race Theory augmented by the concept of identity negotiation with qualitative methods to respond to the following research questions.

RQ1: How do genetic ancestry tests impact Black and African diasporic identity?

RQ2: What is the relationship between the commodification of identity in genetic ancestry test advertisements and individuals' communication about Blackness?

RQ3: How do Black people discuss anti-Blackness in relation to genetic ancestry testing?

To answer these questions, I ground my scholarship on GATs within an understanding of genomics and genetic genealogy.

The emergence of genomics and genetic genealogy

Commercialized genomics

The discoveries of the Human Genome Project (HGP) from 1990 to 2003 enabled the genomics boom of the 21st century. Pre-HGP, scientists were only able to study genetics, individual genes in the body. The HGP was an international effort to identify

the entirety of humans' genetic material, the human genome (U.S. Department of Energy, 2018). Human genomics make large-scale claims about traits by comparing the presence, absence, and mutations of genes within and between populations (National Human Genome Research Institute, 2022). Genomics has direct implications for clinical practices in medical sciences and studies of human ancestry. Genomic interventions in clinical medicine can identify genetic risk factors and create targeted medicine for diseases such as cancer, diabetes, and Parkinson's (National Human Genome Research Institute, 2020a, 2020b). The HGP created a market for commercialized genomics, which is most evident in the medical industry. Highly profitable services include precision medicine (medicine targeted for specific genetic markers), gene therapy (the process of altering genes that cause genetic disease), and advanced prenatal genetic screening services (Collins & McKusick, 2001; Hood & Rowen, 2013).

Recently, genomics has created niche markets outside of pharmaceutical contexts. Publics are increasingly interested in biohacking, or using science to optimize their bodies and lifestyles (Mercer & Trothen, 2021). Genomics is also monetizable in a wide variety of contexts, which is evidenced by crops of new businesses, such as commercial genetic lifestyle services (Circle DNA, 2021), nutrigenomics services concerning personalized diet and nutrition (PureGenomics, 2021), a short-lived DNA-based dating company (McAshan, 2019), and a now-defunct genetically-based wine service (Robbins, 2016). Within this context, GATs emerge as yet another industry through which genomics is monetized and sold. Genomics has revolutionized studies of human health, behavior, and relationships because of its unique ability to capture both macro patterns across humanity and identify micro genetic markers in individuals. Both personal and

personalized genomics are used as tools for genealogy that sell the idea of discovering “who they are” to customers. Personal genomics enable individuals to sequence their entire genomes (Dudley & Karczewski, 2013) and personalized genomics allow individuals to buy targeted health and ancestry reports (Bartol, 2013). Companies offer a variety of services, including the ability to access raw genetic data, read stylized reports, upload genetic reports to larger databases, and connect with genetic relatives.

Genomics create what Rabinow (1996) called biosociality, a way that science dictates group boundaries and personal identities. He argued that genomics would “colonize older cultural grids” (p. 103), reinforcing, refining, and superseding old social categories, such as race and culture. Although Rabinow framed biosociality as positive and progressive for societal change, scholars have since clarified how biosociality furthers racial oppression (Nelson, 2016; Panofsky & Donovan, 2019). Rather than subsuming cultural categories and biases, genomics map onto pre-existing cultural ideas through justification and validation. Therefore, racial categories have not been replaced by genomics; instead, genomics has empowered race and racism with new forms of discursive currency that function in old ways to sustain White supremacy. The new science of genomics modifies the relationship between science and race by distancing itself from the old science of racism, with claims to multicultural and liberal progress (Hinterberger, 2012).⁵ It is necessary to examine how genomics contribute to racialized structures of power and oppression, as the genome and heredity become a “defining

⁵ I use “old” to indicate that newer sciences of racism exist. However, the “old” science is more recent than one might imagine. For example, Rushton and Rushton published a 2003 article, concluding that “race differences in average brain size are securely established. As such, brain size-related variables provide the most likely biological mediators of the race differences in intelligence” (p. 139).

feature of social life” (Happe, 2013, p. 182). In this way, genomics seek to explain identity, history, and community in ways that discount both the racial violence of technoscience (technology and science) and the ways Indigenous people and people of color conceptualize their own identities, histories, and communities (TallBear, 2007, 2013).

Traditional genealogy

Genealogy focuses on the “external, visible, and relational processes, which establish links between bodies” (Huell, 2020, p. 112), emphasizing the discovery and (re)definition of relationships within kinship systems. Often symbolized by the family tree, genealogy narrates family histories symbolically (e.g., narratives, names) and materially (e.g., photographs, documents). Langellier and Peterson (1993, 2004) suggest that genealogy is one facet of family stories used to perform and constitute families. Further, genealogical communication encompasses narrative and non-narrative elements that (re)make families generationally (Hendry and Ledbetter, 2017). Genealogy is thus a communicative practice that not only represents families and relationships but also constitutes those relationships and the lineages upon which they are based. Though not practiced by every family, and certainly not practiced in the same ways, genealogy is a set of communicative processes that inform, enrich, and define kinship systems.

Family genealogists often perform the documentation, transmission, and preservation of family material cultures and narratives, as they work to answer questions about their family histories. Genealogists can work independently but often consult with other genealogists via formal organizations and informational connections to educate

themselves and further their genealogical pursuits (Nelson, 2008; Hart, 2018). Family genealogists can act as kinkeepers—valuable family members who maintain relationships, facilitate rituals, and provide information and assistance (Leach & Braithwaite, 1996). Though not all family genealogists are kinkeepers and vice versa, kinkeeping is a useful lens to understand the labor family genealogists, who labor to create cohesion among family identity and history. In my opening narrative, I discussed a genealogist in my family, my aunt, who has taken on the communal work of documenting our family history by collecting information, presenting information at family gatherings, and speaking with family members. Family genealogists play a vital role in advancing genealogical efforts on behalf of their kinship networks.

Although the GAT industry profits from the conflation of genomics and genealogy, the two practices are different in terms of central premises. Genomics privileges the gene as the most significant factor in determining human identity and relationality. As a scientific discourse, genomics relies on the desiderata of objectivity and detachment, which shape discourse and hinder perceptions of its anti-humanizing effects (Solomon, 1985). Yet, it is not objective nor detached and is shaped by the “types of evidence scientists choose, the ideas about credibility and counterfeit that factor into these choices, and the mechanics of how evidence is converted into scientific models and conclusions” (Kohli-Laven, 2012, p. 200). In contrast, science and technology do not mediate traditional genealogy, which can encompass broader forms of relationality, such as adopted relationships, friends who are considered family, and other important relationships that extend beyond the biological nuclear family that is central to Western relationality. Within the GAT industry, we see the tension between genomics and

genealogy, as each uses modes of interpretation to define human relation. These tensions become most evident through the practice of genetic genealogy.

Genetic genealogy

Significantly, genomics has interceded in traditional genealogy methods, offering information that material and oral cultures cannot alone provide (Wailoo, 2012). Unlike traditional methods, genetic genealogy uses science to construct relationality and is often interpreted as objective fact because it is extended the “halo of legitimacy” (Duster, 2003, p. 115) associated with genetics. GAT companies commercialize a style of genealogy that can only be accessed through the genome and thus the companies who are able to decode the genome. Early in the advent of the HGP, scholars identified that a key ethical, legal and social (ELSI) issue of human genomics would be its effects on conceptualizations of human relatedness, including genealogy (Collins & Galas, 1993; National Center for Human Genome Research, 1990). Contemporarily, individuals, communities, and government structures grapple with the use of genomics to establish familial and relational ties. Noting the future-oriented nature of genetic genealogy, Kramer (2015) argued that the practice “creates the desire for belonging within networks that may not yet, or may not ever, be satisfied” (p. 89). Therefore, the applications and implications of genetic genealogy are never truly finished, as we continue to see its unfolding impact on our social world.

Viewing genealogy through genomics is *one* way of understanding human descent, migration, and relations; yet for many, the GAT industry has become *the* way of interpreting genealogy. Significantly, the majority of the most lucrative GAT companies

reside in the United States (Regalado, 2019), demonstrating how commercial genomics is culturally embedded within Western, White, and U.S.-based patterns of commodifying geneticized genealogical identities. GAT companies contribute to unequal global power relations, in which U.S. values and cultural meanings are exported along with products that afforded the credibility of science. The genomic relationality for which GATs advocate thus shape the nature of human relationships across the world.

Genomic constructions of anti-Blackness

Like other communication scholars who discuss anti-Blackness by turning to Black studies for foundational concepts and theories (Hall, 2020; Towns, 2022), I use Black studies to theorize the anti-Blackness of commercialized genomics. Costa Vargas and Jung (2021) stress that “unlike racism, which tends to focus on analogous experiences of oppression, antiblackness stresses the singularity of Black people’s dehumanization, antihumanization” (p. 9). Anti-Blackness underscores how Blackness is constructed as the antithesis not only to Whiteness but to social life itself. Debates about humanism persist within Black studies, as some scholars posit that the humanity of Black people is recoverable while others do not (Hartman, 1997; Towns, 2018). However, most agree that the exclusion of Black people from the category of human began with racial slavery, a process that turned African people into commodities, stripping them of the ability to govern their own lives. While White supremacy evolved from literally owning Black people, social constructions of Blackness were formed from the ability to be propertied (Harris, 1995), the ultimate exclusion from humanization and social life. Although non-Black people of color experience dehumanization, the persistent anti-

humanization of Black people is a particular quality of degradation. This manifests across the African diaspora in “the wake” (Sharpe, 2016) of racial slavery, which radically altered the social terrain of the globe through the racialization and subjugation of Black people. Hartman (2008) tells us that anti-Blackness is the “afterlife of slavery” in which “Black lives are still imperiled and devalued by a racial calculus and a political arithmetic that were entrenched centuries ago” (p. 6). Pervasive anti-Black ideologies, systems, discourses, and conditions shape Black life, which we experience within a myriad of contexts (e.g., educational, correctional, medical, and technological fields) (Alexander, 2012; Benjamin, 2019; Morris, 2016; Roberts, 1997). Importantly, acknowledging anti-Blackness does not mean conceding to it. Rather, anti-Blackness illuminates the ways Black people create and sustain life despite ongoing oppression under White supremacist regimes. As Lucille Clifton (1993) wrote, “celebrate / with me that everyday / something has tried to kill me / and has failed” (p. 25). Black people continue to build lives and communities that are beautiful and worth celebrating, despite anti-Black racism’s effects.

Investigating the relationship between anti-Blackness and GATs, I ask how these products develop within the pre-existing anti-Black context of science and genomics. Towns (2018) suggested “the Black body functions as a communicative medium, or an extension of Western self-conceptions, so often overdetermined by whiteness” (p. 354). I argue that Whiteness manifests through Western scientific thought, which has historically and contemporarily overdetermined Blackness as inferior. Science—along with religion, education, law, media, and other institutions—has furthered anti-Blackness by biologizing Black inferiority and White superiority. Biology has “proved” negative racial difference among the Black community, and the scientific method has (re)defined

Blackness over centuries to further Black people's anti-humanization to the benefit of White structures of power. The United States had a vested interest in racializing skin tone, hair texture, bodily smell, cranial size, brain functioning, and bodily capabilities to secure Black people at the bottom of a racial caste system (Rushton & Rushton, 2003; Smith, 2006). These scientific discourses were used to entrench anti-Blackness within the U.S. legal system and in public discourse (Ehlers, 2012). The idea of "Black blood" and "Black genes" was central to the rule of hypodescent, or the idea that one drop of Black ancestry polluted Whiteness (Haney López, 2013b). Science was a critical force in legalizing racial categories that created an exclusive category of Whiteness and an underclass of Blackness.

Within this historical context, genomics has emerged over the past several decades as a science that re-biologizes and relies on the idea of innate human difference at the microscopic level. The discourse that genomics as a field produces about DNA has become part of the way people understand racial difference. Fields and Fields (2014) note the following about the way "DNA" has become a metaphor for race since the genomic revolution:

When equated to "DNA," "blood" resumes its prehistoric career. Only as metaphor may one speak of "black genes," or of "white" and "black" blood. But once invoked, the metaphor launches a logical program of its own: If "blood" is synonymous with "race," and "DNA" is synonymous with "blood," then "DNA" is synonymous with "race" (p. 52).

GAT discourse about DNA can, thus, be viewed as discourse about race. Genomics, at large, relies on ideas of genetic difference between populations. From a critical perspective, these differences across "populations," cannot be understood as neutral, objective, biological designations but as political markers within existing fields of racial

power. I suggest that genomics contribute to anti-Blackness by marking differences within bodies that we inherently view as raced. Because (racial) difference is always operationalized within hierarchy, the use of genomics to fortify discourses of difference also reproduces racial hierarchy, wherein Blackness resides at the bottom and Whiteness at the top. The taxonomical impulse of genomics thus furthers anti-Blackness, because human categorization is necessarily entwined within existing White supremacist structures. Rothman (2001) posited that genetics is not only a discipline but is “a way of thinking, an ideology more than a science—[that] puts all of the essence of life, all of its energy, majesty and power, into the nucleus of a cell” (p. 15). Genomics, then, the macro version of genetics, is also an ideology that furthers anti-Blackness.

Commercializing genetic ancestry testing

Genomics has been commercialized to everyday consumers through the GAT industry. Although one of the most well-known discoveries of the HGP was its declaration that all humans are 99.9% genetically similar (Collins & Mansoura, 2001), the GAT industry relies upon genetic differences between humans to sell products. Humans are 99.9% similar, but “there are still approximately *thirty million points of difference* in the DNA between any two people” (Duster, 2003, p. 147, emphasis in original). It is within these points of genetic difference that GATs purport to explain our humanity via ancestry by capitalizing upon and framing our slight variations into narratives of great meaning. These points of difference also become tools to further racism, because any difference, no matter how small, can validate scientific racism and its accompanying racist ideologies (Panofsky & Donovan, 2019). Technological

advancements and expanding commercial markets continue to make tests more accessible and popular (Ball et al., 2017). I conceptualize GAT companies as those that use customers' DNA to sell explanations of human descent, grouping, and/or migration, usually via comparison to genomic databases. Popular GAT companies include HomeDNA (founded in 1995), FamilyTreeDNA (founded in 1999), African Ancestry (founded in 2003), 23andMe (founded in 2003), MyHeritage (founded in 2003), AncestryDNA (founded in 2012), and Living DNA (founded in 2016) (AfricanAncestry, 2021; Ancestry, 2021; Carson & Chaykowski, 2019; FamilyTree DNA, 2021a; HomeDNA, 2021a; Living DNA, 2021; MyHeritage, 2021a).

Many companies use both open-access and proprietary databases to compare segments of customers' DNA against samples, making genomic data paradoxically both democratized and privatized (Chow-White, 2011). Open-access databases include the Personal Genome Project (PGP) established by Harvard University and the National Human Genome Research Institute's (NHGRI) International Hapmap Project and 1000 Genomes Project (Clarke et al., 2012; The International HapMap Consortium, 2004). Conversely, GAT companies' proprietary databases belong solely to the companies and grow with each customer's data. The more tests a company sells, the larger its database becomes and the more accurate and nuanced the analyses can be. In this way, DNA functions as a commodity that, combined with customers' data, is a main source of industry profit. Companies also vary in their modes of analysis, which are tools that make sense of people's genetic relatives (family history), their ancestors' geographic origins (biogeographic ancestry), and/or their ancestors' belonging to different populations (continental ancestry) (Royal et al., 2010). Differences in databases and analytic

techniques produce and delimit the information customers receive from any given GAT company. The specifics of these techniques are not always available to customers, which means GATs companies have nearly unilateral power to declare truths without transparency, checks for accuracy, or accountability. To theorize how micro level interpersonal communication shapes the meaning of these tests and vice versa, I situate GATs as both relational and racial projects that are impacted by industry interests in marketability, commercialization, and profit. This critical/cultural perspective is generative because race and identity are constructs built through the constant interplay between individual level and macro level forces. GATs are arbiters of identity and tools for race-making, so I analyze them through an interpersonal and an institutional lens to capture their impact on interpersonal relationships and societal ideological.

The rise of GATs has led scholars and activists to critique GATs for their connections to scientific racism.⁶ Saini (2019) and Roberts (2012) argue that GATs are a contemporary way of re-entrenching race within science thereby reproducing scientific racism. This re-biologization of race (Omi, 2010) is essential to critique because, as previously mentioned, the HGP (Collins & Mansoura, 2001) revealed that race is not a biological truth and more genetic difference exists within racial groups than between them. Yet, these tests invoke social constructions of race long-presumed to be biological, whether they intend to explicitly report on race or not (Roberts, 2012). To create genetic databases, scientists often begin by sampling genes from racial, ethnic, and continental groups. They begin with the assumption that groups of people have different allele

⁶ While many scholars use the terms “scientific racism” and “race science,” Field and Fields (2014) argue that “bio-racism” is a more appropriate term, considering how these racist processes were scientific failures.

patterns of identifiable differences in their genes. In doing so, they overlook how an allele pattern appears across the human genome. This makes it seem as if racial, ethnic, and continental groups have exclusive genetic markers, or that racial genes exist (Nash, 2015). In reality, human genetics are random and any genes that appear with high frequency in a population also appear outside of that population (Roberts, 2012). Further, GATs invoke race through their use of continental and ethnic ancestry, often commercialized as a way for people to find their roots. In the United States in particular, where race is figured as a mastery category (Omi & Winant, 2015), continental ancestry from Europe, Asia, Latin America, and Africa maps neatly onto the hierarchy of ethnoracial⁷ categories including White, Asian, Latinx, and Black. Far from colorblind, post-racial, or anti-racist, GATs are biotechnologies with racial implications that manifest in micro and macro contexts. It is essential to grasp the co-constitutive nature of GATs and race so we understand how racial constructs and racialized power dynamics are inherent to all genomic projects. Indeed, GATs may be the future of racial projects. Mirroring how racial terms have changed over time, in the future biogeographic ancestry might be used in place of racial terms. Such shifts in language could mask the way racism contributes to inequity in myriad contexts. For people of color, these changes could mean the rationalization and biologization of disparities in healthcare, education, penal systems, and more.

⁷ At times, I use “ethnoracial” to draw attention to the way ethnicity is racialized, race is ethnicized, and the GAT industry blurs analytics distinctions between race and ethnicity. This term is not a substitute for race. It shows the both/and of race and ethnicity simultaneously co-producing each other. Loveman (2014) calls this the “family resemblance” of the terms we use to delineate “collectives that share ancestral or cultural roots” (p. 14) (e.g., race, ethnicity, origins, caste, nationality, and linguistic group).

In addition to understanding how GATs invoke race, it is equally important to analyze how individuals filter their GAT results through their identities and cultural understandings of race and ethnicity (Foeman, 2009b; Horowitz et al., 2019; Nelson, 2016; Panofsky & Donovan, 2019). Scholarship demonstrates that people exercise choice in how they incorporate genetic information into their sense of self, family, and community. Nelson (2008) called this biosociality “affiliative self-fashioning” to illustrate how people reconcile the personalized data of GATs with alternate identificatory resources, including self-aspirations and external appraisals. Based on Nelson’s concept, Roth and Ivemark (2018) propose a “continuum of geneticization.” This spectrum illustrates how people may choose total acceptance of GAT results (i.e., genetic determinism theory) or make sense of results through their racial and ethnic identities (i.e., genetic options theory). Both of these concepts describe the agency of GAT customers in determining if and how to use GATs in building a sense of self. From a critical/cultural perspective, I critique the power of the GAT industry while prioritizing the agency of people to accept, apply, reject, refine, and negotiate the meanings of their GATs.

Important to this study are the structures of race that influence how people interpret genetic ancestry. In a study involving 12 Black, 8 White, and 1 Latinx participant, Foeman (2009) showed that Black people were more likely to have an existing narrative of the European ancestry their GATs revealed. White people, in contrast, were more likely to be surprised if their GATs revealed African ancestry.

Similarly, in an interview study with 100 people⁸, Roth and Ivemark (2018) found that White people were more likely than any other group to incorporate genetic identities into their sense of self and Black people were the least likely. Differences may exist between racial groups' interpretation of GATs because the freedom to identify with ancestry is constrained by racial, ethnic, and national identity (Nash, 2015). For instance, Black people often have the least amount of latitude to incorporate genetic identities into their sense of self because of racial structures that make Blackness an essentializing feature. Receiving results of European or Asian origins may not be transformative to a person's sense of self when the lived experience of being a Black person is unlikely to change. In the United States in particular, based on laws of hypodescent, Black people have historically been propertied by their Blackness (Harris, 1995), making the presence of any Blackness the defining factor in a person's racial identity, legal rights, and life prospects. Therefore, the presence of ancestry that is perceived as Black and the lived experience of being Black often remain central to a person's sense of self, while other modes of identification offered by GATs are foreclosed by dominant racial structures. Despite this reality, many Black people still use GATs to understand their histories, particularly if they are descended from enslaved people (Nelson, 2016). Paradoxically, even though racial slavery was produced, in part, through scientific racism, descendants of racial slavery use contemporary racial science to reclaim and celebrate the ancestry that Gats allow them to reclaim from histories erased by White supremacy. This study expands this compelling body of scholarship in 3 ways: I ask how Black people interact

⁸ N = 100. Total identifications, including single and mixed race: 71 White; 28 Black; 19 Hispanic/Latino; 9 Asian; 24 Native American (Roth & Ivemark, 2018).

with biotechnologies that uphold White supremacy through racial genomics. I examine how GATs shape identity negotiation processes. Finally, I deconstruct the corporate power and discourse of the GAT industry.

Genetic ancestry testing companies

The GAT industry encompasses dozens of companies that offer similar yet sometimes distinct services (Table 1.1). In what follows, I provide an overview of 23andMe as a key exemplar of how the industry works by summarizing its corporate structure, services, and diversity, equity, and inclusion (DEI) initiatives to demonstrate the investments and programs common to the industry. I chose 23andMe specifically because of its leadership as a GAT company and a health service—a business model that later companies have followed.

23andMe. Named for the 23 pairs of chromosomes in a human body, 23andMe is valued at \$2.5 billion and hosts the world’s largest genetic research database (Carson & Chaykowski, 2019).⁹ Since launching its first personal genetics test for \$999 in 2006, 23andMe now sells millions of tests each year for less than \$100 (23andMe, 2021b; Carson & Chaykowski, 2019). *Time Magazine* named 23andMe’s genetic tests “Invention of the Year” in 2008, and the company has continued to refine its services with expanded products over time (Time Magazine, 2008). Important to this study, 23andMe Ancestry results are comprised of four components that include a/n: (1) Ancestry Composition illustrating a person’s ancestors’ connection to specific nations, regions, and

⁹ It is unclear what criteria 23andMe uses to measure its status as “the world’s largest genetic research database” or what criteria AncestryDNA uses to measure its status as the “largest consumer DNA network” (23andMe, 2021c; Ancestry, 2021).

peoplegroups presented as a pie chart of percentages, (2) Ancestry Detail Reports that offer more in-depth information about the ancestry composition pie chart, (3) maternal and paternal haplogroups that indicate a group to which people belong because of a common ancestor, and (4) results that confirm or deny Neanderthal ancestry, an extinct human species that preceded homo sapiens (23andMe, 2021c). To date, the majority of scholarship about 23andMe has focused on the implications of its health reports with regard to the FDA and customer agency (Annas & Elias, 2014; Zettler et al., 2014).

After 23andMe went public in 2021 to expand its business prospects, the company reported a third-quarter revenue of \$57 million and a 9-month revenue \$171 million. Their private database now includes 12.2 million genotyped customers (23andMe, 2022k). 23andMe is governed by a Board of Directors, a leadership team, and committees. The board includes CEO and co-founder Ann Wojcicki and 8 members with a range of work experience in highly visible technology companies, health, investment, and other sectors.¹⁰ Board members Neal Mohan, Roelof Botha, Sandra Hernández, and Valeria Montgomery have worked for Google, YouTube, Eventbrite, Evernote, the California Health Care Foundation, and Morehouse School of Medicine, among other places. (23andMe, 2022d). Other leadership positions include a privacy officer, investor relations, and a scientific officer (23andMe, 2022h). The company began to heavily invest in pharmaceutical work in 2018 to expand its market prospects, with a \$300 million equity investment by GlaxoSmithKline (GSK) (GlaxoSmithKline, 2018). Since then, 23andMe has run its first clinical trial for a cancer therapy with GSK and bought

¹⁰ Ann Wojcicki is connected personally to several tech companies. Her ex-husband Sergey Bin co-founded Google, and her sister, Susan Wojcicki is the CEO of YouTube. Google was an early investor in 23andMe (Silverberg, 2018).

Lemonaid Health, a platform for telemedicine and digital pharmacy (23andMe, 2020, 2021d). 23andMe has produced over 180 research articles and continues pursuing drug discovery programs through its research branch (23andMe, 2022k). These corporate expansions into health and pharmacology are significant to note because they indicate 23andMe's increasing influence within private and public institutions of health and science.

23andMe's attention to diversity, equity, and inclusion (DEI) has increased in the past few years, given the recent demand for DEI and anti-racist investments since 2020. . In 2021, the company created and appointed a new director of DEI as a direct response to 2020's high-profile cases of police brutality (23andMe, 2021a). Company employee demographics are 45% White, with the least amount of representation from American Indian people (0.2%), multiracial people (2.3%), and Black people (2.2%). The leadership team's numbers are more disparate, with 63% White representation (23andMe, 2022f). The company outlines its DEI efforts for hiring, employee experience, product research and development, and community impact and collaborations. These initiatives range from inclusive interview training to employee resource groups (e.g., Blacks@, femengineers, Neurodiversity, etc.). Going forward, the company articulates plans to work on "increasing the value that our product delivers to customers from non-European backgrounds" (23andMe, 2022f). For example, the company has made recent developments to specify African ancestry estimations by adding 25 African ethnolinguistic groups¹¹. 23andMe's contributions to research on the Transatlantic Slave

¹¹ The current African reference groups are the following, with * indicating the 25 new groups: African Hunter Gatherer (Mbuti people*, Baka and Biaka people*); Congolese and Southern East African (Angolan and Angolese: Congo (the Democratic

Trade led to the development of new interpretations and algorithms that are used to produce more accurate ancestry reports for customers connected to these new groups (23andMe, 2022j; Micheletti et al., 2020). Ongoing projects like the Global Genetics Project and Populations Collaborations Program continue to target underrepresented groups from around the world to encourage their participation in 23andMe. Many of the groups targeted for inclusion are on the African continent with goals to build more diverse databases and produce more comprehensive research (23andMe, 2022g, 2022b).

AncestryDNA. Utah-based AncestryDNA is the world's largest DNA consumer database. Ancestry.com began in the early 1990s by offering digitized family histories, census records, and other genealogy tools. The company launched AncestryDNA in 2012 and by 2018 it became the largest consumer DNA network in the world, with over 10 million people. Three years later, Ancestry had cataloged 20 million people's DNA (Ancestry, 2021). Blackstone Group Inc bought Ancestry (the parent company) for \$4.7 billion in 2020, with annual earnings of more than \$1 billion (Oguh, 2020).

AncestryDNA offers autosomal DNA testing to indicate male and female direct ancestors, using a reference panel of the Human Genome Diversity Project (HGDP), the

Republic of), Shona and Nguni peoples*, Luba and Kete peoples*, Kongo and Mbundu peoples*; Southern East African (Kenya, Rwanda, Kikuyu and Kamba peoples*, Luhya and Luo peoples*, Massai people*, Rundi peoples*, Hadza and Sandawe*, Broadly Congolese and Southern East African); Ghanaian, Liberian, & Sierra Leonean (Ghana, Liberia, Sierra Leone, Ashanti people*, Ewe, Fone, Ga-Dangme, & Fante people*, Mende people*, Temne and Limba peoples*, Peoples of Liberia*); Senegambian and Guinean (Guinea, Cape Verde, Gambia, Senegal, Mandika people*, Fula and Wolof peoples*); Nigerian (Nigeria, Edo and Ijaw people*, Igbo people*, Yoruba people*, Esan people*, Bamileke and Kom peoples*); Broadly West African (Cameroon, Mauritania); Ethiopian and Eritrean (Ethiopia, Eritrea, Peoples of central and western Ethiopia*, Tigrinya speakers*; Somolia; Sudanese (Sudan, South Sudan); Broadly North East African; Broadly Sub-Saharan African; ‡Khomani San* (23andMe, 2022j).

1000 Genomes Project, and its proprietary database to craft reports for each customer. Ancestry results are formatted as “ethnicity estimates,” which align with up to 43 global regions (AncestryDNA, 2018).

MyHeritage. With over 91 million users worldwide, the Israel-based company MyHeritage provides both traditional and genetic genealogy services also through autosomal testing (MyHeritage, 2020, 2021b). Though main offices are located in Tel Aviv, MyHeritage has 6 international offices, including one in Lehi, Utah. Customers receive 2 interrelated sets of ancestral information: (1) Ethnicity Estimates denote ancestral ethnicity from 42 possible groups, and (2) Genetic Groups provide geographic information about these ethnic groups. For example, an ethnicity offered by MyHeritage might be Ashkenazi Jewish. The accompanying Genetic Groups associated with that ethnicity might be Poland, Ukraine, Russia, and Romania. The results also provide details about these groups, including how many DNA kits have been used by this ethnic group, where many people from this ethnic group live, and common names for people in this group (Horowitz, 2021).

FamilyTreeDNA. FamilyTreeDNA offers three GAT tests, which include: Y-DNA for paternal ancestry, mtDNA for maternal ancestry, and autosomal for maternal and paternal ancestry. Results come in 4 sections: MyOrigins delivers “ethnic percentages” via a visual mapping tool; ancientOrigins shows ancient ancestors’ migration routes and connections to ancient European groups (e.g., Neolithic Hunter/Gatherers, Early Farmers, and Bronze-age Metal Invaders); Family Matching connects users to other users via confirmed DNA matches; and Chromosome Browser allows users to compare DNA blocks to their genetic matches (FamilyTree DNA, 2021b).

FamilyTreeDNA boasts that it does not sell customers' genetic data to third parties (FamilyTree DNA, 2018), but has been involved in privacy controversies involving law enforcement (Haag, 2019).

AfricanAncestry. Unlike other companies, AfricanAncestry has a specific target audience of members of the African diaspora, with the largest audience being African Americans. Co-founded by Drs. Rick Kittles and Gina Paige, AfricanAncestry's focus on African genetics fills a gap in the GAT market because European genetic data is the most abundant resource. Therefore, AfricanAncestry can give more specific results about African genetic ancestry than other companies. AfricanAncestry boasts "the most comprehensive database of indigenous African genetic sequences in existence" (AfricanAncestry, 2020). The company's database includes 30,000 lineages from over 30 African countries and hundreds of ethnic groups (AfricanAncestry, 2022). AfricanAncestry offers three tests: Matriclan tests use mtDNA, patriclan tests use Y-DNA, and family tests use autosomal DNA. The company also offers unique merchandise, including certificates of belonging to African groups and commercial memorabilia (e.g., t-shirts, jewelry, and study guides).

Living DNA. In 2016, Living DNA was launched from the parent company DNA Worldwide, which provides DNA, drug, alcohol, and forensic testing, specializing in immigration and child custody cases (DNA Worldwide, 2021). Founded by David and Hannah Nicholson, LivingDNA is a privately-owned UK-based GAT company that offers health and ancestry tests (Living DNA, 2021). Ancestry tests include ancestry percentages, maternal and paternal haplogroups covering deep ancestry (up to 80,000 years), and optional family matching with members in the LivingDNA database.

Customers can also obtain their raw genetic data files for other use, such as uploading to GEDmatch or other databases. The company boasts specialist ancestry in African ancestry, European Ancestry, British Ancestry, and Irish ancestry. These specialist ancestry products appear to be based on the amount of genetic data available from the African continent and these European regions.

HomeDNA. HomeDNA sells a variety of mtDNA, Y-DNA, and autosomal testing products, including ancestry, health, and pet testing. The company offers 8 types of ancestry tests. GPS Origins tests are biogeographical tests: GPS Origins Ancestry test is a general biogeographical test; GPS Origins Algorithm allows customers to upload their raw genetic data including data from other companies; GPS Origins African Edition is for people of African descent; and GPS Origins Asian Edition is for people of Asian descent. Their Advanced Ancestry Test offers in-depth information about gene pools and migration patterns. Conversely, the Starter Ancestry Test uses fewer DNA markers to compare a customer's ancestry via four regions (Europe, Indigenous American, East-Asian, and Sub-Saharan African) to their contemporary ethnic connections. Finally, the DNA Origins Maternal Line and DNA Origins Paternal Line tests offer mtDNA and Y-DNA analysis (HomeDNA, 2021b).

Geno 2.0. In 2019, National Geographic Society discontinued its line of GATs—Geno 1.0, Geno 2.0, Geno 2.0 Next Generation, and Geno 2.0 Next Generation Helix—which were part of the company's Genographic Project. Co-led by IBM, The Genographic Project (2005—present) examines human migration by collecting DNA samples from Indigenous people and the general public. The project has been heavily criticized and well-received because of the range of its sample and the way it relied on

Indigenous participation (Indigenous Peoples Council on Biocolonialism, 2006; TallBear, 2007). In its early years, the Genographic Project received funds and genetic information from public participation GATs. These kits were relaunched in 2012 under the brand Geno 2.0, which allowed customers to choose to include their information in the larger research studies (IBM, 2006; National Geographic, 2016, 2021a). Geno tests used a combination of mtDNA, Y-DNA, and autosomal analysis. FamilyTreeDNA processed many of National Geographic's genetic ancestry tests, and Geno 2.0 Helix tests were affiliated with Helix, the population genomics platform (National Geographic, 2021b), showing how GAT endeavors are often part of multiple corporations.

The data surveillance of biogenetic databases

Databases are a foundation of the GAT industry and function as mechanisms of data surveillance (dataveillance) that reproduce colorblind racism, which, as an ideology attempts to ignore or dismiss race and racism in lived experience. Database creators privilege the interests of their most profitable users, which have historically been White stakeholders with political and economic power, such as U.S. military and intelligence (Benjamin, 2019). Stevens, Hoffmann, and Florini (2021) argue that databases are entangled within discourses of optimization that mask White normativity. That is, they optimize functions for the White majority according to White norms thereby sustaining White supremacy. Further, databases function through purportedly colorblind logics and algorithms that “conceal the role of race in structuring our social world” (Stevens et al., 2021, p. 121). Functionally, race operates within databases and their applications, but colorblind racism discursively obscures race's role in database technologies. Discourse

about information and code masks race's presence within databases, particularly biogenetic ones (Chow-White, 2012), which rely on human difference. Echoing concerns about the discriminatory nature of big data at large (Barocas & Selbst, 2016; Hoffmann, 2019), I critique biogenetic databases for the surveillance they foster in law enforcement and medical contexts that renders people of color more susceptible to surveillance and penalization.

Large-scale genomic databases inherent to the GAT industry increase dataveillance on demographic information (e.g., names, emails) and biogenetic material. Concerns about the dataveillance of GAT companies have entered public discourse in the wake of several high-profile incidents. In 2018, police used the genetic genealogy site GEDmatch to catch the "Golden State Killer." GEDmatch violated its privacy conditions to allow law enforcement access (Zhang, 2019). The same year, MyHeritage experienced a data breach in which over 92 million people's email addresses and encrypted passwords were compromised. The company later admitted that it opened its database to the FBI to assist in an investigation (Haag, 2019). A month later, 23andMe announced a partnership with the pharmaceutical company GlaxoSmithKline (GSK) (GlaxoSmithKline, 2018), raising additional privacy concerns about data being shared with other companies. Following these incidents, the Pentagon warned military personnel against using GATs because of security risks (Martinez, 2019). Some attribute privacy concerns as the main reason that several GAT companies experienced a sharp decline in profit in 2019 (Creet, 2020; Farr, 2019; Molla, 2020).

GAT companies' cooperation with law enforcement has exposed the risk of their databases amid perpetuating the anti-Blackness of the criminal justice system. Browne

(2015) argued that surveillance is a fact of anti-Blackness and that Blackness has historically been “a key site through which surveillance is practiced, narrated, and enacted” (p. 9). Browne’s claim is evident in the common practice of forensic genomics used in criminal investigations (Murphy, 2020; Stelloh, 2019). For example, the now-discontinued DNAWitness was an early product that predicted the race of suspects by using Ancestry Informative Markers (AIMS) on DNA. Although using AIMS to predict race is imperfect, DNAWitness was used as evidence in court to link suspects to crimes (Fullwiley, 2011). More recently, Parabon Nanolabs announced its Snapshot Genetic Genealogy Service, which uses genetic genealogy, DNA phenotyping, and kinship inference to assist in investigations. In other words, this service identifies people by searching for their relatives in public genetic genealogy databases, predicts people’s physical appearance based on their DNA, and determines relatedness to other people based on DNA matching (Parabon Nanolabs, 2021). Forensic genomics impact Black people and non-Black people of color whose biogenetic data is disproportionately present in criminal justice system databases. It also creates indefinite genetic surveillance that can lead to racist stigma and discrimination (Risher, 2011; Wallace, 2011).

Within the context of these technologies, several GAT companies have opened their proprietary databases to police searches to assist criminal investigations. Almost half of U.S. Americans believe it is acceptable for GAT companies to share data with law enforcement. Yet, out of White, Black, and Hispanic groups, Black people are more likely to say it is not acceptable (Perrin, 2020). Recently, Maryland passed the first U.S. law that regulates how law enforcement uses consumer genetic data (Ram et al., 2021).

More states are considering legal responses, as legislators determine whether DNA-database police searches violate Fourth Amendment rights (McLoughlin, 2021). Given the stakes of anti-Black dataveillance, it is essential to understand how Black people conceptualize dataveillance within the GAT industry.

Paralleling the anti-Blackness of law enforcement is the anti-Blackness of medical science. Dataveillance manifests through GAT companies and pharmaceutical industries sharing biogenetic data to produce medical studies. Concerns about confidentiality are valid given the long history of medical sciences accessing and exploiting Black people's biogenetic data. Examples include stealing Henrietta Lacks' cells and using them for decades without permission to pioneer medical research ("Henrietta Lacks," 2020; Skloot, 2011), experimenting on Black people under the guise of syphilis treatment in Tuskegee, Alabama (Brandt, 1978; Solomon, 1985; Frazier, 2020), and conducting forced sterilizations on Black and Indigenous women in the name of eugenics (Beal, 2008; Washington, 2006). Consequently, African Americans maintain higher levels of medical mistrust than their White counterparts (Arnett et al., 2016; LaVeist et al., 2000) and use cultural memory to evaluate biomedical research (Bates & Harris, 2004). These concerns remain well-founded amid historical and continued failures within the institutions of science and medicine to humanize Black people. Several GAT companies have partnered with pharmaceutical and medical companies, sharing data and research findings for mutual discovery and profit. Additionally, Henrietta Lacks' cells are still used without her family being adequately compensated for several decades of medicine and scientific exploitation. Recently, Lacks' family filed a lawsuit against Thermo Fisher, a biotech company that profits from her cells, after past lawsuits have failed to offer

recourse (Kabbara, 2021). Additionally, the coronavirus pandemic has exacerbated mistrust in biomedical research. In the past 2 years, Black Americans have had low confidence in vaccine efficacy due to collective memory about biomedical racism (Langer Research Associates et al., 2020; Opel et al., 2021). The pandemic has created a deluge of bioracist discourse, including anti-Asian hate to anti-Black discrimination. Whereas Asian people have been falsely vilified and constructed as carriers of the virus, initial claims about Black people asserted their biological immunity (Dhanani & Franz, 2020; Le et al., 2020; J. Ross, 2020; Wright & Duong, 2021). The racialization of COVID-19 indicates contemporary ways that science is used as a tool of racialization and a justification for racism.

Black Communication Studies

The roots of Black communication studies

My attention to anti-Black dataveillance places me in conversation with scholars from numerous fields, including my discipline, communication studies. This project is situated within Black Communication Studies which emerged in response to the field of communication's Eurocentric and White-normative nature. Several scholars have criticized communication studies for being racist, Eurocentric, xenophobic, White supremacist, and colonialist (Chakravartty et al., 2018; Chakravartty & Jackson, 2020; Flores, 2016; Hendrix, 2005; Houdek, 2018; Orbe & Allen, 2008; Yep, 2010). Intercultural communication and later critical intercultural communication paved the way to theorize race and racism as communicative phenomena (Halualani & Nakayama, 2010; Leeds-Hurwitz, 2010). Black communication scholars focus our attention at the

crossroads of communication, culture, and identity with regard to people of the African diaspora. Rather than treating race as an optional unit of analysis, Black communication scholars emphasize the omnipresence of race throughout communication phenomena, including social movements (Edgar & Johnson, 2020; Moss & Jackson, 2017), public spheres (Johnson, 2021; Squires, 2002), interpersonal and family contexts (Boylorn, 2013; Minniear & Soliz, 2019), digital discourse (Sobande, 2020; Steele, 2018), the Black press (Gallon, 2020; Ross, 2020), and mass media (Castle Bell & Harris, 2017; Florini, 2019). Key questions to which our work responds include: How is Blackness rhetorically, discursively, and performatively constructed? How do Black people use communication to resist White supremacy? Two main contributions of Black communication to the discipline are its insights on Black media and Black technologies, both of which are essential to this project.

Often taking an Afrocentric view (Asante, 2003), Black communication scholars examine the role of media in producing and resisting anti-Black racism. Black media scholars interrogate how media shape conceptions of Blackness by examining the politics of representation in many contexts, including television, cinema, and social media. Others also interrogate media industries and audience. Hall's (1991, 1992) foundational approach influences this area of inquiry because scholars situate media as cultural productions entangled within ideologies that produce race. Some scholarship critiques how Whiteness constructs Blackness in mediated contexts (Griffin, 2019; Murphy & Harris, 2018; Washington, 2020), while other research examines how Black people (re)define race through media (Arthur, 2021; de B'éri, 2008; Maragh-Lloyd, 2020; Steele, 2021). Black media scholars contribute to communication studies by drawing

from digital media studies, internet studies, sociology, critical race studies, and platform studies (Hamilton, 2020). These meaningful interdisciplinary interventions deepen and broaden communication inquiry. Kelsie's (2020) critique of anti-Blackness in genetic genealogy discourse, which includes genetic genealogy advertisements and television, concludes that genetic genealogy demands that Black people "assent to de-racialization in order to enter into the drama of Human value" (p. iv). Via motifs of loss and recovery, genetic genealogy discourse invests Blackness within neoliberal multiculturalism. Building upon such works, I analyze commercials in this project to deconstruct dominant representations of race in GAT advertising. Through my analysis, I uncover the racial implications of GAT advertisements, theorizing how they operate within contemporary media and genomic landscapes to commercialize Western and White dominance over identity construction. Taking after Hall (1991), I also ask how people interpret dominant ideologies encoded in media. Participants in my focus groups discuss advertisements and reflect on anti-Blackness, racism, and dataveillance.

This project is also in conversation with scholars who theorize Blackness in the technological realms of algorithms, databases, artificial intelligence, and digital platforms (Benjamin, 2019; Brock, 2020; Nelson, 2016; Noble, 2018). Scholars in this area embrace interdisciplinarity across science and technology studies (STS), media studies, and sociology. This area aligns with Black communication studies because their approaches often focus on the discursive construction of race through communication technologies. Dominant discourse presents big tech and big data as solutions to race because they represent more progressive futures, but research demonstrates that these industries reproduce the racist social systems from which they emerge (Chow-White,

2011; Hoffmann, 2019; Stevens et al., 2021; H. Wallace, 2011). In summary, “Racism and sexism are part of the architecture and language of technology” (Noble, 2018, p. 9). As technological innovations increasingly inform societal decision-making among, for example, law enforcement, scientists, and doctors, it is vital to challenge their reproduction of anti-Black racism. Benjamin (2019) calls the New Jim Code “the employment of new technologies that reflect and reproduce existing inequities but that are promoted and perceived as more objective or progressive than the discriminatory systems of the previous era” (p. 5–6). For example, AI technologies, like Facebook auto-tagging, reproduce racism by reinforcing associations between Blackness and animality. In incidents where Black people have been aged as gorillas, AI is exposed as a racist code, influenced by social biases instead of a neutral technology (Benjamin, 2019). In pharmacogenomics, race is used in decision-making algorithms as a variable that helps determine what drugs are appropriate for what populations (Goodman, 2013; Vyas et al., 2020). This approach often means that Black patients receive less or lower quality care. Situated within Black communication studies, I argue that the New Jim Code includes the GAT industry. GATs are often described as progressive technologies that reveal the falseness of race. However, they generate racial and racist discourse that influences discursive constructions of identity and difference.

Finally, this project is indebted to Black communication scholars who have established Black storytelling as an essential area of inquiry. Their work demonstrates that narrative is a powerful tool for understanding racialized power dynamics and communicative phenomena. Black stories can “breach the heavy weight of dispossession and loss” and theorize the world (McKittrick, 2021, p. 7). Scholarship documents how

Black people story our lives in many contexts, including interpersonal, organizational, and intercultural settings (Davis, 2002; Houston, 2002; Scott, 2013). Boylorn's (2013) *Sweetwater: Black Women and Narratives of Resilience* examines Southern Black women's lived experiences through narratives of their interpersonal and family communication that detail how Black social life is a constant interplay between community-based meanings and political and social norms. The book is a necessary disruption to the Whiteness of autoethnography communication studies and asserts that Black women's stories about race, class, and gender are meaningful sites of scholarly inquiry. Others, like Durham (2020) and Johnson (2016) have crafted autoethnographic narratives that further critical/cultural communication by complicating our understanding of race through intersectional lenses. Their scholarship explains how the stories we tell about ourselves and that others tell about us are integral parts of our senses of self. Similarly, Alexander's (2004, 2006, 2011) work shows us that narrative performances can powerfully critique hegemonic constructions of race, gender, and sexuality. Taking from Alexander, I understand the performance of identity via GATs to reveal broader patterns of our social lives. Madison (1993) positioned narrative as a means for the "specialized knowledge, or scholarly discourse of people of color" (p. 216) to transform power relations. In doing so, Madison's work reveals how the epistemologies of Black people are valuable for making sense of our social world. Through storytelling, Black people become critics and produce authoritative knowledge on our own cultural experiences. Taking after Madison, I turn to Black people's narratives about their GAT experiences as expert knowledge that is necessary for understanding the relationship between GATs, race, and communication. I also use my voice as a Black scholar

throughout this project to show how my family stories and intrapersonal narratives are an integral part of the way I understand GATs as racial technologies.

(Black) interpersonal communication

In addition to situating my work with Black communication studies, this project is also relevant to interpersonal communication, specifically a tradition of Black interpersonal scholars who make arguments about Black people's social lives.

Interpersonal communication focuses on communication between two or more people who have some influence and/or interdependence (Knapp & Daly, 2011). This area theorizes communication contexts (e.g., workplace, families, health settings, and intercultural settings), communication units (e.g., nonverbal communication, language, and personality), and communication functions and processes (e.g., social support, influence, and nonverbal messages) (Berger, 2005; Knapp & Daly, 2011). Overlapping with related fields, such as health communication and intercultural communication, interpersonal scholars ask: How does interpersonal communication produce behaviors? How do communication contexts influence interpersonal relationships? How does meaning emerge from interpersonal communication? Interpersonal scholars' contributions to the field are robust and have deepened our understanding of disclosure, identity, conflict, influence, emotions, relationships, and families.¹² Common critiques of interpersonal communication are its overreliance on positivist, psychological, and Eurocentric roots. Interpersonal communication has largely failed to sustain critical

¹² For examples, see: Baxter, 2011; D. O. Braithwaite et al., 2010; Faulkner, 2014; Guerrero, 2019; Hanasono & Yang, 2016; Manning, 2015; Moore, 2017; Petronio, 2013.

engagement with race and racism with a few exceptions that have led to multiracial and international family communication (Minniear & Soliz, 2019; Soliz & Phillips, 2018). Oftentimes scholars who do critical race work that addresses interpersonal contexts are often more associated with other areas of research like intercultural or critical/cultural communication (Boylorn, 2013; S. M. Davis, 2019; T. M. Harris, 2018). To become more racially inclusive, interpersonal communication should embrace critical race perspectives and resist anti-Blackness through theoretical, topical, and methodological changes. Recent calls to partner interpersonal communication with critical theories and methodologies (via critical interpersonal and family communication, CIFC) signal opportunities to transform interpersonal theory and praxis through critical race perspectives (Hintz, 2019; Moore & Manning, 2019; Suter, 2016).

My work is possible because scholars have challenged the Whiteness of interpersonal communication and centered Blackness and Black people as worthy areas of relational inquiry. In particular, scholars like Marsha Houston and Dorothy Pennington theorized Black communication despite White dominance in the field (Houston, 1994, 2000, 2002a; Jackson & Givens, 2006; Pennington, 1979, 1993). Their work was a significant intervention, because they were concerned with everyday Black speakers, challenged the view that Black people are homogenous, and analyzed interpersonal discourse within the context of racial power. Houston (2002a) critiqued interpersonal communication scholarship for only considering Black communication in comparison to White communication (intercultural communication). This, she argued, re-centered Whiteness and “created the impression that the masses of African Americans are preoccupied with how to talk and relate to White people” (p. 37). Houston (2002a)

advocated for more attention to *intracultural* stories within Black communities, noting their transformative potential for the discipline. I take Houston's (2002a) call seriously by interrogating how Black people talk to each other about GATs. I also draw inspiration from Davis, whose scholarship on Black women's supportive communication centers on how intersectional identities vitally influence types and styles of interpersonal dynamics (S. M. Davis, 2015, 2019). Davis necessarily resists Eurocentricity and answers the pressing question: How do Black people communicate among ourselves, in our own right? This query figures Black communication as a valid area of study that does not rely on comparisons to White counterparts. Significantly, Davis's Strong Black Woman Collective Theory is present in the most recent edition of *Engaging Theories in Interpersonal Communication* along with chapters on intersectionality and Critical Race Theory (Boylorn, 2021; Davis, 2021; Minniear & Cardwell, 2021). The inclusion of these theories in mainstream interpersonal scholarship conveys the gradual acceptance of critical race research and work about Black people in interpersonal communication.

I examine Black people's interpersonal communication to uncover their understanding of GATs. Previously, I analyzed mediated forms of interpersonal communication in the context of YouTube reveal videos (Peters, 2021). My analysis showed that Black people use past communicative events and conversations with online audiences to construct meanings of African ancestry. However, research has yet to explain how Black people discuss dataveillance and anti-Blackness in relation to GATs. I fulfill this gap by echoing Davis' line of research in the context of scientific racism. I ask, "How do Black people communicate about GATs among ourselves, in our own right?" In doing so, I expand communication research on GATs by centering individual and

communal voices of Black people. I also expand research in communication by centering scientific racism and dataveillance. The focus group method of this study creates dynamic interpersonal communication events that reveal shared meaning-making.

Critical Race Theory

The origins and key tenets of CRT

With a disciplinary grounding in Black communication studies, I use Critical Race Theory (CRT) to critique White supremacy in the context of genomics. CRT, an anti-racist project, critiques racial power dynamics in service to equity and justice. Rooted in law, this theoretical lens has since proliferated into many disciplines including education (Dixson et al., 2017; Yosso, 2005), public health (Ford & Airhihenbuwa, 2010), social work (Kolivoski et al., 2014), and communication (Anguiano & Castañeda, 2014; Griffin, 2010; Isaksen, 2011; Rossing, 2014). In its formative years, Bell (1995) described CRT as “legal scholarship” that “embraces an experientially grounded, oppositionally expressed, transformatively aspirational concern with race and other socially constructed hierarchies” (p. 898-906). Similarly, Delgado and Stefancic (2017) characterize CRT as a movement involving “a collection of activists and scholars engaged in studying and transforming the relationship among race, racism and power” (p. 3). CRT thus supports scholarship and activism that work toward achieving racial justice by positioning people of color at the center of inquiry. Extending CRT to the realm of scientific racism, I critique GATs as racial technologies that socially construct race and function within structures of power that have used science to perpetuate anti-Blackness.

CRT is most often described in terms of two core premises, five to seven tenets, and six overarching themes. CRT's 2 core premises are to deconstruct White supremacy and engage in social justice (Bell, 1995b; Delgado & Stefancic, 2017). These premises support scholarship about multiple foci, resulting in branches of CRT that counteract the normative Black/White binary that largely governs race (Alcoff, 2003). These branches include LatCrit (Latinx CRT), AsianCrit, BlackCrit, and UndocuCrit (Undocumented CRT) (Aguilar, 2019; Brayboy, 2005; Dumas & Ross, 2016; Iftikar & Museus, 2018; Solórzano & Yosso, 2002). Branches of CRT allow scholars to analyze specific racial positionalities within racial hierarchies.

CRT scholarship coalesces around 5-7 tenets. First, interest convergence reveals how little progressive change happens without incentive for the dominant group in power. Interest convergence suggests that racial progress often occurs if it benefits and does not exceedingly harm those in power. Bell (1980) forwarded this concept to argue that *Brown v. Board of Education* only occurred because the interests of Black people and the interests of White people converged momentarily. In this critical view, desegregationist litigation did not pass because Black people pushed for it, alone, but because it served the dominant White interests at the time—rehabilitating the United States' image in post-World War II politics. Second, racism as everyday asserts that racism is not unusual but commonplace. In law, this tenet exposes how racism is commonly defined as overt, intentional, aberrant, and individual. Instead, CRT asserts that racism is ingrained in society at structural and interpersonal levels, so much so that people regularly employ implicit bias against people of color (Bridges, 2019; Davis, 2013; Parks & Rachlinski, 2013). Third, race as a social construction asserts that race is a

dynamic product of social relations rather than biological differences. This tenet exposes how racial groups have been reconfigured over time and how race changes within different contexts. For example, U.S. law has reconfigured racial and ethnic groups out of convenience for the nation. Mexican people were once considered a different race and then considered White when it was convenient to meet labor needs (Haney López, 2013b, 2013a). Fourth, the critiques of colorblindness and post-racialism combat dominant discourse about the irrelevance of race and the progress of liberalism. In the post-Civil Rights era, colorblind ideology omits race and racism in explanations of social inequality (Bonilla-Silva, 2018). Post-racialism takes a similar stance, acknowledging that racism was once a problem but is not any longer (Crenshaw, 2011). CRT scholars critique both colorblindness and post-racialism as insufficient responses to racist systems of power. Fifth, counterstorytelling uses narrative to speak against White supremacy by amplifying marginalized voices. This method centers the voices of people of color and White people committed to anti-racism to advocate for change (Bell, 1995). Sixth, Whiteness as property theorizes the material and immaterial value of Whiteness. Harris (1995) suggests race evolved from relationships to property in which White people owned and protected property and Black and Indigenous people were both made property and stripped of property. This tenet interrogates the relationship between race and class. Finally, intersectionality illustrates how single-axis thinking theoretically erases and harms people of color who experience multiple systems of oppression (Crenshaw, 1989). This widely applied analytic, framework, and praxis illustrates the complexity of intersecting power relations, such as racism, sexism, classism, and ableism (Hill Collins & Bilge, 2020).

The value of CRT in scientific contexts

CRT is useful for critiquing racism within sciences and medicine because these institutions have perpetuated bioracism for centuries. Reardon and Tallbear (2012) stand out as advocates for critical race understandings of genomics, particularly the field's anti-Indigenous groundings. Using Whiteness as property, they argue that Whiteness undermines Indigenous self-determination for the sake of European identity exploration. My scholarship builds from Reardon and Tallbear's (2012) by critiquing the anti-Blackness of commercialized genomics. CRT has been more readily taken up within the study of science education to identify unconscious bias, deconstruct the Whiteness of scientific knowledge, and critique the overrepresentation of White science educators (Larkin et al., 2016; Mensah, 2019; Wallace & Brand, 2012; Walls, 2016). This scholarship ultimately advocates for a more *humane* human genome education, which posits critical science education as a necessary tool for reducing the perpetuations of scientific racism and racial biases (Donovan et al., 2019). CRT equips health sciences with important critiques of structural inequalities within public health (Ford & Airhihenbuwa, 2010, 2018; Gilbert & Ray, 2016; Hay, 2018; Obasogie et al., 2017), population and translational health (Graham et al., 2011; Roberson, 2022), women's and maternal health (Adebayo et al., 2021; Vardeman-Winter, 2017), and clinical practices of medicine (Cunningham et al., 2021; Zewude & Sharma, 2021). These scholars and practitioners are using CRT to develop anti-racist frameworks that combat micro, meso, and macro inequities in healthcare. The coronavirus pandemic has strengthened calls for CRT within health sciences, as scholars and practitioners grapple with the racial inequities that COVID-19 has exposed (Ford, 2020; Yam et al., 2021). The racial and

ethnic disparities of coronavirus hospitalization and morbidity rates remain a central point of critique.

Interestingly, the pandemic has coincided with renewed public backlash against CRT, given their overlap with “the summer of racial reckoning” in 2020 (Chang et al., 2020, p. 1), amid increased attention to anti-Black police brutality. As a result, public discourse about both CRT and science have temporally and conceptually overlapped, leading to renewed interest in their (in)compatibility. One result of the public conversations about health, racism, and CRT has been the boom of public policies aimed at declaring racism a public health crisis (Mendez et al., 2021; Paine et al., 2021). After protests erupted following the murder of George Floyd in 2020, over 200 declarations were made at city, county, and state levels (American Public Health Association, 2021). At the federal level, an Anti-Racism in Public Health Act has been introduced and remains under deliberation (*Anti-Racism in Public Health Act of 2021*, 2021). Contemporary debates about CRT and science have created a cultural moment in which generative conversations about the two are ongoing. Within this societal context, my work valuable interrogates GATs to make CRT more prominent at the intersections of race and science.

Most relevant to this project are CRT’s critiques of the social construction of race, colorblindness, and post-racialism to deconstruct White supremacist structures that consequentially impact how Black people understand and talk about our racial identities. Race as a social construction conceptualizes how race changes over time but always upholds White supremacy. As genomics become increasingly adopted in medicine, science, and commercial realms, White racial power and racist logics will be reproduced

through the discourse of genes. Consequently, I situate GATs as biotechnologies that shape meanings of race and inform manifestations of White normativity and scientific racism in contemporary society. Further, post-racialism is an insufficient articulation of race in U.S. and global society—despite its commercial value to narratives of racial progress. I challenge the idea that biotechnologies can be colorblind or post-racial in any context, including their conception, application, and commodification. Although the GAT industry implies that their products do not reveal race and even offer a solution to race or racism, I disagree because race is socially constructed and implied through the use of genetic genealogy and remains omnipresent in our societal structures despite corporatized denial. GATs can and do influence racial and ethnic identity (Roth & Ivemark, 2018), meaning they are part of the way race and racism operate in our world today. Through CRT, I deconstruct how the multimillion-dollar industry of GATs commodifies race under the guise of post-racialism and colorblindness.

In the wake of 2020's summer protests against police brutality, 23andMe's CEO Anne Wojcicki issued a statement (Appendix B.) calling their products euro-centric and promising to make their products and staff to be more inclusive (Wojcicki, 2020). However, Wojcicki did not reflect on how 23andMe's products contribute to racialization or the anti-Black racism that incited the protests. Instead, her contribution to conversations about anti-racism was for the company to improve its products by buying the genetic data of more Black people globally and employing more people of color to do so. In this way, she positioned 23andMe's ancestry tests as a solution to racism rather than a contributor to it. Wojcicki's call is emblematic of how corporations re-write race onto the human genome while denying their products' racializing effects operating

throughout structures of society. Chow-White (2012) argues, “the genome has become a new site of negotiation over the relationship among biology, culture, technology, and racial meaning” (p. 226). It is vital to examine the GAT industry’s influence on how people experience and define race intrapersonally, interpersonally, and culturally.

Like all theories, by design CRT has strengths and limitations. Because CRT originated in law (Bell, 1995), it is most applicable to legal critique and, more broadly, macro level analyses of U.S.-based racism. CRT scholars have produced exemplary critiques of the U.S. Constitution and Supreme Court cases (Bell, 1980; Crenshaw, 1989; Dudziak, 2013; Gotanda, 1995). Many of its tenets primarily address structural patterns of racial power. Consequently, CRT is not as well-equipped for micro level analyses to describe how race is re/produced in intrapersonal and interpersonal contexts. Despite this limitation, CRT can and should be adapted to micro level analyses. Recently, Harper, Smith, and Davis (2018) used interviews with students, faculty, and administrators to analyze Black undergraduate students’ experiences. The authors used Whiteness as property to analyze the physical and symbolic property rights of the college town in which the Black undergraduates lived (Harper et al., 2018). Another study, using CRT’s focus on racist institutions interviewed Black and Hispanic people living with HIV to understand how structural racism influenced their health decisions (Freeman et al., 2017). Cummins and Griffin (2012) used CRT’s counterstorytelling tenet to narrate Black men’s experiences in White spaces of higher education. In these cases, scholars use qualitative methods and individual experiences to challenge structural racism. Taking after these examples, I look toward lived experiences to illuminate the scientific racism enabled by GATs alongside the intra and interpersonal consequences of the power dynamics

embedded in GATs. To do this, I partner CRT with identity negotiation, which is a concept that explicates the intrapersonal and interpersonal processes of meaning-making involved in taking GATs.

The influence of GATs on racial identity negotiation

Conceptualizing identity negotiation

Instead of adhering to a specific identity negotiation theory, I employ identity negotiation as a concept to explicate how Black people enact, revise, and solidify relationships with Blackness through GATs. Racial identity negotiation is the constant process of (re)defining the self through racial terms, which are inextricably linked to ideas of ethnicity, nation, indigeneity, and nation. In psychology, models such as the Multi-dimensional Model of Racial Identity (Marks et al., 2004; Sellers et al., 1998) and Nigrescence theory (Cross, 1971; Parham, 1989; Vandiver et al., 2001) describe the steps through which people move to arrive at facets of their racial identities over time. These theories account for the external factors (e.g., profound events; cultural ideas) and internal factors (e.g., self-concept, salience of identity) involved in identity formation. Similarly, in communication, Ting-Toomey's identity negotiation theory (INT) illustrates how intercultural and interpersonal communication are processes through which people negotiate sociocultural identity (Ting-Toomey, 2015; Ting-Toomey et al., 2000; Toomey et al., 2013). INT argues that people's composite identities—race, class, gender, and so on—are formed by sociocultural conditioning. Interpersonal and intercultural encounters shape meanings of identity within that conditioning. Put simply, identity negotiation is the “ processes whereby relationship partners reach agreements regarding “who is who”

(Swann Jr. et al., 2009, p. 82), which locates identity negotiation within interpersonal spheres. Racial identity negotiation is the constant process of (re)defining the self through racial terms, which are inextricably linked to ideas of ethnicity, nation, indigeneity, and nation.

However, racial identity negotiation cannot be understood at the micro level alone. Social structures that hegemonically labor to define “who is who” constrain and enable how people identify themselves and others. Utilizing race as an example, the social institutions of law, education, and science structurally discipline people into racial subject positions (Ehlers, 2012) that limit how we define and enact race. In Hall’s (1990) terms, identity refers to a suture between the ideologies that interpellate people into subject positions and the processes that create subjectivities. Therefore, to understand identity, we must examine ideologies. I investigate Black identity negotiation in relation to the ideologies of anti-Blackness, White supremacy, and scientific racism. Numerous studies have interrogated how GATs change people’s racial and ethnic self-conceptions (Foeman et al., 2015; Horowitz et al., 2019; Roth & Ivemark, 2018; Scully et al., 2016). Less research has explicitly grounded a GAT inquiry of racial identity within a larger critique of the industry’s ideological and discursive presence. In doing so, this project advances our understanding of the co-constitutive relationship between racial identities and racial ideologies in the genomic age.

A CRT perspective pairs well with identity negotiation because identity negotiation theories are weak in their ability to theorize how macro racial structures impact individuals’ sense of self. CRT illuminates how the Whiteness of the GAT industry shapes meanings of race, while identity negotiation shows how individuals

personally grapple with genetics and race. If GATs are “malleable tools” in identity negotiation processes (Marcon et al., 2021, p. 147), I examine how bio-racist structures shape the tools that construct Black identity.

Black identity negotiation

Blackness is unstable, even volatile, as past and present discourses converge to construct its meanings and to define Black people. Gilroy (2003) describes Blackness as a cultural-political hybridization across geographical space, and McKittrick and Woods (2007) define Blackness through its mobility and transgressive nature. These theorizations elucidate how Blackness and Black identity are not fixed ideas. Indeed, all racial identities are fragmented, multiplicative, and incomplete constructions formed through competing and overlapping fields of discourse (Hall, 1990). Discourses of ancestry, phenotype, geography, culture, and law all compete to define Blackness in local and global contexts. My own race is shaped by my family history, skin color, and cultural practices. These discourses do not always perfectly align to evidence my Blackness. My cultural background, for instance, is entrenched in White, rural experiences and not urban African-American experiences. As I traverse various spaces, such as regions in the United States or university settings, my Blackness is continually and discursively (re)made. My engagement with scholarship on anti-Black scientific racism, my discussions with colleagues about this research, and my conversations with Black participants are all informing my understanding of what it means to be Black. Continually questioning Black conceptions of family history is shaping my relationship with my own family and past. Even for people not as entrenched within critical race inquiry as me,

GAT discourse functions as another discourse about Blackness that creates, destroys, and refines its meaning. Many discourses simultaneously seek to define Blackness, which requires Black people to preserve our agency to define ourselves.

It is important to note that Black identity is heterogeneous throughout the African diaspora, which refers to connections based on Indigenous African origin and the sociocultural identity of Blackness (Redmond, 2018). Therefore, Black identity negotiation is contextually bound within nation-states, sociohistorical processes, temporal frames, gendered experiences, transnational exchange, and political and economic systems. Differences aside, key historical junctures, present conditions, and possible futures link the disparate groups that locate themselves within the African diaspora. Across time-space, histories of colonization, racial slavery, and racial hierarchy mark shared political realities. Sharpe (2016) discusses this facet of Blackness through the concept of the *wake*. Wake, among many applications, refers to the water trail that ships leave behind. Sharpe (2016) argues that Black people live in the wake of the ships that carried enslaved peoples and in the wake of ongoing systemic oppression and anti-humanization. In this view, to negotiate Black identity is to contend with the historic and contemporary weight of racism.

Genetic ancestry testing is a tool to envision and materialize African diasporic identity by reading Indigenous African descent onto the genes. The Black diaspora is constituted by political, social, and cultural tensions regarding the presence and absence of Africa (Hall, 1990). Commercialized genomics reveal the presence and absence of Africa with DNA. Global Black identity is negotiated in no small part through a relationship to the continent. This process is often represented in Black studies through

the Middle Passage. The slave ship on the Middle Passage symbolizes both the departure of Africans from the continent and the return of the diaspora to Africa (Gilroy, 2003; McKittrick & Woods, 2007). If Africa is a site of departure and a point of re-entry for Black people (Redmond, 2018), GATs are a symbolic return to Africa through the lens of one's body. GATs create novel ways to negotiate and interpret Black identity through a "genetic prism" (Duster, 2003, p. 5). This prism refracts questions of Blackness through the lens of genetics, guiding us to ask and answer different questions about race.

Summary

In this chapter, I autoethnographically narrated my experience with 23andMe to illustrate how the GAT industry interacts with Black family history and traditional notions of genealogy. I also contextualized GATs within the science of genomics, the politics of surveillance, and the ideologies of anti-Blackness and scientific racism. I then established the disciplinary foundations of this project within Black communication studies and interpersonal communication. Finally, I justified my use of CRT and identity negotiation to analyze how Black people communicate about GATs and how the GAT industry constructs Blackness. In Chapter 2, I describe my methodological approaches to gather and analyze qualitative data.

Reference Groups	Percentage
Sub-Saharan African	72.2%
• West African	59.1%
○ Nigerian	27.4%
○ Ghanaian, Liberian, and Sierra Leonean	17.3%
○ Senegambian & Guinean	6.3%
○ Broadly West African	8.1%
• Congolese and Southern East African	13%
○ Angolan and Congolese	12.5%
○ Southern East African	0.2%
○ Broadly Congolese and Southern East African	0.3%
• Broadly Sub-Saharan African	0.1%
European	25.8%
• Northwestern European	25.8%
○ British and Irish	25%
○ Broadly Northwestern European	0.8%
Western Asia and North African	0.5%
• Broadly Western Asia and North African	0.5%
Trace Ancestry	1.0%
• Filipino and Austronesian	0.2%

Figure 1.1 My 23andMe Results in 2022

• Broadly Central and South Asian	0.2%
• Southern Indian and Sri Lankan	0.2%
• Broadly Chinese and Southeast Asian	0.1%
• Indonesian, Thai, Khmer, & Myanma	0.1%
• Indigenous American	0.1%
• Levantine	0.1%
Unassigned	0.5%
	100%

Figure 1.1 Continued

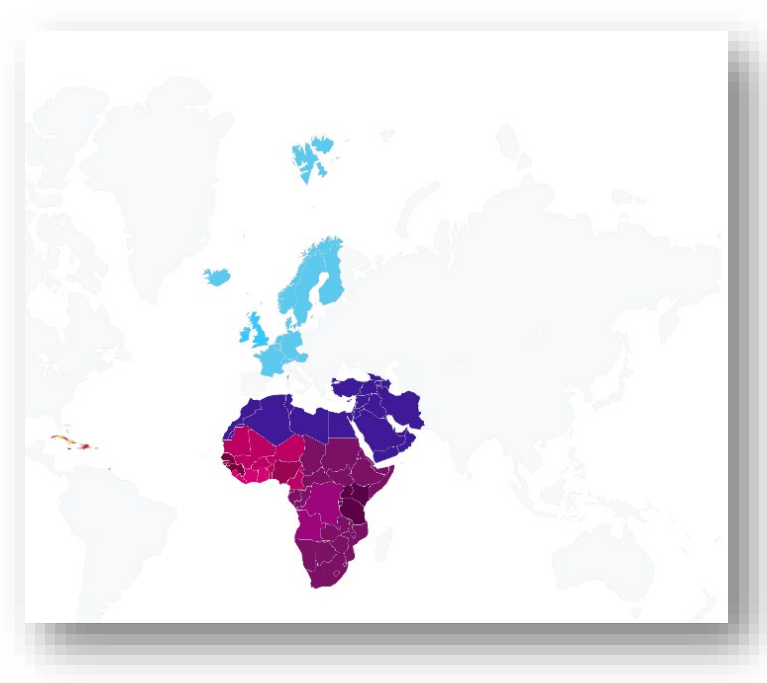


Figure 1.2 Map of 23andMe Results

Table 1.1 Comparison of GAT Companies

Company	mtDNA	Y-DNA	Autosomal	Health Testing	Neanderthal & Early Humans	Public or Private
AncestryDNA	No	No	Yes	Yes	No	Public
23andMe	Yes	Yes	Yes	Yes	Yes	Public
MyHeritage	No	No	Yes	Yes	No	Private
FamilyTreeDNA	Yes	Yes	Yes	Yes	Yes	Private
AfricanAncestry	Yes	Yes	Yes	No	No	Private
Living DNA	Yes	Yes	Yes	Yes	No	Private
HomeDNA	Yes	Yes	Yes	Yes	No	Private
Geno 2.0 ¹³	Yes	Yes	Yes	No	Yes	

¹³ Geno 2.0 is the only company that is no longer active.

CHAPTER 2

METHODOLOGY AND METHODS

In this chapter, I explain my methodology and methods for data selection, collection, and analysis. First, I situate my study within qualitative inquiry, critical/cultural inquiry. Second, I discuss my critical race grounded theory (i.e. methodology) analysis of GAT advertisements, focus groups, and interviews (i.e. methods). Next, I evaluate the research design using the criteria of credibility, originality, resonance, ethics, and intellectual rigor. Finally, I review my positionality and reflexive process as a researcher. This study's design embraces the emergent and human-centered nature of qualitative research while drawing from the analytical tradition of critical race scholarship.

Critical qualitative inquiry

If research methods are the “practical technologies of intellectual traditions” whose resources “sustain formal theories and philosophies by generating knowledge that supports their claims” (Lindlof & Taylor, 2019, p. 6), then qualitative research encompasses a set of approaches and methods that value rich description and contextual meaning. Creswell and Poth (2018) define qualitative research by its assumptions, methods of data collection, and representation. In terms of assumptions, qualitative research traditionally operates within the interpretive paradigm, which understands that

social meaning is multiplicative. Moreover, this research tradition prioritizes inductive and deductive approaches to data collection within natural settings. Finally, qualitative research is written or presented in ways that include participant voices, reflexivity, description, and interpretation (Creswell & Poth, 2018). I utilize a qualitative approach because I am invested in understanding the meanings that Black people ascribe to GAT services. I also analyze patterns and themes within discourse produced by GAT services. This approach allows me to consider the complexity of racial and genetic discourse within the GAT industry without seeking to reduce its complexity. It also provides a way to represent Black people's experiences in their own words. Ultimately, qualitative methods are tools to humanize Black people in relation to the GAT industry and produce rich descriptions about Blackness in the context of commercialized genomics. Given historical and contemporary manifestations of anti-Blackness within scientific discourse, Black people's perspectives are vital for building more just futures within genomic industries. This project honors Black people's narratives that speak powerfully about Black community, resistance, and knowledge.

I partner qualitative methods with critical theory to engage in critical qualitative inquiry. As a critical race theorist, I approach this subject with assumptions about racial and scientific power that place the current project within the critical paradigm. As Ono (2011) argued, a critical approach "address[es] power as a constitutive dimension of social life, hence [it] is inclusive of the different ways power functions" (p. 94). The critical paradigm goes beyond interpretation into the realms of critique and transformation (Denzin, 2017). In contrast, qualitative inquiry has historically been associated with the interpretive paradigm. However, a growing tradition of critical

qualitative inquiry uses qualitative methods to interpret, describe, and deconstruct power in many forms. Critical qualitative methods advance research because rich descriptions, narrative, and communicative data are tools for critique and pathways toward liberation. Pasque and Pérez (2015) assert that critical qualitative inquiry “does not stop at a definition of power, but includes a constant examination, complication, and problematization of it” (p. 149). Drawing from this definition, I engage in critical qualitative inquiry to examine the construction, maintenance, and resistance of anti-Blackness and genomic power. I use qualitative methods because they can challenge, enhance, and modify existing theories of racial power by enriching our understanding of how, why, and by what means racial marginalization occurs. In this way, qualitative methods complement my use of CRT and act as investigative tools to expose the multifaceted ways in which race and science foster anti-Blackness.

In Black communication studies, qualitative inquiry is a growing and vibrant approach to research. Scholars have used qualitative methods, such as focus groups, interviews, discourse analysis, and autoethnography to aid in interpretive and critical research on Black discourse, cultures, and representation. Interviews and focus groups, specifically, have proven to be valuable tools for data collection, as they are a way to capture the humanity of Black people and validate Black lived experience as a source of knowledge (Davis, 2019; Griffin et al., 2014; Martin, 2021; Minniear & Soliz, 2019). Several related studies explore the racialized communication and conflict between African Americans and West African immigrants (Dapherede Otusanya & Castle Bell, 2018; Whittington et al., 2021). Their studies powerfully present participants’ stories about African diasporic, interpersonal conflict. Others, such as Johnson (2021) and

Maragh-Lloyd (2020), have conducted focus groups to understand how Black people respond to traditional and digital media. These studies understand Black people as critical producers and consumers of media whose perspectives are necessary for characterizing our current information landscapes. Building on this work, I ask how Black people respond to GAT advertisements and produce discourse about GATs because they are a critical audience for the industry.

Additionally, I situate this project within interpersonal communication. The majority of interpersonal research adheres to the post-positivist paradigm (Braithwaite et al., 2015), using quantitative methods. Despite underrepresentation, qualitative interpersonal research continues to gain traction. In recent years, several calls have advocated for increased training in and more inclusion of critical and qualitative research within the subdiscipline (Braithwaite, 2014; Manning & Kunkel, 2014; Moore, 2017). In response, scholars have used interviews, arts-based research, textual analysis, and ethnographic methods to advance knowledge of parent-child relationships (Faulkner, 2021), mediated and non-mediated communication about (non)parenthood (Moore, 2021), (queer) heteronormativity (Manning, 2015), and interracial families (Cardwell, 2021). This project contributes to the ongoing intervention of situating qualitative inquiry within interpersonal communication. It is vital for the field to produce more nuanced knowledge about racial identity negotiation, and grounded theory is a promising approach to continue expanding interpersonal communication.

Grounded theory

Grounded theory is a methodology that allows qualitative researchers to move beyond interpreting data to create explanations for social phenomena (Glaser & Strauss, 2009). The approach developed as an intervention to narrowly-defined approaches that required quantitative data and statistical analyses to generate theoretical insight. By using it, qualitative scholars can construct empirical explanations without relying on quantitative measures or existing theory (Glaser & Strauss, 2005, 2007). Debates about grounded theory persist, concerning ideas like the role of pre-existing literature and researcher reflexivity. Yet, all grounded theories adopt inductive logics, utilize a constant comparison method of data analysis, and create theoretical meaning from data (Charmaz, 2014). An inductive approach allows grounded theory users to build broad explanations from specific data. Constant comparison involves examining insights across data, codes and categories of analysis, and existing literature to arrive at increasingly abstract concepts. Finally, scholars construct theoretical meaning from a combination of inductive reasoning, constant comparison, and coding processes (Charmaz, 2014). Unlike other approaches that separate data analysis and collection, grounded theory is an approach that views collection and analysis as simultaneous and mutually influential. Grounded theory has been a useful methodological approach in a range of communication scholarship that centers the voices of people of color to investigate issues race, nationality, and identity (Brummett & Afifi, 2019; Dutta & Jamil, 2013; Onuzulike, 2018; Qiu & Muturi, 2016). Extending this work, I use a specific type of grounded theory, critical race grounded theory.

Critical race grounded theory

Critical race grounded theory (CRGT) combines the theoretical tenets of CRT with the methodology of grounded theory. Using this approach, I incorporate critical theory and social justice goals within the methodology itself and not solely the findings (Charmaz, 2020). Malagon, Perez Huber, and Velez (2009) define CRGT as a methodology that:

draws from multiple disciplines to challenge White supremacy, which shapes the way research specifically, and society generally, understands the experiences, conditions, and outcomes of People of Color. It allows CRT scholars to move toward a form of data collection and analysis that builds from the knowledge of Communities of Color to reveal the ways race, class, gender, and other forms of oppression interact to mediate the experiences and realities of those affected by such oppression... [critical race grounded theory] generates the concepts we construct in order to further our commitment to deconstructing oppressive conditions and empowering Communities of Color (p. 264).

This approach is valuable because it simultaneously honors critical race research and generates new insights through original qualitative study. An alternative to CRGT is to eschew existing theory in favor of insights that emerge only from data. This leaves behind a wealth of knowledge developed by people of color for decades. A second alternative is to only rely on CRT tenets and themes, taking them at face value and showing how they operate in different contexts. Doing so limits the ability to use qualitative data to challenge, confirm, or revise CRT. Thus, CRGT is an advantageous use of abductive reasoning, which seeks the best explanation for the available data, allowing for intuition and creativity to play a role in interpretations alongside theory and methodology (Charmaz, 2008).

CRGT can be used for “emancipatory theory building” (Malagon et al., 2009, p. 263) because it explicitly critiques White supremacy and theorizes racial power. CRGT

puts CRT's counterstorytelling tenet into practice by asserting that the narratives of people of color are vital for social science research, including the perspectives of scholars of color (Malagon et al., 2009). As a Black academic, I take up CRGT both to center the voices of Black participants and to account for the ways my positionality, cultural intuition, and lived experience actively shape this research. CRGT allows for my autoethnographic voice to be a part of this project's counterstorytelling. Moreover, I use CRT to deconstruct the macro structures of the GAT industry, including the social institutions of science, technology, and media. Specifically, the concepts of White supremacy, Whiteness as property, the social construction of race, colorblind racism, and post-racialism are central to my understanding of racialized genomics and the analysis of this data. I used a CRGT approach to interpret data from 2 sources: GAT advertisements and virtual focus groups and interviews. Combined, these data represent industry-produced discourse and consumer discourse, which is necessary for understanding how the GAT industry's messaging and services influence its customers and how customers interpret GATs. Together, ads, focus groups, and interviews provide a range of texts to analyze the circulation of GAT discourse in multiple, overlapping spheres.

Genetic ancestry testing advertisements

My first data set is a series of advertisements by GAT companies. Advertisements inform and persuade audiences while establishing a brand image (Mehta et al., 2008; Terui et al., 2011). I view advertisements as purveyors of capitalist societies that circulate commodities (Hamilton & Bodle, 2019) and play a key role in the commodification of DNA by representing the value of GATs and increasing GAT sales. I argue that

advertisements serve a pedagogical function, not only instructing audiences how to buy GATs but also how they can use GATs in their own lives. Putman and Cole (2020) discussed how the rhetoric of AncestryDNA advertisements interpellates viewers into the ideological force of DNA. They concluded that AncestryDNA profits from the appeal of “symbolic ethnicity,” which describes “a pursuit of identity by U.S. Americans removed from their immigrant ancestors by at least three generations” (p. 4). In doing so, AncestryDNA advertisements naturalize and legitimize biological ethnicity, calling viewers into the weak social ties of symbolic ethnicity. Similarly, Scodari (2017) argued that 23andMe and AncestryDNA advertisements emphasize hybridity and fetishize culture, ultimately making the companies complicit in “processes of racialization...[and] racist misappropriations of genetic science” (p. 12). I answer Scodari’s (2018) call for further research into the GAT industry’s representations of its products. Analyzing GAT advertisements is particularly useful for answering RQ2: What is the relationship between the commodification of identity in GAT advertisements and individuals’ communication about Blackness?

Selection. I analyzed 15 advertisements (Appendix E.) by GAT companies that range from 30 seconds to 5 minutes in length, resulting in 21.9 minutes of advertisements. To construct this data set, I chose 3 advertisements from each of the four biggest companies (AncestryDNA, 23andMe, MyHeritage, and FamilyTreeDNA). I also selected 3 advertisements from AfricanAncestry because it is the only company that solely targets African diasporic customers. The 5 advertisements in the focus group protocol (Appendix D.) are part of this dataset. I gathered these ads from company websites, YouTube, and Ispot.tv. In line with my research questions concerning race,

anti-Blackness, and data privacy, these ads represent Black customers, speak about race and/or Indigeneity, mention data privacy, and discuss relevant topics of ancestry and culture. The videos range in length and form. Some convey customer testimonials (e.g., “Krystina”) while others describe GAT services (e.g., “African Ancestry-About Us”). Some tell stories of individuals (e.g., “Afa Testimonial”), while others speak broadly about communities or humanity as a whole (e.g., “Tribal Quest Papua New Guinea”). I used theoretical sampling to determine the final number of advertisements, meaning I collected data until I reached theoretical saturation, or the advertisements no longer offered new insights (Malagon et al., 2009).

Focus groups and interviews

My second method of data collection involved focus groups and follow-up interviews with Black people who have taken GATs (Table 2.1). As a group interviewing method, focus groups allowed participants to reflect on past communicative experiences while creating interpersonal communication events (Davis, 2017). Follow up interviews allowed for more in-depth explanations of their experiences and ideas (Table 2.2). In alignment with CRGT, this centered the voices of Black people and their understandings of race and GATs. With a mediated format—via Zoom Video Communications—people from geographically diverse areas were able to participate. The 8 focus groups were between 60 and 90-minutes. While 6 out of 8 focus groups were within the typical range—between 3 and 12 people (Tracy, 2013)—1 focus group had 2 participants and 1 focus group had 1 participant. I include the 1-participant focus group in the focus group count because we followed the focus group protocol instead of the interview protocol.

Individuals were invited for 30 to 60-minute follow up interviews based on their focus group participation. I chose some participants over others because I wanted them to elaborate on experiences from the focus group or because they were not as active in focus group discussions as others. In total, I conducted 8 focus groups with 37 people and 8 interviews, which is consistent with the average range of participants in interview studies in communication (Jensen et al., 2013). I conducted 1,010 minutes of data collection total between the focus groups and interviews.

Participants. To participate, individuals had to be 18 years or older, speak English, identify as Black, have taken a GAT, and be able to participate in a virtual focus group and/or interview using Zoom. By Black, I mean participants who belong to the African diaspora and identify with labels including but not limited to African descended, Afro Latinx, African American, Afro Caribbean, Afro-Indigenous, multiracial, and biracial. By GAT I mean a biotechnological test that uses customers' DNA to report explanations of human descent, grouping, and/or migration, usually via comparison to genomic databases. Although GAT tests update and evolve, I did not require a time frame for participants' use of these services, as their experiences at different times were also used to provide insight into the research questions at hand. I recruited participants through network and referral sampling (Naderifar et al., 2017), which allowed participants to recommend others for participation in the study. I also used social media advertisements and paid targeted advertising on Facebook and Instagram, which was supported by the Utah Center for Excellence in ELSI Research (UCEER) grant. The ad campaign that targeted people who had an interest in GATs, genealogy, and related subjects ran from October 2021 to December 2021.

I collected human subject data between October 2021 and February 2022.

Participants ranged in age from 25-68, with an average age of 40 (Table 2.3). When asked about gender, 70% (n=26) of the participants self-identified as woman or female, and 30% (n=11) identified as male or man. Because this data was based on self-identification and no participants described their gender as queer and/or trans, most participants likely identify as cisgender. All participants identified as Black, with 13% (n=5) identifying with one or more race(s). The ethnic backgrounds of the participants included African American, Black American, Jamaican, Caribbean, and Latino, with the highest percentage of ethnic identification being African American (n=33). The majority of participants (n=27) did not identify with tribal or Indigenous groups, but those who did indicated a variety of African and Native American tribes and/or ethnic groups (e.g., Igbo, Navajo, Hausa). Additionally, most participants (n=35) self-reported their nationality as U.S. American, while fewer participants (n=6) indicated nationality in a country outside of the United States (e.g, Canada, Nigeria). Participants took a range of GATs, including 23andMe, Family Tree DNA, and AncestryDNA. The most-used genetic ancestry test was AncestryDNA (n=19), followed by 23andMe (n=15) and AfricanAncestry (n=5). 25 participants reported taking 1 GAT, and 12 participants took 2-3 GATs. The time between taking the GAT and participating in the focus group ranged from one month to 10 years, with the average time being 2 years and 6 months.

Participants engaged in this research from a variety of places, including Canada and regions across the United States, with representation from the Northeast, Southeast, Midwest, Southwest, and West.

Procedure. After screening questions that determined if individuals fit the criteria for the study, individuals consented to the study via a Qualtrics survey (Appendix H.). Participants completed a survey (Appendix I.) that included demographics (e.g., race, ethnicity, age, gender), email address, and pseudonym. This survey also asks participants to provide a form of evidence that they had taken a GAT. Participants provided screenshots of emails and pictures of GAT certificates as evidence. Focus groups took place via Zoom and were recorded on the platform. The majority of people used both audio and visual to participate, although some chose only audio and even less (n=3) chose text participation via chat. I saved the recording and chat files in my password-protected Zoom account and password-protected laptop. After each focus group, participants received an optional survey and compensation—a \$50 Amazon gift card—via the UCEER grant. The post focus group survey, taken by 26 of the participants, gave individuals space to note important moments from their groups and voice additional comments or concerns. Participants who completed follow up interviews were invited to take a post interview survey and compensated with an additional \$50 Amazon gift card.

My focus group protocol (Appendix D.) included open-ended questions that asked participants to elaborate on their experiences taking a GAT, their conceptualizations of Blackness, their perception of GATs, and their beliefs about GATs, racism, and (anti-)Blackness. Using a CRGT approach, these questions were informed by CRT, particularly its structural critique of White supremacy and the social construction of race in the lives of everyday Black people. For example, the first questions asked about participants' racial identity development and asked them to verbalize what it means to be Black, as well as how they learned to be Black. The protocol included five

advertisements to which participants responded. The advertisements introduced important themes in the conversation, such as scientific racism, data privacy, and claims to identity. Based on the narratives of the advertisements, I crafted relevant questions about the topics, such as: If you had Nicole's ancestry would you feel more or less Black? Why or why not? What doubts or concerns do you have concerning the accuracy of GATs?

I treated the protocol as a flexible tool (Charmaz, 2014) that changed during data collection. I eliminated or revised some original questions and added new questions. For example, an early question asked, "What are your thoughts on the belief that GATs are harmful because they reproduce harmful connections between race and science?" Some participants commented that this question was confusing, and others had difficulty answering the question. I revised the question to ask the following: "Some people say that GATs are harmful because they are a return to the past which tied ideas of race to biology, for example, the one-drop rule. What do you think about the idea that GATs reproduce connections between race and biology?" Changing the vocabulary from "science" to "biology" elicited more responses, and mentioning a specific concept, the one-drop rule, gave participants a clear point of reference to use in answering the question. The interviews expanded on these conversations (Appendix E.) and were more flexible than the focus group protocol because I individually tailored the questions. Some interviews focused on a specific family's genealogy, while others focused on participants' ideas of Blackness or concerns regarding data surveillance. I followed the participants' leads, allowing them to determine the direction of the conversations based on what they felt was important. The interviews served as a way to garner more in-depth information from participants and to reflect on ideas in the focus group alongside

participants. Interviews often included discussion of the focus groups, allowing me to better understand which ideas and feelings were memorable.

Data analysis

Memoing. My analysis of these data began before I concluded data collection. Grounded theory calls for constant comparison methods, which involve simultaneously collecting and analyzing data and comparing insights across data as they emerge (Charmaz, 2014). Memoing is a reflexive process that I used to keep track of ideas, patterns, and questions from the beginning of data collection. I took memos while watching advertisements by noting what was memorable, what questions I had, and how I was making sense of the ads as I watched them alone and with participants. I also took memos before, during, and after each focus group and interview to note my assumptions about the data, poignant discoveries, and recurring patterns. At the end of each focus group, I wrote about my experiences as a facilitator and set goals for more effective interviewing. In the first focus group, I did not ask many follow up questions but I made it a goal to ask more follow up questions in the future. Further, I took notes on the content of the focus groups and interviews during and after, which allowed me to identify similarities and differences as they emerged. To illustrate, I noticed early on that many participants seemed “unconcerned” about issues of data surveillance. As I listened to more participants, I realized that many were saying they felt they had no control over their data, not that they did not care about their data privacy. The “it is what it is” attitude I noted early on was not mere indifference but was, in many cases, an expression of powerlessness. Participants’ feelings of powerlessness were, at times, connected to

conspiracy theories about racial bioweapons, clones, and other uncertain futures determined by White supremacist powers beyond their control. Memoing about my changing perceptions throughout the data collection process helped me to arrive at this conclusion.

Intertextuality and textual units. Using CRGT allowed me to understand these data in relation to existing theory (CRT), my knowledge of GATs, and related texts. Like CRT, CRGT advocates for the contextualization of studies of race within the researcher's knowledge and experience. Thus, I used intertextuality to theorize the form and content of the ads. Intertexts include but are not limited to knowledge of the genre of the text, texts about the texts, and contexts in which texts are circulated (McKee, 2003; Panigraha & Chandra, 2013). In this case, my knowledge of GATs, my previous research on GAT companies (Peters, 2021), and unselected advertisements all informed my analysis. Two key texts I use to understand the GAT industry and its relationship to race are Nelson's (2016) *Social Life of DNA* and Nash's (2015) *Genetic Geographies*. Though not communication scholars, they identify key language and rhetoric (e.g., belonging, heritage) surrounding genetic genealogy that informed how I viewed the ads. Having watched many genetic ancestry advertisements, my knowledge of the genre was useful for interpreting the kinds of messages they presented. For example, I was familiar with a specific series of 23andMe ads that educates the public about the science behind their tests. The 23andMe advertisements I chose were separate from this series and its purpose, which led me to posit that the videos I analyzed had less to do with the transparency of scientific analysis and more to do with the product's appeal.

I conceptualized this complete data set (ads, focus groups, and interviews) as a series of interrelated texts made of smaller parts. I analyzed the advertisements through several textual units including images, music and sound, and words (written and verbal). Observing main and background actors, setting, and calls to action, I noted camera angles, color, and lighting. I also attended to my perception of the characters' racial presentation along with phenotype such as skin color and hair texture. I paid attention to absences in the ads by asking the questions: What does not appear in these videos that could or should? What parts of the GAT industry story are left untold? What do these silences reveal about the text and, ultimately, the companies themselves? Using a CRGT approach, I was interested in how the ads spoke to and with focus groups and interviews. These focus group and interview conversations were rich, layered texts for analysis. Each conversation was a text comprised of smaller conversations (e.g., discussions about specific advertisements.) Follow-up interviews were texts that expanded the meaning of focus groups. When I spoke with individuals about the focus group conversations, we created new texts about existing texts.

The ads, focus groups, and interviews served as important intertexts for each other. I questioned the differences and similarities between the texts, asking: What was present in the conversations that was absent in the ads and the industry? What was absent in the conversations that was present in the ads? What was absent and present in both? How do the ads speak to the participants' experiences? And how do participants speak back to the ads? This line of questioning was generative, as participants' conversations shaped my view of the ads in meaningful ways by drawing my attention to what they considered important, aggravating, confusing, and resonant. Many participants were

unhappy with the advertisement “Surprise Ancestry” and noted negative emotions (e.g., anger, annoyance) about the positive emotions expressed in the video (e.g., happiness, giddiness). By listening to them, I was able to identify not only the impact of the advertisement on audiences but also the emotional resonance of the video itself. Because of their responses, I paid greater attention to the nonverbal and verbal displays of emotion in the video, which enhanced my analysis of the representation of relational dynamics. This was one way I co-constructed knowledge with participants. Rather than relying solely on my interpretation of the texts, I understood participants’ interpretations as equally important contributions to the analysis.

Coding process. I used the company Rev to create transcripts, using funds from the African American Doctoral Scholars Initiative. This resulted in 328 single-spaced pages of conversations. I read through the transcripts several times to familiarize myself with them and then checked for accuracy, making decisions about grammar and punctuation. On the next read-through, I added nonverbal and emotional cues to the transcripts, noting where laughter was shared as well as other nonverbal communication (e.g., head nodding, clapping, head shaking). Next, I added the chat into the transcripts, inserting participants’ chat comments where they appeared in the conversation. The transcripts became the foundation of my analysis, although I used the recordings at times to re-familiarize myself with the visual and audio cues.

To aid in the analysis, I used Dedoose, a secure web-based qualitative data analysis software that is commensurate with NVIVO and other qualitative analysis

software. Although it has not been used much within the discipline of communication¹⁴, it has been used in other social sciences (Geisler, 2018; Salmona et al., 2020). I used Dedoose to organize and code the data; Dedoose did not code or analyze data for me. My first stage of coding was a line-by-line analysis, which involved naming or describing small units of the conversation, such as sentences, statements, or single answers to questions. My initial stages of coding were marked by openness, which led to more descriptive than analytical codes (Charmaz, 2014). I also used the post surveys at this stage by marking the elements that participants said stood out to them or seemed important or interesting from their groups. In this way, I followed CRGT's imperative to include participants' perspectives in the analysis of data (Malagon et al., 2009). Their voices meaningfully directed my attention toward patterns in the conversations. For example, one participant noted in a post survey that, "[Other] participants were not aware of how their DNA ethnicity percentages can change frequently. Ancestry and other sites seems to hide this from customers. In fact, the ads make it seems as though your stated results are who you are...forever [text as is in original]." This insightful comment helped me to name the code "surprise at changing results" and see its connection to my analysis of the advertisements. Advertisements show participants expressing surprise at initial results but do not depict reactions to updated results, which are also an integral part of the GAT experience.

The second step of focused coding was marked by more analytical logic. In this phase, I interpreted meaning across the data sets based on my initial codes. Focused

¹⁴ A search in the database Communication and Mass Media Complete for "Dedoose" yields one result in the journal, *Written Communication*.

coding involves choosing the most significant or frequent initial codes and identifying where there are connections and analytic possibilities (Strauss, 1987; Strauss & Corbin, 1991). An example of focused coding is to choose an initial code and ask “What patterns emerge between codes?” and “Which of the codes best accounts for the data?” (Charmaz, 2014, pp. 140-141). When constructing the theoretical code “Blackness as trauma” I questioned the relationship between initial codes, which described varying facets of racial trauma. I wondered about the relationship between the participants’ personal trauma and the trauma they described as shared between all Black people. This inquiry led me to categorize the trauma as family and/or generational, personal, and genealogical/ancestral. Finally, my coding led me to construct categories that explain the data. Categories are more abstract than the labels of the second phase of coding and begin to explain the data more extensively by contextualizing them within existing literature and their context (Charmaz, 2014). Although labeled by steps, the process of analyzing qualitative data is emergent and iterative rather than sequential. Throughout the process, I returned to previous stages of coding to ask different questions, try different organizational schema, and—using the abductive approach—come up with the best possible explanation to answer the research questions (Charmaz, 2014).

The example of theoretical coding in Table 2.4 represents some of the most emotional stories of the focus groups. I was surprised by the depth of disclosure participants offered. Although we spent a short amount of time together, participants shared intimate life experiences about race and racism, which contributes to the emotional resonance of this study. Their disclosures reminded me that focus groups capture only a small amount of a person’s life but that they are still a powerful method

for eliciting in-depth responses. I was also grateful for the way participants related to each other in the groups by listening to each other's stories, staying attentive throughout our conversation, and building from each other's responses in productive ways. Their interpersonal communication with each other was constructive, reciprocal, and emotionally rich. The artificiality of the focus groups creates limits on them as a data set. They cannot perfectly represent interpersonal communication between Black people who have a relational history in non-research settings. However, the focus groups were still profound experiences for me as a researcher and the participants, based on their post survey responses. They were able to reach deep levels of disclosure, as they related their experiences to others' experiences.

The final component of CRGT is a conditional matrix (Figure 2.1) based on insights derived from the coding process. A conditional matrix is “a coding device that shows the intersections of micro and macro conditions with actions and clarifies the connections between them” (Malagon et al., 2009, p. 267). This mapping shows the relationship between structural (e.g., GAT industry, anti-Blackness) and individual (e.g., racial identity negotiation, intrapersonal communication) levels of analysis. In the form of a fishbone diagram, I show six branches—racial ideologies, institutions, the GAT industry, racial identity negotiation, customer discourse, and industry discourse—that produce the overall discursive landscape of GAT discourse about Black identity. The “Racial Ideologies” branch depicts how White supremacy, anti-Blackness, colorblindness, post-racialism, and scientific racism frame GAT discourse. Though they each occupy different descriptions of the branch, they are entwined and co-construct one another. The “Institutions” branch indicates how Western science, genomics, and

medicine epistemologically and economically shape GATs. The “GAT Industry” branch illustrates how Whiteness directs GAT companies and their surveillance structures. The “Racial Identity Negotiation” branch describes how interpersonal communication, intrapersonal communication, and diasporic communication meaningfully inform the racial identity negotiation enacted through commercialized genomics. The “Customer Discourse” branch details the overarching analytical codes of participant discourse. Finally, the “Industry Discourse” branch describes how GAT ads and other modes of discourse commodify genomic self-fulfillment through de-politicizing and decontextualizing Blackness. I used this diagram to build the arguments of the analysis chapters because it allowed me to visualize the relationships between the macro and micro discourses.

Counterstorytelling. Parts of this research are presented through narrative as auto/ethnographic research and counterstorytelling. For example, Chapter 1 begins with an autoethnographic account and so do subsequent chapters. I focused on narrative throughout this project because narrative is central not only to CRT as a theoretical body but also to the field of commercialized genomics, which innovatively creates stories about individual and collective selves through DNA. Counterstorytelling emerged organically from my time immersed with these data sets that contained so many stories. Advertisements told mini-narratives— 30- and 60-second tales about the worth of a GAT company’s product. Participants, too, relied on stories to describe their understandings of race and genetic ancestry testing and to relate with other focus group members. Further, as a researcher, I encountered stories every time I presented this project, workshopped it with colleagues, and conversed with others about it. People brought up narratives in the

news, family stories, or the experiences of a friend of a friend of a friend. I came to understand GATs through the lens of these powerful narratives that acted as heuristic devices for a diverse array of people in academic and lay spheres, alike. CRT scholars have argued that it is vital to listen to the voices of people of color and use stories to reveal truths in creative ways (Delgado, 1989; Matsuda, 1987; Solórzano & Yosso, 2001). Accordingly, I use counterstorytelling to critique the Whiteness of the GAT industry, evoke the emotionality of using GAT products as people of color, and expand research by using narrative *as* research (Toliver, 2022). Chapter 5 takes the form of a composite counterstory, meaning the characters do not represent a single individual but are characterized through a variety of sources, including participants' experiences, my experiences, and relevant literature. The story illustrates the effects of GATs on two Black siblings at the crossroads of an institutional reconciliation project and their unknown ancestry. I further elaborate on counterstorytelling as a method in Chapter 5.

Indications of methodological rigor

In the context of qualitative scholarship, intellectual rigor refers to the use of “sufficient, abundant, appropriate, and complex: theoretical constructs, data and time in the field, sample(s), context(s), data collection and analysis processes” (Tracy, 2010, p. 840). Rigor relies on the data analysis and the overall theoretical and methodological construction of the research project. My use of CRT and identity negotiation, along with critical race grounded theory across the data generated cohesion among theory, methodology, method, and analysis in service to making a complex argument about the scientific racism of GATs and its effect on Black individuals, communities, and society.

Qualitative research criteria

I evaluate this project's rigor based on the qualitative research criteria of credibility, originality, resonance, and usefulness (Charmaz, 2014). I achieved credibility by becoming intimately familiar with my data and making sure it sufficiently supports my claims. Engaging in over 1000 minutes of interviewing, presenting this project, and discussing this research with scholars all increased the credibility of the study by deepening my understanding. Another way to achieve credibility is by triangulating (Morse, 2015) a diverse data set. I practiced triangulation by using existing theory, advertisements, focus groups, and individual interviews to make claims. Together, these sources of knowledge created a more comprehensive understanding of the social phenomenon of GATs. My project meets the criteria of originality because my analysis generates new insights and extends, challenges, and refines current research in the areas of critical race studies, Black communication studies, and science communication. The research demonstrates resonance because it offers rich insights into the lived experiences of Black people. It is both resonant and useful because I use the experiences of Black people to make recommendations about GATs to the industry.

Finally, I evaluated my research via careful consideration of ethics. Understandably, studies including Black participants that involve science and genetics should be thoroughly evaluated to increase the benefits of and reduce the harm of the research. I received IRB approval for this study, which ensured that I took the proper steps to maximize privacy, consent, and confidentiality. Additionally, I am informed by feminist and critical race perspectives that advocate for an ethic of care (Leget et al., 2019). Care ethics require that I be reflexively accountable to power dynamics and work

alongside participants to center new critical insights about race. Practicing care and relational ethics (Ellis, 2016), I am also mindful of my own biases and cognizant of the participant's desires and goals. I worked toward more equitable researcher-participants relationships by following the CRGT technique of collaboration with participants. The optional post focus group surveys, for instance, allowed participants to further reflect, elaborate, and clarify as needed, and I will continue to share updates about this project with participants.

Reflectivity and reflexivity

Reflectivity. A final criterion for qualitative research is the use of reflectivity and reflexivity to render visible the underlying assumptions of the research process. Reflection is “an in-depth consideration of events or situations outside of oneself” which involves “examining what we think happened on any occasion, and how we think others perceived the event and us, opening our practice to scrutiny by others, and studying data and texts from the wider sphere” (Bolton, 2010, p. 13). One key component of reflectivity for this project is interrogating how audiences and participants perceive the research project, itself, which became visible during the recruitment process.

For recruitment, I ran ads for the study on Facebook and Instagram, which automatically created a test page that circulated the ad to a subset of the target audience. The comments on the test page, over 150 of them, were stressful to engage with and insightful to read. The majority of comments were by self-identified White people who were upset that they saw the ad on their Facebook or Instagram, thought the study itself was racist, or wanted to spread White supremacist ideologies about GATs. These

comments called the study “exclusionary,” “woke,” “divisive,” or “race drama” for inquiring only about Black people’s experiences. As one person said, “It [genetic ancestry testing] pertains to ALL of us. Live in the now.” The comments became increasingly derogatory, as users argued with each other, and a handful of self-identified Black users pushed back against racist comments. One user claimed that “White Europeans and Progeny built the effing World we live in” and that anything else was “revisionist genealogy.” When a Black user asked why so many White people were offended by the study, another person replied, “Why y’all always crying racism? A banana peel, a rope on a tree, cotton plant sets y’all off. Be wantin’ reparations for that.” Reading comments like these, I began to feel nervous about including my name and university email address on the study ad. I wondered if a White supremacist would contact me or if I should run a different version of the ad without my name. Thankfully no one contacted me out of hate. However, the comments reminded me that there are always risks to conducting anti-racist research and that studying Blackness critically threatens White supremacy.

Secondarily, comments on the test page made me realize that my topic of study was enough to cause people to mistrust me as a researcher. Users commented on the post, telling people not to give me their genetic information, saying: “Be very Leary of these so-called surveys of African Americans especially coming out of Utah. What’s their purpose/agenda, really?” and “Pro-Tip don’t give strangers on the internet your banking information or genetic material” and “This is not to be trusted.” Previously, I had not considered how many people would be distrustful of my study based on its topic, alone. In the focus groups and interviews, I spoke with participants about the fear of data

surveillance and privacy. I had not considered how audiences could view my study as part of those same surveillance systems, particularly because I am based in Utah, where Ancestry is also located. My participants were people who had already taken GATs, but this criterion necessarily excludes Black people who have chosen not to take GATs for many reasons, including privacy concerns. These comments reminded me of the deep mistrust around GATs and this study's limitations because it only engages with people who have already taken GATs. The test page for the study ad informed my understanding of the project, its potential impacts, and its limitations.

Reflexivity. In addition to reflectivity, CRGT advocates for a critical self-reflexive praxis that involves interrogating how I am affected by my scholarly inquiry and how my presence contours the inquiry. Reflexivity is the process of understanding how I, as a researcher, am “experienced and perceived by others” (Bolton, 2010, p. 14). Because both my theory and methodology necessitate my visibility as a Black researcher, I began this project with an autoethnographic reflection of my experiences taking a 23andMe test. This entry point into the project centers my voice, perspective, and lived experiences. As a Black woman I exist along several intersecting axes of oppression. Yet, as a native English speaker, a doctoral student, a U.S. American, and a cisgender and able-bodied person, I also benefit from structural power and privilege. Key to this study, my identity as an African-American means that I view this project from an emic lens (Lindlof & Taylor, 2019) that is deeply informed by my own experiences with Black racialization and anti-Black racism. CRGT encourages me to draw from my cultural intuition to collect, analyze, and represent data (Malagon et al., 2009). My knowledge and experiences played an active role throughout the research process as a means to build

rapport and collaborate with participants. Throughout our focus group and interview conversations, I shared information about my identity, family, and GAT experience. When participants spoke about being descendants of enslaved people, I resonated with their pain. When one person described their family's move during the Great Migration, I disclosed my family's history as participants in the Great Migration. When another participant described their GAT results updating over time, I related that to my own experiences with updated results in the years following my initial test. This allowed me to build connections with participants and collaboratively engage in sense-making. From our conversations, my perception of their perception about me was that I was interested and invested in the project and that my experiences were similar to many of their own.

Throughout the research process, my perspective of GAT discourse shifted, as I grappled with my expectations versus the reality of the interviews. Initially, I was disappointed in how participants spoke about race and science, particularly those who argued that race is biological. I had not expected that so many participants would hold variations of this belief. Because I critique scientific racism and anti-Blackness as a critical race theorist, it was disheartening to hear so many Black people buy into these normative ideas. Yet, I allowed participants the space to talk about their beliefs and I understood my discomfort as a sign of our heterogeneous and conflicting ideas about Blackness as Black people. Another disappointment that I encountered during interviews was how African Americans spoke about Black people globally in ways that were xenophobic, consistent with anti-Black racism, and/or supported ideas of African American exceptionalism within the diaspora. I did not expect African Americans to readily disclose disdain for other members of the African diaspora. Nor did I expect so

many African Americans to view African American history as separate from and, problematically, more oppressed than Africans' history. This discourse made me increasingly reflexive about my role in facilitating these discussions. My identity—and the identities of others in the focus groups—created space for such disclosures, and I struggled with the idea that I was complicit in these conversations. I am glad that I was able to elicit candid answers for participants, but I disagreed with opinions that I viewed as reproducing anti-Blackness. Ultimately, the points of disagreement showcase the breadth of opinions that Black people have about Blackness and GATs and implicate Black people in the reproduction of anti-Blackness.

Despite several instances of disappointment, I was often delighted while talking with participants. I was impressed by the emotional depth and the level of disclosures in the groups, especially around ideas of family and Blackness. One of the opening focus group questions was “What does it mean to be Black?” Participants dove right into answering, often disclosing past racial trauma, family histories, and persistent questions and struggles they have with Blackness. I had tears in my eyes while participants cried about racial discrimination and anti-Blackness in their lives and the lives of the people they love. Their stories reminded me of my racial trauma and the reasons why I am invested in research that centers the lives of Black people and critiques White normativity. Our narratives about our own lives remain understudied and devalued within academic contexts. On the other hand, I smiled when they described Blackness as pride, love, community, and joy, and I could relate to the ways they described music, family, media, and cultural knowledge as key to their racial experiences. I was struck by the feeling of community in the groups. And my feelings were amplified when participants

expressed thankfulness to me and to each other for their time, attention, and perspectives. Sharing a wide range of emotions with participants reminded me about the humanity of this research and my humanity, too.

My African American identity as a marker of both race and nationality privileges my positionality among members of the African diaspora who do not have the power afforded by U.S. citizenship. In particular, because socially constructed meanings of race change across spatial contexts, I remained reflexively vigilant about how my racial frames influenced the study. Participants who were not African American played an important role by informing me about their diverse perspectives. Additionally, I paid particular attention to participants whose racialization occurred in contexts outside of the United States. While I am embedded within the U.S. context, analyzing a majority of U.S.-based companies, and drawing primarily on scholarship authored by U.S. American scholars, I am mindful of ethnocentrism and how race, ethnicity, and ancestry are defined differently internationally. When people discussed race, I asked questions that allowed them to contextualize their experiences within their geographical and political contexts. While I speak of Blackness generally in this study, I am aware that the data are biased toward African American, Black American, and Western perspectives.

Methodological challenges

Although carefully planned and thoughtfully executed, this research is limited in several ways. For one, there is a sampling bias that limited the participants in terms of demographics (Lindlof & Taylor, 2019). Because I am U.S. based and the study was advertised in the United States, there are few participants from other parts of the world,

meaning discussions of Blackness are mostly contextualized within the States. The study was conducted in English via Zoom, which also constrained who could participate. People who did not have access to the technology or could not use the technology were unable to participate. Moreover, the sample was shaped by the nature of the research questions, which ask about Black people's experiences who have already taken GATs. People who are interested in (genetic) genealogy are more likely to participate in projects like this, so there is an overrepresentation of people who seriously use GATs in pursuit of family genealogy. The sample is not representative of all Black people who have taken GATs, yet qualitative research does not seek to be representative. Rather, this sample provides an in-depth perspective on an important contingent of people affected by the GAT industry. Their lived experiences with GATs matter because Black people's perspectives are necessary for understanding the racialized impacts of commercialized genomics. The results are transferable to other contexts in which scholars and practitioners are interested in Black people's perspectives.

Summary

This chapter reviewed the methodological commitments of this project and the methods used in the study. I situated this inquiry within critical qualitative inquiry and explained my critical race grounded theory process, which involved analyzing advertisements, focus groups, and interviews and their intertextual relationships. Finally, I evaluated the research design using criteria for qualitative research. In the next chapter, I present an analysis of the data, showing how Whiteness dictates the depictions of

identity negotiation in the ads and how participants both critique and reproduce anti-Blackness as a response to GAT industry discourse.

Table 2.1 Description of Focus Groups

Group	Number of Participants	Length of Discussion
Focus Group 1	8	90 minutes
Focus Group 2	11	90 minutes
Focus Group 3	5	85 minutes
Focus Group 4	3	90 minutes
Focus Group 5	2	60 minutes
Focus Group 6	1	60 minutes
Focus Group 7	4	85 minutes
Focus Group 8	4	90 minutes
Total	38	650 minutes

Table 2.2 Description of Interviews

Interviewee	Focus Group Number	Length of Discussion
Interviewee 1	1	49 minutes
Interviewee 2	1	50 minutes
Interviewee 3	2	40 minutes
Interviewee 4	2	45 minutes
Interviewee 5	3	55 minutes
Interviewee 6	3	40 minutes
Interviewee 7	3	36 minutes
Interviewee 8	4	45 minutes
		Total: 360 minutes

Table 2.3 Descriptive Information of Participants

<i>Pseudonym</i>	<i>Age</i>	<i>Gender</i>	<i>Race</i>	<i>Ethnicity</i>	<i>Indigenous and/or Tribal Affiliation</i>	<i>Nationality</i>
TJ	30	Man	Black	Black American	N/A	U.S.
CaptHardy	69	Woman	Black	African American	N/A	U.S.
New York	32	Male	Black	African Canadian	Igbo	Canada
Omobowale Kappr Khoury	38	Man	Black	African American	Yoruba, Mandinka, Fula, Mende, Temne, Kpelle	U.S. and Sierra Leone
Lee Marie	46	Woman	Black and White	African American	N/A	U.S.
Cocoa	51	Woman	Black	African American	N/A	U.S.
Misty	51	Woman	Black	African American	N/A	U.S.
Utah	21	Man	Black	African American	Navajo	U.S.
Blacq	25	Man	Black	African American	Yoruba	U.S.
August	33	Woman	Black	Black	N/A	U.S.
Queen	34	Woman	Black	African American	N/A	U.S.
Maisley Goyard	27	Woman	Black	African American	N/A	U.S.
Ebony Doe	46	Woman	Black	African American	N/A	U.S.
Cairo	30	Woman	Black	African American	N/A	U.S.
Arrow	56	Woman	Black	African American	N/A	U.S.

Table 2.3 Continued

<i>Pseudonym</i>	<i>Age</i>	<i>Gender</i>	<i>Race</i>	<i>Ethnicity</i>	<i>Indigenous and/or Tribal Affiliation</i>	<i>Nationality</i>
Motsesanagape	59	Female	African American	African American	West African—Unsure	U.S.
JunePlum	55	Woman	Black	Jamaican and African American	N/A	Great Britain and U.S.
Mocha	68	Woman	Black	African American	N/A	U.S.
Scorp	25	Woman	Black	Caribbean and African American	N/A	U.S.
For Winnie	53	Female	Black	African American	Bubi and Tikar, Hausa, Fulani	U.S.
Amy	42	Female	Black	African American	N/A	U.S.
Carmen	30	Woman	Black	Black	N/A	U.S.
Cali	25	Man	Black	African American	Igbo	Nigeria and U.S.
Vee	29	Man	Black	African American and Latino	N/A	U.S.
Shaka Zulu	57	Man	Black	African American	N/A	U.S.
Rabekah	59	Female	Black	African American	N/A	U.S.
Lemon ¹⁵	28	Woman	Black	African American	N/A	U.S.
Vin Diesel	25	Man	Black and White	African American	Bantu (Shona)	Canada
Tiana	36	Female	Black	African American	N/A	U.S.

¹⁵ Lemon identified as Black, and a relevant part of her racial identity negotiation over time includes previously identifying as Black and White biracial.

Table 2.3 Continued

<i>Pseudonym</i>	<i>Age</i>	<i>Gender</i>	<i>Race</i>	<i>Ethnicity</i>	<i>Indigenous and/or Tribal Affiliation</i>	<i>Nationality</i>
Bluebird	57	Female	Black and White	African American, European American	N/A	Italy and U.S.
Valencia ¹⁶	30	Female	Black,	African American	N/A	U.S.
Herstory	47	Female	Black	African American	N/A	U.S.
TK	54	Woman	Black	African American	Igbo	U.S.
Hope2000	39	Woman	Black	African American	N/A	U.S.
Mesa	51	Woman	Black	African American	Creek	U.S.
Adam	38	Male	Black	African American	N/A	U.S.
Phillyguy	37	Man	Black	African American	N/A	U.S.

¹⁶ Valencia identified as Black, and a relevant part of her racial identity negotiation over time includes discovering a large amount of Middle Eastern ancestry via her GAT. Although she does not identify as Middle Eastern, she notes that it has some effect on her identity and her familial identity.

Table 2.4 Example of Theoretical Coding

Label	Definition	Examples
Blackness as Trauma	Family and/or generational racial trauma	<p>“His [my father’s] childhood friend was burned alive in a house because his, that child’s family was registering people to vote in Louisiana. One of his cousins was drown in a retaining pond. His brother was shot for being uppity. That’s on the death certificate.”</p> <p>“They [my parents] grew up during Jim Crow. They had to, you know, live that way, had to go to movie theater, but you sit in the top balcony, bad seats. The white guys arrived through their communities, you know, on the weekends and terrorized them.”</p>
	Personal racial trauma	<p>"I was in maybe second grade when that happened...but a white kid spit on me. So that was my first, you know, encounter or how I learned, you know, from at least from their perspective, what it meant to be black.”</p> <p>“As a kid...I asked my mom what was different, you know? I know I’m black, and there’s white, like what was different? Is there anything wrong with me? Cause the way, people treat me sometimes.”</p>
	Genealogical/ancestral trauma	<p>“your entire history was taken from you.”</p> <p>“everything [is] wiped and annihilated and you have absolutely no idea where you come from”</p>

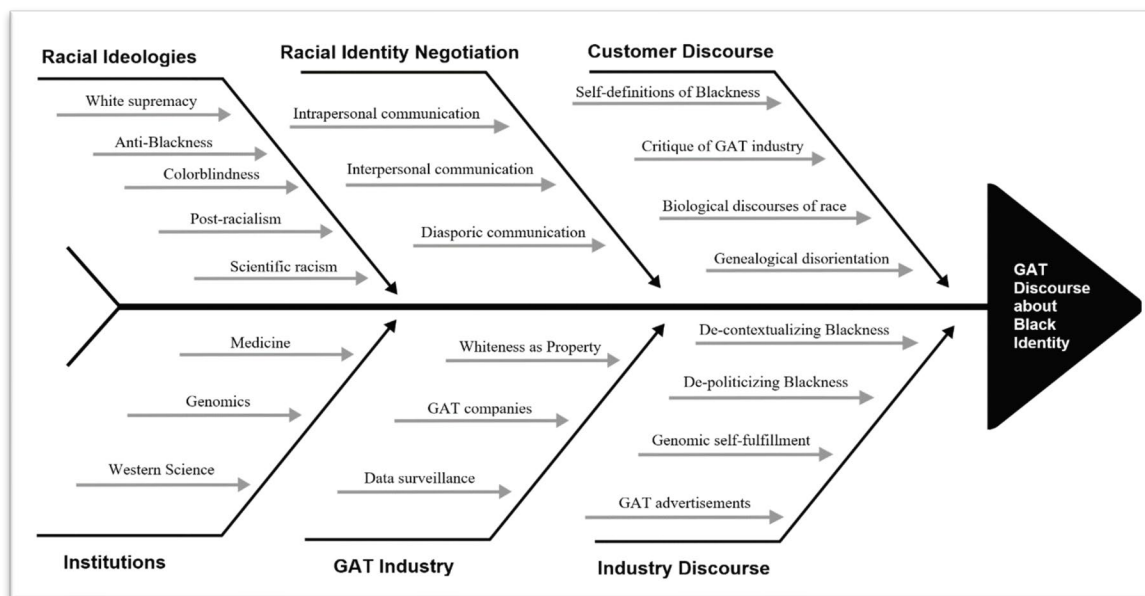


Figure 2.1. Conditional Matrix

CHAPTER 3

THE COMMODIFIED GENETIC SELF

Introduction

While working on this project, I have felt surveilled, as if faceless GAT industry employees and marketing executives have watched my every move or like they have gathered information about me in places beyond my reach. I do not feel this way solely because I have taken a 23andMe test; admittedly and I volunteered my DNA for use in some of the industry's research. Rather, by simply being online, I expose myself to Web 2.0's inherent mechanisms of data identification and control. When I visit GAT company websites, search for GAT ads on YouTube, or Google "genetic ancestry tests," each website collects information about me—my IP address, account information if available, and cookies, the text files that allow websites to incessantly track my activity and preferences. As a social institution, technology has made everyday surveillance a standard part of internet use in service to the highly-lucrative economy of online behavioral advertising (Varnali, 2021). In this system, advertisers make inferences about our preferences and show us ads related to our previous search history and account use. For me, this means a slew of personalized ads about GATs. They have appeared everywhere in my online life: embedded in my public and private social media profiles, floating in the sidebar of unrelated websites, and appearing in between videos I watch.

While I have researched the GAT industry, I have become its target for information gathering. As I sought out a discrete set of GAT ads, the industry has exposed me to a litany of commercial discourse. As participants expressed, the constant surveillance did not make me feel alarmed but resigned to the forces of technology beyond my control.

My experience exemplifies how, within our online economic landscape, people encounter GAT ads through the apparatus of surveillance capitalism, which demands the “everywhere, always-on instrumentation, datafication, connection, communication, and computation of all things, animate and inanimate, and all processes—natural, human, physiological, chemical, machine, administrative, vehicular, financial” (Zuboff, 2019, p. 4). The computational impulses of the GAT industry reflect broader surveillance economies that transform all matter into data points and all data points into commodities for profit. GAT ads are an integral part of the economic vitality of the industry, because they build brands, generate public interest, and attract and retain customers. Simultaneously, they signal the ideological commitments and hegemonic discourses of the GAT industry operating within surveillance capitalism. Although GAT ads often cohere along dominant ideologies, I recognize their polysemy as conveyors of multiple, overlapping, and competing meanings (Condit, 1989; Priyadharshini & Pressland, 2018). I also acknowledge the complexity of audience agency, which influences how people decode these messages (Hall, 1991). In this chapter, use CRT to deconstruct the dominant meanings within a set of GAT advertisements that reproduce ideologies of White supremacy and anti-Blackness. To do so, I center participants’ meaning-making of industry-produced messages to illustrate how audiences can accept, reject, and negotiate the industry’s ideological messages.

GAT advertisements account for one part of a larger, conflict-ridden media system in which DTC genetic testing companies strategically employ advertising to sell cutting-edge technologies. Often, audiences view new tech products as risky, and advertisements—along with word-of-mouth communication—play a key role in persuading people to adopt new products and services (Horsky & Simon, 1983; Singhal, 2009). Directly following the completion of the HGP and early commercialization of genomic tests at the turn of the 21st century, scholars and practitioners began cautioning against the role of ads in the newly developing industry. Warnings were targeted toward DTC health tests, like those that detect BRCA 1/2 genes for breast cancer susceptibility. For example, Chandros Hull & Prasad (2001) argued that a prominent BRCA 1/2 ad was manipulative, misleading, and misleading because it did not include all relevant information, targeted a vulnerable audience, and guides the audience to the company instead of health care professionals. However, unlike traditional genetic testing, which requires scientists, practitioners, and trained genetic counselors, DTC testing and its advertising leave customers to use messages and products without industry professionals' guidance. Because of what has been marketed as increased consumer agency, companies, scholars, and activists have advocated for and against ads out of concern for accurate representations and audience agency. While some have endorsed more federal regulations on genetic testing ads, others have argued that customers can and do make informed decisions based on genetic results without government oversight (Williams-Jones, 2006).

In one high-profile 2013 case, the U.S. Food and Drug Administration (FDA) ordered 23andMe to stop marketing its products without FDA approval out of concern for public health (23andMe, 2022a; Pollack, 2013). Later, in 2017, 23andMe became the first

DTC genetic testing company approved by the FDA to market its health products (U.S. Food and Drug Administration, 2017). The majority of conflict has surrounded health tests (e.g., predictive testing, carrier testing). Yet, comparable federal oversight has not been implemented for ancestry testing. However, similar ethical concerns about representation and audience agency apply to the GAT context. How accurate are the representations of GAT ads? Can consumers make fully informed decisions about buying them? Via GAT ads, can audiences differentiate between concepts like genetic ancestry, race, ethnicity, nationality, and culture? Motivated by these questions, I interrogate the relationship between GAT ads, Black GAT customers, and racialized power dynamics that have interpersonal and structural implications.

In this chapter, I use CRT's tenet of Whiteness as property to show how the GAT industry commodifies Black identity negotiation as a de-political and de-contextual process that constitutes customers within the discursive imperative of colorblind scientific discovery. By minimizing customer agency in identity negotiation, GAT ads exaggerate the promise of delivering fulfilled racial-genomic selves. It is especially egregious to promise fulfillment of identity to Black customers via White technologies that perpetuate the anti-Black ideology of scientific racism. As Black GAT customers, we offer a counterstory that insists on the politicization of Blackness within historical and contemporary White supremacist violence. Paradoxically, many participants use the anti-Black discourse of scientific racism endemic to GATs as a mechanism of mutual recognition throughout the African diaspora. This chapter critiques representations of (Black) identity negotiation in GAT media, while interrogating how Black customers

participate in and resist interpellation into the datafied, geneticized Blackness of our surveillance capitalist state.

The property of Whiteness in postgenomic identity construction

Whiteness as property exposes the attachments between science, Whiteness, and the GAT industry, because it underscores how GATs—and their discourse—reproduce the ideological commitments of the White institution of science. The systematic exclusion of people of color and Indigenous people from knowledge production in scientific realms and the use of science to further racial subjugation frame the context of the GAT industry. Mensah and Jackson (2018) argue for the term “science as White property” (p. 8) to critique how Whiteness determines “the *right to use and enjoyment* of science—what science looks like, who engages in science, and who science is for” (p. 22, emphasis in original). Historically, Whiteness has claimed dominion over science, which, in turn, has been used to property global colonized subjects. In contemporary times, Whiteness orders how commercialized genomics is used in racial, ethnic, and Indigenous identity construction. Reardon and Tallbear (2012) critique how Whiteness controls genomics through a case study of the Genographic Project, a genetic anthropological study to track human migration, which relied on Indigenous participation. They argued that anthropologists and genomic scientists used genomics as a civilizing project that defined Indigenous people by mining their genetic property. Indigenous people were therefore stripped of their ability to define themselves, and Western technoscience reinforced the epistemological hierarchy in which White and European knowledge subjugated Indigenous knowledges. Following their argument, I critique how the GAT

industry interpellates Black customers into discourses of discovery that are endemic to White scientific thought, thereby allowing Whiteness to determine the discovery of Black identity and constrain Black self-determination.

Discourses of Whiteness and discovery

GAT ads constitute customers within the discursive imperative of scientific discovery. The majority of the ads I analyzed depict discovery as an immediate outcome of GATs. The actors' resulting shock, surprise, and delight about newfound genetic identities are powerful performances that entice audiences into "discovering" themselves by relying on genetic explanations. Across companies, iterations of "discovery" appear frequently, as audiences are told: "Discover your ethnic mix." "Discover the story only your DNA can tell." and "Discover traditions." (FamilyTreeDNA "FamilyTreeDNA Promise"; AncestryDNA "Lezlie"; FamilyTreeDNA "Traditions to Discover"). The language of finding genetic origins and present-day families saturates the GAT industry because "discovery" is an imperative of science, itself. Science is often taught through discourses of discovery by (in)famous White men in the global North, such as the familiar narratives of Charles Darwin's theory of evolution and Alexander Fleming's discovery of penicillin (Ideland, 2018). Rhetorics of the HGP closely follow this schema. The National Human Genome Research Institute (NHGRI) compares the HGP to the "outward exploration of the planet or the cosmos," except that it was "an inward voyage of discovery...looking to sequence and map all of the genes—together known as the genome—of members of our species, *Homo sapiens*" (U.S. Department of Energy, 2022 emphasis in original). This grand language constructs the world and its workings as

passive objects, awaiting theorization from the world's brightest White, Western minds. Therefore, discovery discourses epitomize the epistemic violence (Spivak, 1988) that Whiteness uses to determine who can know, what can be known, and by what (rational, valid) means. The GAT industry reproduces and further substantiates the discourse of its epistemic grounding within the Whiteness of science.

In the MyHeritage ad “What Makes You, You?” a voiceover promises that “With MyHeritage DNA you’ll discover who you are and where your ancestors came from.” The screen is cut in half with two actors on either side. To the left is a middle-aged White Swedish woman in a kitchen, and on the right is an older White man from the United States in a living room. They swab their cheeks, send their samples away, and then read their results.¹⁷ The strangers find out they are “long lost relatives” with an estimated relationship of second cousins. Illustrating family connection, the woman steps across the split screen into the man’s home, where they sit together and enthusiastically look at a book. Though we cannot see the pages, it is likely a family genealogical source like a photo album. This ad depicts how the corporate “happily-ever-after” of MyHeritage enables the “discovery” of genetic identity and relational identity. GAT companies call customers into identity negotiation processes that implicate individuals and collectives in the past and the future. The collapsing of time and space across generations and TV screens beckons customers to understand themselves as attached to people who are spatially, temporally, and relationally distant. GAT ads like “What Makes You, You?” persuade customers into a process of identity negotiation that configures historical and

¹⁷ The woman’s report is not shown but the man’s report reads: 51% English, 22% North and West European, 16% Scandinavian, and 11% Iberian. Iberia encompasses Spain and Portugal (MyHeritage, 2022).

contemporary kinship across exclusively genomic lines. Genetics, as a valid arbiter of identity, determine how individuals can discover relatedness. The Whiteness of this discovery directive is evident when contrasted with the ways Indigenous people and people across the African diaspora prioritize kinship practices that do not rely on genomics (e.g., othermothers, fictive kinship, nonbiological conceptions of families, communal understandings of families) (Chatters et al., 1994; Foster, 1993; Olaore & Drolet, 2017). These kinship practices are non-existent within GAT ads, which overvalue genomics-determined biosociality (Rabinow, 1996) and present GATs as the right way to define families under the auspices of scientific objectivity. This illustrates one way White supremacy operates—by setting terms and conditions for the relational experiences of all people.

Discovering White, western relationality

The tensions between scientific explanations and nonscientific explanations of relationality are exacerbated by the GAT industry. For example, the MyHeritage ad “Tribal Quest Papua New Guinea” shows how the imperative to discover biological relationships directly conflicts with Indigenous relationality. The video documents Israeli MyHeritage experts who travel “deep into the rainforest...to continue...[their] quest to preserve the family histories of tribal people.” Mirroring European exploration, the team travels by boat to visit a remote community and “discover” their ways. Brayboy argued that a tenet of TribalCrit, Tribal CRT, is that “concepts of culture, knowledge, and power take on new meaning when examined through an Indigenous lens” (Brayboy, 2005, p. 429). Although Brayboy’s conceptualization of TribalCrit is based on Native American

experiences, the critique extends to the context of Papua New Guinea. The team goes not to understand the Indigenous community's knowledge about relationships to honor their culture but to shape their knowledge within MyHeritage's database. Via Whiteness, Indigenous knowledge is useful when it can be bent to the workings of Whiteness' needs. During their visit, the employees interview community members spliced between videos of traditional dances, ceremonies, and music. Community members are depicted as welcoming to the MyHeritage experts. In a series of segments, the employees wear face paint, hug community members, and take pictures with them.

One MyHeritage employee summarized the experience by saying, "They were just eager to share with us their stories, their personal stories, their family histories, their myths and legends, their cultural heritage. And basically, they gave it to us to safeguard for them for the sake of the future for generations to come." Although Israel did not colonize Papua New Guinea, the territory was colonized by several Western countries, and neocolonial power structures remain between it and, for example, Australia (Grewcock, 2014). Replicating colonial discourse, this ad constructs the Israeli employees as more technologically advanced than the community's people, who lack the experts' knowledge, tools, and resources. MyHeritage becomes the technoscientific "safeguard" of the community's family histories. Western scientific thought has historically propertied people of color and Indigenous people. The corporate language of protection and security ultimately undermines Indigenous peoples' desires for self-determination and self-identification without outside influence. In MyHeritage's view, the only way the Indigenous people's ancestry can be "safe" is by subjecting it to the constant surveillance of their corporate databases. Similarly to "What Makes You, You?"

this ad's discourse of discovery ultimately serves the company. Although Tribal Quest does not collect DNA from its participants and instead documents family history without genomics, its corporate discovery discourse operates in two distinct ways.

First, the MyHeritage experts embark upon the discovery of documenting the community's ancestry. Second, their online database is represented as a tool for future family discovery. The project's goal is to ensure that future generations can find their genealogy through MyHeritage. Since Indigenous DNA is an essential yet underrepresented commodity within the GAT industry (Reardon & TallBear, 2012), the "safeguarding" of this community's family history means that, as consumers, descendants might be more attracted to MyHeritage's GAT, which, in turn, supplies the company with valuable biogenetic data and increased Indigenous sampling. Tribal Quest and similar projects that target Indigenous communities are depicted as altruistic, but they ultimately serve corporate interests. Via the profit-driven motives of the GAT industry, customers' search for identity—whether familial, genetic, or ancestral—ultimately translates into industry earnings. Biogenetic data from underrepresented populations in GAT databases, like Black and Indigenous people, creates possibilities for refined reference populations, increased accuracy, and more advanced analyses for all customers. Whereas White and European people are overrepresented in many GAT databases (Erlich et al., 2018), people of color and Indigenous people are underrepresented and highly desired.

Underrepresented DNA is a necessary property to construct the genetic identities of the majority of White and European customer base of the industry. "Tribal Quest Papua New Guinea" depicts the project as opening up possibilities for future family discovery, while setting the stage for GAT profits. Through the GAT industry, biogenetic data of

Indigenous people and people of color become propertied (Reardon & TallBear, 2012), which secures Whiteness' claims over our bodies in ways that reflect the property relationships built through colonization and slavery.

Moreover, the discovery consistently depicted relies on Western conceptions of biological relations to classify and visually represent family relationships through family trees (Easter, 2016). The family tree's unified version of connectedness is problematic because it is often unattainable for Indigenous people and people of color whose lineages have been broken through colonization and Western imposition. An Israeli news story of MyHeritage's trip to Papua New Guinea expands upon the "delegation" and their work helping the community make family trees. One MyHeritage employee notes, "If for one moment we think we're talking about an additional brother, a moment later it becomes clear that it's actually a neighbor." Because the clans and tribes have different forms of relationships that are not biological, he says, their relationships are incompatible with the software. He laughs about the difficulty, saying, "smoke comes out of its [the software's] ears" (MyHeritage, 2019). The imagery of smoke coming out of the software's ears powerfully illustrates the conflict between the GAT company's software, Western conceptualizations of relationships, and the neo/colonial destruction of Indigenous relationality. The software literally cannot compute, or accurately represent, the webs of relationships in this community. To "safeguard" the community's history, their history must be cast through the existing White logics that undergird the GAT industry. I interpret his laugh as trivializing these differences, or at the very least constructing the difficulty as playful or humorous. CRT exposes how the consequences of MyHeritage's quest are anything but trivial. It is dangerous that White technologies are tools to reshape

and thus subjugate Indigenous knowledge. When arguing for an intellectual genealogy of indigeneity as an analytic, Na'Puti (2019) discussed incompatibilities between Western and Chamoru conceptions of identity in the Mariana Islands archipelago. Na'Puti (2019) wrote,

Being Chamoru is not understood through logics of blood quantum, though mixed blood and racial and ethnic identity categories have been forcefully introduced. Such concepts go against our matrilineal society's orientation and practices. We know ourselves as a people belonging to place, a people of the land that we have called home for more than 4,000 years. Our kinships are forged through ancestry or systems of poksai (to nurture/welcome) – so there is no such thing as being “part” Chamoru. As Chamorus, we understand ourselves as having full responsibility to ocean, land, and people (p. 495).

Though not speaking about the GAT industry, Na'Puti's definition translates well into the GAT context. Her conceptualization of Chamoru identity identifies the contradictory and exploitative nature of Western genetic technology being used or presumed to be capable of fully capturing Chamoru identity. Entire concepts would be excluded, such as ocean and land. If one tried to use a GAT site to represent the complex relationships between land, ocean, and people in the Marinas, “smoke comes out of its [the software's] ears” (MyHeritage, 2019). In “Tribal Quest Papua New Guinea,” MyHeritage is empowered to safeguard the community's history by reshaping their relationships in its Western technoscientific image, as the company directly intervenes in what it means to discover family history for future generations of Indigenous Papua New Guineans. This ad represents how the GAT industry tangibly reshapes relationships across the globe. For Black diasporic customers, including those who are Indigenous, entrusting GAT companies with biogenetic data and/or family history means their Blackness will be interpreted through the lens of Whiteness. This intervention disrupts self-sovereignty, as corporate power dynamics capitalize from constructing Black and Indigenous familial

relationships. Whiteness, constructed through science and Western relationality, functions as the normative lens for understanding Black identity negotiation. Like future generations of the community in this ad, Black customers face the challenge of potentially understanding their kinship practices in relation to the White declarations made by GATs. Via colorblindness, the industry masks its Whiteness to preserve its customer base, so Black customers may be unaware that their participation in the industry means that they must understand their kinship practices via the White declarations made by GATs.

(Re)circulating scientific racism

GATs call customers into conceptualizations of identity reliant on White, scientific normativity and, in doing so, they (re)circulate discourses of scientific racism to audiences, including Black GAT customers. Science, as a racialized practice, has long been weaponized as a tool of empire to create and justify racial hierarchy (Saini, 2019; Yudell et al., 2020); delegitimize Indigenous epistemologies (TallBear, 2013; Walajahi et al., 2019); hoard Western and Global North resources (Schiebinger, 2005; Seth, 2009); and further neo/colonial conquest (Duster, 2003; Ideland, 2018; Yudell, 2011). The discourses of scientific racism and biological essentialism that have foundationally anchored scientific inquiry and sustained the dominant racial hierarchy for centuries are pervasive throughout commercialized genomics, despite the industry's refusal to acknowledge their omnipresence, as the discourses of race (via ancestry) and science (via genomics) converge. Consequently, these harmful ideologies are reproduced within everyday communication about race. GATs specifically do so by tethering race to science

without a commitment to anti-racism. As a critical race scholar, I am concerned that GATs enable participants to discuss Blackness in terms of science, genetics, and phenotype in ways that (re)biologized Blackness. These discursive patterns matter because they signal how the GAT industry mobilizes anti-Black scientific racism and perpetuates the false belief that race and racism are biological.

The genomic evocation of Black biology

Through GATs, participants communicated about race and conflated Blackness and genetic ancestry. Via CRT, this is troubling because centuries of resistance by communities of color and Indigenous communities have resulted in the near consensus that race is a social construction, not a scientific one. For instance, after 23andMe's "100% Nicole," participants discussed if the ad, by revealing the actress's genetic ancestry, also revealed her race. The consensus among participants was that the ad only revealed her genetic ancestry but her racial identity would be decided by several factors, including others' appraisals of her appearance. Despite these answers that separated genetic ancestry and racial identity, participants still used the two concepts interchangeably when talking about their families and meanings of Blackness. Maisley, for example, discussed her results compared to her sisters by saying:

When my sister got her test results, my sister is almost 40% White genetically. When that happened, I was like, oh, that makes a lot of sense. That's why your hair looks like that...And so I was like, if I take my test, my results probably should be a little bit different. My hair looks like this [shows medium length afro pulled into afro puff]. My sister might have a little bit more fair skin than me, but I was like, maybe I'll be a little bit more Black. But we both have the same percentage of White and Black.

In this interview, Maisley discussed her Louisiana Creole roots and the range of skin colors and hair textures present in her extended family. As a person with medium-toned brown skin and kinky hair, Maisley expected to have more African ancestry than her light-skinned sister whose hair has a looser curl pattern. This was a common misconception among participants, caused by the racialization of phenotype and genetic ancestry. Black people with features more closely associated with Whiteness were often assumed to have more European genetic ancestry. The slippage between genetic ancestry and race is evident in the way Maisley interchangeably used genetic ancestry and race. Instead of saying her sister has 40% European genetic ancestry, she said “40% White genetically.” This was a common conflation among participants, where White stood in for European ancestry and Black stood in for African ancestry. Even though advertisements did not mention racial categories, their depictions of ancestry evoked racial meaning from audiences. Thus, the industry relies on corporate colorblindness, yet reproduces racial meaning. The absence of explicit racial discourse from GAT ads allows the White discourses of race science to speak through GAT the ads without explicitly mentioning race. Even as most GAT companies purport to be colorblind, they produce racializing discourse that sustains White normativity. From a CRT perspective, this is not an accident but is the result of intentional choices that mask Whiteness’ presence so that it can retain power and control over commercialized genomics and all people’s conceptions of themselves and others.

Furthering the rhetorical slippage between race and science, for people who already believe that race is biological, GATs can be leveraged as evidence of this dominant truth (Panofsky & Donovan, 2019). One participant, Motsesanagape, strongly

advocated for a view of biological race. When the focus group was discussing how the ads portray the relationship between race and science, she said:

When people say race is a social construction, I contend that race is a genetic construction. Because if I was to say, point to the Black woman out of a group of one Black woman and one White, you would be able to do that. That's not social, that is genetic and that's racial. And the way I look, the way each of us look, that's not social. That's genetic, and that's biology, and that's science.

She went on to explain how the GAT industry strengthens her argument, saying:

Now, does it mean it's a hard fast science, you are African and only African, or you are Asian and only Asian. No, it doesn't mean that. There's a lot of mixture and fluidity because of people traveling the world, doing what people do...But I do look at it [genetic ancestry testing] as actually strengthening the connection between race and biology, and helping to document and prove that race is not just a social construction. That race is also a genetic and biological construction.

In Motsesangape's view, the GAT industry firmly justifies race as a genetic and biological truth. GATs are tools that legitimize the return of biology in racial definitions, which ultimately benefits White supremacy. Whiteness sustained its value as property, in part, through the legitimization and legalization of race science and the enshrinement of race science within U.S. law. Blood quantum, slave codes, and anti-miscegenation laws all rely on the biological inferiority of Black people manifest in and through anti-Black racism. Whiteness has always profited from the advancement of scientific racism because it has ensured that Whiteness remains a protected property and that Black people remain subjugated.

The re-emergence of race science through GATs benefits White supremacy by advocating for biological racial differences that must be contextually grounded within the racial hierarchy in which we live. Motsesangape exemplifies how it benefits Whiteness for Black people to also believe in biological differences of racial groups. As a CRT scholar, I do not dismiss Motsesangape's voice. Rather, I challenge her assumptions and

recognize how her perspective is shaped by Whiteness. It is vital to critique all people's voices, even Black people's voices when they support Whiteness. The presence of the GAT industry in everyday conceptualizations of race furthers White supremacy and anti-Blackness because GATs are a tool of Whiteness that present scientific racism as a viable and desirable discourse.

Biological discourses of African diasporic recognition

Nelson (2016) argued that GATs act as diasporic resources that people throughout the diaspora use to weave together ideas of community. I suggest that GATs' evocation of race science is also transformed into a diasporic resource that Black people use to foster global recognition. Participants did not take up discourses of scientific racism specifically to advance anti-Blackness; Instead, they borrowed race science discourses via GATs to engage in politics of recognition throughout the African diaspora. In this context, biological racism is not used to reinforce ideologies of White exceptionalism. Participants—and other Black people they included in their narratives—used biological discourses to claim similarity, community, and relationship to Black people, particularly between African Americans and African people. Therefore, the same discourse that Whiteness uses to construct Blackness as abject, subjugated, and propertied is paradoxically used to realize the Black diaspora.

Lee Marie, a biracial Black and White woman, discussed how she identified with African diasporic people through the recognition of her facial features. Several interpersonal communication encounters shaped her views. She explained that her 23andMe and test told her, “You’re Nigerian,” and this declaration confirmed the way

her phenotype had been identified as West African in the past. Lee recounted being in Oakland, California, saying: “There’s a bunch of Nigerians and they were all like, “You’re Nigerian because of the forehead. And everybody in my family, on my dad’s side, has this exact head...I looked at them and I was like, oh my God, they all have the same face shape.” However, being recognized by other Nigerian people as potential diasporic kin was not something Lee Marie took seriously until her genetic test reported her Nigerian heritage. She then told the story of meeting a Nigerian person after taking the test:

When I got to the Bay...this Nigerian guy was like, “Oh, you’re Nigerian!” And I said yes because I had just got my freaking results. I don’t know nothing about being Nigerian; 23andMe says I am. I was like “Yes!” all confident. “I found out yesterday, sir!” He was like, “Yeah, I could tell by your head.” And I looked at his head and I was like oh yeah, he has got the same exact head, which is unusual. This is not the average head...This is interesting. I can see Nigeria on there.

As she narrated this story of mutual recognition via face shape, Lee’s excitement grew. After describing some trouble finding her sense of self as a biracial Black and White woman, this narrative was punctuated by feelings of acceptance and joy. Nigerian (diasporic) people recognized her as similar to them based on their face shape. At first, she did not take this seriously, but her 23andMe report reinforced the idea of their biological similarity. Significantly, Lee did not believe Black diasporic perspectives until they were confirmed by dominant logics of Whiteness via a Western biotechnology. This shows the authority that the GAT industry has because it can be used to authorize claims about similarity and difference, unlike more marginalized perspectives. Moreover, historically, face shape was a component of phrenology, which anthropologists used to determine race, character, morality, and intelligence to prove White superiority. This science, furthered by collecting skulls across the world and comparing their

measurements, had disastrous global effects throughout the globe, where skull shape was used to justify genocide and racial slavery (Bank, 1996; Gossett, 1997; Yudell, 2011). Through Lee's story, we see how 23andMe mobilizes the contemporary traces of these historical ideals. Lee was recognized as Black and presumed to be Nigerian based on a particular shape of her face. Historically, this kind of categorization was used for anti-Black aims to assign negative traits to Black people, such as laziness or ineptitude. Yet, in this context, Lee and Nigerian diasporic people used these discourses to determine their similarities and negotiate relationships with each other. In witnessing Lee's retelling of her encounter, the interaction was a heartfelt, positive experience at the micro level, despite having negative macro implications.

Others told similar stories of how GATs authorized mutual recognition through the language of scientific racism. Tiana said that Nigerian and Ghanaian people had told her things like, "Oh, you look Nigerian, you look like you're from Ghana, you look Egyptian." Like Lee, Tiana did not take these claims from Black people seriously. After taking an AncestryDNA test, she reinterpreted these past claims as true, because AncestryDNA provided the statistics. Reflecting, she said, "Oh, okay, I'm 26% Nigerian, and I'm Mali, and Ghana is in there, too." For Lee and Tiana, their GAT tests authorized biological similarity and aligned their identity negotiation within the African diaspora. GATs valorize existing discourses of scientific racism by functioning as credible empirical evidence. Where once skull measurements or blood quantum established racial (dis)connections, now a GAT report operates similarly.

Black people can refashion these discourses for their own purposes—to enact interpersonally and intrapersonally who belongs where in the diaspora. These politics of

recognition can happen in myriad contexts, including the African continent. Omobowale recounted traveling to Sierra Leone and Nigeria, where residents noted that he was “acting American, but [his] face was local.” When one man thought he was Nigerian because of his facial features, he told the man he was from the United States, and the man was shocked. He explained how this almost got him into trouble at an airport in Nigeria, saying: “I was trying to leave, immigration thought I was Nigerian based on my Yoruba face. And so, when I presented a passport that wasn’t Nigerian...he was suspicious.” Omobowale felt connected to African people on his trips, and that feeling of connection increased when he was recognized by phenotype as a member of the diaspora. As he said, “they [Nigerians] could kind of tell kind of what tribes you’re from based on your face and your look.” Omobowale applied for and received citizenship to Sierra Leone through AfricanAncestry, so the recognition of his phenotypical similarities augmented the emotional journey of establishing a sense of communal belonging and claims to the continent. Discourses of scientific racism, evidenced and legitimized by GATs, affectively connect the African diaspora, as members negotiate their place within it. In these instances, GATs are operating as tools that dictate who the African diaspora is and how we should relate to one another on a global scale.

Participants also described how these same politics of recognition operated within African American relationships in the United States. As Maisley said, “You know Black people when you see Black people. You know White passing Black people if you’re a Black person probably. You can recognize physical features of Blackness.” Her comments resonate with Motsesangape’s aforementioned view that “The way each of us look...That’s genetic, and that’s biology, and that’s science.” In the United States,

participants used discourses of scientific racism to critique the idea of White racial purity and establish recognition within Black communities. Queen noted that her friend recently adopted a child who she suspected was not racially White. Queen boasted, “We [Black people] can always tell. I had to tell her that baby’s got *a little something*, that baby’s Black. You can see it in his hair and his face and his nose.” Her comments reflect the construction of Blackness within the United States, furthered by the rule of hypodescent, wherein a person’s body is thought to evidence an inner racial being (Ehlers, 2012). Many speculated that a GAT could reveal hidden Blackness, but only to White people who are not able to read racial bodies in the same way as Black people. Black people, many participants agreed, could use the logics of scientific racism to recognize other Black people. Because Black survival in the United States has always relied upon Black communities persisting in the face of White supremacy, this recognition is a means of survival. Harris’ (1995) narrative of her grandmother passing for White shows what has always been at stake for Black people to navigate racialized phenotype. Her grandmother, like many Black people who were able to, “walked into forbidden worlds / impaled on the weapon of her own pale skin” (p. 1709). This subjugated knowledge about recognizing what is considered phenotypical Blackness is a knowledge that meant the difference between economic freedom and economic exploitation, between precarious safety and sure danger.

White people who have not had to survive by mimicking or fooling Whiteness do not possess the same cultural knowledge because Whiteness—and its assorted assumptions, privileges, and benefits—have always belonged to White people (Harris, 1995). Significantly, it was also a topic of conversation during which Black participants

critiqued White people for their lack of racial awareness and mistaken beliefs in White racial purity. Many noted that White people are surprised by their non-European ancestry because of calculated ignorance. Amy summarized this by saying, “White people are shocked. And it’s like no. You’re not fully White. We all knew that.” This critique of White racial ignorance is a critique of White supremacy at large, which sustains itself through the strategic colorblindness, or color evasiveness, of White people (Annamma et al., 2017; Bonilla-Silva, 2018). White supremacy relies on the assumption of racial purity, which many White people believe because it naturalizes their position at the top of the racial hierarchy. The participants’ critiques powerfully expose the lie of racial purity and the rules of hypodescent on which White supremacy relies, and in doing so, they align with CRT.

Although race science is a product of White supremacy its discourses can be leveraged for alternate means. Black people use the discourses of race science afforded by GATs to critique White supremacy and build the African diaspora through politics of recognition. When recast through Black understandings of race, race science discourses can be used as a tool to deconstruct White racial ignorance and notions of White racial purity. The GAT industry produces messages that establish White scientific imperatives for discovery as the optimal means of identity construction. In turn, this can facilitate the dismissal of marginalized meanings of community, such as the non-biological relationships of othermothering, otherfathering, or the relationalities established by the tribe in the “Tribal Quest Papua New Guinea” advertisement. At the same time, people of color and Indigenous people can appropriate the discourses of scientific racism endemic to the GAT industry to construct new conceptions of community. Participants’

interpersonal encounters with members of the African diaspora were the contexts in which these politics were forged and identities were negotiated. This is not to say that GATs' re-biologization of race does not contribute to anti-Blackness. Rather, a CRT lens acknowledges that Black people can participate in anti-Blackness by relying on GATs while refashioning those outcomes for subversive means. Whiteness may undergird the GAT industry through scientific racism, but Black people can resist essentialist objectification by using GATs to construct the African diaspora. Significantly, this gives Black people agency and self-determination over their subjectivities, a right that has been denied us since the invention of race commodified Blackness at the onset of racial slavery.

The promise of fulfilled racial-genomic selves

As the ideological foundation of the GAT industry, scientific racism promotes identity negotiation processes that are fulfilled through genomics. Previously, I discussed how the White, scientific directive of identity discovery conflicts with many Black and Indigenous modes of relationality. Here, I focus on how GAT ads portray Black actors' identity negotiation processes within the context of "science as White property" (Mensah & Jackson, 2018, p. 8). Securing Black representation in advertising by paying actors or satisfied past customers speaks to Black audiences. GAT ads' commodification of Blackness (e.g., identity, family, culture, and joy) relies on a dominant narrative in which GATs are constructed as an exclusive experience of self-fulfillment that can only be accessed through GAT companies. Many ads follow a problem-solution format that, when read critically, illustrates how the GAT industry markets itself as a vital

intervention to the messy problem of contemporary identity politics. The problem is that customers do not know who they are, and the solution is that the company can declare who people are through the power of DNA analysis (Putman & Cole, 2020). Through this construction, DNA analysis is the only tool that can fix the problem of Black identity.

To illustrate how the commercialized narrative of identity fulfillment works, I use multiple definitions of the word “fulfillment” to delineate between how different kinds of fulfillment the industry offers. Throughout my analysis, I noted which promises about identity were reoccurring themes across ads. By thematizing categories of identity commercialization (e.g., those involving diaspora and the self) as types of fulfillment, I show how the GAT industry positions itself as the (White) savior of Black yearning for identity. I identified how fulfillment works in three distinct ways in GAT ads. First, the *Oxford English Dictionary* defines “fulfill” as, “to fill with a sense of satisfaction or self-realization.” The ads depict customers who become deeply self-satisfied and self-aware through their GAT journeys. Second, the *Oxford English Dictionary* defines “fulfill” as “to fill to the full, fill up, [or] make full.” GATs ads that do so dramatize filling in individuals’ identities with symbolic and de-contextualized connections to global diasporas. Third, the *Oxford English Dictionary* defines “fulfill” as “to finish, complete, bring to an end.” These ads market GATs as necessary for completing a person’s identity. Genomics expand what is knowable about humanity and ultimately have the final say, bringing the search for identity to a scientific end. Taken together, these motifs of fulfillment act as a powerful tool for recruiting Black customers into genomic promises of identity. In the sections that follow, I show how the industry commodifies the self-fulfillment of self-realization, diasporic others, and the complete, datafied self.

The fulfillment of self-realization

GAT ads often depict customers who become self-realized by taking a GAT. Discovering genetic ancestry fulfills their sense of self, empowering a newfound awareness. In these ads, GATs are vital to intrapersonal communication and self-identification. For example, in the AncestryDNA commercial, “Krystina,” a dark-skinned Black woman with natural hair recounts, “I was shocked. Right away called my mom, called my sisters.” Her dialogue is interwoven with scenic images of African landscapes shaded in blue and tan colors. As her story of newfound kinship concludes, with her hand over her heart, Krystina says, “I was grateful. I just felt more connected to who I am.” After expressing a range of emotions in the commercial—including surprise and joy—Krystina arrives at gratitude. She conveys thankfulness to AncestryDNA after being “connected” to herself by the GATs’ declarations of her genetic ancestry from Cameroon, The Democratic Republic of the Congo, and the Bantu people. A significant absence from the ad is any mention of Krystina’s genetic ancestry from outside of the African continent, although she likely has ancestry from elsewhere, too. Nevertheless, the African results reinforce and legitimate Krystina’s connection to herself as a Black woman. The material of her DNA symbolically constructs, as the tagline says, “greater details, [and] richer stories” about her African roots. Krystina becomes a more coherent person through AncestryDNA, because in exchange for her genetic data the test transforms her into a self-realized Black person. Through the White science of genomics, AncestryDNA saves Krystina from her ignorance about herself.

Also absent is any mention of why Krystina does not know her ancestry, which protects the White industry from admitting to the role of Whiteness in ruining the familial

and ancestry identities of people of color and Indigenous people. In place of erased histories, the scientific technologies of AncestryDNA construct Krystina's relationship to Africa for her. Whatever ties—cultural, familial, affective, economic—Krystina may have had to Africa before taking the test do not matter as much as the genetic evidence of her belonging to the continent as dictated by AncestryDNA. CRT illustrates how Krystina's dependency on AncestryDNA is created by Whiteness and positions a White company in charge of Krystina's understanding of her Blackness. Their report is depicted as the definitive evidence of Krystina's inner being, which would remain inaccessible, without White genomic intervention, a corporate White savior. In this way, GATs are portrayed as a necessary and superior tool for identity negotiation.

Likewise, the AncestryDNA ad, "Lezlie" is framed as a testimonial, but it depicts how AncestryDNA ensures fulfillment by solving racial ambiguity (Figure 3.1). Lezlie, who I read as a mixed-race, light-skinned Black woman with shoulder-length natural hair in spiral coils, narrates how Ancestry helped her discover her true sense of self.¹⁸ She begins with a question, "What are you? What are you? What are you? I probably got that question 3 to 4 times a week." The "what are you?" question is commonly posed to racially ambiguous people who are asked to identify themselves for the sake of racial clarity. Because race is assumed to be a readily apparent text on the body, collective anxiety about racial ambiguity emerges when people cannot be immediately identified by the racial imperative for immediate visual classification (Joseph, 2012; Nishime, 2020).

¹⁸ Although I read Lezlie as a mixed-race Black woman, others might read her differently. Like Kelsie (2020), I interpret the identity of an actor in a GAT ad as mixed race because the ad itself "renders...[them]...intelligible as mixed-race...regardless of personal identification" (p. 119). In this case, the pie chart of Lezlie's identity and the questions about her identity construct her as mixed race.

Reactions are considerably strong when ambiguous mixed-race people's existence between and among racial groups threatens White racial stability and the dominant racial hierarchy. Thus, when race cannot easily be read, Whiteness panics at the inability to classify and thus subjugate subjects. "What are you?" resolves the inherent tension of the social construction of racial categories being exposed through racially ambiguous people. This question also functions to discipline people by forcing themselves within the racial hierarchy to make them intelligible racial subjects. Washington (2020) wrote of Meghan Markle's mixed-race identity at the intersections of race, celebrity, and royalty, positioning Markle as "a cipher." She argued that

ratios and percentages are used as a shared key for explaining and understanding her identity. For some she is Black, others White, or biracial, or ambiguously ethnic. As her body is a cipher, the inconsistencies, multiplicities, certainty, and uncertainty make sense since how she is read changes from moment to moment and from person to person (p. 351).

Identity negotiation for multiracial people highlights how others' appraisals of phenotype play a large role in how people see themselves. Similar to Markle, Lezlie's body has been a cipher for her ethnoracial identity in the past, as she has moved through life with people reading race onto her body in different ways. Whiteness demands the constant policing of racial bodies on structural and interpersonal levels, so individuals actively participate in the racial disciplining of each other at the same time that institutions like law discipline us into racial subject positions (Ehlers, 2012). In the ad, Lezlie's AncestryDNA report becomes the shared key for decrypting her racial identity in response to the question "What are you?". Importantly, unlike the body, which can "lie" or misrepresent the so-called hidden truths of race, a GAT report is constructed as scientific truth. Whiteness

uses the supposed objectivity of genomics to mask its role in maintaining the racial status quo.

Lezlie's ad depicts how the GAT industry benefits Whiteness by (re)securing global racial order. Despite the reality that White supremacy works against people of color, like Krystina, Lezlie also expresses gratitude for her report. Lezlie describes how the test solved a life-long question for her, saying, "I would always get asked if I was Asian or Moroccan or something else, so I jumped at the chance to take the DNA test through Ancestry. And my results ended up being African, European, and Asian, which confirmed what, I guess, people had seen in me all my life." Although being asked "what are you?" is about ethnoracial belonging, Lezlie answers the question through genetic ancestry by conflating a question about ethnoracial identity with a question of genetic ancestry. AncestryDNA fulfills her ethnoracial self by decoding her race through her genes. Her African, European, and Asian genetic ancestry neatly map onto the racial categories of Black, White, and Asian, which exemplifies why Saini (2019) argued that "ancestral regions in individual ancestry studies are usually based on continental geographies of difference and thus evoke Euro-American definitions of race without using the term" (p. 46). The slippage between genetic ancestry and race becomes apparent when Lezlie declares that she now has an answer to the question of her identity, stating: "I do feel like Ancestry helped give me a sense of identity....'What are you?' Now I know." Troublingly, her statement reveals that she needed a biotechnology company to dictate who she is instead of coming to an understanding of herself via her own self or community. Whiteness institutionally asks the question, "What are you?" and necessitates an answer to place people within our racial hierarchy. Whiteness then offers

the answer via GATs, and masks the answer as self-fulfillment. This language mirrors the language used by participants in this study who, as mentioned earlier, interchangeably used race and genetic ancestry because of the underlying race science of the industry. While participants used these terms to construct communal identity throughout the diaspora, Lezlie uses these terms to become a more self-realized person by solving her racial ambiguity. Racially ambiguous mixed-race people have long been an anxiety of Whiteness, because Whiteness must carefully guard itself to ensure its exclusive value as a form of property. White supremacy relies on the illusion of stable racial categories to form the racial hierarchies it needs to persist and maintain power. Therefore, GATs are tools of Whiteness that decode the threat of racial ambiguity. Lezlie's testimony depicts how genomic intervention for mixed-race Black people can fill them with a sense of satisfaction and self-realization in ways that benefit Whiteness.

The fulfillment of diasporic others

The second way GAT ads commodify Black identity negotiation is by fulfilling, or filling in, Black identity with the symbolic presence of genetic relatives. Ads equate the arrival of a new "discovered" genetic self with an intrinsic connection to global diasporas, which serve as decontextualized and disembodied people to whom one belongs. Commercialized genomics create profitable imaginaries in which the presence and absence of collectives are read onto an individual's genes. Genes render race a quantifiable text that makes a person's connection to peoplegroups across time and space legible. Returning to "Krystina," we can see this collective identity as fulfillment at work. She arrives at gratitude because she discovers, "I am from Cameroon, Congo, and the

Bantu people.” As she speaks about her discovery, images flash by of African people: kids playing soccer in a rural landscape, a figure hanging brightly patterned fabric from a clothesline, a woman in a colorful shirt and black headwrap carrying a basket on her head, and someone cooking a meal over an open fire. As if figments of her imagination, her impassioned speech conjures the visuals of diasporic others who represent the people of the places she lists. As these people take shape within Krystina’s imagination, they also occupy space in her genetic report, which reads them into her DNA and her into their communities. Krystina holds up a phone with her dramatized results. Although blurred in the background, viewers can sense a facial expression saturated with pride. Her name is written above the continent of Africa, where an amorphous green shape sprawls across the continent indicating her connections to specific places. Her name floats near the top in a white text as a claiming symbol, one that pronounces Krystina as belonging to African peoples and African peoples to her (Figure 3.2). While DNA functions as an individual tool for self-realization, it also crafts the world’s people collectively in the image of the genome.

Krystina’s story of fulfillment indicates the troubling ways that the GAT industry depends upon and reinforces socially constructed hierarchies of people that are fixed within colonial and White supremacist histories. Krystina declares that she is from the Bantu people, yet Bantu is not a recognized ethnic group and is not a term used by the very people it seeks to describe. According to Schoenbrun (2004), Bantu is a term for a colonially constructed linguistic group that was retroactively racialized, ethnicized, and indigenized. In the mid-1800s, German linguist Wilhelm Bleek coined Bantu to classify culturally unique groups of people as one category based on linguistic similarities.

Therefore, Bantu people are the product of a German scholar's imagination during German colonization, whose linguistic theories were racialized to further the European empire (Bank, 2000). In several contexts, Bantu also became synonymous with Native, further constructing the geopolitical category of Black indigeneity—and inferiority—within colonial regimes. In South Africa and German Southwest Africa,¹⁹ Bantu was used to classify ethnoracial groups and their physical homelands and legal rights. The racialization and indigenization of the term Bantu within colonial systems contributed to the Herero and Nama genocide and the Rwandan genocide (Mamdani, 2002; Samudzi, 2021). While Bantu as a racial and ethnic category was replaced by “African” during the Black nationalist movement in the late 20th century (Samudzi, 2021), it conveniently finds new life within commercialized genomics.

In “Krystina,” AncestryDNA presents Bantu as a discrete genetic ancestral group for the actress to claim, but it does so by ignoring its very recent history and violent construction. Black people who are unaware of how and why Bantu people were categorized as a group might very well accept this term as an accurate representation of a community to which they belong. Because of this, GATs can interpellate Black people into White, colonial taxonomies of African people. The use of Bantu people demonstrates how supposed genetic absolutes rely on socially constructed categories that are shaped by colonial, White supremacist projects that are a-historical. Krystina may belong to the Bantu people and experience strong kinship with them, but she can only belong to them because White colonial projects constructed them to begin with. GATs thus call Black

¹⁹ German Southwest African was a German colony in present day Namibia (Baer, 2017).

customers into identifications that are created by Whiteness. For African Americans to identify as Bantu means that Whiteness has divorced African Americans from their African heritage to such a degree that Whiteness can then use a White technology to classify Black GAT customers within White constructions of African-ness, and that these technologies are persuasive enough for Black people to then take up those classifications themselves.

The call to fulfill Black identity negotiation through GATs is strong within AfricanAncestry ads because of its unique ability to pinpoint African ethnic groups and countries. In the 3-minute ad, “AFA Testimonial-Quintin,” Quintin expounds upon his genetic connection to the African diaspora, much like Krystina. A dark-skinned Black man with a full beard, he introduces himself by saying, “Hi, I’m Quintin and I am Marka of Burkina Faso.” The video is shot like an interview, with closeups of him at different angles that are interspersed with footage of him writing on a chalkboard. In the end, we see he has filled in the blank “I am” with “determined, sharp-witted, cheerful, Marka.” Quintin declares his newfound Indigenous African identity, and, via the chalkboard, it quite literally fills in the blank of who he is. Quintin’s narrative is a familiar one: In the absence of personal identity and familial ancestry, a GAT has uncovered previously unknown connections to African groups. Harkening back to Krystina’s green amorphous shape claiming the continent, GATs create disembodied notions of past and existing groups. It does not matter who they were, are, or will be in the future, as long as they exist to stake identity claims upon in the immediate moment.

Differently from Krystina, Quintin’s narrative challenges this decontextualization, as he uses AfricanAncestry to fortify genetic *and* interpersonal connections to people

from Burkina Faso. He describes how his Marka identity is now made tangible in his everyday life with a business acquaintance became a friend and then family. The person, who recently immigrated from Burkina Faso, became “like *family* family” (emphasis in original). The climax of the ad is the strong relational connection between Quintin and his “discovered” Burkinabé kin. Quintin’s story stands out among the ads as one that mentions a specific African person, though we do not see him. Other ads speak far more generally about African countries or provide montages of African landscapes and people that are largely consistent with stereotypical African B-roll commonly displayed in Western media. His narrative resists Whiteness’ demand that the disembodied African diaspora be ready for GATs to reshape it at a moment’s notice. It suggests that Black people on the continent of Africa and elsewhere have stakes in claiming particular embodiments of African-ness, constructing borders of cultural identity, and inviting or not inviting diasporic others into the communal fold. Through a CRT lens, mindful of how race works in global contexts, Whiteness is exposed as creating conditions in which any Black person can claim African-ness in any way they want through GATs. This is a problem because African people should be at the center of defining themselves. To resist this idea, we must consider the multiple, fraught, and contradictory claims of “belonging” to Blackness that Whiteness shapes and proffers.

The fulfillment of the complete, datafied self

The final way GAT ads sell Black identity negotiation is by depicting identities that are fulfilled, or completed, through the authority of science and mathematics. As demonstrated in Krystina, Lezlie, and Quintin’s ads, Black people are narratively

constructed as unable to self-determine their own identities without a genetic test to dictate their Blackness for them. GAT ads covertly rely on depictions of genetic determinism, which describes how some people accept wholeheartedly that genetics establish truths about selfhood (Roth & Ivemark, 2018) that become imbued by emotion. In reality, many GAT consumers weigh factors, such as identity aspirations and experiences of racialization, to determine if and how to negotiate GATs into their sense of self (Nelson, 2008; Roth & Ivemark, 2018). GAT ads simplify and omit these interpretative processes by, for example, not depicting how customers consider results based on their family histories, socialization, or personal desires. Customer interpretation in GAT identity negotiation processes is noticeably absent from ads. When Black people are depicted as non-agentic, passive beings, it contributes to anti-Black narratives of Black people's lack of humanness. Instead, they depict people who receive GAT results and accept their truth immediately and without dispute. To discover the self, ads say, people must trust GATs to authorize their identities because the companies' technologies can objectively and accurately compute who we are.

GAT companies promise identity completion through the datafication of identity. To datafy identity is to narrate it through the ontology of databases, which requires "an atomization of the users and their division into numerous smaller entities" (de Mul, 2015, p. 110). Biotechnological databases—public and proprietary—break individuals' identities down to molecular levels and compute them according to statistical analyses. The ad "FamilyTreeDNA Promise" portrays how companies package this message for audiences. The commercial begins with a light-skinned Black actor in a dark suit speculating, "So you want to find out who you really are, discover your ethnic mix, and

celebrate your unique, 100% self. Cool.” This statement implies that potential customers do not know who they are, cannot find their “ethnic mix,” and cannot celebrate their 100% selves because a GAT company has yet to tell them. Individuals must turn to the GAT industry for help, where DNA acts as “an omniscient narrator of one’s life; an all-knowing, third-person observer who has exclusive yet neutral insight into the intricacies of the subject’s (consumer’s) life story” (Putman & Cole, 2020, p. 7). Moreover, the authority rests specifically in the hands of FamilyTreeDNA, because the company has the technology to compute an identity (e.g., ethnic mix, self). Like MyHeritage’s “Tribal Quest,” this ad creates an epistemological hierarchy between what the individual or community knows and what the company knows. FamilyTreeDNA creates a *more* sophisticated and *more* valuable knowledge of selfhood thanks to the technoscience that calculates who people are. The datafication of identity necessarily removes the agency of identity construction from individuals and places it in the expert hands of GAT corporations. With the exception of AfricanAncestry, most GAT companies are owned by White people and utilize databases that benefit White customers the most because they overrepresent European ancestry (Erlich et al., 2018; Nelson, 2016). So, to datafy Black identity through GATs is to fulfill Blackness with a science by and for White people. Further, Whiteness benefits when more Black people buy into White-determined ideas of what Blackness is.

Genomics is one more institution in which Whiteness constructs meanings of Blackness. This ideological and discursive process has been well-documented in contexts such as education. Historically, the institution of education has used Whiteness to construct Blackness as deviant and further assert White supremacy. This is produced by a

range of strategies, including curriculum choices, racist interpersonal encounters, and institutional pushout (Iftikar & Museus, 2018; Morris, 2016; W. A. Smith et al., 2016). Even more troubling, GATs do so while functioning under the auspices of science, technology, and medicine. The illusion of objectivity makes them dangerous tools for constructing meanings of Blackness, which are difficult to resist because biotechnologies are persuasive in their science.

The authority of GAT companies to complete Black identity is carried out by rhetorically constructing its methods as superior to a layperson's. FamilyTreeDNA's use of "100% self" produces the idea of a fully contained, quantifiable, and knowable self that can—and should—be determined through Western and White mathematics. The 23andMe ad "100% Nicole" most aptly depicts this rhetoric (Figure 3.3). "Getting to Know You" from Rogers and Hammerstein's *The King and I* plays in the background of this ad that depicts travel as an outcome of taking a DNA test. The lyrics, "getting to know you, getting to know all about you" encapsulate the imperative of the GAT industry to "discover" the self through biotechnologies. Nicole follows her DNA around the world, partaking in the cultures that now "belong" to her due to her genetic reports. She drinks and takes selfies with a group of newfound friends in East Asia, plays soccer and dances with five men on the street in West Africa, and rides a dune buggy and receives a massage somewhere in the Middle East. As she logs each cultural memory, an image of her pie chart follows her around, appearing behind her head in a halo effect to quantify her identity and experiences as 29% East Asian, 12% Middle Eastern, 46% West African, and 3% Scandinavian. A missing 10% of the equation from the ad does not stop the

climax of the commercial, when 100% glows behind her head and she smiles at the screen, identity complete.

Though Nicole cannot see the pie chart, the audience can. The pie chart halos her head, resembling religious iconography. Across spiritual traditions, the halo represents enlightenment, awakening, or arrival at understanding, peace, or awareness (Kaplanoğlu & Dartar, 2021). Nicole's datafied genetic identity is the final, enlightened stage of discovering who she is. However, 100% is not the objective calculation it is depicted to be. Weiss, Jung, and Sharp-Hoskins (2021) argue that 23andMe relies on algorithmic abstraction—where computational algorithms and Western mathematics collide to decontextualize ancestral claims sell Whiteness. They assert that “23andMe's genetic “truths” rely on the suppression of complexities, most notably histories of colonial violence deemed irrelevant to the task of procuring “ancestry” (p. 291). The percentage of 100% is only achieved through White logics of abstraction that treat Nicole's Blackness as something that can be removed from the sociopolitical context in which it is produced. Bell (1995b) argued that “abstraction, put forth as “rational” or “objective” truth, smuggles the privileged choice of the privileged to depersonify their claims and then pass them off as the universal authority and the universal good” (p. 901). In this way, the algorithmic abstraction of GATs “smuggles” Whiteness under the guide of computation. Because Whiteness governs Western science and mathematics, the confluence of the two within GATs produces a rhetoric of identity that sustains Whiteness not only as superior but also as objective.

In “100% Nicole,” algorithmic abstraction and the datafication of her identity serve a White fantasy of multiculturalism, which is paradoxically furthered and

threatened by mixed-race Black identity. In one sense, mixed-race individuals are necessary for multiculturalism, as they represent the breaking down of rigid racial categories of the past. In another sense, Blackness itself is a threat to multiculturalism because it signifies that racism—and anti-Blackness—are embedded within our society. Dumas and ross (2016) assert that one tenet of BlackCrit is that “*Blackness exists in tension with the neoliberal-multicultural imagination*” (p. 430, emphasis in original) because “Black people are seen to stand in the way of multicultural progress, which is collapsed here with the advancement of the market, which in turn, under neoliberalism, is presumed to represent the interests of civil society and the nation-state” (p. 430).

Nicole becomes intelligible as a mixed-race Black woman not only through her comparison against darker-skinned African background characters but also through the pie chart that follows her throughout the ad. Scodari (2017) argued that “100% Nicole” exemplifies the cultural hybridization and racial fetishization of the GAT industry. In doing so, she wrote that Nicole has “a facial structure that vaguely reads as Asian, hair color, texture, and style that appear African, freckles that are most common and noticeable on European faces, and a skin color that blends these heritages” (Scodari, 2017, p. 8). Even this description, intended as a critical analysis, breaks Nicole’s body—her skin, hair, and facial structure—into racial data made less ambiguous through approximation. The underlying assumptions of database ontologies that have sorted and assigned Nicole’s ancestry create discursive space for her body to be re-racialized in accordance with phenotypical and biological conceptions of race. Like Lezlie, Nicole’s racial ambiguity serves a larger purpose that is essential to the GAT industry’s business model. Nicole’s racialization allows her to slip seamlessly between ethnoracial worlds in

the ads, as she discovers her cultural roots around the globe. Her mobility between and within racial and national groups is imperative to White visions of multiculturalism, where Black mixed-race identity is evidence that race and, more importantly, racism no longer matter. In the genomic, post-racial future all racial lines have been blurred and overcome. Yet, these visions of multiculturalism via multiracialism further anti-Blackness and make it more difficult for Black people to escape the trappings of Whiteness. In discussing GATs Kelsie (2020) argued,

multiracialism becomes an antiblack post-racialism, hostile to the perceived intractability of Blackness to move beyond the white-Black binary, imagining the movements for civil rights and Black Power to have been important precursors but no longer relevant to the struggle. Blackness becomes an object of derision, an anachronism that victimizes multiraciality in a sort of reverse-racism (p. 145).

The reliance on mixed-race Black people in GAT ads reveals how the GAT industry calls Black audiences into identity negotiation processes that covertly undermine Black self-determination and serve White visions of progress. Black people are thus called into molecular multiculturalisms (Hinterberger, 2012), where genetic variation and connection become rhetorically bound within a seemingly inclusive multicultural politics that are anti-Black.

Whiteness' construction of Black identity

If GATs are a White project of racialization, it stands to reason that they construct Blackness in ways that are non-threatening to Whiteness. Representations of Black GAT identity negotiation are constrained by the genre of advertising in which the ultimate goal is to build brand image and lucrative companies. Vital components of Black identity negotiation must be excluded to ensure that ads generate interest and revenue. Corporate

messages cannot alienate White customers with the spectrum of positive *and* negative emotions experienced by Black customers, and they also attract Black customers by commodifying the fulfilled desires of identity. So, the ad cannot capture the emotional, spiritual, or psychological depths of Black GAT identity negotiation. Yet, GAT ads do not flatten these representations solely for this reason. Mirroring how Whiteness works in education and entertainment, these representations are motivated by the desire to construct Black GAT identity negotiation as inconsequential entertainment that lacks political consequence. Consistent with other findings (Berryman, 2021; Marcon et al., 2021), the ads in this study depict the discovery of ancestry as a positive experience, which actors use to perform appropriate reactions, such as international travel, increased curiosity, and gratefulness (Berryman, 2021; Marcon et al., 2021; Putman & Cole, 2020). These appropriate reactions do not include political understandings of race that challenge White supremacy or scientific racism, even though for many Black people, GATs require reckoning with global anti-Blackness and histories of European colonization because our broken ancestral lineages are rendered visible through DNA.

The depiction of Black identity negotiation via GATs as a positive, entertaining, and inconsequential misrepresents the experiences of many Black GAT customers. As Carmen said, “There’s a potential to provide hope for Black people who feel lost.” While industry discourse calls Black people into appropriate (i.e., non-political, non-threatening) responses to GATs, Black consumers critique these representations to fill in the gaps Whiteness intentionally leaves empty. Even when GAT ads explicitly mentioned the political realities of Blackness through, for example, referencing racial slavery, they fashioned genetic ancestry as an innocent tool for racial reconciliation and White

rehabilitation. This was seen most prevalently in the ad “AncestryDNA | A Surprise Discovery | Expert Series | Ancestry,” which depicts two genealogists—Nicka Smith and Crysta Cowen—at a Genealogy Jamboree Conference (Figure 3.4). The women stand shoulder to shoulder around a handheld mic, discussing how they learned they were distant cousins through AncestryDNA. Nicka, a Black woman, explains how she found an ancestry match with Crysta’s mother. She and Crysta then worked together to “crack the case” of their relationship. The story of their unlikely connection is full of head-nodding, side hugging, clapping, and squealing at the prospect of their kinship. Crysta laughs, noting, “clearly Nika and I do not look alike, right?” She thinks it is “really cool when you start to see the fact that people who look as differently as she and I do, clearly of different races, have this opportunity to find this common ancestor.”

De-politicizing Black GAT identity negotiation

The ad de-contextualizes African American (genetic) identity, specifically, by not acknowledging the White supremacist conditions of African American ancestry. Nicka weighs in on how it is common for African American people to discover “that they have a large percentage of European ancestry that they didn’t even know about.” European genetic ancestry opens up “a slew of cousins” like Crysta is for her. The ad fails to articulate why such a high percentage of European genetic ancestry exists within African American populations. It is not because interracial marriage has been legal in the United States for the last 55 years (*Loving v. Virginia*, 1967). African Americans are considered a genetically admixed population—with European and African ancestry—as a direct result of the enslavement of African people (Phelan et al., 2014; Rajagopalan &

Fujimura, 2012). More specifically, it is a result of White slaveowners with European ancestry raping enslaved African/American women to produce more property. This particular practice is the reason AfricanAncestry has a specific test that traces mtDNA, or maternal DNA, rather than Y-DNA, paternal DNA, to the African continent. A function of Whiteness as property, Harris (1995) contended, includes the ability to generate more propertied people of color to exclude Whiteness as a means to protect its value. This relationship between property and Whiteness is evident in racial slavery, where Black people were legally deemed property and could not legally generate property, even when they birthed children of color who became the property of White slave masters, which negated the kinship of their parents. Spillers (1987) describes how enslavement damaged the kinship relations of African people because terms like “mother” and “family” were superseded by property rights when women who were enslaved gave birth. The child was already “property/kinless” and owned (Spillers, 1987, p. 74). Nicka does not account for the trauma of African American genetics, despite being a prominent African American genealogist who speaks about the realities of racial slavery for African diasporic people in other contexts. This ad decontextualizes her identity in an effort to depoliticize its potential to critique a utopian vision of White and Black relations.

Through corporate depoliticization, the ad “AncestryDNA | A Surprise Discovery | Expert Series | Ancestry” ignores the devastating effects of White supremacy, and it uses their shared ancestry to exemplify the “anti-racist” effects of AncestryDNA and rehabilitate the image of Crysta as a White woman. Nicka says, “My list is at about 12, 10 to 12 couples that I’m descended from that are of European descent that I had no clue were my ancestors...It’s another piece of the story...For my family, it’s not necessarily

starting and ending with slavery. It's starting and ending possibly with people on the Mayflower. Maybe. We'll see. Or you know, it's ending here [with Crysta]." Through Nicka's interpretation, it is unclear whether her European ancestors were involved in enslavement or not, but mentioning the Mayflower signifies Indigenous genocide. Her European ancestors are presented as an alternative to the traditional narrative of slavery within African American (genetic) genealogy. Moreover, they further White supremacist narratives of U.S. identity and nation-making by harkening back to a romanticized Mayflower narrative.

Indigenous retellings of the same events emphasize how the glorification of these early settler narratives silences the historical violence of White settlers (Kurtiş et al., 2010). Via CRT, these narratives are a way to preserve Whiteness' power by memorializing White people as benevolent, despite settler colonial and White supremacist violence. This symbol of European exploration, settlement, and progress is presented by AncestryDNA as a positive connection that is somehow distinct from the violence of slavery. Yet, the settlement of the Americas through chattel slavery is more a direct continuation of the Mayflower story than a separate one. The Mayflower itself was violent, but in this corporate retelling via a Black GAT customer and expert, the Mayflower and the women's shared European ancestors are symbols of racial peace between Nicka and Crysta, as representatives of the racial divide between Black and White worlds. This retelling only works by erasing the violent history of colonial Whiteness inscribed onto both of their racial identities. As they hug, smiling about their newfound relationships, they represent the use of GATs for liberal ideas of progress that depend upon the de-politicization of Blackness. In this post-racial configuration, the two

women have overcome race via genetics, showing how the industry manipulates race to produce the illusion of a genomic “anti-racist” future.

Similar to Lezlie and Nicole whose racial ambiguity benefits Whiteness by furthering narratives of molecular multiculturalism (Hinterberger, 2012), Nicka and Crysta represent a complementary part of this narrative—genomic post-racialism. Via genomic post-racialism genomics is framed as a way to overcome the irrationality of race and racism with the rationalizing effects of science. Where race is understood as socially constructed and fictional (e.g., irrational), genomics is fashioned as objective and truthful (e.g., rational). Reardon (2012) tells us that this is not possible because technoscience “create[s] new forms of racism at the very moment that it explicitly seeks anti-racist ends” (p. 25). Crysta and Nicka’s story is not a “post-racial story.” Rather, via CRT, it emerges as an example of White supremacy using its own tools to sustain its power and fulfill White desires. Analyzing a GAT ad that depicted a Black and White interracial relationship, Kelsie (2020) argued that, “genetic genealogy figures genetic admixture as interracial desire” (p. 141). Interracial desire, though not romantic, undergirds Crysta and Nicka’s relationship. It is their interracial desire for each other—and their ancestral connections—that allows them to transcend racism. The only way their desire can work within the ad is by decontextualizing Nicka’s Black identity and negating colonial history to create a narrative that makes Crysta, a White woman, look and feel good because of her connection with a Black woman. Together, they are a sign of racial progress that GATs can uniquely produce. A 23andMe ad in partnership with the History Channel’s remake of *Roots* (2016), summarizes these sentiments when a Black actor, Diaka Massaquoi, concludes, “we’re all in this together.” Through his narrative, Black

audiences are called into an understanding of admixed genetic ancestry as a chance to forward racial progress. Instead of prioritizing Black politics or challenging anti-Black racism, Black people are called toward postracial unity with humanity broadly, and White people, specifically. The violent histories contributing to African American (epi)genetics are discarded in favor of the future, where White people and Black people achieve harmony through genetic ancestral connections—a harmony that does not require reckoning with or even acknowledging White supremacy.

A counterstory critique of genomic racial progress

The GAT industry constitutes Black identity negotiation within discourses of White scientific discovery and identity fulfillment that depoliticize Blackness and benefit Whiteness. However, Black customers can and do speak against these dominant representations. The most prominent pushback from participants centered around Nicka and Crysta's story because they rejected GATs as tools for racial reconciliation or progress. Participants agreed, almost unanimously, that Crysta and Nicka's representation was unsatisfactory because it overlooked the historical trauma of slavery and colonization. They recognized the decontextualization and depoliticization of Blackness as an intentional corporate oversight. In almost every focus group, the discussion of this ad became highly emotional. People expressed anger, confusion, disgust, and offense. Participants' range of negative emotions exposes how the GAT industry has failed to fully represent Black identity. Merely watching Black GAT identity negotiation evoked a wider array of emotions than Ancestry chose to depict in the ads. Black people's affective responses are a critique of Whiteness because they exemplify what the White industry

chooses not to represent about Blackness in order to attract more Black customers into a sense of identity fulfillment.

Shaka said, “Well, I think you can see in that video that White supremacy and Whiteness was playing out as we were looking at it, because the Black woman and the White woman had to basically pretend like there was no race issue there.” His focus group members agreed, musing how the ad must have intentionally disregarded racial slavery as the reason behind Nicka and Crysta’s connection. They found it improbable that the women weren’t thinking about slavery, positing that they pretended to forget about it for the sake of the video. To sell GATs, companies must present information where, above all, race does not get in the way of profits. Another person, Carmen, took offense to the ad, saying that Crysta looked “too happy” about being related to a Black woman. Others agreed with smiles and nodding heads. They found it suspicious that Crysta was “giddy” about the connection and speculated that it made her feel good about herself. The interracial desire constructed in the ad as a post-racial fantasy was deconstructed by participants as an obvious reinforcement of White supremacy. Even though ads depicted GATs as catalysts for racial reconciliation between Black and White people, participants disagreed that GATs could do much to stop interpersonal or institutional racism.

Ebony Doe said, “They [White people] gave birth or they fathered black children and it didn't change their attitudes toward Black people.” Motsesanagape similarly said, “White people know that their ancestors raped or they had relationships, however you want to term it, with Black women. And they probably would just say, well, that’s his prerogative. And so yeah, if a child comes of it, so what? They don’t affect who that

person is.” She concluded that a GAT revealing Black and White people’s shared ancestry wouldn’t “make much of a difference” in terms of contemporary racism. Cairo agreed, adding, “I don’t think it changes anything unless they were open to trying to change anyway. I mean, it didn’t change anything for the slave masters when they were having Black children...So why would it change anything now?” Many Black women in this study directly identified and criticized the sexual assault of Black women that is often responsible for Black people’s European genetic ancestry. European and African ancestral connections, they argued, do not facilitate anti-racism because these connections have always coincided with and perpetuated misogynistic anti-Blackness. Via CRT, we can understand the intersectionality of anti-Blackness as a power structure and how it overlaps with sexism to produce overlapping rather than a single-axis, “discrete sources of discrimination” (Crenshaw, 1989, p. 140). Participants rightfully critiqued the de-politicized imagining of Nicka and Crysta’s ancestral connections, asserting that due to the historical context it is likely that they are related due to violence against a Black woman.

Overall, participants argued that Blackness and African ancestry be politicized and contextualized, in contrast to GAT ads that represented African genetic ancestry and Blackness as an entertaining but ultimately politically inconsequential discovery. Despite buying GATs without politicized representations, they viewed their ancestry as deeply meaningful, given histories of anti-Blackness. In CRT, the contextualization of race is key to understanding how race operates (Delgado & Stefancic, 2017). Context is an integral part of a color-conscious anti-racist framework that attends to the national and institutional contexts in which racial meanings emerge. Conversely, Whiteness often

relies on ahistorical and de-political accounts to hinder efforts to redress racist harm (Bonilla-Silva, 2018). Black GAT customers filled in the blanks of GAT ads by foregrounding the historical context and political consequences of Black people's genetic ancestry. In doing so, they created a counterstory that critiqued the limited versions of Blackness they saw in the ads. Although some people participated in supporting Whiteness in the GAT industry by relying on biological constructions of race (e.g., Mostesenagape, Maisley) many more, including (e.g., Cairo, Queen, Valencia) resisted dominant messaging by insisting on more nuanced understandings of Blackness and African ancestry.

Conclusion

If “the genome has become a new site of negotiation over the relationship among biology, culture, technology, and racial meaning” (Chow-White, 2012, p. 226), then commercialized genomics are the main way White supremacy dictates these relationships for Black people. Specifically, the GAT industry controls Black GAT identity negotiation and defines what it means to be Black via logics of genetic ancestry, which is overwhelmingly dominated by Whiteness in including science and mathematics, database ontologies, and algorithmic abstraction. At its core, the GAT industry is an enterprise predominately owned by White people and propertied by Whiteness that leans heavily on the way new technologies appear to transform older discourses of scientific racism. This chapter discussed how Black GAT customers partake in discourses of biological racism in ways that legitimate White normativity and also resistantly forge Black understandings of identity, community, and ancestry. Whiteness seeks to overdetermine Black identity

negotiation via GATs by minimizing Black people's agency in our identity construction. The promises of identity fulfillment—the fulfillment of self-realization, the fulfillment of diasporic others, and fulfillment of the complete, datafied self—throughout GAT ads encourage identity enforcement more than identity negotiation. Identity negotiation implies an interplay between structural and interpersonal forces, which validates individual agency, but GAT ads prioritize the industry's desire to control Black people's identity by enforcing White logics. Structurally, technoscientific power enables Whiteness to construct Blackness through logics of discovery that interpersonally promise self-realization and communal belonging.

Black GAT customers' responses illustrate the individual and communal agency that is conspicuously absent from GAT ads. Because GATs have the power “to influence the way we define race, determine who belongs to various racial groupings, and understand racial connections” (Roberts, 2012, p. 249), it is vital that Black people continue to practice self-determination in the face of hegemonic, genomic constructions of Blackness. Black people's experiences parallel Indigenous communities who exercise sovereignty to define nation, community, and self beyond White, colonial institutions (Brayboy, 2005; Harry & Malia Kanehe, 2006; TallBear, 2013). In contemporary litigations, Native people have fought for their DNA to be considered a protected cultural property that is free from commercialization, exploitation, and White supremacist colonial violence (Reardon & TallBear, 2012; TallBear, 2013). Black people, too, must exercise our agency to construct Blackness outside of the GAT industry even if as consumers we choose to use the products. Black people should consider how the protection of our genetic data as property protects Black identity, too, within the White

supremacist industry of commercialized genomics. One way to navigate this paradox is for Black customers to intentionally pair GATs with community conversations that speak against the authoritative voice of the GAT industry. Black people can resist the top-down approach of the GAT industry by employing strategies that put them in conversations with other Black people who also have stakes in defining what Blackness is.

In the next chapter, I examine how Black people negotiate their identities, given the structural constraints of race and dominant industry messages. While Chapter 3 has focused more on critiquing industry-produced messages, Chapter 4 highlights the lived experiences of Black GAT customers, given their definitions of Blackness, experiences with racism, African diasporic encounters, and beliefs about GATs' accuracy.

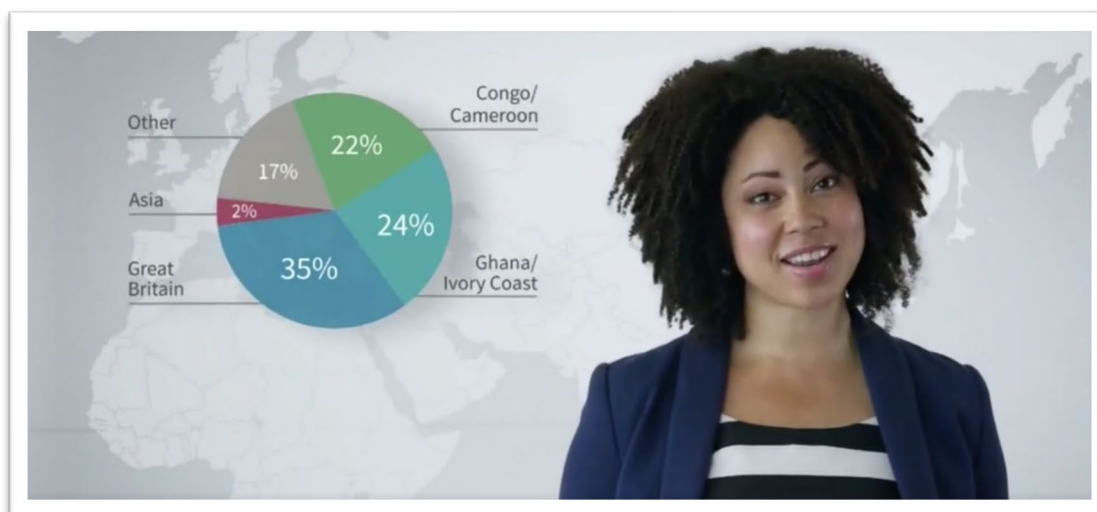


Figure 3.1. “Testimonial Lezlie” (AncestryDNA).

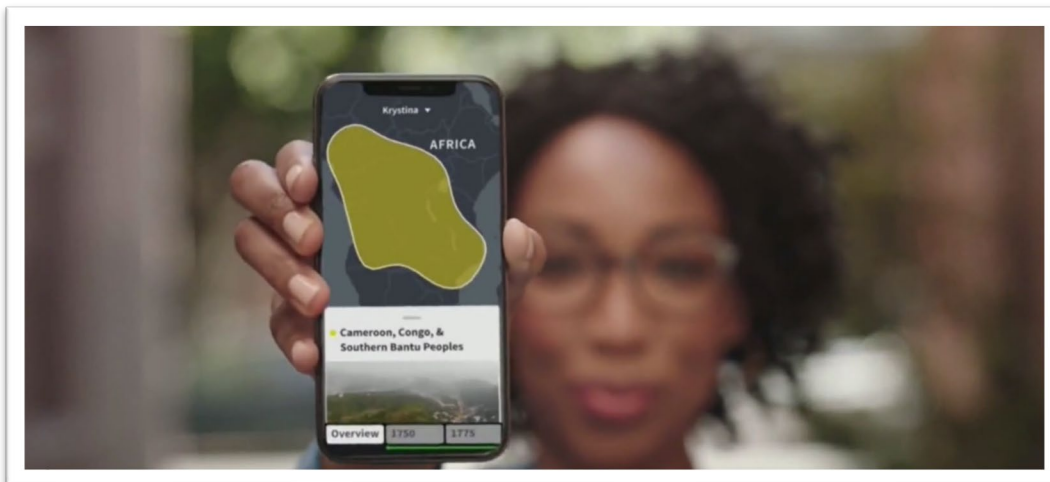


Figure 3.2. “Krystina” (AncestryDNA).

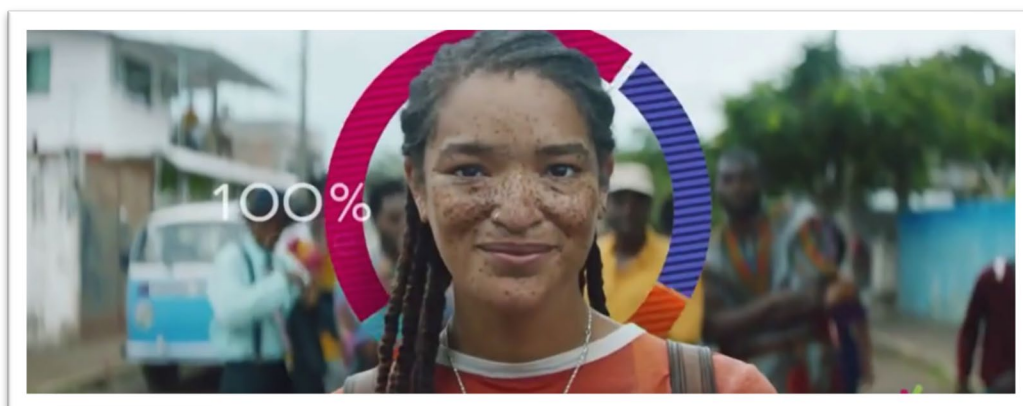


Figure 3.3 “100% Nicole” (23andMe).

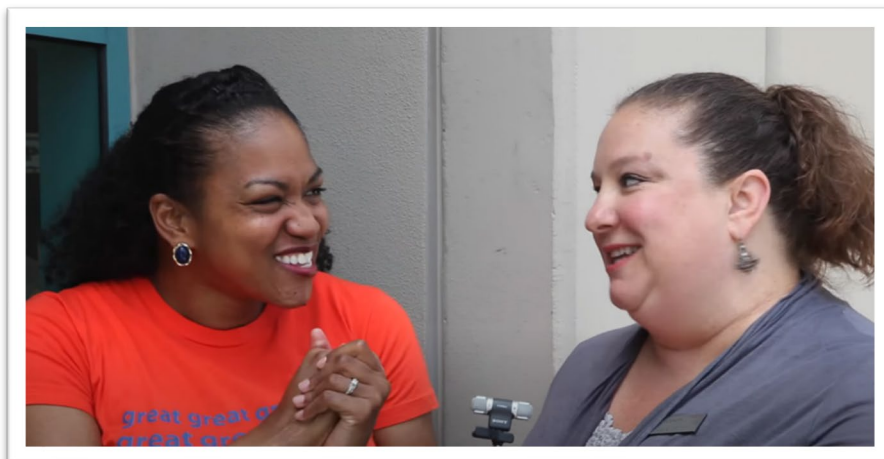


Figure 3.4 “AncestryDNA | A Surprise Discovery | Expert Series | Ancestry” (Ancestry).

CHAPTER 4

NEGOTIATING THE DIASPORIC SELF

Introduction

Growing up, I heard stories about my papa, Willie J. Wilson, who was my mother's father. I remember him not as the young and busy Mississippi-born preacher, but as an older, slower man with a friendly grin. He was so light-skinned that I sometimes wondered if others thought he was White. In an often-quoted family story, a White person with a tan once tried to assert that he was Blacker than my papa, to which my papa responded in his southern drawl, "You might look Black, but you'll never *think* Black." His declaration has stuck with me, though he passed away some years ago, and I wasn't present when he said this. This family oral history is, as Madison (1993) said, evidence of "life lived" that is "the root of our beginnings and the root of our understandings" (p. 214). My papa's conversation made me aware that there are ways to *think* Black, which I would later come to understand through terms, like Du Bois' double consciousness. Du Bois (1903) theorized that Black Americans experience a "twoness" (p. 16) of the mind because we are part of the United States but separate and subordinate within it. He argued that the "unreconciled strivings" (p. 16) of being both American and Negro creates a racialized mental conflict, or as my papa would say, a way of thinking Black. The idea of Black consciousness makes me wonder, how do we know what Blackness means for ourselves and other people? How do we recognize who belongs to

and within Blackness, when cultural racisms create different ways of knowing race around the world (Hall, 1992)?

These questions resound within the GAT industry in which DNA tests are posited as a solution to the problem of a broken Black identity, a way to re-think Blackness through a “genetic prism” (Duster, 2003, p. 5), particularly for descendants of enslaved people. Robert Burch, Jr., president of the Utah Chapter of the Afro-American Historical and Genealogical Association, encouraged Black Americans to do DNA testing because “it allows us to leap across the obstruction of 600 years of racial lies and historic deletions” (Mims, 2017, para. 17). If White supremacy has erased Black history through centuries of racial lies then commercialized genomics, with an “allure of objectivity” (Benjamin, 2015, p. 131), is fashioned as a technology of truth through which Black people can recover their ancestry within the historical archive. My 23andMe experience, as described in Chapter 1, could be viewed through this lens, as GAT companies sell to Black people the genealogies that White supremacy has destroyed. Despite this prominent discourse of restoration, Black people are less likely to outright change racial and ethnic identities based on GATs results than people of other races (Roth & Ivemark, 2018). So, if GATs are a source of knowledge that shape Black identity, how are they doing so? How do they influence what it means to be Black in a postgenomic age?

This chapter’s analysis extends previous research on GATs and identity by using CRT and identity negotiation to connect the macro context of racial power to the micro phenomenon of racial identity negotiation via GATs. I show how structural racism shapes participants’ definitions of Blackness and, consequently, their GAT identity negotiation processes. Participants rhetorically construct GATs as an antidote to historical anti-Black

violence and erasure, yet that same racial violence constrains how they can use GATs in identity construction. Because participants experience the essentializing effects of anti-Black racism, they do not describe GATs shaping their Black identities. Rather, they describe how GATs influence their African diasporic identities. As participant TJ said, “It didn’t really teach me about my Blackness, but my African-ness.” I argue that this has two major implications. First, GATs discursively construct African diasporic relationships by materializing and authorizing identity claims. Second, the GAT industry is effective in its campaign to decouple race from other conceptions of relationality (e.g., diaspora, biogeographic ancestors, DNA relatives), evidenced by Black people’s dichotomization of Blackness and the African diaspora in our conversations with each other. Some participants used this dichotomization to construct ethnocentric views that ultimately benefit Whiteness. Finally, I argue that the case of Native American ancestry reveals two functions of Whiteness in Black GAT identity negotiation. First, colorism creates a hyperfocus on Native American ancestry in Black family oral histories. Second, Whiteness uses the idea of constantly evolving technologies to retain indefinite control over present and future identity constructions. Participants turned to critiques of GATs’ accuracy and effectiveness to resolve identity contradictions and create interpretive space for future technological advances and identity building.

Blackness: A historical and genealogical loss

The CRT value of “looking to the bottom” (Matsuda, 1995, p. 63) for the epistemological wealth of people of color lies in the relationship between the knower and what is known. Black people (the knowers) have a unique relationship to Blackness (what

is known) because we experience it within ourselves, amid our communities, and within global systems of anti-Blackness. Participants in this study consistently defined Blackness as a historical and genealogical disconnection from Africa as “lost history,” “unknown roots,” and “disconnection.” They articulated Blackness within the “afterlife” of the Transatlantic Slave Trade (TST) and the continued imposition of racial violence across multiple, simultaneous domains (Hartman, 2008). In their terms, Blackness is a condition based on the dislocation of African and African diasporic people from African lands, cultures, languages, and kinship networks.

This is a particularly African American view of Blackness, one that relies on the historical memory of the TST and strict racial boundaries within the United States, where the racial hierarchy is based on the Black-White binary. The overrepresentation of African American participants in this study led to the prevalence of this view. Throughout the Americas, African descended people have a similar historical memory because of the legacy of slavery within South and Central American countries, although racial structures within Latin American countries are more fluid based on phenotype and cultural affiliation (Abel & Schroeder, 2020; Paschel & Sawyer, 2008). The horrific physical, psychological, emotional, and spiritual abuse of slavery has left indelible effects on its diasporic descendants. The consequences of transgenerational and cultural trauma are far-reaching, including internalized racism, persistent feelings of anger, and low self-esteem (Degruy, 2017). Black people navigate identity formation through this collective memory of racial trauma (Eyerman, 2001). Participants described how the collective memory of slavery is key to their understanding of Blackness.

Shaka associated Blackness with the Negro spiritual, “Sometimes I Feel Like a Motherless Child.” To him, the lines are meaningful because, “When you don’t know who your mother is or your parents are, you feel disconnected. For us [Black people], particularly we want to know that connection and that helps people restore some of the damage that slavery has made.” The lyrics of this spiritual poignantly capture both the interpersonal and cultural ramifications of violent separation. Because Black people were forcibly removed from their mothers and the motherland of Africa, the lyrics capture the lived experience: “Sometimes I feel like a motherless child, / Sometimes I feel like a motherless child, / Sometimes I feel like a motherless child, / A long way from home.” Representing the deep sense of loss within the African diaspora, this spiritual depicts home as a distant, perhaps unreachable place. The invocation of the African homeland reminds us that Black people’s identities are constructed within The Door of No Return, the physical and symbolic place through which millions of Africans left the continent and never came back. Brand (2001) suggests that the Door “casts a haunting spell on personal and collective consciousness in the Diaspora” (p. 6). Perhaps this is what my papa meant when he said, “think Black,” that there is a way of knowing that the Door—and passing through it—creates. Shaka’s attention to African dis/connection illuminates the importance of understanding his positionality as an African American to how he defines and negotiates Blackness. Even though the participants’ definition of Blackness as a genealogical disconnection from Africa may not ring true to all Black people in the world (or ring equally as true), African Americans’ definitions still implicate all Black people, who are constructed within and against each other by global anti-Blackness (Busey & Coleman-King, 2020). Thus, when Shaka spoke of “disconnection” and August

suggested Black people “were stripped of our Black ID or our African identity,” they pointedly invoke the larger diaspora. Similar to Shaka, Carmen summarized her definition of Blackness by saying:

[Blackness is] not knowing where you came from, but knowing that you can still be something or somebody and just kind of being who you are and being completely true to yourself. Because I don’t really know anybody’s heritage that has had everything wiped and annihilated and you have absolutely no idea where you came from.

Carmen describes her Black identity as being annihilated by White supremacy and produced within systems of anti-Black violence that have reduced her ability to know herself. White supremacy has separated her from knowledge of her heritage, like African languages, cultures, religions, foods, and ways of life. As a descendant of enslaved people, Carmen is still the “motherless child” that Shaka referenced. Significantly, White supremacy does not foreclose her agency. Instead, Carmen “breach[es] the heavy weight of dispossession and loss” (McKittrick, 2021, p. 7) by asserting a different narrative, one that allows for self-creation. In the face of historical and contemporary traumatic loss, Black people continue to forge new identities, cultures, and ways of being, as a form of self-determination, which is a type of labor and invention that happens globally (Gilroy, 2003; Sharpe, 2016).

Like Shaka’s sentiments, Carmen’s disconnection from herself is a matter of crossing and collapsing space and time. She anchors a past space-time (“where you are from”) to the present (“being who you are”) and the future (“[who you] can still be”). This spatiotemporal collapse of identity is endemic to the GAT industry because it capitalizes on the logic that the past is simultaneously happening in the present—that where you are from in a distant history is who you are today. Carmen’s understanding of

her Black identity is a combination of her present experiences, the past, and the structural forces that have severed the two. Brand (2001) narrates this collision of the past and present by saying, “One enters a room and history follows; one enters a room and history precedes. History is always seated in the empty room when one arrives. Where one stands in a society seems always related to this [the Door of No Return] historical experience” (p. 6). Blackness is always a matter of history happening in the moment and is always a reference to Africa, despite the fact that Africa is always changing and some connections might be unrecoverable.

Participants’ motivations to take GATs for identity-seeking purposes cohere around their descriptions of Blackness as a site of loss. Some participants took GATs because one was gifted to them or because of GAT commercials or by celebrities, like Chadwick Boseman. However, most took GATs because they wanted to answer specific questions about their genealogy or garner a deeper understanding of their identity. Cairo, for instance, wanted to figure out “where I came from in Africa,” and Vin wanted to know if the “word of mouth” about where he was from was true. This shows how Black people engage in roots-seeking behaviors because of the genealogical trauma of Blackness. Our motivations for taking GATs create a powerful counterstory that resists the GAT industry’s commitment to colorblindness. Rather than using GATs for a sense of identity devoid of race and racial consequences, Black people often take GATs *because of* their race. Misty described taking 23andMe to find specifics about her family genealogy, stating:

It just made me realize how much of our [Black people’s] history is lost and how we can’t find it or reclaim it...It just makes you realize how lost we are. But if we had that knowledge, who would we be? Like if you knew exactly where you came

from, who would you be? How would you present yourself to the world? How would that have changed your path, knowing exactly where you came from?

Misty's questions evoked nods of understanding from other focus group members, who also went on to describe the "lost" nature of Black history. In the same group, CaptHardy later remarked that "without the test, I had no idea where my people came from. And so, it gives me, as you have all said, a feeling of belonging, it gives me an identity." Their comments show why GATs are attractive to Black people who otherwise are unable to uncover information about their pasts. Moreover, GATs are not only about the historical identity of Blackness but also about the future of Blackness. Returning to Misty's comment above, she feels that if she knew where she came from, it would influence who she could become. Echoing restorative corporate discourses, Misty's and CaptHardy's comments position GATs as a cure to the problem of Black genealogical loss. White supremacy created the disconnection that participants describe, yet Whiteness also offers the solution of GATs to Black people. As argued in Chapter 3, Whiteness is encoded into the logics of GATs, which computes identity fulfillment through Western technoscience. Because Whiteness controls the GAT industry, the solution of GATs for Black identity construction further reinforces White epistemologies and modes of relationality.

The structural constraints of Black identity negotiation

Essentialism, Whiteness, and hypodescent

Anti-Black racism essentializes Black people by confining Black people within stereotypes and rationalizing their experiences of oppression as natural and inevitable. To be essentialized by race is to be defined solely by the characteristics of a racial group, which ultimately serves White supremacist ideas of racial hierarchy. CRT scholars have

long argued against the idea that race is an “inherent, fixed, essential biological characteristic” (Van Wagenen, 2007, p. 158). Via CRT, we know that race is a social construction and cannot produce innate traits, such as morals, temperament, and intelligence. As an anti-essentialist theory, CRT argues that people of color cannot be reduced to or by their race and that diversity exists within socially constructed racial groups (Valdes et al., 2002). Yet, in everyday life, racial essentialism persists in service to anti-Black aims. Black people are defined, even overdetermined, by their Blackness; subsequently, they are discriminated against and experience microaggressions, implicit bias, and other forms of racial inequality. Many participants described how essentializing experiences of Blackness defined their understanding of Blackness. As a result, GAT results did not change their meanings of Blackness. For Winnie encapsulated her experiences with essentialism by saying:

My entire spectrum of my being, everyone I was around was Black. So, it wasn't until I was in elementary school. And we had bussing in Kentucky, which is when they took students, especially Black students and out of their Black community and bussed them to White communities...And so I think I was in maybe second grade when that happened. And so, it was my first real encounter with a lot of White kids. I'm certain I had seen White kids before, but a White kid spit on me. And that was like, it's something like, I get emotional thinking about it today because I'd never experienced that. Didn't know why, didn't know what that meant. And it just affected me so deeply, and I think it was at that point where I began to think about myself differently or think about myself through, you know, White people's eyes...So that was my first encounter or how I learned, from at least from their perspective, what it meant to be Black.

For Winnie teared up as she described how she came to know her Blackness through a traumatic early childhood experience of White racial violence. Her story is framed within the fallout of *Brown v Board of Education*, which disproportionately harmed Black children in service to White racial power. CRT scholars have argued that *Brown v Board of Education* benefited White children and families more than it benefited Black children

and families. Under the guise of liberal, progressive politics, the ruling to de-segregate schools ultimately rehabilitated the nation's image on the post-World War II global stage, while still subjugating Black people through continued racial subjugation in education (Bell, 1980, 1995a). We see the racial inequity clearly in For Winnie's story. Removed from the school in her Black community, she was taken to a White school, where she encountered interpersonal racism for the first time.

Her experience resembles Fanon's (2008) account in *Black Skin, White Masks* in which a child saw him and called out, "Look, a Negro!" The moment in which he is recognized as Black and labeled as such by a White child, he remembered that "I was responsible at the same time for my body, for my race, for my ancestors" (p. 84). Fanon was unable to ignore the historicity of his condition as a Black person, as he became fixed within Blackness as a racial construction. Using Fanon's account, Towns (2018) uses Black feminist new materialisms to argue that "His [Fanon's] blackness was a tool, a technology that served a function *not* for Fanon but *for* the utility of White self-conceptions. Another way to say this is that in this encounter Fanon did not have Kantian self-determination; he was outer-determined by another's monopoly of self-determination" (p. 354, emphasis in original). For Winnie's story is remarkably similar. Her Black body, too, became the "communicative *medium* through which the small child self-conceptualized whiteness" (Towns, 2018, p. 355, emphasis in original). Subsequently, For Winnie then came to conceptualize herself through the White child's conception of her. In that moment, she became fixed within and essentialized by Blackness through the White gaze. Decades later, she attributes that moment as key to her understanding of race. Interpersonal racial violence—framed by the structural racial

inequity of de-segregation—fixed her within Blackness as a racial subjectivity. Others’ narratives also illustrated how racism and racial essentialism shaped their Blackness through their families and communities. JunePlum explained how her understanding of Black identity emerged through a “baptism by fire” since her Black father did not want her to talk about race. She said:

My experience was, I actually didn’t even know I was Black. I know I was Jamaican, but we lived on a military base when we first came to the United States and I was 12. So when I was almost 13, I went to a school off base. And that’s the first time I was asked, what are you mixed with? And I had no concept about what that was...My dad does not like talking about race. And he has a good reason for it. His childhood friend was burned alive in a house because...that child’s family was registering people to vote in Louisiana. One of his cousins was drown in a retaining pond. His brother was shot for being uppity. That’s on the death certificate...So there’s a lot of trauma that my dad absolutely will not talk about....But my baptism by fire, I realized, oh, I am actually, I’m black. That’s who I am. And that’s what I put down. And it comes with a whole host of issues. When you check that box on paperwork, you are treated differently.

JunePlum’s traumatic family history deeply informs her conception of Blackness.

Experiences of racism made her realize that “checking that box” of Blackness in the United States would formally usher her into the country’s racist history and present.

While For Winnie described a personal formative experience with racism, JunePlum narrated familial experiences with racism. Both individual and collective stories of anti-Blackness anchor a person’s understanding of Blackness. Their combined stories highlight how early childhood experiences of racism shaped their consciousness—their ways of thinking Black in the U.S. context. Developing a Black consciousness meant seeing themselves through the lens of Whiteness and determining who they could be despite White racial violence. Because of this, JunePlum reported that taking 23andMe and Ancestry DNA did not change her idea of Blackness. Instead, her family’s struggle with anti-Black racism is the reference point for her idea of what it means to be Black. A

genetic report at 50-years-old did not hold as much weight compared to these heavy family stories. While a genetic report is a decontextualized and datafied explanation of identity, her family stories hold more profound, emotional resonance. Likewise, others noted that GATs did not change their conception of their Blackness because of their cultural experiences—most of which were shaped by the enduring legacy of the One Drop Rule.

Lee Marie discussed her daughter's test in relation to her own. Both the mother and daughter had more European ancestry than African ancestry, but Lee Marie told her daughter, "That's irrelevant...That's a whole lot more than one drop sis. You're Black. It's done." She continued with a metaphor, saying, "It doesn't matter because you add chocolate to milk and it's now chocolate milk. It may be weak chocolate milk, but it's not white milk no more." As Lee Marie explained her self-described "old school" philosophy on race, she smiled and laughed. My understanding of her nonverbal communication was that she recognized the illogical nature of racial categories, yet she still raised her daughter to understand herself within those categories. CRT exposes how U.S. Blackness conceptualized through the scientific racism of hypodescent can be deconstructed but never fully escaped. That is, an understanding of the illogical and constructed nature of race does not negate the experience of being raced.

Lee is aware that these are "old school," colonial conceptions of scientific racism, but she still must live as a biracial Black and White woman raising a multiracial Black daughter in the United States. "A whole lot more than one drop" of Blackness is enough to experience the material effects of racism. Her Black identity, then, is a direct result of the institutionalization of scientific racism in the United States and the rules of

hypodescent that have governed racial classification here. Lemon and Adam expressed similar sentiments. Adam also identified as Black and White biracial. Lemon now identifies as Black but previously identified as Black and White biracial. Both participants discussed identifying as Black sometimes (Adam) or all the time (Lemon) because they are treated as Black. Everyday racialization at individual and structural levels causes them to be essentialized by their Blackness in ways that resonate with the stories of For Winnie, JunePlum, and Lee Marie. In the end, they, too, concluded that a GAT told them less about their Blackness than the reality of being racialized as Black in the United States and Canada. Their Blackness continued to be produced through the logics of racism within familial, regional, and (inter)national contexts, rather than genetic explanations.

Whiteness and the illusion of self-determination

When combined, the picture that participants paint about Black GAT identity negotiation is contradictory, much like the very idea of race itself. They described Blackness through motifs of loss and trauma, wounds that GATs are poised to heal (e.g., Shaka's "motherless child" metaphor). If, as they defined it, Blackness is a genealogical disconnection from Africa, then GATs can mend that broken connection. Yet, they also conceptualized Blackness through the trauma of racism (e.g., JunePlum's "baptism by fire" metaphor) and the essentializing nature of race in the U.S. context according to colonial legacies of scientific racism and racial codification in law (e.g., Lee Marie's "chocolate milk" metaphor). Because these personal and familial experiences of racism defined their Blackness, they argued that GATs could not shape their understanding of

their Blackness. Lived experience meant more than a genetic report. As Ebony Doe concluded, with a definitive tone, “I don’t feel any less Black. I was born to Black parents, raised in Black culture, Black community, Black schools...so, that didn’t change just because the number [of European ancestry] was high.” Even participants who discovered they had more European ancestry than African ancestry, like Lee Marie, or more European ancestry than expected, like TJ, opposed the idea that taking a GAT shaped their Blackness because to be Black is to be racialized as Black within a White supremacist society. There is no room to be anything else. Like Lee Marie told her daughter, “You’re Black. It’s done.”

CRT reveals why these contradictions of Black GAT identity negotiation persist. The assertion that race is a social construction within CRT explains how race is made through social forces in service to White supremacy. Whiteness constructs race in multiple ways that may be contradictory but that ultimately uphold Whiteness’ material, economic, and symbolic power. Participants defined Blackness as genealogical loss due to Whiteness. They also defined Blackness as traumatic racial experiences due to Whiteness. Further, they defined Blackness through the logics of Whiteness, itself (e.g., hypodescent, scientific racism). Even when participants described their Blackness as “pride,” “magic,” “joy,” and “honor,” in ways that resonate with the CRT idea of community cultural wealth (Yosso, 2005), this was always juxtaposed against White conceptions of Blackness, such as the essentializing experiences of racism and the racial categorizations described in Lemon’s, Adam’s, For Winnie’s, and JunePlum’s stories. This is the “outer-determination” of which Towns wrote (Towns, 2018, p. 354). Because Whiteness constructs Blackness via macro, meso, and micro racisms, Black people never

fully escape the ideas of Blackness that Whiteness has set forth for us. Although it may seem subversive that the Black participants in this study did not allow the White technologies of GATs to shape their Black identities, this is only because Whiteness had already overdetermined their identities in other ways. Harkening back to Fanon, there are always already tools of Whiteness, pointing, calling out, and defining us: “Look, a Negro!” Chapter 3 demonstrated how even the choice of ethnic terminology like “Bantu” is controlled by Whiteness.

Participants’ narratives are consistent with Nash’s (2015) argument that GATs are not “interpretively indeterminate” because “the freedom to choose is not evenly distributed” (p. 64). Putman and Cole (2020) describe how the GAT industry creates an “illusion of freedom” through “careful rhetorical work” (p. 12), whereby audiences are told they can discover any and everything about themselves through the tests. While White people are more able to exercise the choice to try on new ethnic identities via GATs (Putman & Cole, 2020; Roth & Ivemark, 2018), Black people are constrained by socio-political consequences, historical legacies, and lived experiences of Black racialization. The context of GATs exposes the perilous lack of agency Black people have over Black identity negotiation, in general. Even when resisting White determinations of Blackness via GATs, Black people still fall into definitions of Black identity that are produced by Whiteness. In participants’ descriptions of their identity negotiation, White racial power on multiple terrains constricts self-determination for Black people, which ultimately retains the authority of Whiteness—and its technologies—to define what Blackness means.

Geneticizing the African diaspora

Negotiating kinship

Although participants resisted the idea that GATs informed their Black identities, they expressed how GATs did shape their African diasporic identities. In contrast to their definitions of Blackness, which relied on White conceptions of essentialism and thus fixity, they conceptualized diaspora in terms of openness to meaning and interpretation. Patterson and Kelley (2000) asserted, “we must always keep in mind that diasporic identities are socially and historically constituted, reconstituted, and produced and that any sense of a collective identity among black peoples in the New World, Europe, and Africa is contingent and constantly shifting” (p. 19). In the context of commercialized genomics, Nelson (2016) calls the shifting of the African diaspora a DNA diaspora. The term refers to the role of GATs as a diasporic resource that weaves kinship ties together across the world. Further, GATs are an unequally distributed diasporic resource, meaning they are not available to everyone in the diaspora equally and all people’s GATs are not given the same weight when considering compounding factors like celebrity and ethnic identity. Nelson argues, and this study also demonstrates, that GATs construct the African diaspora through forms of exchange (e.g., tourism trips) and rights and responsibilities (e.g., philanthropic or economic contributions). As a communication scholar using CRT, I view this through the lens of racialized discourse. I suggest that the GAT industry creates discursive possibilities for re-naming the self and others in ways that shift the boundaries of the African diaspora. Discourse is the context and the tool for negotiating diasporic relationships and identities through past, present, and future diasporic encounters. Participants may discursively construct race and diaspora as

independent concepts, but CRT exposes how the social construction of race constitutes the diaspora, itself.

The GAT industry's messaging about identity tells consumers that genetic identities are true, instantaneous, and open for (re)claiming. As discussed in Chapter 3, advertisements depict the immediate acceptance of genetic identity, rather than ongoing identity negotiation processes characterized by competing claims to belonging and diasporic rifts. The difference between ads and reality is stark. In "Have You Taken the Right Test?" AfricanAncestry depicts people reading their reports and then shouting, "I'm Yoruba!" and "I'm from Nigeria!" The ads show Black actors instantaneously claiming their belonging to African ethnic groups and countries. This message constructs Blackness as an uncontested identity that GATs can arbitrate. In comparison, participants were hesitant to claim the identities in their genetic reports, often considering the social appraisals of others. Tiana shared her sentiments, taking on a hesitant tone, as she said:

I mean, I wouldn't go proclaiming that [I'm Nigerian] elsewhere just because, like I said, I just don't know if that's respectful to say... I guess I'm saying there's more to it than just the percentage. I haven't been walking around saying that I'm mostly Nigerian. And let's say if it was from Ghana, you know what I mean? I still wouldn't, because... I don't know. I guess I don't see what it benefits me outside of relationship. There's nothing there.

Tiana's understanding of her own identity is understood in terms of respect for other Nigerians and those in the Nigerian diaspora (e.g., Nigerian immigrants, first- and second-generation Nigerians in other countries). Rather than simply accepting the company's genetic identification of her, she defers her own identification in relation to them, which we see further in her next statements:

Even though genetics say this and even though I may look like this, it doesn't mean that's how I'm received... Genetically, I'm Nigerian, but I'm not Nigerian. I don't have the cultures, I don't have the knowledge and all that stuff, and so, me

wearing something Nigerian, that's not enough. You know what I mean? It's worth more than just that.

Harkening back to the participants' definitions of Blackness as a site of cultural loss, Tiana identifies ethnically as African American and does not know details about her African ancestry. Although Tiana watched the ad "Krystina" and saw Krystina's feelings of gratitude and acceptance, Tiana expressed more uneasiness with Nigerian identity. To her, a genetic declaration must partner with cultural knowledge, lived experience, and community. Rather than wholesale accepting what 23andMe and AncestryDNA told her, she understands that the Nigerian community also creates borders of belonging and has the cultural authority to accept or not accept her. Via CRT, I read this as resistance to racial power. Whereas the White GAT industry asserts dominance over arbitrating Black diasporic identities, Black people can defer ideas of belonging to Black ethnic, cultural, and national groups. As White supremacy attempts to define Blackness through science and technology, Black people can look to conceptualizations of relationships within the diaspora to constitute it from the inside instead of the outside. Within the African diaspora, these politics of recognition and inclusion can be fraught. As JunePlum explained, being a Jamaican immigrant in the United States., "There are multiple [Black] cultures and they don't always mesh well." Tiana's comments align with genetic options theory (Roth & Ivemark, 2018) in that she does not fully accept her GAT results' declaration of a Nigerian identity; rather she weighs the results through several factors, including her cultural knowledge, lived experience, and the Nigerian community's self-definitions. JunePlum and Tiana show us that the African diaspora is a contested relational terrain and that while the GAT industry can seek to "repair" diasporic relationships, it can also further strain them. As a whole, African Americans in this study

did not feel diasporic tensions were resolved through GATs. GATs only served to further complicate questions about “who is who.”

However, GATs did open up discursive opportunities for participants to negotiate their understanding of themselves in relation to the diaspora. Maisley said:

I used to have a lot, a very big disdain for Nigerian people...They just used to really grind my gears. But my 23andMe test says that most my African ancestry is from Nigeria. So now it's like, alright, if this is true, we can relax a little bit and you don't got to be so angry. Or there's a common ground, there's a conversation to be had.

According to Maisley, she was at odds with Nigerians because of community conflict and media representations, like Yvonne Orji. Orji is a popular Nigerian-American actress known for her role in Issa Rae's *Insecure*. In Maisley's understanding, Orji represented tensions between African Americans and African-born immigrants. Communication scholars have argued that Black intra-community conflict in the United States is furthered through mutual stereotyping, microaggressions, and competing claims to Blackness (Dapherede Otusanya & Castle Bell, 2018; Whittington et al., 2021). In this vein, Maisley described previous communication encounters with Nigerians on Twitter as “diaspora wars” that are common in social media spaces (Knight, 2021). Diaspora wars often involve conflict about cultural practices, signs of solidarity, and global media representations (e.g., discussions of cultural appropriation and economic standings between Black ethnic groups globally). Despite existing tensions within the Maisley's diasporic relationships, 23andMe opened up relational possibilities that had previously been foreclosed. After finding out the majority of her ancestry came from Nigeria, she realized, “These your cousins acting like this. Maybe you talk to them now, instead of cussing them out on Twitter. Maybe. Because now it's your cousins. And they got you

out here looking like this.” The term cousin demonstrates the shift in Maisley’s thinking about imagined kinship established via her GAT. Previously, she conceptualized herself as separate from Nigerian people—barely held together by the tenuous ties of Blackness across continents. After the test, she uses a familial term to describe Nigerian people, indicating a level of closeness, even if tension remains within those relationships.

23andMe allowed her to imagine herself as part of a transcontinental family of the Nigerian diaspora. Like Tiana, Maisley’s understanding of (her) Nigerian-ness was still uncertain and incomplete, but her GAT did contour her understanding in meaningful ways, inviting her to think of Nigerians as “cousins” rather than enemies in diaspora wars.

Likewise, others narrated a shift in thinking after taking GATs that allowed them to form new interpersonal diasporic bonds. Carmen described a familial-like bond after taking a GAT, too, saying:

I was working closely under the mentorship of a Ph.D. who was from Cameroon. And he was always trying to figure me out. He was always like, “I know exactly you are Angolan. You are this and that.”...He was always trying to create something from nothing. I’m like, “You don’t know.” And he’s like, “You look just like my auntie.” I’m like, “You need to stop.”...So I was honestly like, “I just want to see what this test says, so I can shut you up.” But then it came up that the top one hit at the time was Cameroon, Angola, and then Bantu tribes. It was that region. And he was like, “I knew it. I knew it.”...And it was a way to connect with an African, a mentor in a way that made me feel like family. Because I moved out here alone, and I had nobody. And he took me in his family and adopted me, basically. And he’s like an uncle to me now, and I’m really close to his entire family.

While Maisley’s story shows how GATs influence the possibility of relationships, Carmen’s story shows how GATs can solidify existing diasporic relationships. In this case, AncestryDNA not only influenced how Carmen sees herself but also her relational identity with her Angolan mentor. The GAT added a layer of legitimacy and fostered

diasporic intimacy, leading them to feel closer. Instead of relating to one another as an African American and an Angolan, they now relate as an Angolan descendant and an Angolan. Previously, Tiana's comments represented when diasporic communities defer to one another outside of biotechnologies to determine who belongs or not. Here, Carmen's story shows that diasporic communities can agree upon the use of biotechnologies to arbitrate diasporic identity.

Via CRT, it is troubling to see the slippage between intra-community boundaries and the boundaries (re)drawn by big biotechnology companies. As GAT companies continue to grow, their influence over community self-definitions will also grow. This has implications on a global scale, where one does not need to engage in international travel (like 100% Nicole) to encounter diasporas. In the United States, GATs shape the relational identities between African Americans and African immigrants, relationships that are already fraught with tension. Even Tiana, who declared that she wouldn't claim to be Nigerian based on her results "felt like there might be room for that [claiming a Nigerian identity] if she had a Nigerian friend who would help her navigate it." So, while people negotiate who they are based on their GATs, they must also negotiate who they *can* be based on real-world dynamics within the broader diaspora. The GAT fails to reflect these dynamics in media, but the industry also increasingly shapes those dynamics, as it alters how people define communities to which they do and do not belong.

Omobowale, one of the few participants to describe a more immediate acceptance of his GAT results, described how AfricanAncestry transformed his diasporic identity in symbolic and material ways. He used AfricanAncestry to gain dual citizenship in Sierra

Leone—a process that is becoming more popular, since actor Isaiah Washington became the first to gain African citizenship based on DNA in 2006 (Nelson, 2016). The government of Sierra Leone accepts AfricanAncestry reports as evidence of ancestry and continues to grant citizenship to those in the diaspora whose genetic reports prove relatedness to ethnic groups of the country. In May 2022, the government granted an additional 59 African Americans Sierra Leonean citizenship. President Julius Madaa Bio said the following in the ceremony welcoming them:

Today, we celebrate our common ancestry. We welcome each and every one of you home with open arms. You never left. Your DNA says you have always been of us and with us. All around us are dotted historical reminders and monuments of departures and of arrivals –some sad and harrowing; some celebratory – from Bunce Island to the Cotton Tree, under which the very first set of resettlers gathered to thank the Lord for their safe return home in 1787... This is home. This is where the heart is. Welcome to Sierra Leone. Oona kabor. Ehkusheh. (Thomas, 2022, para. 7-8, 21).

The idea that “Your DNA says you have always been of us and with us” illustrates the power of the GAT industry to reveal previously hidden diasporic connections. So far, I have discussed individuals and communities accepting and rejecting the authority of GAT companies. Sierra Leone is an example of what is at stake at the macro level, when states, nations, and governments use GATs to arbitrate identity. DNA Sierra Leoneans represent the present and future of GAT companies as private, Western-based companies that directly influence the construction of citizenship and nationality worldwide. The exportation of these technologies into government systems necessarily means the exportation of their logics and foundations in Whiteness, which is yet another way Whiteness operates through GATs to influence subjectivity around the globe. Omobowale described feeling connected to the people from his tribes and felt they helped transform his identity from African American to African. As discussed previously, most

participants did not feel that GATs changed their idea of Blackness, but Omobowale's GAT—and the legal citizenship rights it conferred—did change his symbolic understanding of Blackness and his legal status in the United States and Sierra Leone. He said,

After I found out my DNA results, we had the 2020 census. And normally you just put African American, and there's a subcategory. And so I was like, I know my tribe, so I put all my tribes down. And then I posted on Twitter and some people were like, "No you can't do that because they're going to think you're Nigerian, Sierra Leonean, and all this other stuff." And I was like, "But I am all that stuff, I am my roots."

Omobowale's GAT led him to materially change his legal identity, which, in turn, shaped his relational networks. In Sierra Leone, he built relationships with people in his adopted home village. Grounded in those relationships, he is helping to facilitate economic aid. He says:

Right now I'm trying to help one of the villages that adopted me, it's a Temne village. So I'm trying to help them start a business where they can sell their merchandise to people in Europe and America. And before they had blocks because they were in Sierra Leone. Even though colonization is over, there's still a lot of things that many Africans can't do. Access is limited, financially... So because I have American citizenship, I can help them navigate around it and help them get around the blocks. So, I'm partnering with them and I'm helping them set up, I was able to find a company finally that processed transactions. A lot of them were like, we don't do Sierra Leone. I'm like, why? You work in Nigeria. But working with them help sell their merchandise that they make in their village that they've been making for thousands of years.

Omobowale's initiative to invest in business aligns with larger conversations about the role of the Sierra Leone DNA diaspora. President Bio instructed African American dual citizens to "Make this your home, a destination for investment. Promote innovation, entrepreneurship, and invest in areas and at rates you can afford" (Thomas, 2022, para. 18). GATs, as we see with Omobowale, not only shape individual identity but also

diasporic identity by creating new forms of exchange, rights, and responsibilities (Nelson, 2016), such as economic partnerships and business investments.

Omobowale’s diasporic identity—negotiated within relational, scientific, and legal structures— is a vital point of agentic decision-making, given the way law has been used to constrain Black identity in the United States and global contexts. The U.S. legal system has historically dictated who—and, importantly, what—Black people are and where we belong by institutionalizing blood quantum and slave codes that wrote Black subordination into the foundation of the nation (Haney López, 2013b). Since its inception, CRT has been “ideologically committed to the struggle against racism, particularly as institutionalized in and by the law” (Bell, 1995b, p. 898). CRT exposes how the law has stripped Black people of the ability to self-determine our identities or obtain full citizen rights. Even so-called progressive laws rely on conceptualizations of race that benefit White people and are “unconnected to the historical reality of black oppression” (Gotanda, 1995, p. 262). Absent the ability to be fully recognized within the legal context in the United States, the ability to obtain citizenship rights in Sierra Leone via AfricanAncestry is a significant intervention.

However, this intervention is not equally available to everyone, as AfricanAncestry is the only company whose test is accepted by the Sierra Leonean government, an AfricanAncestry test is around \$300, and there are fees associated with the citizenship application and conferral (AfricanAncestry, 2022). CRT shows how dual citizenship in Sierra Leone operates in opposition to the racist laws of the United States, but as a theory, CRT bound by “localism...rooted in the painful particulars of U.S. history and bounded by geography” (Aoki, 2000, p. 915). CRT can tell us about the

history of Omobowale's experiences as an African American but has less to say about the Sierra Leoneans with whom he is now in relationship. For an extended analysis of that, other perspectives from Black studies, African studies, and other areas would be useful. From a communication perspective, Omobowale's story exemplifies how AfricanAncestry materially and symbolically changed who he understands himself to be, and his relationship to the diaspora. It acted as a powerful communicative artifact that changed who he was. Where once there was estrangement, now there is familiarity. Where once there was a difference in citizenship, now there are fellow citizens and village members. His GAT identity negotiation happens micro (himself), meso (the communities of which he is now part) and macro (governmental, legal). This case demonstrates the conflation between genomics and genealogy that is created by the industry. Although Omobowale is was only given a static, company-generated genetic report of his relatedness, it was ultimately his own labor of identity work and the community labor of relationship-building that resulting in his feelings of (re)connection. The company did not so much provide him with an identity, as he used the company's product to engage in more labor to create an identity he desired. Ultimately, Omobowale's story demonstrates how Black GAT identity negotiation happens at micro, meso, and macro levels. His personal identity is constrained and enabled by the ethnoracial politics of communities and, even, nations.

The discursive racial and diasporic divide

So far, I have thematically discussed GATs as a restorative solution to Black identity and the limits of GATs in Black identity negotiation. In doing so, I have shown

how Blackness (as identity, culture, and race) and the African diaspora (as relation, descent, and geography) are articulated in dichotomous ways through the participants' lived experiences. The majority of participants reported that GATs did not define their Black identities, yet they described how GATs influenced their diasporic identities. The race/diaspora bifurcation (e.g., "this test shaped my ideas of my African diasporic identity, not my Blackness") mirrors the colorblind discourse produced by the GAT industry, which speaks of human connection, ancient diasporas, and geographic ancestry while concealing race. Troublingly, the industry's colorblind perspective is reproduced by Black GAT customers in their communication about Blackness and the African diaspora. As a whole, participants were color-conscious, a perspective for which CRT advocates (Delgado & Stefancic, 2017), so they did not ideologically buy into colorblindness, itself. Rather, they adopted the language of colorblindness produced by the industry in ways that furthered ethnocentrism and xenophobia of Whiteness. The language of colorblindness endemic to the GAT industry (e.g., race-less diaspora or diaspora minus race) influenced Black customers to communicate about Blackness in ways that benefited Whiteness.

CRT illuminates how colorblindness is a dominant ideology that denies structural racism and attributes racial inequality to non-racial factors, such as economics or cultural differences (Bonilla-Silva, 2018; Crenshaw, 1997). Via logics of colorblindness, the discursive absence of race is used as evidence to prove that race is, indeed, absent. Bonilla Silva (2018) discussed how colorblindness is produced at the micro level, where White people avoid the language of race or use diminutives when speaking about race to conceal the fact that race—and thus racism—are operating in their lives. Similarly, at the

institutional level, the GAT industry conceals the presence of race by not using racial terms. This is a persistent pattern in the rhetoric of genomics, which uses race-neutral language to ignore the workings of race (Chow-White, 2009). As an example, AncestryDNA boasts that it tracks customers' "origins in over 1,5000 regions," and helps customers discover their "genetic ethnicity" (AncestryDNA, 2022b). Yet the company fails to articulate how "origins," "regions," and "ethnicity" are all racialized concepts that are actively used to construct our ideas of race. The industry strategically avoids using racial terms to obscure its own role in reproducing Whiteness. Acknowledging race would mean reckoning with how GATs re-biologize conceptions of race. It would also mean admitting that GATs benefit White people the most because European ancestry is more represented in databases. Finally, it would be mean conceding that the industry, itself, is based in Western technologies that reproduce dominant, White ideologies about kinship. A colorblind perspective allows the industry shore up Whiteness' power by masking its presence.

Framed by the industry's ideals, participants often attested that GATs shaped their idea of their African-ness but not their Blackness. Tiana expressed tension between U.S. Blackness and Blackness in Nigeria by saying:

It's going to sound bad, but I don't typically hear positive things about Nigerian people outside of food, right? Like, "Oh, we love some Nigerian food." But as far as just the people or I really hear a lot negative about the men, but maybe that's just because I'm a woman. So, I think at first, it was kind of like, "Oh," and it made me feel a kind of way that I wasn't able to immediately connect that with something positive, if that makes sense. Like, "Oh, maybe this is, I don't know, part of the reason why I'm X kind of way." If all you mostly heard is negative stuff, you're really not trying to apply that to any attributes of yourself. And it didn't affect me how I feel about my Blackness but maybe a bit of how I felt about my, I don't know, my African-ness. Maybe that's the only way it makes sense.

For Tiana, taking a GAT did not change how she felt about her Blackness but her African-ness, and her African-ness was understood in terms of previously held stereotypes about Nigerians. Her comments resonate with Maisley's aforementioned conflict with Nigerians. Maisley argued that "diaspora wars are real." Speaking about the appropriation of African American culture around the world, she said, "whatever we [African Americans] say, everybody follows, even Africans." Further, Cairo's comments summarized many of the feelings of African American participants, when she said, "I've always had the experience of being Black in America, but not really paying attention to being of African descent." Together, Tiana, Maisley, and Cairo's comments reveal a troubling dichotomization between U.S. conceptions of Blackness and the idea of the African diaspora. Participants did not bifurcate the two because they believed in the colorblind discourses of the GAT industry; instead, the GAT industry allowed them further discursively construct U.S. Blackness as antithetical to African Blackness.

Their comments reveal ethnocentrism and xenophobia, as some asserted a hierarchy that placed African Americans above other Black people worldwide. This was particularly salient in the way African Americans articulated their "lost" history as an *exclusive* experience. This perception necessarily ignores how White supremacy has also destroyed the kinship networks, cultural practices, and epistemologies of Black people around the world, including descendants of enslaved people throughout Latin America and Black Africans on the continent of Africa. Encapsulating this perspective TJ said, "They [Africans] at least know who they are, but we [African Americans] don't." Their perspectives illustrate how they view racism and White supremacy as a national instead of a global project. If a person believes that U.S. Blackness is distinct and, even superior

to Blackness in other national contexts, then they are unable to understand how White supremacy thrives from global anti-Blackness.

Via CRT, the race/diaspora bifurcation enabled by the GAT industry is exposed as a strategy of White supremacy. Busey and Coleman-King (2020) argue for CRT to be understood as a Black diasporic theory because of its utility in explicating the relationship between global systems of anti-Blackness and the diasporic constitution of transnational and translocal Black subjectivities. Their analysis of Latin America shows that CRT is capable of deconstructing global White supremacy while retaining nation-specific critiques. Following their argument, I understand how some of the participants' views of U.S. Blackness are antithetical to CRT because they construct a hierarchy within the African diaspora. Empowered by the industry's colorblindness, participants communicated about Blackness and the African diaspora as discrete rather than overlapping constructions that furthered ethnocentrism and anti-Black xenophobia. African Americans' ethnocentrism aligns with and furthers U.S. Whiteness' ethnocentric and xenophobic beliefs.

If CRT is a Black diasporic theory, then it requires us to understand how the African diaspora is inherently racialized and how White supremacy can benefit from diasporic contestations. Transnational anti-Black racism, involving racist structural oppression across continents, constructs the African diaspora as it exists today (Busey & Coleman-King, 2020; Sawyer, 2008) as a racialized imagined community (Anderson, 2016). Thus, it is vital that a global view of Blackness be used to combat the global nature of White power. Important to note is that not all participants bought into the race/diaspora divide, particularly those with personal and familial backgrounds outside of

the United States. Scorp, whose parents are Moroccan and Haitian, asserted that “diasporic Black” included things like culture and nation but that “it’s all Black in the grand scheme of Blackness.” Similarly, I contend that it is all Black in the grand scheme of White supremacy and anti-Blackness; and in order to critique White supremacy, we must do so on a global scale.

Mistrust and the search for Indigenous American ancestry

While Black customers described the (non)effects of GATs on their Black and African diasporic identities, they also recognized GATs as imperfect tools that are not entirely accurate or effective. Rather than accepting the industry’s messaging passively, most participants expressed interest in the scientific and technological processes of GATs, particularly those who had specific aims for taking a GAT, such as finding a specific relative or filling in missing links of a family tree. Participants’ critiques of GATs were woven throughout our conversations but they became most prominent as they spoke of their (lack of) Native American ancestry. Participants often understood Native American ancestry through family oral histories. As PhillyGuy asserted, “I’m pretty sure every Black family has these mythical stories about Native Americans in the family.” Their family narratives, as interpersonal processes (Foeman, 2009a; Kellas, 2010; Koenig & Trees, 2013) were powerful discourses that often competed with information in GAT reports. Critiquing GATs created interpretive possibilities when their genealogical aspirations, or their desires for their ancestry (Nelson, 2016) were not fulfilled by their results.

Genealogical disorientation and the limits of GATs

Unlike African ancestry and, to a lesser extent, European ancestry, Native American ancestry elicited the most surprise and disappointment, because participants had existing family narratives about Native American ancestry but it was least likely to be confirmed by GATs. Black families in the United States often have oral histories about Native American ancestry (Abel & Schroeder, 2020) that speak to Native American ancestors in the distant past. Whereas White people's increasing interest in claims to Indigeneity has been attributed to their desire to benefit themselves materially or fill a cultural absence due to the belief that Whiteness has no culture (Golbeck & Roth, 2012; TallBear, 2013), Black people's oral histories about Native American ancestry signal desires to escape the anti-Blackness of the U.S. context. Almost always, stories of Native American ancestry feature individuals who are phenotypically closer to Whiteness than Blackness and whose physical traits are desirable within the family history, which I show with participants' comments. Rather than attributing those traits to White violence, often those traits become associated with Native American relatives. August theorized why this occurs, stating, "I think that's easier for our people to say, "Hey, I'm Cherokee," instead of saying, "Yeah, I have English ancestry because our mothers were raped." Native American ancestry becomes a part of Black family oral histories and identities to contend with histories of anti-Black racism and violence against Black women. Rabekah, whose story encapsulates a similar experience said:

My mother used to tell us that we came from Native Americans, and she was really bright skin, really beautiful hair, and all her family that I knew was like that. So I said I surely I'm going to find out what tribe of Indians we come from...And so when my test results came back, I was kind of surprised when I didn't see anything and I saw Scandinavian, and I was like, "What?: So, I said,

okay, let me do mom's test because I know surely she's going to have it...And hers came back with zero Native American and I was like, "What?"

Rabekah's story exemplifies genealogical disorientation, the way that GATs leave people unsettled when they discover they are not who they thought they were (Nelson, 2016).

Participants discussed family stories about great-grandparents and great-great-grandparents who were phenotypically different than other family members—usually attributed to longer, straighter hair and lighter skin color. They described how these stories circulated as oral histories that shaped the family identity. However, these histories lacked documentation to prove Native ancestry to family members, outsiders, and legal entities, such as Indigenous nation's tribal councils and the U.S. government.

The following examples demonstrate the similarities of their stories:

Sameoldsong: In my family, my grandmother told us stories of how she was...Irish, Native American and African. Then, on my grandfather's side of the family, his mother was a full-blooded Native American and then, his father was Black. So, I expected to have some kind of Native American in me and I think it was like 1%. I was just like, "Wait a minute. If you do the calculations, the mathematical calculations, I should be more than that." But, no. The impact is that what we were told as children don't necessarily prove true. I guess you're just kind of surprised when you get your results.

Hope2000: I'm going to jump on that Native American side because I had none when I looked at mine and I had the same story. Some great-great-grandmother had long black hair and it had this big silver streak down the middle and she used to wear it in braid and I'm like, "Okay." My ancestry showed none of that. I got Cameroon, Nigeria and England and Northern Italy. But yeah, I will say I was surprised because the way they tell those stories about great-great-grandmamma and Cherokee.

As Hope2000 finished her story, the focus group broke into smiles and laughter. She animated her storytelling with hand gestures and facial expressions, miming her great-great-grandmother's braid and showing a confused expression at the results. Her narrative created a lively affective atmosphere but so did the shared experiences within the group.

As TJ said, “everybody’s got a story like that.” For both Sameoldsong and Hope2000, the women expected to have more Native ancestry than they received in their reports. But GATs rely on notoriously under-sampled databases for Native ancestry, making their Indigenous ancestry results less accurate than other results, like European and, even African results. For example, AncestryDNA currently has 1173 regions of European ancestry, 113 regions of African ancestry, and 136 regions in North, Central, and South America combined. The company offers specific cities in countries in the United Kingdom (e.g., Greater London, Southeast London), yet “Indigenous North Americas” is an entire region by itself. Despite some receiving results as specific as a city, people with Indigenous Native American ancestry can receive the approximation of the 9.5 million square miles of the North American continent. This is due to differences in sampling; more samples generate a larger database which increases the inferences companies can make about customers’ relation to a population. Ancestry Informative Markers (AIMS) are the subset of SNPs, single nucleotide polymorphisms, that scientists analyze to define populations. Those populations—and their AIMS—create the reference panels against which individuals’ DNA are compared. Sampling determines not only the meaning of the population (e.g., Greater London vs Indigenous North Americas) but also the confidence with which statistics can describe genetic relations (Fullwiley, 2011; Nash, 2015). Importantly, these differences are also due to Indigenous activists who have advocated for companies to not arbitrate the identity of Native nations. The lack of specificity protects Indigenous nations’ sovereignty to determine kinship.

Since the Human Genome Project ended in 2003, global efforts have been made to sample Indigenous populations. These initiatives often lead to increased resistance to

biocolonialism from many tribes, nations, and Indigenous groups. Biocolonialism is a “strain of colonialism propelled by the genetics revolution that many indigenous activists maintain further imperils their centuries-old fight for self-determination” because it is an “offensive uniquely targeting and threatening the sovereignty of Indigenous communities” (Di Chiro, 2007, p. 254). A recent example of biocolonialism is the case of the Havasupai Tribe of Northern Arizona. Between 1990 and 1994, members of the tribe donated DNA samples to Arizona State University for studies about type 2 diabetes. They later learned that their samples had been used for non-diabetes-related research, including studies about population inbreeding and ethnic migration (Garrison, 2013). In April 2010, the *Havasupai Tribe v. Arizona Board of Regents* case settlement included direct compensation to tribe members, funds for a clinic and school, and the return of the tribe’s DNA samples (Mello & Wolf, 2010). Indigenous people remain underrepresented in genomic research due to historical and contemporary malpractice, and lack of trust and transparency (Claw et al., 2018; Mello & Wolf, 2010). Because of this, Native American ancestry cannot always be confirmed or denied by GATs.²⁰ In a blog post on Native ancestry, AncestryDNA (2022a) states,

There is still a chance that we missed evidence of Indigenous American DNA. This is because you may have inherited genetic markers that AncestryDNA does not use to identify Indigenous American ethnicity. Additionally, some Native American communities are underrepresented in genetics research, largely due to distrust in tribal communities because of centuries of extractive and exploitative research practices.

²⁰ A 2018 White Paper by AncestryDNA shows a reference panel that includes 146 samples for North, Central, and South Native American ancestry combined. The same reference panel includes 1519 samples for England, Wales, and Northwestern Europe, and 2072 for Germanic Europe (AncestryDNA, 2018)

Faced with the option to accept the GAT's appraisal of their Native ancestry, continuing to fully believe in family oral histories, or finding a middle ground, participants often turned to a critique of the sample size. Motsesanagape said:

I always thought that my mother's mother was Native American. She looked Native American to me and her hair looked Native American...But when I got my results, I didn't have any Native American Indigenous ancestry. And I know why. Number one, they were committed genocide against, so there's not enough of them to test. And they don't trust the government and we can kind of look around and see why that's the case. So, that part I don't know that I'll ever be able to verify or deny DNA-wise or oral history-wise or any other way. I don't know that I'll ever be able to document that. But I still do believe that's part of my ancestry. I just can't document it.

Cairo also wondered about the sampling, when thinking about her ancestry, saying, "I think I also have a similar experience. I know that my great-great-grandparents were Native American. I know that they were also Haitian and that is definitely not in my report at all...The reports didn't show that at all. I don't even know if they really took a sample size for that." AncestryDNA includes Afro-Haitians and Indigenous Haiti and the Dominican Republic in their results. Cairo's results did not reflect either population.

Finally, Arrow contributed her story to the conversation:

See, same way when I see the Native Americans, because I have a great-grandfather that looks Native American. He has the hair, but it was like 1%. It was so small on mine. I use Vita gene, for my ancestry calculations and no big surprises for me, but I don't know. When you know a great grandparent had that native American ancestry because of his mother and you wonder why it didn't really show up much in yours, you can only put a question mark there and just keep going. But it doesn't define who I am. I know what he looked like and what his mother was, would've been my great-great-grandmother. But we just kind of have to, just take it with a grain of salt, some of these results, because they vary from kit to kit.

Arrow correctly identifies how company databases have significant influence over the results customers receive. A person can take tests from multiple GAT companies and receive different results. Faced with unexpected results regarding Native American

ancestry, many participants did not accept the genetic determinist belief that their GAT test was an authoritative voice on their identities. They questioned the limits of the technologies in deciding who they were, many demonstrating a firm belief in their ancestry regardless. For example, Motsesanagape concluded that she still believes in her Native ancestry, despite not being able to document it.

Participants' reliance on stories about the phenotype of Native American ancestors shows how Whiteness shapes Black family narratives and Black GAT identity negotiation. Reece (2016, 2019) uses CRT to critique how colorism has contributed to structural racism in the United States. Through colorism, people of color are awarded benefits for phenotypical proximity to Whiteness. Within the structures of colorism, "Black people who look more stereotypically White—lighter skin, thinner noses, thinner lips, straighter hair, lighter eyes, etc.—tend to be privileged relative to those who look more stereotypically Black—darker skin, thicker noses and lips, tightly coiled hair" (Reece, 2019, p. 5). Colorism does not solely shape conceptions of desirability but also contributes to economic stratification and differences in educational outcomes, mental and physical health, and punishment within the prison industrial complex (Crutchfield et al., 2017; Keith & Monroe, 2016; Monk, 2021; Oh et al., 2021; Viglione et al., 2011). Cardwell (2021) used CRT to argue that colorism is an important part of family communication for multiracial families. These participants' narratives illustrate that colorism also shapes family history and Black GAT identity negotiation. Phenotypical proximity to Whiteness, attributed to Native Ancestry is privileged in family discourse and individuals' conceptions of themselves. Shaka commented on this, saying,

My wife's family was swearing by this Native princess. And they all took the test, even my mother-in-law. Come back with 0% Native. I was telling them... "Y'all

not going to find any Native,” but they was to the point that at one of their family reunions, they had a picture of a Native [person] on a shirt. Just because they thought one woman [was their ancestor]. I’m like “Whoa! *One* woman is Native; you celebrate that and everybody else is Black?” You know that statistically is problematic.

To Shaka, it was harmful that his wife’s family elevated the story of a Native American ancestor above the story of Black ancestors. One Native American woman became the center of their family narrative—even so far as to be commemorated on a family reunion t-shirt—while Black people in the family were not given central roles. Put together with other’s stories, including those told by Arrow, Motsesanagape, and Cairo, Shaka’s narrative illuminates how Whiteness uses colorism to shape Black family oral narratives. Those narratives are then incorporated into Black people’s GAT negotiation processes.

Increasing industry samples, decreasing public trust

Participants’ criticism of the industry included sampling as both a past and ongoing process. As samples are collected, genome-wide association studies (GWAS) are conducted, more research is produced, and technologies are refined, GAT companies rework their processes and update customers accordingly. Although this might be seen as a strategy to increase participants’ trust in the scientific process, most participants interpreted updated results as a sign of the industry’s lack of credibility. When focus groups watched advertisements together in which the actors immediately claimed identities, participants raised specific concerns about the claims’ veracity because they failed to depict the everchanging nature of genetic identities. After watching the ad “Krystina,” Rebekah cautioned against her identity claims. She adopted a warning tone when saying, “I saw that commercial before, too. I would look at that commercial and

honestly got a little mad...I was like, well just hold your horses girl, because you might change in the next year. So, you may be so something else. We're Nigerian now."

Carmen also thought Krystina's declarations were premature, saying, "I don't like when those commercials show a person like her saying "I'm from," because that's very misleading because that's not the case. Then, when people take the DNA test and they get excited because they think that means that they are from this place, it's even more misleading when they get an update and that changes...That's not exact."

Carmen's commentary about the "Krystina" ad reveals that, even as the industry produces discourse about an authoritative genetic identity, participants interpret the scientific process that undergirds those identity claims as unreliable because it is, essentially, never finished. CRT tells us that race is never truly finished but is continuously constructed by institutions, communities, and individuals. Thus, GATs function well as a tool for race-making, because they can easily evolve and shape Black GAT negotiation in different ways over time. Benjamin argued that "the power and problem with genomics is its dexterity" (Benjamin, 2015, p. 139). Therefore, the dexterity of GATs gives it power because advancements of the technologies are always expanding the industry's ideological reach.

Many participants also wondered how they could use GATs for identity claims if those claims were based on evolving information outside of their control. Maisley narrated how her results changed from mostly Ghanaian to Nigerian. She said that she would "feel lost again if I was going to marry myself to this." JunePlum thought similarly, saying, "It changes over time. First I'm excited. Wow. I'm 50% that, and, like you say, over a few years later, you're down to 30 and you're thinking, wait in a minute,

am I still going to be African? Am I going to have some African stuff in me?” Adam, too, hesitated to say, “I’m Nigerian” because the results could change and then “all of sudden, no I’m not.” These doubts were amplified by desires to act on their genetic results by traveling, researching, or engaging in cultural festivities. Drawing connections across focus groups, their concerns posed questions, such as: Would their actions to enact genetic identities be essentially meaningless if their results eventually changed? And was closure identity possible with the potential for GAT results to change always on the horizon? Herstory discussed how her daughter traveled to Ghana, in part because of her AncestryDNA results. However, her results changed to majority Nigerian later on. Herstory was glad her daughter had other reasons to travel to Ghana because otherwise, her daughter would have been disappointed that she had traveled to a homeland that was not actually her home. In these narratives, participants worried that GAT results, as Carmen said, “don’t mean shit,” because they are constantly changing.

Although all identities are always in flux, as we negotiate them through communication and social factors, like culture and gender (Ting-Toomey, 2015) it is the illusion of stability that grants us the ability to claim identities. The identities that GATs offer remain visibly under construction through new email notifications, altered ancestral timelines, and updated percentage breakdowns. In my report, for instance, I received notification a year after I received initial results that my ancestry could be traced back to Trelawney Parish, Jamaica. The very disciplines that produce quantified identities (e.g., mathematics, genomics, computational engineering) are also beholden to the epistemic demand for ever-increasing data and accuracy. Whiteness uses the ever-shifting practices of the GAT industry to maintain control over Black GAT identity negotiation in the

present and the future. Via CRT, differential racialization shows how Whiteness constructs racial groups differently over time to benefit Whiteness (Delgado & Stefancic, 2017). Asian Americans, for example, have been constructed as model minorities and dangerous foreigners at different times to suit White supremacy (Jun et al., 2021; Li & Nicholson, 2021). Whiteness needs to be able to control both the present and future of racial construction, so it benefits Whiteness that these technologies maintain control of identity construction well after customers receive their initial GAT results.

Given the perpetual fluctuation of GAT results, some participants chose to accept their tests with “a grain of salt.” Cocoa believed the tests to be decently accurate, yet warned about the multitude of variables involved. In a pragmatic tone, she concluded “they’re going to increase, they’re going to decrease, and it just really depends on where you’re testing and which company and who they have in the database, and who’s testing throughout the different ethnicities and the database.” Cocoa was not upset by this reality but had chosen to accept it as a natural part of the GAT identity negotiation process. Despite this, she would “rather have a clue on something than not knowing nothing at all.” The ability to claim any sort of history as a Black person was better than not having any history at all. Arrow concluded that a GAT, limitations included, “just gives us a window of what we may or may not be made of. It’s only a window. It’s a snapshot. It’s a guess.” Both Arrow and Cocoa tell us that the limited and imperfect information of a GAT test—the snapshot or window they allow—is still useful for Black people who have no other way of determining their ancestry. Despite the technological limitations, GATs play an important role in constructing their sense of Blackness as individuals within communities.

Significantly, instead of mirroring the wholesale identity acceptance of GAT-produced discourse, participants positioned GATs somewhere between an imperfect science and a metaphor for describing human relations. While some, like Omobowale, fully accepted their genetic identity, others, like Arrow and Cocoa, concluded that GATs were more “a guess” than anything else. Belief in the technologies shaped how people could, or even wanted to incorporate them into their sense of self. For many, critiques of the GAT industry were a way to lessen the sting of incompatible genealogical aspirations and realities. If GATs are always updating results, then it becomes easier for customers, like Motsesanagape, to say, “I don’t know that I’ll ever be able to verify or deny DNA-wise or oral history-wise...But I still do believe that’s part of my ancestry.”

The future of Black genetic identities

Participants’ lived experiences express how Black GAT identity negotiation is constrained and enabled by anti-Black racism, Black diasporic politics, and GAT industry norms. The GAT industry does shape the African diaspora by authorizing identity claims that must be negotiated in a globalized world impacted by omnipresence power dynamics, often through interpersonal encounters. Simultaneously, the industry’s colorblind discourse, which separates race from diaspora, is reflected in everyday talk about Blackness. The way participants used the race/diaspora bifurcation of the industry shows that GATs do influence the way Black people talk about Blackness. Further, it shows that the African diaspora can be thought of as a mix of temporalities, where distant connections are not always enough to warrant present-day identification with others in the diaspora. While some use GATs to build relationships with other Black people

globally across borders over time, others choose not to believe in results that are necessarily unfinished. Critiques of scientific accuracy represent key points of resistance against White normativity by troubling the idea that Whiteness has an indefinite hold on Black GAT identity negotiation.

As genomics continue to develop, the industry will have changing effects on ideas of Blackness. The industry is only expected to grow in value and scope (Research and Markets, 2021), and the shortcomings of sampling, accuracy, and database inclusion are coupled with the imperative to create more profitable products. Looking to the future of GATs, participants often realized how their thoughts, feelings, and identification could potentially change. For example, Valencia discovered that she had a large amount of Middle Eastern ancestry when she took the test. Through this, her family discovered that her father's biological father was not a Black man, as they had thought. Instead, he was Middle Eastern. Discussing the relationship between her Blackness and newfound genetic ancestry in Asia, Valencia said, "I'm not quite sure where I land on it just yet." Potential updates to her results could influence her ideas in the future. Like GAT results, an individual's sense of self is always in process, and changes in the industry will influence identity negotiation differently over time. This fluidity gives Black people more latitude to negotiate their identities via GATs but also gives Whiteness an indefinite hold over how we define ourselves.

To increase the industry's credibility with Black customers, some participants advocated for increasing the amount of African and African diasporic samples in GAT databases. Sameoldsong said, "I think it's important for Black people to do the DNA testing because the larger the database, the more accurate the results. I think it's

important.” Blacq agreed with this sentiment, adding that, “more samples would help more of us.” My impression of their comments is that they wanted more Black people to have answers about their identities, even if those answers are incomplete. Others’ speculations about the future of the GAT industry posited that increasing samples and genotyping techniques could boost the industry’s credibility. With refinement and acceptance at interpersonal, institutional, and transnational levels, GATs might be widely accepted as definitive answers in the search for identity. If this is the case, Black people might be able to use them to form more meaningful connections to their history and others throughout the diaspora.

Hope200’s questions remain to be answered: “If they could...trace everybody back and it was 100% accuracy, I wonder...how would the powers that be change?...How would there be a significant change in the way society starts moving?” As GATs continue being funded by the exploding pharmacogenomics market, they could reach new levels of authority. Perhaps more nations will accept GATs as evidence to establish political and legal status. Or GATs could provide a basis for new categories of identity and relationality, like DNA Sierra Leoneans (Abel & Schroeder, 2020; Nelson, 2016). At the crossroads of science, medicine, and biotechnologies, critical/cultural scholars should continue to interrogate how the industry shapes structures of racial power in interpersonal and structural contexts. Investigating how White sciences, mathematics, and epistemologies (Benjamin, 2015; Daly Weisse et al., 2021) constrain and enable the way Black people define and communicate about themselves and other Black people around the world should also become an interdisciplinary priority.

This chapter has discussed the way Black GAT customers sustain and resist the dominant messaging of the GAT industry. Industry discourse represents hegemonic narratives about race and GATs. In the next chapter, I turn to counterstorytelling to narrate participants' experiences in conjunction with scholarship and relevant current events. Through counterstorytelling, I contextualize the GAT experience within familial conflict, community policing, and White supremacist systems.

CHAPTER 5

A CRITICAL RACE COUNTERSTORY

Introduction

The GAT industry relies on the narrativization of DNA to mold its customers in its own colorblind, post-racial, and non-racist image. By generating ads that narrate identity discovery, maps that narrate human geography, pie charts that narrate genomic identity, and family trees that narrate relationality, the GAT industry tells a compelling story of humanity through commercialized genomics. However, via CRT, this story becomes visible as a stock story that functions to uphold the norms of Whiteness in the GAT industry. To counter the industry's stock story, I create a counterstory to deconstruct how GATs function socially, illustrate how Black customers use GATs, and contextualize GATs within micro, meso, and macro systems of racial power. Doing so is methodologically productive alongside Chapters 3 and 4. In Chapter 3, I deconstructed the dominant stories, or stock stories, produced by the industry. Chapter 4 examined how Black GAT customers respond to the GAT industry, amid its stock stories and products. Composing a counterstory in this chapter allows me to build on these trajectories by narratively depicting the stock stories of the industry and weaving together customer's stories to illustrate the complex politics of Black GAT negotiation, given concerns of anti-Black surveillance, accuracy, family desires, institutional projects for reconciliation, and national politics.

Significantly, oral and written stories play a large role in Black cultures. Narratives—including song, storytelling, and signifying practices—remain an important vehicle for Black meaning-making, community-building, and cultural transmission, even as technology has enabled new forms of communication (Gates, 1983; Lu & Steele, 2019; Madison, 1993). Therefore, this methodology, which narrativizes the tenets of CRT, also honors the diverse storied traditions of people of color by resisting White supremacy in content and form. Rather than shaping all knowledge through the dominant, Eurocentric practices of academia (e.g., research reports, academic books), counterstories assert that narratives, including dialogue, setting, and character, are also sites of knowledge. If all knowledge is “a story of some kind, produced by a situated knower” (Baszile, 2015, p. 240), then counterstories expose the hegemonic tales that construct our social lives, and they create avenues for subjugated knowledge to thrive. With these commitments, counterstories represent research in ways that honor Black traditions of storytelling. I follow a tradition of critical race scholars who believe that rather than simply collecting stories, researchers should tell stories (Toliver, 2022) in ways that “challenge, displace, or mock...pernicious narratives and beliefs” (Delgado & Stefancic, 2017, p. 50).

Conceptualizing counterstories

As a theoretical and tenet commitment of CRT, counterstorytelling generates narratives that critique dominant stories about race and racism. Sometimes described as master narratives, standard stories, majoritarian stories, monovals, or stock stories (Solórzano & Yosso, 2002), dominant narratives reproduce ideologies (e.g.,

colorblindness, meritocracy, anti-Blackness) that uphold Whiteness (e.g., colorblindness, meritocracy, anti-Blackness) to maintain hegemonic status quo. In contrast, counterstories speak from the bottom (Matsuda, 1987) to unmask normative assumptions about race, depict the realities of racism and other forms of oppression from the perspective of the oppressed, and imagine trajectories toward justice and freedom. Counterstories are composed from lived experiences and real-world sources of data (Delgado, 1995). Scholars have used this method to critique the Whiteness of journalism pedagogy (Alemán, 2017), oppose White discourses in race curriculum (Matias, 2013), document the everyday oppression of multiplicatively marginalized faculty (Griffin, 2016), and trouble the notion of progressive U.S. laws (Solórzano & Yosso, 2002). Resistance narratives are essential for debunking the everyday narratives that “purport neutrality and common sense” (Alemán, 2017, p. 75) despite subjugating people of color.

Composite counterstories

Composite counterstories create characters and storylines from multiple sources of data, including research, lived experience, participant data, and current events (Delgado, 1995; Solórzano & Yosso, 2002). Composite characters pedagogically represent many aspects of a broader political phenomenon, as they are placed “in social, historical, and political situations to discuss racism, sexism, classism, and other forms of subordination” (Solórzano & Yosso, 2002, p. 33). In the original use of CRT composite counterstorytelling, Bell (1989) critiqued the U.S. law as racist via the character, Geneva Crenshaw. As a fictionalized character based in reality, she represented the tensions inherent in marginalized people working in the legal justice system. Geneva speaks with

the other characters, speculating about alternatives to *Brown V Board of Education* that could have benefited Black children and critiquing anti-discrimination employment laws, and pointing out sexism in Black communities. In this way, Bell (1989) metaphorically “employ[ed] stories that are not true to explore situations that are real enough but, in their many and contradictory dimensions, defy understanding” (p. 7). Thus, his composite counterstory was a tool for making the paradoxes of racism legible in new and accessible ways. Similarly, Delgado’s (1995) *Rodrigo Chronicles: Conversations About America and Race* featured Rodrigo. Rodrigo was characterized as Geneva Crenshaw’s half-brother, an African American law graduate navigating his career in conversation with his mentor, the narrator. Rodrigo and Geneva did not have one-to-one representational relationships between themselves and real-world people. Instead, they were composites of assorted real-world experiences, ideologies, research, and people known to the authors. Other composite counterstories have created characters based on the experiences of Black and Indigenous youth (Samuels-Wortley, 2021), Black male faculty (Griffin et al., 2014), and Black elementary and secondary school teachers (Cook & Dixson, 2013; Tafari, 2018).

Specifically, I draw inspiration from scholars whose composite counterstories include qualitative data. For example, Samuels-Wortley (2021), constructed a composite counterstory based on interviews with Black and Indigenous people about their experiences with police. That project narrativized their lived experiences and was “influenced by the deeply rich and personal experiences shared by the participants themselves” (p. 1146). This composite counterstory is also inspired by the participants, whose stories about being GAT customers are not decontextualized data but are part of

the narratives of their lives. Drawing from this project's grounded theory approach, data, previous scholarship, and lived experience, I act as a bricoleur (Denzin, 2017), to create a counterstory about GATs, the industry, and consumers of color. My composite counterstory expands the narrative landscape of the GAT industry by centering Black customers' experiences and telling a story that critiques the narratives produced by the industry, itself.

Stock stories, which normalize dominant White perspectives are the narratives that counterstories deconstruct. Martinez (2017) described the purposeful juxtaposition "stock story vs. counterstory:

The audience is invited to first experience a version of the events from a status quo point of view, which...represents that of the institution. Following the stock story, a counterstory is then presented to develop the author's marginalized viewpoint and to critique the viewpoint put forth by the stock story while offering alternative possibilities for the audience to consider (p. 70).

D'Arcy (2017) took up this approach to render visible the dominant narratives of Traveller communities²¹ compared to Travellers' perceptions of their own lives. The stock stories falsely depicted Travellers as people who do not support their children's education and jeopardize their education because of the community's mobility. D'Arcy interviews with Traveller families created a counterstory, which described alternate reasons for educating their children at home, including the fact that their children faced racism and discrimination in school systems. While the dominant narratives villainized Traveller families, the counterstories illustrated how Travellers' lives are shaped by systemic discrimination. In another example, Han (2008) used stock story vs counterstory

²¹ Traveller communities face antigypsyism, "discrimination, racism, ignorance and neglect" (D'Arcy, 2017, p. 645) and are racialized and Othered.

to expose how oppressed groups can use stock stories to marginalize other oppressed groups. Using the case of White gay men, Han (2008) explains how stock stories about race in the gay community are about the ideal of multiculturalism but not about materially including people of color. The resistive narrative of gay Asian men shows that racism negatively shapes their experiences in queer spaces and relationships. Like D'Arcy's (2017) research, Han's (2008) research shows how "stock stories of the dominant group work to absolve its members from all liability in creating and maintaining racial hierarchy" (p. 18). The counter narratives are powerful because center the lived experiences and voices of marginalized people to critique the dominant racial hierarchy.

I use a "stocky story vs. counterstory" method to contrast the dominant narrative of the GAT industry with a critical race perspective that centers people of color rather than corporate profit. The counterstory challenges dominant, ingroup narratives (Delgado, 1989) that the GAT industry tells about itself, its customers, and its employees. More specifically, the stock story represents the GAT industry's hegemonic messaging, including its reliance on colorblindness and post-racialism in commodifying genomic identities. The counterstory is a resistant narrative that shows how anti-Black racism, surveillance, and U.S. history shape Black GAT customers' experiences with innovative technoscience.

My composite counterstory is shaped by a rich collection of data that includes my lived experience as a Black GAT customer and researcher, participants' stories, media, current events, and academic scholarship. Anchored by the codes and categories from my critical race grounded theory (CRGT) analysis, I center several key themes in this

chapter. The first theme is the spectrum of ways participants conceptualized privacy and anti-Blackness within the surveillance of the GAT industry. I highlight the largest theme: powerlessness in the face of ongoing (data) surveillance from the government, police, and corporations. The second theme is the lingering question of GATs' usefulness in anti-racist, reconciliation, or reparation projects. To investigate the confluence of anti-Black surveillance and GATs' position in anti-racist efforts, I tell the story of two siblings who use 23andMe to find a grandparent and have different perspectives on its risks and utility. Although this is a composite counterstory and the characters represent a wide variety of political and ideological beliefs about race, science, and surveillance, I use single quotation marks and footnotes to distinguish when characters speak in direct quotes from this study's qualitative data to identify participants' voices. Other dialogue and story elements are the results of paraphrasing participants' responses in combination with other data sources. Set in the present-day fictional city of Bunker Hill, Tennessee, the location reflects a geographic microcosm of political issues in which GATs are implicated, including White supremacist violence, contested public memory, anti-CRT legislation, and conversations about reparations. Embedded within this context, two Black siblings, Kiara and Morgan Reid, come to terms with their ancestry via 23andMe. First, I tell an industry stock story and an industry composite stock story. Then, I tell a critical race composite counterstory.

Industry stock story

The Human Genome Project led to the explosion of the GAT industry. Companies like 23andMe, AncestryDNA, MyHeritage, and AfricanAncestry have revolutionized the

way everyday people can access information about themselves through the genome. This industry has helped millions of people discover who they really are through the power of DNA analysis. Before GATs, people had to rely on family stories and incomplete records to fill in their family trees and uncover their ancestry. These methods are helpful, but they are subjective and cannot a complete picture of our pasts. People can misremember or hide truths, and records can go missing or be misleading. However, DNA cannot lie, and GATs are objective, scientific facts. Using cutting-edge technologies, sophisticated algorithms, and state-of-the-art databases, GAT companies can tell you where you come from.

Customers report that GATs fulfill them in many ways. GATs can fulfill customers by giving them insight into themselves that they would have never known. They also fulfill customers by connecting them to cultures and people across the world. And they fulfill customers' identities by completing them with the authority of science. GATs have helped people find lost family members, discover more about themselves, adopt cultural customs, and become more interested in the world around them. Through GATs, people not only become more connected to themselves but also humanity.

Anyone can benefit from taking a GAT, and everyone benefits when one more person does take a GAT. The more people contribute, the more accurate and sophisticated results can be. By contributing DNA, customers help themselves and other people. In addition to having top-of-the-line security, GAT companies protect the world in valuable ways. In some companies, opting into research means that customers' DNA can help develop precision medicine for some of the most important medical issues of our time. By participating, customers serve a greater good. Within our DNA is the story of

humanity. The GAT industry harnesses the power of genetics to make customers—and the world—a better place.

Industry composite stock story

A few miles west of Nashville, Tennessee, Kiara Reid, a 30-year-old Black woman decided to take a GAT to find her maternal grandfather, whom she never knew. Her mother had recently passed away, and the loss made her wonder about who her family was. She believed that taking a test could help her connect to her mother and her family history in ways she had been unable to while she was alive. After seeing a 23andMe ad “100% Nicole,” she talked to her younger brother, Morgan, a college student who lived with her.

“I was thinking about doing one of those tests like 23andMe. I could find out more about the family,” Kiara said over dinner one night.

“I hadn’t really thought about it before,” Morgan said, sounding unsure. “You sure it’s safe? I heard they caught a killer with one of those tests.”

“It has to be safe. Basically everyone’s done it,” Kiara said, dismissively. Then she unlocked her phone and read from the webpage she had been browsing earlier. “Look the site says they don’t share ‘genetic or self-reported data with employers, insurance companies, public databases or 3rd party marketers without...explicit consent’” (23andMe, 2022i).

Morgan took the phone and scrolled a bit, reading for himself. He seemed reassured by the company’s promise. “It says they won’t ‘release any individual-level personal information to law enforcement unless we are required to do so by court order,

subpoena, search warrant or other requests that we determine are legally valid' (23andMe, 2022i), so I guess we should be okay," he said.

"See? If they say it's safe, it's probably safe. Plus Kay at work just took one, and she had a good experience."

With her brother's support, Kiara took the test and received the results three weeks later. They were fascinated by the different types of ancestry she had, mostly African and European. As the ad "100% Nicole" ad had promised, it revealed things they would have never known without the company's help. They were 59.1% Nigerian, 12.5% Angolan and Congolese, 25% British and Irish, and even 0.2% Filipino and Austronesian.

"It's like looking at yourself in a new way," Morgan said. On their 23andMe ancestry report, he clicked on the Western Asian and North African categories to learn more. "I can't believe we come from all of this!"

"I know," Kiara said, with excitement. "And when we opt into DNA relatives, we might be able to find someone who can tell us more about mom's dad. It's amazing!"

Eventually, Kiara got in contact with her DNA relatives via 23andMe and discovered their grandfather, Percy Smith. He had also lived in Bunker Hill for generations but had passed away. His other daughter, their mother's half-sister, and their half aunt, Maureen, stayed in contact online. She shared pictures of him when he was younger and explained that he probably hadn't known their mom existed. Still, Maureen's family welcomed them into the fold by inviting them to dinner and, even a family reunion. It was more than they had hoped for. For Kiara and Morgan, taking 23andMe was the genetic proof they needed to know who they were.

A deconstruction

The industry stock story follows the pattern of identity fulfillment presented in GAT ads, which I described in Chapter 3. The GAT industry is presented as beneficial and altruistic, and customers are constructed as hopeless without genomic intervention. The industry composite stock story follows a similar pattern. Morgan and Kiara have a specific question about who they are as grandchildren, and the GAT successfully fulfills this part of their identity and satisfied their curiosity. The technology is necessary for them to access this information because discovering who their grandfather was is beyond the scope of their abilities without the help of science and technology. They trust 23andMe's ability to provide reliable answers about who they are and believe the company will keep their data safe based on its articulated policies. Any concerns they had were assuaged by the company's statements on privacy, which they took at face value. In this version of the story, it does not matter that Kiara and Morgan are Black. Their racial identities have no bearing on their use of the test, concerns about data surveillance, or faith in their results. Their ancestry report could be swapped for any ancestry report and they could be siblings of any race, and the story would be the same: 23andMe was beneficial because it scientifically answered their questions about ancestry. This is undoubtedly a colorblind narrative because their Blackness does not mediate their experiences with the GAT, and the GAT exists seemingly beyond racial structures. As a stock story, this represents the GAT industry's commitment to colorblindness and indifference to racism and White supremacy, which makes GATs appear as neutral tools in objective identity negotiation processes. Colorblindness ultimately upholds Whiteness by disguising the presence of racism (Annamma et al., 2017; Bonilla-Silva, 2018), which

is why it is an attractive ideology within commercialized genomics. In the next section, I tell a composite counterstory to contrast this composite stock story.

Counterstory

Your DNA is my DNA

Kiara almost muted the TV when the ad came on, but she recognized Henry Louis Gates Jr., so she let it play. Gates wore his usual well-fitting dark suit and rectangle glasses that she remembered vividly from her mom's fascination with the man. Before her mom had gotten sick and passed away three years ago, she had loved Dr. Gates and his assorted TV shows.²² During their weekly phone calls, Kiara often got updates on which celebrities appeared on *Finding Your Roots*, where Gates' team used traditional and genetic genealogy to reveal celebrities' ancestries. "They did Sterling K. Brown this week. You know that's a fine man," her mom had said. Kiara had been embarrassed at the time, because who wants to hear about their mom's crush? But now, she remembered her mom's voice fondly, with the familiar ache of grief in her chest.

Settling against the couch, Kiara watched the ad for season 8 of *Finding Your Roots*, which featured Dr. Gates talking with celebrities, including Spike Lee, André Leon Talley, Lena Waithe, and Lee Daniels (PBS, 2021). Speaking over the montage of

²² Dr. Henry Louis Gates, Jr. has written, produced, and starred in several Black history and genealogy-focused TV shows and documentaries, including *African American Lives* (2006), *African American Lives 2* (2008), *Faces of America* (2010), *African Americans: Many Roads to Cross* (2013), and *Finding Your Roots—with Henry Louis Gates, Jr.* (2012-present). Along with his scholarly work on Blackness in the U.S., he has pioneered mainstream depictions of African American genealogy. Some of his projects are sponsored by GAT companies. For example, *Finding Your Roots* is sponsored by Ancestry and the Inkwell Society, of which Anne Wojcicki (CEO of 23andMe) is a part (PBS, 2022).

interviews, Dr. Gates said, “We are walking family trees. And our ancestors are waiting for us to find them.” In an emotional scene, he revealed Brittany Packett Cunningham’s biological grandfather. The woman’s medium-toned brown skin and shoulder-length twisted hair reminded Kiara of her own. Gates proclaimed, “We opened up a whole new world for her.” Across the table, Brittany flipped open a book while holding back tears. The black and white picture showed her grandfather as a young man with a low haircut and broad face, smoking a pipe. Choked with emotion, she asked, “That’s him? Wow! It’s like finding yourself” (PBS, 2021).

Kiara watched the rest of the ad with more interest. Was it true? If she found her biological maternal grandfather, would it be like finding herself? Like Brittany, would she be moved to tears? Genetic ancestry tests seemed like they could offer her a sense of fulfillment, as if they could complete something about her identity that she hadn’t been able to complete on her own. She had many questions about her ancestry that she had never been able to answer. She didn’t know where her African ancestors came from before they had been enslaved in the United States. But more immediately, Kiara had never known her grandfather because her mom hadn’t known who her father was either. Her mom always said she came from a generation where family history was grown folks’ business, and she had passed away without knowing much family history. Maybe that was why her mother had been so drawn to Dr. Gates’ shows? Maybe she was fascinated by the idea of discovering something that she didn’t have herself—her own genealogy? Ever since her mom had passed away, Kiara had wanted to learn more about her family and her ancestry, and the desire seemed to grow every day.

Morgan entered the living room just as the ad was ending, carrying a cold piece of pizza. He'd brought home an extra box from the Black Student Union (BSU) meeting he led at Bunker Hill University (BHU), where he was a senior. After graduating from the same school 5 years ago, Kiara had started a job as a web developer in their hometown, Bunker Hill, Tennessee, and Morgan had moved in to cut down on his college expenses. Sometimes it felt like she was filling in for their mom, but mostly it still felt like her little brother was just perpetually crashing at her place.

"That's the show mom used to like, right?" He asked, mouth full of pizza.

"Yeah, it looks like a ton of celebrities this season. Mom would have loved it." She paused before saying, "I was thinking of doing one of those tests, you know. I could find out more."

Morgan chuckled, as he sat beside her. "You want to give those people our DNA?"

"I want to find out who mom's dad is, or was. Don't you ever wonder? She never got to find out," Kiara said. Their mother had expressed that she was curious about it as a teen, but she hadn't the resources—time or energy or money—to do the necessary digging. Now with tests like AncestryDNA, it seemed like it might be easier to find the answers their mom had never been able to find.

"You're serious?" Morgan frowned. "You think that's safe?"

"It can't be that risky. Everyone's done one. Didn't you see all those celebrities doing it?"

“I think your DNA is basically my DNA,”²³ Morgan said, taking a bite out of the pizza. “And I think I’m a Black man living in the South and you’re a Black woman living in the South, and you should be concerned too. You give them my DNA and the next thing you know, I’m turning up in some police search.”

Kiara rolled her eyes at the exaggeration. He seemed serious, but she could tell there was a hint of playfulness in his tone. “You think they’re gonna do a nationwide manhunt for Morgan Leroy Reid sometime soon? What are you planning?” Kiara asked.

“You ever heard of the Golden State Killer? The FBI’s been all up in those companies, whether we know it or not.”²⁴

“Maybe, but you’re not a mass murderer. You shouldn’t have anything to worry about.” Morgan rolled his eyes, so Kiara tried again, saying, “Okay, so, I have a phone that’s tracking my every move. I got two computers...I’ve never read the privacy thing, the terms and conditions on anything I’ve ever signed up for...I generally don’t take precautions to protect myself in any other data-driven way. They know exactly what I’m doing, where I’m at. They just can track us. No matter what we do. We’re going to get tracked regardless.”²⁵

“So, you think that means we should just hand it to them? Look, even your boy Gates got got by the police at his own house! And he’s Gates!”²⁶

²³ Wallace et al (2015) argue, “Genetic information implicates not only the individual but their biological relatives and social family...The ease with which genealogical and other personal data from the client, and by extension from their relatives, can be shared, linked and used, raises issues of who gives consent to provide that data and how well all parties are aware of the implications of participation” (p. 2).

²⁴ Direct quote from participant, Utah.

²⁵ Direct quote from participant, Scorp.

²⁶ In July 2009, Dr. Henry Louis Gates Jr. was arrested by a White police officer while attempting to enter his home in Massachusetts. This occurred a few blocks from

Kiara remembered that incident well because it was some of the first news coverage she followed about anti-Black racism and the police. Eight years before the Black Lives Matter movement erupted in Ferguson, Missouri, only 4 hours away from where they lived, Kiara had watched news stories about Gates' unfair arrest in Massachusetts. She had been 17 and Morgan had been 12, when their mom had sat them down to remind them about The Talk—how to behave around law enforcement officers as a Black person to stay alive. It was the same talk her mother had given her when she was young, so it was, in a way, an “intergenerational rhetorical form” for African Americans (Erby, 2021, p. 24). Conversing with her mom about Gates' arrest showed her that all Black people—even rich ones—can't escape the racial profiling of law enforcement. When Gates, a Harvard professor, was arrested at his own home, it shed light on the anti-Blackness of the U.S. criminal justice system in which Black people are incarcerated 6 times more than White people. And the overcriminalization of Black people has left over half a million African Americans in prison (Alexander, 2012; Taylor, 2016).

Given the national context, it made sense that Morgan was afraid of his DNA being on record and accessible to the police, government, or corporations, which already unfairly targeted Black people. They both kept up with the news. Headlines nearly every week indicated some kind of anti-Black discrimination. Just last week, Ryan Coogler, director of *Black Panther*, had been detained by police after attempting to withdraw money from his own bank. The teller had thought Coogler was a bank robber (Taylor,

Harvard University, where Gates was a scholar of African American history and English (Goodnough, 2009).

2022). Kiara was well aware that Black women continue to have the highest rates of pregnancy-related mortality (Petersen et al., 2019). Many examples like this that showed them how anti-Blackness was an everyday part of their lives. So, Kiara understood his hesitancy. But still, Kiara thought that maybe it was worth the risk.

“All I’m saying is ‘if they want a DNA sample from you, they can get a DNA sample from you the easy way or the hard way.’²⁷ ‘This country is so corrupt that they’re going to get you one way or the other.’²⁸ At least this way, we’d be getting something out of it,” she said.

“I’m not arguing that they can’t get my DNA. I just don’t think I should do anything to make it easier to find me. ‘We’re the ones who have to worry about it the most. There are so many of us that’s already incarcerated unjustly. Black people are always getting twice the time as our White counterparts.’²⁹ You know, I was just learning in my ethnic studies class about anti-Blackness and systems of surveillance. The author argued that surveillance is always something Black people have experienced and that it’s been used to control and contain us since slavery (Browne, 2015). These tests seem like one way to create more surveillance for us.”

“I get what you’re saying, but we should still think about it. Even if it’s risky, it might be worth it. How else will we ever know?” Kiara asked. Her mom had never been able to find out about her father, but a test like this could be something Kiara could do for her, even after she was gone. “It could be a cool thing to find out and it could tell us more about mom.”

²⁷ Direct quote from participant, Motsesangape.

²⁸ Direct quote from participant, Shaka.

²⁹ Direct quote from participant, Misty.

“Look, you can do it,” Morgan said. He wasn’t dismissive, but he did look tired of talking about this. “You don’t need my permission. But if I get arrested because some cousin of some cousin committed a crime and they think it’s me, that’s on you.”

“Fine,” Kiara said. With an exasperated sigh, she turned the TV back on. “That’s on me.”

Decoding our past through DNA³⁰

Two weeks later, Kiara retrieved the glossy white 23andMe box from her mailbox and sent a picture of it to Morgan.

Kiara: about to take this! get in your last crimes!

Morgan: omw right now in fact

Kiara: haha great...how’s it going with admin?

Morgan: oh you know white people white peopling. I’ll tell you over dinner?

Kiara: I’ll order something

Inside, she placed the 23andMe kit on her kitchen table, where she sat and habitually turned to Twitter. She had been following the hashtag #BHU200 for the last couple of days, and some of her brother’s tweets were at the top. The BSU and other groups on campus were using the hashtag to gain public attention about the ongoing controversy at the school. They were protesting BHU’s use of slave labor during its earliest years. Recent controversies about Black history and critical race theory in the state (Allison, 2021; McMorris-Santoro & Edwards, 2021) had brought attention to the hidden history

³⁰ The subheading comes from the title of Season 2 episode 10 of *Finding Your Roots with Henry Louis Gates, Jr.*

of the university. Kiara was surprised to learn that BHU sold 200 enslaved people to pay off its debts, which was ultimately the reason the school was standing today.³¹ She never imagined that her alma mater would be among the many institutions that were reconciling their history with slavery, including Georgetown University, Harvard, Yale, Princeton, College of William and Mary, Rutgers, Brown University, and the University of Virginia (Stein, 2016; Wilder, 2013). Morgan had become somewhat of an activist on campus because of his role at the BSU. While Kiara was more likely to quietly critique racism, he saw himself as a leader in the fight against racism. Morgan was meeting with the university administration as part of their negotiations. Meanwhile, the hashtag continued to gain traction. As Kiara scrolled, she saw a mix of reactions from people.

Tweet: Over 40 universities across the world are part of the Universities Studying Slavery (USS) Consortium (University of Virginia, 2022). Why isn't BHU part? #BHU200

Tweet: Our state still has 100 confederate monuments (Pfleger, 2021). The problem is bigger than #BHU200

Tweet: #BlackLivesMatter at BHU too. We're meeting with administration now. Join us tomorrow for a demonstration in the courtyard! #BHU200

Kiara's mind spun as she scrolled through the posts. Kiara hadn't remembered her college experience being so conflict-ridden, but maybe it had been, and she just hadn't been paying attention. All of the media attention made her worried for her brother. It

³¹ Georgetown University in Washington, D.C. was funded through the slave labor of 272 people who were sold to pay off some of the university's debt. Student protests associated with the Black Lives Matter Movement called attention to the way the institution benefited from the slave labor of Black people with the hashtag #GU272. The Georgetown Memory Project has documented 212 of the enslaved people and over 5000 descendants. Georgetown now grants legacy status to descendants, which allows them preference in admission like children of alumni (Swarns, 2016; The working group on slavery, memory, and reconciliation, 2016).

seemed like everyone had something to say about her small community and its college, even people who knew nothing about the place. Many were in support of the Black students, faculty, and staff who were leading the protests, as well as the community members and allies supporting them. Together, the #BHU200 hashtag created a “protest narrative” with “versatility of expressive forms” (Yang, 2016, p. 16), including pictures, videos, and art. Kiara looked for her brother’s face in each representation of the gatherings, just to see if he was there, if he was okay. She spotted his backpack in the corner of one photo and the top of his head and afro in another. Some of the tweets opposed acknowledging the university’s history.

Tweet: Cheers to all the people who aren’t falling for the divide and conquer agenda.³² The past is the past. No one at BHU now owned any slaves. Everything is not racist! #BHU200

Pacing the kitchen, Kiara thought about how “everything is not racist!” had been leveraged against her so often. The few times she had challenged herself to be more outspoken in class or at work, White people thought she was exaggerating or bringing race into the equation when it wasn’t there. White people had told her to “get over” race, as if it was something she could simply forget. She couldn’t believe someone was saying the same thing about this. How could anyone think the university literally being built on slave labor was not racism? How could that history be unrelated to her experience as a Black student there, or her brother’s? She scrolled to see the responses to the tweet. Someone had posted a TikTok in which a Black man was explaining the idea of post-racialism. He said,

So, someone told you it wasn’t about race or that we’re beyond race? Well, critical race theory scholars define racism by its everydayness, meaning it often

³² Direct quote from response to this study’s advertisement on Facebook.

doesn't involve intentionality. Most things—people, practices, institutions—reproduce race without invoking race at all (Bridges, 2019). One way that racism persists today is through the belief of post-racialism, or the idea that “we are, or are close to, or ought to be living outside of debilitating racial reference” (Goldberg, 2015, p. 2). Postrace has become “*the* racial project of our time” (Banet-Weiser et al., 2019, p. 5), and the silencing of race-conscious discourse ultimately retains Whiteness’ superordinate position on the racial hierarchy (Gray, 2019; Squires, 2014). Postracialism is a form of new racism. So, if you want to combat racism, start by acknowledging that racism is still a thing.

The short video made Kiara pause. Postracialism seemed to explain some of her experiences as a student at BHU, where people had even questioned whether the BSU was necessary because they thought that all students had the same experience at the school. That seemed to be Whiteness talking because she knew—and all of her friends of color knew too—that was untrue. Her college years, like many Black students’ at PWIs, had been littered with microaggressions, cultural alienation, and silencing which made the campus climate unwelcoming at times (DeCuir & Dixson, 2004; Jones, 2020; Solórzano et al., 2000). Clearly, race has always been an issue, racism was real, and a BSU was necessary. The BSU was the real reason information about the BHU200 was being spread in the first place. The White institution was not readily addressing the issue and had no plan of action without students like Morgan. They were nowhere near being done with race if the university hadn’t even admitted to its role in enslaving Black people. Did the administration think they could hide it forever? Did they think no one would care? Maybe they had thought only Black people would, which was “no one” by their definition.

Kiara closed Twitter and sat down, overwhelmed by the weight of the controversy that she was only tangentially connected to. It was Morgan who was in the middle of this. She was glad that he was fighting for what he believed in, and she had

always seen him as a leader. But part of this made her anxious. Her alma mater, no matter how great, was still an institution that would protect itself at all costs. Her brother, however passionate, did not have much power as an undergraduate student compared to the power of the university, the media, and the state and national politics. During her time in college, she had thought about joining more activist efforts, but, in the end, it didn't seem worth it, not when she felt so powerless. She worried about Morgan being on the frontlines of the protests. Would they punish him somehow? She wanted him to get his degree. She had promised her mom she would make sure that happened. And she wanted him to be safe, but she also wanted them to win. But what would winning look like? Would the university make an apology for enslaving people and move on? Would that be enough?

Returning her attention to the 23andMe box in her hand that said "Welcome to you," she thought about Morgan's concerns about data surveillance. Was she really going to put herself and her brother at risk to get the answers she wanted? Would it be worth it? Colorful chromosomes lined the bottom of the box. Inside, a neon pink and green packet told her how to register her account on 23andMe's website, spit into the tube, and return the box with the attached postage. She read the book front to back and then followed the instructions for spitting into the plastic tube. Placing it in a bag with the biohazard symbol, she sealed it back into the box.

Kiara "conjure[d] a fantastic tale of laboratory elves inventing...[her] place of origin out of magical ancestral dust" (Huell, 2020, p. 121). Somewhere in a distant lab, someone would be running calculations to tell her who she really was. Would learning where her ancestors had lived be meaningful? She was mostly interested in connecting

with potential family members and finding out more about her grandfather because her mother had always wanted to know him. But the test made her think about her African ancestors, who they were and wanted to be. She'd been texting her friend, Elijah about it, and he'd pointed out that knowing more about her ancestors might make her feel more grounded, more connected. "“Maybe your family was a tribe of doctors. Maybe your family was the healers, maybe your ancestors were teachers and counselors within the tribe,”³³ he'd said. Maybe this test really could help her “reconcile home and past, belonging and longing, global community and corporeality” (Huell, 2020, p. 124). She doubled checked the seal on the bag, placed it back into the box, and applied the postage. In a few weeks, they would get their results. She hoped by then the protests were over. She wanted her brother home and safe.

The stories we tell³⁴

Three weeks later, the Reid siblings sat in their living room, hunched over a laptop, minutes after Kiara had received the email from 23andMe saying, “Your results ready! A world of exploration awaits!” She logged into the account to see the ancestry report. At first glance, it seemed to be what she was expecting.

“Looks like a 70/30 African European split. Not bad,” Morgan said. “I thought we’d be like 80 or 90, you know? It’s not like either of us are light-skinned. Neither was mom.”

³³ Direct quote from participant, Misty.

³⁴ The subheading comes from the title of Season 3 episode 1 of *Finding Your Roots with Henry Louis Gates, Jr.*

“From what I’ve read it’s pretty normal. Most African Americans seem to have that much European in them (Bryc et al., 2015). I heard a lot of the European ancestry is from slavery.”

“Dang, we almost mixed!” Morgan said with a chuckle. “That’s probably why you like *The Office* so much.”

“Shut up!” she said, slapping him playfully on the arm. “It’s probably why *you* date so many White girls!”

“Ohhhh,” he said faking pain in his chest. “That hurt. It really hurt.”

She smiled. “It’s pretty cool though. Angola. Nigeria. Ghana. You always wanted to visit Accra.”

“Uh huh,” he said. “And it’s a lot of small numbers too. Filipino. Khmer? What’s that?” he asked.

Kiara hovered over the category. “It says, ‘From Myanmar to Indonesia, the people of Southeast Asia are genetically diverse, reflecting the legacies of several migrations beginning over 40,000 years ago. More recently, the region has been heavily influenced by Hindu, Buddhist, and Islamic cultures. Before its fall in the 15th century, the Khmer empire— encompassing modern-day Thailand, Laos, and Cambodia—was the largest land empire in the region’s history.’”³⁵

“That’s pretty tight,” Morgan said, looking over the map. “Never heard of Khmer before.”

³⁵ Direct quote from description of Indonesian, Thai, Khmer, & Myanma ancestry on author’s 23andMe.

While waiting nervously for the results, Kiara had done some sleuthing to imagine what receiving her results might be like. She'd stumbled upon a lot of reveals and unboxings on YouTube, where customers shared their experiences publicly. A lot of them seemed overjoyed about their result like she'd seen in Gates' TV show, too. In one video, a woman had said,

‘Knowing where you’re from puts something different within you and it gives you a different perspective on life, it pushes you differently, it moved you a little differently, and so maybe if we all knew where we came from, that we would be just a little different in who we are today.’³⁶

Feeling unsure, she wondered if these results would change how she moved or who she was. None of it was exactly unexpected, but it was interesting. Some of these places she had never even heard of, and she wondered where all of that trace ancestry came from. Yet, it didn't change who she was. If anything, these results reinforced her sense of self. She was a Black woman from Bunker Hill, Tennessee, and she knew she was the descendant of enslaved people. That seemed to be written on her DNA. 70% African. 30% European. East African, Nigeria, Liberia, Sierra Leonean—she may have been “from” there, in a strange sense of the word, but it was only because her ancestors had been stolen from those lands. There didn't seem to be anything specific enough to latch onto though, no names or cities or villages. Everything else had been erased from her family's reach, such as their cultures, languages, and histories. DNA was the only connection she had. She had been looking forward to feeling connected after watching so many positive reveals online, but now it felt kind of cheap.

“You okay?” Morgan asked, noticing her frown.

³⁶ Direct quote from participant, Misty.

“Yeah, I’m just disappointed I guess,” Kiara said. “I read this article earlier that quoted Gina Paige who founded AfricanAncestry. She said,

“Even though we don’t know the names and even though we don’t know the languages, and even though we don’t know our family tree and we’ll never know those, we have the actual DNA from somebody who made it through that entire horrific history of capture, being packed on a slave ship, plantation living, no humanity, can’t get married, you can’t keep your children, you’re not allowed to read and write, segregation, Jim Crow, you name it...Somebody’s DNA made it through all of that for us to be here.” (Ahébé, 2021, para. 45).

Seeing her own results, Gina Paige’s comments resonated even more. The report did make her realize that so many people had survived for her to exist. She was not just a descendant of enslaved people. She was a descendant of survivors. This was about the stories she could tell herself about where she came from. Somehow that felt more empowering than the reveal videos from 23andMe and AncestryDNA that she’d watched. People seemed overjoyed about the results, but none of them seemed to talk about the history of it, what the DNA actually meant for people’s lives.

“So how does this help you find mom’s dad?” Morgan asked.

“Well, this part doesn’t really,” Kiara said, swiveling her mouse over the color-coded map. “What matters is connecting with DNA relatives to see how it says we’re related. I mean if he took the test or someone else related to him, it should show up.”

“Is it showing?”

“I haven’t opted in yet. I wanted to check with you to see if you’re okay with it? We don’t know what we’ll find,” Kiara said, chewing her lip.

“Let’s do it,” Morgan said, patting a hand on her head. “I know how much you want to find him. And I know I was going on earlier about all the surveillance stuff. I still

believe it. We can never be too careful, but I think it's worth it too. For you and for mom, too."

"Thanks," Kiara said, giving him a short hug. "I just hope we can find him."

Breaking silences³⁷

Kiara stepped into BHU's courtyard and found a spot at the edge of a small crowd. It was an open space lined with a low stone wall, and the center held a statue of the school mascot, an eagle. The plaque beneath it was engraved with the school's slogan: Higher Purpose, Greater Good. This was the same place Kiara had seen on her brother's social media accounts, where people had gathered, chanted, listened, and rallied together against the university's silence and for racial reconciliation. Now the space was neatly arranged with a podium and lines of chairs. A few reporters stood at the ready with cameras and notepads, and Kiara wondered what they were writing about—maybe about other Black alumni like her. This "listening session" was open to the community, so Kiara had come to see what the university was planning to do about BHU200.

A White woman with a short haircut stepped to the podium first. She introduced herself as the Dean of Students, and she assured those present that the university administration had been carefully listening to what students and community members had been saying. Then she went on to make a formal apology to the enslaved people and their descendants on behalf of the university. She said:

From 1837 to 1865, [Bunker Hill University] benefitted from creativity, labor and talent stolen from Black people. By participating in and profiting from slavery, by condoning it and in some cases ardently defending it, members of the [Bunker

³⁷ The subheading comes from the title of Season 6 episode 15 of *Finding Your Roots with Henry Louis Gates, Jr.*

Hill University] community helped to sustain and perpetuate this horrific institution. We acknowledge, regret and offer our deepest apology for the College's complicity in perpetuating slavery. Further, we acknowledge, regret and offer our deepest apology for the College's complicity, after slavery was outlawed, in perpetuating unjust laws and false ideas that systematically denied to generations of Black Americans freedom, equality and opportunities that are a birthright. In upholding unjust laws and false ideas, the College betrayed its obligation to honor the dignity of each person and its commitment to a quest for truth. While an apology is an important acknowledgement, we know that by itself it is insufficient. We have much work to do to understand the pain and injury the college has caused as well as to appreciate fully the strength, gifts, and power of enslaved persons and our foundational indebtedness to them (Davidson College, 2020).

A smattering of polite applause filled the silence before another person came up to field questions and comments from the audience. The first person to get in line was a Black man in a security uniform who asked what the university was doing to support Black students on campus currently, especially because they had been the ones pushing for the university to account for their participation in slavery. He said:

"It's all good to apologize for the past, but what about now? Black students experience racism every day on this campus. Black students are still admitted at lower rates. Black faculty aren't supported. Black staff aren't respected. What are you doing about the endemic racism at every level here?"³⁸ For any so-called reconciliation, administration will need to debunk the 'delusional color-blind, race-neutral, and meritocratic notion of...[your] HEI's (higher education institution's) procedures'"(Closson, 2010, p. 271).

Nodding in agreement from the audience, Kiara thought of her experiences as an undergrad at BHU and her brother's. The campus operated from a "frame of abstract liberalism" (Bonilla-Silva, 2018, p. 56), where they talked about equal opportunity and

³⁸ In CRT, the endemic nature of racism is often thought of as permanent. As Bell argued, "Racial equality is, in fact, not a realistic goal" (Bell, 1992, p. 363). Thus, instead of racial equality, he advocated for a "mechanism to make life bearable" (Bell, 1992, p. 377).

individual choice to ignore racism.³⁹ One White faculty member had told her that everyone had the same chances and the same resources at the school, so everything was fair and racism didn't matter, but she knew that wasn't true. Everything was about race to her. It had to be because racism was an everyday part of her life. Even this, her relationship to her institution as a Black alumna, was about race. This was an institution she wouldn't have been allowed to attend had she been born a few generations before, an institution that participated in the enslavement of people who looked like her. The man's statement made her want to ask the question she had been worrying over since her mom had passed: How was the university going to support the mostly Black students, like her brother, who poured their time and energy into protesting? It was because of them that BHU was even making this apology, to begin with. But she didn't want to draw more attention to her brother or be in front of the crowd, so she held her tongue.

The next person in line was a slender White woman in a professional suit that made Kiara think she was here on business. She asked, "How is the university going to address its role in participating in slavery when the state is pushing for anti-CRT bills that inhibit teaching about racism? HB 580 banned critical race theory in K-12 schools In Tennessee and 'section 51, part 6...makes lesson plans illegal if students feel discomfort, guilt, or anguish' (Greene, 2022). In fact, 38 states have passed anti-CRT legislation or are attempting to pass legislation to limit the way K-12 schools and higher education

³⁹ Scholars have argued that colorblind ideologies in education produce "strategies of erasure" that are simultaneous practices of whiteness" (de los Ríos et al., 2015). Within institutions, the refusal to acknowledge racism is often the refusal to acknowledge people of color's experiences and a re-entrenchment within White racial frames (Feagin, 2013).

institutions can talk about racism (Greene, 2022). What steps is the university taking to ensure that histories of racism and CRT are taught in this political climate?"

Kiara pondered the question. She hadn't been following the news closely but she did know that Tennessee and many other states were passing these laws. She had read somewhere that it was a backlash in response to the protests against racism over the last few years, especially after the murder of Mr. George Floyd in Minnesota. "Modest reform creates tremendous backlash," Kimberlé Crenshaw said in the article, "And sometimes the backlash is more enduring than the reform" (Ottsen, 2022). Kiara understood the woman's statement, and she agreed. How would the university address slavery if it tried so hard not to address race and racism in so many other ways? And, would the state even let it?

Next, an older Black woman who reminded Kiara of her mother, in a way, came to the microphone. It was probably the neatly pressed hair under a baseball cap. Kiara still had her mom's favorite Memphis Grizzlies hat. The woman's voice was bit shaky, but she seemed firm when she introduced herself. "Hi, my name is Elizabeth Mahoney, and I'm a genealogist for my family. We are descendants of the BHU200, of a man named Robert who was enslaved on this property is my great-grandfather. I would like to know how the university will compensate the descendants. The university accumulated its property and its wealth from the labor of enslaved Black people, and then excluded us from the institution until the 1960s by giving exclusive property rights to education to

White people (Harris, 1995).⁴⁰ How is the university going to pay us back? And we should be included in whatever you how you all decide. Thank you.”

Her question invoked a more vigorous round of applause from the audience, Kiara included. So far, she hadn’t heard from any descendants except for this previous speaker, Ms. Mahoney. In fact, she hadn’t given much consideration to descendants before hearing her perspective. For the next 25 minutes, people came up one by one to ask more questions and make comments. There were more people here than she expected, at least 50 more than she expected. They were a mix of students, alumni, donors, community members, and university employees. When it was announced that they only had time for one more question, a Black woman about Kiara’s age came to the mic.

“Many universities have dealt with similar questions as BHU in this regard,” she said:

“A similar case is Georgetown University, and genetic genealogy has been used there to reunite lost kin as a way to repair the past.⁴¹ Although the Georgetown Memory Project (GMP) does not have an official affiliation with Ancestry, the project “manages a collection of DNA test-results from approximately 25-50

⁴⁰ CRT education scholars have argued that all education is propertied by Whiteness because the White property rights of possession undergirded the exclusion of Black children from educational institutions. Despite formal desegregation, segregation endures through economic and educational policies. Further, the failure of predominately White institutions to actively recruit people of color also secures higher education spaces that are propertied by Whiteness in both admissions and teaching content (Aggarwal, 2016; Brady et al., 2000; Closson, 2010; Donnor, 2021).

⁴¹ The Georgetown Memory project states that, “A DNA match (i.e., evidence of shared DNA between a given individual and a verified GU272 descendant) is not by itself sufficient to prove descent from a GU272 Ancestor. (While the shared DNA may have been contributed by a common GU272 Ancestor, it may also have been contributed by a common ancestor completely unconnected to the GU272). Nevertheless, the GMP often encourages potential descendants to take a commercially available DNA test, and to compare their test results with the results of verified GU272 descendants. While not conclusive proof of GU272 descent, DNA matches (especially so-called “strong” matches) can be helpful in guiding or confirming the GMP’s archival research” (Georgetown Memory Project, 2022).

verified GU272 Descendants, on Ancestry.com. These kits are managed under the name “Georgetown Memory Project” and are labelled as such when they appear in a test-taker’s list of DNA matches” (Georgetown Memory Project, 2022). Does the university plan on using commercialized genomics in this process, given the way genetic ancestry testing ‘has its foundations in the very racial science it is used to overturn and...its claims to scientific credibility are thin?’” (Nelson, 2018, p. 18).

“Were they that thin?” Kiara wondered. It seemed that her test was accurate, at least in the fact that she had been connected to a dozen DNA relatives on the site. That had been a shock, but it was also exciting. After sending a few messages, she was waiting to hear back to see if anyone knew something about who her grandfather could be. It seemed like the test was pretty accurate if it could tell her about these distant relatives she hadn’t even known about before. But the other stuff about having ancestry from China and Great Britain and Angola? She wasn’t so sure (Figure 5.1). There wasn’t any way to know if that stuff was true, was there? She didn’t think it was 100%, but she’d ‘rather have a clue on something than not knowing nothing at all.’⁴² Even if the results were updated or changed, it was something she could hold on to.

The last person to speak was a Latinx woman who introduced herself as the Vice President of Equity, Diversity, and Inclusion. She said,

‘We are committed to moving our campus forward in alignment with justice. To our fellow Black...students: We see you. We hear you. We support you...We are committed to supporting each other meaningfully and we stand in solidarity’ (Associated Students of the University of Utah, 2020). As a community, we are still working to better support our Black students, faculty, staff, and community members. We do not yet know concrete steps, but moving forward the university has commissioned a Working Group on Slavery that will work with students, faculty, staff, community members, and members of other institutions to draft recommendations for the university. The direction we are taking at this time is to use the powerful tools of genetics with companies like Ancestry to find descendants and make reconciliation possible. Despite the political climate, it is important for us to face this history, and we now have technologies to help us do

⁴² Direct quote from participant, Cocoa.

so. ‘Change doesn’t happen quickly, but the world does change. In the spirit of our core values, “we will make mistakes but we will learn from them and keep blazing forward”’ (Wojcicki, 2020, para. 2) with Bunker Hill pride. Thank you all for your presence. We will keep your comments in mind and attempt to answer your questions more fully in the weeks to come.”⁴³

Kiara left the gathering wondering how the university would even be able to tell who the descendants were. So far, she’d been unable to track down her grandfather, and it seemed like she may never know. Perhaps the university would be doing other things, like tracking down birth records, in addition to the testing, because the testing seemed like it wasn’t enough. The empty rhetoric of the spokesperson left her feeling uneasy. How would the university handle this? How would her brother?

Relatives we never had⁴⁴

Later that evening, Kiara returned home and followed the BHU200 hashtag as protests erupted again after the listening session. On her way out, she saw paper signs that read, “The University Must Pay!” and “Black Lives Matter Now!” People did not seem happy about the university’s response, and she wondered if Morgan was among them. Some people were advocating for the university to pay reparations, while others were saying it would disadvantage White students for the university to do so. Morgan

⁴³ I place a statement from the University of Utah, my current institution, and 23andMe together to show how similar language between institutions is when making promises to Black people and responding to anti-Black racism. This statement is from 23andMe’s CEO, Anne Wojcicki, in response to the Black Lives Matter movement. For example, a study of statements issued by medical institutions after the murder of George Floyd showed that statements often do not include wording of tangible support, failed to address anti-Black racism in meaningful ways, and use a tone of hopefulness (Kiang & Tsai, 2020).

⁴⁴ Subtitle from the title of season 4 episode 8 of *Finding Your Roots with Henry Louis Gates, Jr.*

hadn't responded to any of her texts. She was worried because police presence at the protests was increasing, according to Twitter. At 11:00 p.m., just as she was turning on a show to distract herself from worrying, Morgan came in. He was sweaty and out of breath as if he had run home from the campus. It wasn't that far away, but he also had a car, so it didn't make sense.

"Someone got arrested," he said as a greeting, jogging to the kitchen to get a bottle of water. He threw his backpack on the ground by the door.

"What?" Kiara said, shooting to her feet, her heart suddenly pounding. "What were you doing out there?"

"Police were everywhere and it got ugly," he said, which didn't explain anything.

"You could have been arrested! You think the police are going to care that you're the BSU president when they're looking at a tall Black man threatening them at night?"

"I wasn't threatening—"

"I know that! They don't."⁴⁵

"Look, I'm Black, I'm an easy target.⁴⁶ I get it, but I played it safe. I'm home," he said, taking a moment to catch his breath. "And don't act like you're so concerned about the police now when you went and did that test and practically gave me to them."

⁴⁵ While some CRT scholarship has focused on implicit bias as a source of anti-Black police violence, other scholarship has focused on structural level analysis. A recent article posited that structural racism via residential segregation was the primary reason for the racial disparities in fatal police shootings. The racism of the past, which concentrated Black people into specific neighborhoods, thus produces racism in the present (Siegel, 2020).

⁴⁶ Black students often face layers of surveillance at predominately White institutions. Using CRT, Jenkins, Tichavakunda, and Coles (2021) posited that "for Black college students, the student identification (ID) evokes a legacy of surveillance that can be traced to the freedom papers that freed slaves were required to carry while traversing white spaces as a means to affirm rights to freely belong" (p. 149).

“Really? This again?”

“Hey, it’s just another way for the police to track me. ‘Black people have to worry about this, you know. Black people have been set up before and can be set up again.’⁴⁷”

“I doubt the police need hack 23andMe to find you when you’re making it so easy by running around campus at night in all black,” she said, gesturing at his clothes. “If you keep doing this that test won’t be the reason you’re in jail!” She hadn’t realized she was close to crying until she saw him relax, give her an easy smile, and pull her into a hug. She grimaced at how sweaty he was but hugged back anyway. She felt his heart pound through his back.

“Don’t be worried,” he said, pulling away. “I’ll probably stop. I’m tired of going out there all day and night, and I never thought I’d have to be out here doing all of this.” He sat with her on the couch, while they both took a moment to calm down. “Oh, I almost forgot to tell you, they were talking today about using 23andMe, you know to track down descendants.”

“Yeah, someone mentioned it at that listening session too. It made me think how people don’t really have a choice in being found, just like we don’t have a choice in being tracked all the time. ‘Every time you get a blood test, every time you go to the hospital, they have your DNA, they have it, they can do what they want. If you don’t know, look up the story about Henrietta Lacks. They have your DNA every single time you go to the hospital or the doctor. So, this DNA test is just another thing. We’re giving away our

⁴⁷ Direct quote from participant, Motsesanagape.

DNA on a daily basis.’⁴⁸ ‘Every drop of blood, every x-ray you take, it goes somewhere that we are not sure where it goes.’⁴⁹”

“It’s just inescapable, I guess. ‘If the government wants it or anyone else wants it, I’m sure they already have it...I don’t have this false sense of security. I just think it’s the kind of world that we live in,’⁵⁰” Morgan said.

Kiara grabbed a blanket from behind her and bundled up. She wasn’t cold, but the thought made her shiver. Anyone could find them at any time. Morgan’s concern was making her realize that they could be tracked, followed, and found by the government or police. But still, wasn’t it worth it for her mom? Wasn’t it worth it for the possibility of finding out who her grandfather was?

“For the record, ‘I don’t trust any of the spokespeople. I think the message is only alive, as long as they’re hired and paid to say it [and] they can do anything they want to do with our DNA once they get it,’”⁵¹ she said. “‘I know for 23andMe, I did select for them to dispose of it, but I mean, who’s there to know if they dispose of it or not? I think...I’m risking something by doing this but I feel that the knowledge that I’m going to get is worth it.’”⁵²

“It *is* probably worth it. I mean finding out we’re from Nigeria was pretty cool. And we’re still waiting to hear back from those people to see if anyone has information,” Morgan said. “Look, I know I was giving you a hard time, but security-wise, we probably don’t have anything to worry about. At least not now.”

⁴⁸ Direct quote from participant, SameOldSong.

⁴⁹ Direct quote from participant, Arrow.

⁵⁰ Direct quote from participant, Valencia.

⁵¹ Direct quote from participant, JunePlum.

⁵² Direct quote from participant, Tiana.

“Now?” She asked. She got an alert on her phone and opened it while he talked.

“I definitely think in the future that could change, because...the ability to make genetically specific bio-weapons and stuff like that is coming. So, if your information is out there, then they can use that to do whatever in the future. But right now, the technology isn't there yet.”⁵³ “It’s just building blocks to what's going to change. If there’s something that will target Black people, period, it may not be my generation or my kids or their kids, but...it could be after that.”⁵⁴

“Well let’s hope this doesn’t end in bioweapons,” Kiara said, holding up her phone to him, “Especially because I think it worked.”

“What?”

She checked the phone again as if to reassure herself. “I just got a message from a DNA relative named Deborah, and she had some information. You remember how it said we’re probably cousins? Well, it looks like her mom and our mom were possibly half-sisters. I think they had the same dad. I think we found him.”

Unfamiliar kin⁵⁵

Weeks later Kiara and her brother sat in the university courtyard in neat row of chairs among a well-dressed crowd. Unlike the last time Kiara was here, there were more people in attendance and, to her surprise, more press. Also, Morgan was here, and there weren’t any students dressed in black carrying signs. Following his near arrest, protests

⁵³ Direct quote from participant, PhillyGuy.

⁵⁴ Direct quote from participant, Hope2000.

⁵⁵ Subtitle taken from the title of Season 4 episode 2 of *Finding Your Roots with Henry Louis Gates, Jr.*

had tapered off when the university made stronger statements against its participation in slavery and implemented more concrete steps toward what everyone was calling “reconciliation.” The Working Group on Slavery at Bunker Hill University was presenting some of its preliminary findings at the First Meeting on Reconciliation, the gathering today. Kiara recognized a few people from the first meeting—the Latinx woman who worked in the DEI office and the White dean who’d made the opening statement. Morgan pointed out a few other people he knew—the director of the Black Cultural Center, a professor in one of his classes. Notably, they did not recognize many of the other faces around them, especially the Black people who wore yellow lanyards stating “proud descendant of BHU200.”

Kiara felt the tag around her neck that matched theirs and her brother’s: *Proud descendant of BHU200*. Never had she imagined that they would be here, especially not from a 23andMe test. A month ago, the siblings hadn’t even known who their grandfather was, let alone that his great-great-grandfather had been enslaved at the university. Now, she knew their names. Her grandfather was Percy Reid, and his great-great-grandfather, Amos Joseph, had been born into slavery and sold to the president of the university at the time. Amos Joseph had Moses Joseph who had Moses Joseph, Jr. who had Cassandra (Joseph) Smith who had Percy Smith who had their mother, Rebecca Reid. It was a new genealogy for her, with branches of a family tree she had only previously imagined. It was thrilling and terrifying to step into history in this way. And she wondered if other descendants in attendance had found themselves in the middle of this controversy unexpectedly. She couldn’t believe how her life had been shaped so much by the institution of slavery without her knowing it. She had walked the same property as Amos

Joseph without ever knowing his name. She was now in the company of many families: the Josephs (the line she descended from) and the Johnsons, the Mahoneys, the Queens, the Sanders, the Roberts, and more. All of these families were scattered about, but many of the family members remained close by, like she and her brother, as if they had been tied to the area by an invisible force. Some were dispersed around Tennessee in Nashville, Johnson City, Oakridge, and Memphis, while others had moved farther away. Now she knew there were descendants from Detroit, Michigan, Chicago, Illinois, and Indianapolis, Indiana, and as far away as Los Angeles, California. Many had left during the Great Migration, running away from the Southern roots that had inflicted racial terror upon their families for centuries (Wilkerson, 2011). During the Great Migration, millions of Black people moved from the South to the North, East, and West.

When she had set out to find her grandfather to fulfill her mom's wishes, she couldn't have imagined any of this would happen. The 23andMe ads she had seen only showed happy people, gleefully declaring that they were from Germany or Thailand or South Africa. None of it had prepared her for the way 23andMe would unlock an entire heritage or lock her into the controversy of her hometown and, it seemed, the nation at large. People around the country seemed to be asking: What do we do about slavery? And here she was with her brother in the middle of that doing, or reconciling, as they were calling it. 23andMe had brought her here but had not prepared her for any of it—the confusion, the anger, the sadness, the excitement. The company had promised her discovery, and she had believed that their science would fulfill her sense of identity. Yet, the company didn't seem concerned that this was the result, and it had nothing to say to her about finding out about the BHU200 or her connection to slavery.

She was still mourning her mother, still afraid that her data would be leaked or be used to catch a Black person who wasn't at fault, and yet also grateful that she now had something to place her within broader history, something that connected her to her hometown in even more concrete ways. Finding her grandfather and this new family had come at a cost. She had only paid \$99 for the 23andMe kit. Yet, she had also paid by facing the truth of the anti-Black country and the racist institutions it had produced. Kiara was left wondering if it was worth the price. 23andMe had nothing to say to her. All of the ads she had seen showed people who were ecstatic to receive their results. Nothing about this experience had made her feel ecstatic. She had been anxious about the data surveillance, sad for her mother's memory, curious about her grandfather, worried for her brother, and shocked by her connection to the BHU200. Where was the company in all of this? It had left her and her brother to pick up all the pieces.

Long after the ceremony ended and Kiara and Morgan mingled with the other descendants and traded contact information, long after the university announced that it was granting legacy status to descendants which was commensurate with children of alumni, long after Kiara and Morgan met their cousins and half-aunt and a host of new family members, Kiara would remember the poem that a descendant had read that day. It made her thankful to be Black despite knowing what she and her family had been through. 'If I had to die and come back,' she thought, 'I would still want to come back as a dark-skinned Black woman,'⁵⁶ because being Black meant survival, persistence, connection, and joy.

⁵⁶ Direct quote from participant, Misty.

What does Black Mean?⁵⁷

Being and performing in above average capacities but viewed as mediocre
 Carrying names thru the centuries that many times don't belong to us or our families
 Considered guilty without a fair hearing
 Being brainwashed into not believing in ourselves as a valuable people worthy of respect
 Being looked upon as the negative standard rather than the higher standards
 Constantly checking to see if "the rules" have changed
 Putting "others" at ease about Us
 Being a people looked upon as unworthy of the best that medicine/medical care offers
 Knowing you have African blood, but having no idea from where/whom
 Teaching your kids that they deserve to "have it all" while gently reminding them they can lose it all in a flash!
 Having a violent and racially brutal past that we didn't choose for ourselves
 Reminding ourselves that we've made great contributions to this society we call America.
 Being white as white and black as coal... yet still are considered African American
 Claiming our freedom... yet constantly accepting acts that check ourselves into a restrictive box
 Seemingly being tied to slavery standards in one or more ways thru our eternal lifetimes
 Being part of a remarkable group of beings with the most loving & forgiving hearts imaginable
 Having the strength & fortitude to survive the unthinkable with an attitude of grace
 A people with a rich history that's been purposefully hidden, manipulated or destroyed
 Being a highly spiritual being, believing in the higher good
 Being widely diverse in all facets of existence... because in the end- we're simply human

Conclusion

Using the stock story versus counterstory approach (Martinez, 2017), this chapter narrativizes a critical race perspective on Black GAT use. The narrative follows two

⁵⁷ Poem by participant, Mocha2.

siblings as they navigate 23andMe amid their racialized desire for family ancestry information, tense political climate, concerns about anti-Black surveillance, and racial reconciliation projects. The counterstory highlights four key findings. First, it insists on color consciousness, contrary to the colorblind or color evasive position of the GAT industry, which ultimately relies on a “refusal to address race, and its corollary racism” (Annamma et al., 2017, p. 156) in their products and services. It argues that understanding race and racism in micro, meso, and macro contexts is vital to interpreting the effects of the GAT industry in our inherently racialized world. Kiara and Morgan’s individual experiences as Black people, their community’s struggle with its racist history, and the broader racism of the national context all converge to frame their experiences as consumers of 23andMe. Indeed, GATs are embedded within racial discourse and racial histories that influence their meanings on individual and institutional levels. CRT is an important tool for exposing how racism and genomics co-produce meanings in a postgenomic world. Second, the counterstory reiterates the everyday nature of racism in the lives of Black people and the significance of GATs to our experiences with scientific and technological innovation. Racism is endemic and influences every facet of social life (Bridges, 2019), so GATs are tools that Black people use that are shaped by our experiences of racism. GATs are not simply neutral tools but become entangled within the racist institutions (e.g., education, medicine) in which they are used. Instead of merely being inconsequential entertainment or revealing pleasantly surprising family histories, GATs for many Black people invoke emotions including fear, sadness, gratefulness, and joy. Reflecting participants’ experiences, the Reid siblings’ use of a GAT required

reckoning with ongoing enactments of White supremacist violence and present day conversations about slavery.

Third, the counterstory locates interpersonal communication as a key site of racial and GAT meaning-making. The siblings discuss their fears and beliefs about the GAT, the surveillance it allows, and the consequences it produces. Their conversations—mostly compiled through direct participant quotations—exemplifies how participants used communication between Black family members, friends, and even focus group members to mitigate the risks and challenges of GATs amid anti-Black racism. Just as GATs are relational projects that implicate genetic relatives, they are also social products that Black people use within relationships to understand concerns of genetics, privacy, and anti-Blackness. Fourth, Kiara and Morgan’s story shows the interconnected layers of surveillance—between law enforcement, medical contexts, educational institutions, and GAT companies. Their concerns about privacy and anti-Blackness manifest in different ways. Kiara feels that the government can track her anyway, so she might as well give her biodata to 23andMe and receive something for it. Morgan similarly believes that law enforcement and other institutions might misuse his data but desires to keep it safe from the GAT company. Their perspectives represent the broad spectrum of beliefs participants felt about anti-Black surveillance in commercialized genomics. Black people felt that regardless of their individual choice, the government, law enforcement, medical companies, and GAT companies could all access their (bio)data and use it against them as Black people whenever they wanted. So, taking a GAT was a calculated risk for many participants, who thought carefully about what they could receive from a GAT despite the potential for it to harm them or other Black people in the future.

Taken together, the previous analysis and this CRT composite stock story versus composite counterstory reveal the multitude of factors Black people consider when taking a GAT. For some, the goal is entertainment, genealogy, or even citizenship. No matter the reason, Black people consider the role of GAT companies within broader systems of surveillance that target Black people in their everyday lives. Whether invoking Henrietta Lacks (2020), critiquing GAT companies' promises of privacy, or questioning the future of race-specific bioweapons, Black participants used cultural memory to speculate about the potential violence of GATs. GATs are imbued with inherent mechanisms of racialized surveillance that Black people must consider when choosing to use them. Black people use interpersonal communication to weigh risks and rewards. Finally, this composite counterstory contributes to broader science and technology studies (STS) and interpersonal communication, where narrative is underutilized as a tool for research. In CRT and other anti-racist traditions, narrative is an invaluable tool for humanizing and contextualizing the realities of racism (Bell, 1989; Inoue, 2017; Solórzano & Yosso, 2002). Future scholarship at the intersections of critical race and science and technology studies should demonstrate how storytelling deepens our understanding of the geneticization and datafication of race.

Reference Groups	Percentage
Sub-Saharan African	72.2%
• West African	59.1%
○ Nigerian	27.4%
○ Ghanaian, Liberian, and Sierra Leonean	17.3%
○ Senegambian & Guinean	6.3%
○ Broadly West African	8.1%
• Congolese and Southern East African	13%
○ Angolan and Congolese	12.5%
○ Southern East African	0.2%
○ Broadly Congolese and Southern East African	0.3%
• Broadly Sub-Saharan African	0.1%
European	25.8%
• Northwestern European	25.8%
○ British and Irish	25%
○ Broadly Northwestern European	0.8%
Western Asia and North African	0.5%
• Broadly Western Asia and North African	0.5%
Trace Ancestry	1.0%
• Filipino and Austronesian	0.2%
• Broadly Central and South Asian	0.2%
• Southern Indian and Sri Lankan	0.2%
• Broadly Chinese and Southeast Asian	0.1%
• Indonesian, Thai, Khmer, & Myanma	0.1%
• Indigenous American	0.1%
• Levantine	0.1%
Unassigned	0.5%
	100%

Figure 5.1 Kiara's 23andMe Results in 2022⁵⁸

⁵⁸ These are my 23andMe results, as shown in Chapter 1.

CHAPTER 6

CONCLUSION

Listen to your DNA

I became interested in studying GATs in 2018, when Ancestry partnered with Spotify, a giant in the music-streaming industry, to produce DNA-based playlists. The corporations' campaign entreats users to "listen to your DNA." Through this service, customers can manually input their Ancestry results into a Spotify generator and produce a playlist that musically represents their GAT results. A person whose test declares them 20% German and 80% Korean might receive a playlist that includes German artists Grobschnitt or My Solid Ground and Korean artists BTS or SHINee (Ancestry, 2018). Media attention on the heels of this announcement highlighted concerns about privacy and cultural appropriation. For example, Arcand (2018) wrote, "it's hard not to wonder about the security of the immensely sensitive data collected by companies like Ancestry." Zhang (2018) argued that "cultural identity is the sum total of...experiences. DNA alone does not supersede it" (para. 6). Others called the collaboration "intrusive and gimmicky," (Montgomery, 2018), resisting their marketing by saying, "we are people, not pie charts" (Millner, 2018). Ancestry's statement to *Pitchfork* assured the public that "protecting our customers' privacy is Ancestry's highest priority. Spotify does not have access to DNA data of any Ancestry customers" (Monroe, 2018).

I was not only interested in the playlists but also in the visceral reactions to them, including my own. When I mentioned it in conversation, people recoiled. “How do they get away with that?” a friend asked me. Another colleague shook her head in disappointment, saying AncestryDNA was “slavery fanfiction for Black people.” The audience looked aghast when I presented a paper about the playlists at a conference. But *why* did it make us so uncomfortable that Ancestry would make genetically-based playlists? What did the companies’ partnership have to do with me, a person who had, at that point, not taken a GAT? Why did the idea of DNA being attached to cultural expressions feel threatening and repulsive? The DNA-based playlists are a single product that illuminates many of the valid concerns about the industry. An imperfect science is masked as objective truth. The interpretive reading of DNA is conflated with a cultural experience. That interpretation is called “genetic ethnicity,” further entangling science with race and ethnicity. AncestryDNA licenses customers to cultural expressions previously beyond their reach. The people of those cultural groups have no say over how the company invites others into their cultural productions. AncestryDNA benefits monetarily from the customers’ biogenetic data. The customers are left with digital artifacts—entwined with nation, race, and ethnicity—that they must decipher how to relate to themselves.

This entire production shows how the industry moves seamlessly between an alleged serious science and a harmless entertainment experience, allowing it to mask its ideological underpinnings in scientific racism, anti-Blackness, and White supremacy. Although nearly everyone I spoke to was uncomfortable with AncestryDNA making genetically-based playlists, the Ancestry page about the playlist only characterizes them

as an entertaining and fulfilling technoscientific innovation. The page depicts a woman lying on the ground, smiling and listening to her earphones, and a man playing a tenor saxophone in a suit. Both people are foregrounded before pie charts, maps, and percentages, as the company promises that “an eclectic playlist built from your background is only the beginning. With AncestryDNA you get a more complete story of you” (Ancestry, 2018).

An unsettling aspect of the playlists is the disconnect between what the industry presents as a pleasant discovery of “origins” and what people experience as a harmful conflation of genes with our social world. Just as the industry moves seamlessly between science and entertainment, it also vacillates between the individual and collectives. What is constructed as a fun, enjoyable experience for one customer is simultaneously constructed as good for us all. Perhaps that is why many people, myself included, felt such intense reactions to the playlists: GATs are never about one person. The genome inherently invokes all of humanity—the living and the dead.

The campaign to “listen to your DNA” led me to question how we imbue DNA with meaning. As a communication scholar, I became interested in the way the GAT industry fashions DNA as a text, a media to read and interpret. In turn, our racialized bodies are read in and through science. Using Black feminist new materialism, Towns (2018) argued that “the Black body functions as a communicative medium” (p. 354). This project has interrogated what it means for Black people’s bodies—our genes—to be interpreted through the logics and ideologies of the GAT industry. I show how the industry’s reading of Black bodies allows corporations to inscribe Whiteness onto our communicatively-constructed identities, relationships, and belongingness in the world.

In this concluding chapter, I first summarize the findings of this study by reviewing the analysis from previous chapters. Then, drawing from the project's entirety, I conceptualize racial-genomic interest convergence. This concept anchors my recommended interventions for GAT companies to shift from racist to non-racist practices. Next, I forward a theory of racial identity negotiations, which expands our understanding of race within the field of interpersonal communication. Then, I discuss the limitations of this project framed by inevitable restrictions of methodology and data. Finally, I offer directions for future interdisciplinary research within critical/cultural communication studies, interpersonal communication, and science and technology studies (STS). These directions indicate a rich interdisciplinary research program at the intersections of critical/cultural communication, critical race studies, and STS. Future research trajectories suggest that there is a rich area of inquiry in academic and industry domains to fully comprehend how the GAT industry shapes our conceptions of race, identity, and relationships alongside Blackness being subjected to scientific racism and surveillance racial capitalism.

Summary of analyses

This study's overarching purpose was to understand how the GAT industry influences Black identity and communication about Blackness. I asked three research questions:

RQ1: How do GATs impact Black and African diasporic identity?

RQ2: What is the relationship between the commodification of identity in GAT advertisements and individuals' communication about Blackness?

RQ3: How do Black people discuss anti-Blackness in relation to genetic ancestry testing?

I employed a critical race grounded theory (CRGT) approach to answer these questions, which allowed me to analyze a range of qualitative data through the tenets of CRT. To deconstruct macro industry discourse, I analyzed 15 GAT advertisements from 5 companies (Appendix E.). I selected these media because they featured Black actors and included relevant themes of identity, privacy, and the African diaspora. To analyze the micro implications of GATs, I interviewed Black GAT customers. My second set of data included 8 focus groups and 8 follow up interviews with Black GAT customers. In total, 38 participants were involved in 18.5 hours of discussion (Table 2.1). Focus groups and interviews featured questions about Black identity, anti-Blackness, beliefs about data surveillance, and concerns about GAT accuracy. Focus group participants also watched GAT advertisements together and responded to the industry's media. Throughout the layered process of coding, I primarily used the CRT tenets of Whiteness as property, the social construction of race, a critique of colorblindness and post-racialism, and interest convergence to interpret the data through a CRT lens. This intensive methodological process resulted in three analytical chapters focused on GAT advertisements, Black GAT identity negotiation, and composite counterstorytelling.

In Chapter 3, I critique the Whiteness of GAT industry advertising and its representations of Black identity negotiation. Using Whiteness as property, I expose how the industry commodifies Black identity negotiation by casting through the discursive imperative of scientific discovery. The discovery imperative is an avenue through which Whiteness claims the GAT industry and fashions biotechnology as an exclusive tool for

identity construction. I also show how Black GAT customers mirror the dominant language of scientific racism endemic to the industry. Rather than advancing anti-Blackness, Black people deploy scientific racism (e.g., race as biology, blood, genes) to construct a politics of belonging within the African diaspora. I read their politics as a subjugated knowledge that Black people use to recognize other Black people globally through conversations about the similarity of phenotype. Additionally, participants used the language of the industry to critique White ignorance and White beliefs about racial purity. Interestingly, there were instances in which a similar critique could have been articulated toward the industry, itself. I contend that via racial capitalism, GAT corporate messages promise to fulfill Black identities through self-realization, diasporic others, and scientific authority. First, advertisements promise that customers will become self-realized people through their technologies, offering them deep insight into their sense of self. Second, they promise that customers will become connected to imagined diasporas that are constructed as passive groups of people to whom one can claim ancestral belonging. Third, companies promise that their scientific processes are exhaustive, containing everything a customer needs to know about their identity and family histories. These promises work to minimize customer agency and de-politicize Black identity negotiation by granting Whiteness the authority to construct Blackness and impose claims about the African diaspora by leveraging the supposed objectivity of database ontologies, algorithmic abstraction, and the datafication of identity (Daly Weisse et al., 2021; de Mul, 2015). Participants often resisted the de-contextualization and de-politicization inherent to these messages, and they spoke back to GAT messages by recognizing the anti-Black violence that created Black and African diasporic identity.

Grounded in the understanding that Whiteness governs identity claims via GATs, Chapter 4 illuminates the contradictions inherent to Black GAT identity negotiation, arguing that Whiteness shapes Black identity negotiation by creating the problem of “broken” Black identity and proposing GATs as the solution. Many participants expressed Blackness in terms of ancestral disconnections and incomplete genealogical lineages caused by White supremacy and colonization. Because Whiteness created racial hierarchy and commodifies Black life (Harris, 1995; Omi & Winant, 2015), Blackness always exists through “exclusion from social, political, and cultural belonging; our [Black people’s] abjection from the realm of the human” (Sharpe, 2016, p. 14). Despite Whiteness’ promise to definitively “solve” Black identity through commercialized genomics, participants did not express that GATs strongly influenced their view of Blackness, which they defined in terms of ethnicity (e.g., African American, Jamaican-American) and lived experiences of racism, familial trauma, and the joy of Black communities. They more readily accepted the idea that GATs influenced their African diasporic identities.

I critique how the Western technoscience of GATs is implemented throughout the world to geneticize the African diaspora on structural (e.g., citizenship conferral in Sierra Leone) and interpersonal levels (e.g., diasporic encounters as relational contexts to negotiate kinship). I read resistance in the way Black people defer to community definitions within the diaspora to define themselves, rather than accepting, wholesale, GATs’ definitions of who they are. The interpersonal context of diasporic encounters—even imagined encounters—was a key site of meaning-making, as African diasporic people negotiate their relationships based on GATs, culture, and lived experience.

Finally, I use the example of Native American ancestry to examine how participants' mistrust of GATs mediates the influence they have on their identities. When faced with results that did not align with their genealogical aspirations (Nelson, 2016) for Native American ancestry, participants often critiqued the technologies to create interpretive space, demonstrating knowledge about databases, sample sizes, and company policies. I contend that the promises of future technological advancement and industry updates of sampling pools allow Whiteness to retain indefinite control over Black GAT identity negotiation. As updates occur over time and the industry refines its processes and products, companies preserve the power to arbitrate identity long after customers take initial tests. Participants imagined that increased accuracy and credibility in the industry could result in its ability to govern Blackness in more definitive ways in years to come.

Chapters 3 and 4 critique the overarching narrative of the GAT industry and its effects on Black GAT customers, so in Chapter 5, I turn to narrative as method. Chapter 5 centers composite counterstorytelling as a CRT tenet and method, using narrative to expose the affective and relational components of Black GAT identity negotiation in the context of White supremacist sociopolitical structures. Specifically, the chapter introduces two stock stories, or dominant messages told from a White perspective. The first stock story mirrors the template of GAT ads, showing how corporate messaging represents the GAT experience as overwhelmingly positive. The composite stock story narrates how two Black siblings, Kiara and Morgan, receive GAT results, accept them wholesale, and experience appropriate reactions of joy and gratitude, much like the industry depicts (Putman & Cole, 2020). To counter these hegemonic narratives, I present a composite counterstory comprised of the participants' voices, current events, and

relevant literature. This story follows the same two siblings but places their lived experiences within the surveillance of the GAT and law enforcement, the anti-Black racism of their hometown, the racist history of the United States, and an educational institution's efforts for genetic racial reconciliation. Weaving the voices of participants with scholarship and real-world events, this counterstory narrates the familial, institutional, and political contexts of Black GAT identity negotiation. Kiara and Morgan both express powerlessness concerning the inevitability of surveillance in their everyday lives via technology, medical institutions, law enforcement, and now a GAT company. Kiara embodies the perspective of participants who equated the risks of biogenetic data in the GAT industry with the risks of data surveillance in everyday life. Her brother, Morgan, represents participants who believed that taking a GAT was incredibly risky because of its entanglement with anti-Black racism in law enforcement. Together, they relationally navigate the uncertainty of taking a GAT and the growing racial conflict in their community. The siblings learn through a GAT that they are descendants of enslaved people who were owned at the university they attended, and they become implicated in the subsequent reconciliation project. This composite counterstory illustrates how GATs are increasingly considered anti-racist tools in the fight for racial justice. It highlights the everyday nature of racism, the omnipresence of White supremacist surveillance, the familial stakes of GATs, and the narratives of racial reconciliation attached to commercialized genomics.

Racial-genomic interest convergence

Given the analyses described above, I came to understand the complexities of the GAT industry as a force that overdetermines Blackness but that Black people find useful, despite valid critiques of surveillance and anti-Blackness. I conceptualize the relationship between Black customers and the GAT industry through the lens of racial-genomic interest convergence. This describes the tensions and contradictions at the micro and macro levels that characterize the co-dependency of Black GAT customers and the GAT industry within anti-Black and White supremacist structures of violence. Initially, forwarded in CRT by Bell (1980), interest convergence exposed how the landmark ruling of *Brown v Board of Education* was not the result of liberal progress and White people's sudden, altruistic goodwill toward Black people. Rather, the ruling served dominant, White interests that happened to align with what Black people wanted at the time. He contended:

Translated from judicial activity in racial cases both before and after *Brown*, this principle of “interest convergence” provides: The interest of blacks in achieving racial equality will be accommodated only when it converges with the interests of whites...Racial remedies may instead be the outward manifestations of unspoken and perhaps sub-conscious judicial conclusions that the *remedies, if granted, will secure, advance, or at least not harm societal interests deemed important by middle and upper class whites*. Racial justice—or its appearance—may, from time to time, be counted among the interests deemed important by the courts and by society's policymakers (Bell, 1980, p. 523, emphasis added).

In a highly contentious claim, Bell asserts that racial justice “or its appearance” occurs when it aligns with what Whiteness also desires and requires to retain power. Similarly, Dudziak (2013) argued that desegregation only occurred because the United States needed to create a better national image in foreign policy. Global reporting on anti-Black racism in the United States was tarnishing the nation's image at a time when the United

States was attempting to become a world power, promote democracy, and condemn communism. Desegregation via *Brown* ultimately boosted the U.S.'s world image. Extended beyond the institution of law, racial-genomic interest convergence tracks a similar phenomenon in the realm of biotechnology. Bell (1980) and Dudziak (2013) ask, what factors caused the interests of structurally advantaged White people and structurally disadvantaged Black people to converge around desegregation laws? Mirroring their approach, I ask, where do Black people's interests in ancestry and Whiteness' interests in the GAT industry converge? How do these interests create the illusion of racial progress in ways that ultimately still benefit, or do not harm Whiteness?

To answer these questions, I highlight several key factors on the micro level of Black GAT customers' intrapersonal and interpersonal communication. Intrapersonally, individuals' definitions of Blackness, personal histories, embodied family stories, and experiences with anti-Black racism shaped their understanding of their GAT results. A prominent tension within customers' intrapersonal communication existed between their seemingly conflicting definitions of Blackness. Many defined Blackness as a source of pride, wealth, and community. For example, August said, "to be Black in America is a beautiful thing. I'm very proud of it. I'm proud of the history, I'm proud of the resilience. I definitely want to make my ancestors proud because they worked hard so I can get where I am." Misty, too, described Black people as "magical," saying "We know how to live life, we know how to love, we know how to create. There's so many levels to us." Blackness to them was a beneficial racial identity, despite and, even because of, the strength that characteristics our struggles against global White supremacy. Yet, many simultaneously described feelings of disconnection and incompleteness associated with

their Blackness, defining it in terms of brokenness that they yearn to fix and fulfill. Shaka's "motherless child" metaphor in Chapter 4 resonates as a poignant example of this. I argue that the GAT industry capitalizes on the desires of Black people, particularly descendants of enslaved people, to find a "connection" to "roots" on the African continent and to feel a more "whole" experience of Blackness. Enticing advertisements show Black people making meaningful connections to the African continent and becoming "fulfilled" in various ways, emphasizing joy and gratitude, as described in Chapter 3. Black customers see these representations and desire to replicate them in real life. Further, interpersonal communication between members of the African diaspora showed that these desires for diasporic connection are not easily negotiated. Even when participants were affirmed by members of the diaspora, they questioned whether these affirmations were valid, or what they could enact based on their ancestry. Lee Marie and Tiana, for example, previously met African diasporic people who claimed similarities with them, but they did not know how to act on this information. After GATs "proved" the connections that African diasporic people had previously mentioned, they felt more comfortable identifying with African nations and people. Because Blackness for many people is intrapersonally constructed as a "problem" and diasporic politics are interpersonally difficult to navigate, GATs offer a tempting solution: instantaneous scientifically-based, emotionally fulfilling evidence for the construction of Black identity.

The interpersonal desires of Black customers align with the institutional desires of the GAT industry in several ways. At the macro level, White normativity functions through the institutions of science and technology in the GAT industry. As discussed in Chapter 3, Whiteness is concealed by technoscientific processes that obscure dominant

ideologies through the illusion of objectivity and discovery. I argue that this is dangerous because Whiteness is given authority via the GAT industry to arbitrate who Black people are, determine legal citizenship, and establish our relatedness. One prominent interest of the industry, then, is the over-determination of Blackness on a global scale, which removes agency from Black communities to decide who we are and what Blackness means to us. Reardon and Tallbear (2012) forward a similar argument, stating:

The view that genetic knowledge of human evolution is an objective neutral good that benefits all and not a particular kind of knowledge that fits within a particular way of living and enacting the world in effect denies indigenous people such as the Havasupai the right to control their own genomic resources and identity. While, as Cheryl Harris notes, whites are granted the right to use and enjoy their reputation as “white” people, indigenous people, such as the Havasupai, would not appear to have a similar right to control the construction of their identity as it would impinge on the right—even obligation—of scientists to do research (p. 240).

Reardon and Tallbear’s claims follow a specific Indigenous nation’s battle with biocolonialism; however, their assertions are relevant to the context of Black GAT use. That is, scientific institutions seek to control and profit from the genomic resources of marginalized communities. One reason GAT companies are profoundly interested in Black customers is that our biogenetic data is necessary to construct their databases and further the lucrative industry of pharmacogenomics. We become objectified and propertied by Whiteness within this context, as our DNA is essential to advance the profits of the industry. In personalized medicine, Lee (2012) writes, “race is not only useful in assessing risk or identifying genetic variants that are associated with drug response, but it is also an important demarcation for stratifying potential markets and identifying potential customers” (p. 171). Race, as a proxy for meaningful difference, is increasingly used to identify markets for precision medicine, a multi-billion-dollar global

industry. A most stark example is the marketing of BiDil as a race-based heart medicine for African Americans. Kahn (2014) shows how stakeholders, including the government and the National Association for the Advancement of Colored People (NAACP) were all invested in the claim of race-based medicine. For pharmacogenomics to continue producing, marketing, and selling targeted drugs, increased biogenetic data from Black people are necessary to draw comparisons between and among populations. 23andMe's recent turn to drug development illustrates how GAT companies are at the forefront of these lucrative enterprises (Brown, 2021; GlaxoSmithKline, 2018) that rely on Black people's DNA.

Moreover, Whiteness benefits from the confluence of surveillance cultures in the GAT industry, where medical fields, law enforcement, and technology combine to surveil Blackness. Williams (2020) asserted that "There is a long history of measuring Black bodies, turning those measurements into data, and then building systems of values, beliefs, and predictions off of that data" (p. 76). This process of datafying Black identity through GATs constructs predictive systems of surveillance. Anti-Blackness, in turn, ungirds surveillance technologies that advance technoscientific racism (Benjamin, 2019; Browne, 2015). The ultimate, profitable benefit for Whiteness is the containment of Blackness within ever-growing biogenetic databases.

Racial-genomic interest convergence illuminates how these interests overlap in our contemporary moment. Black people have historically and contemporarily desire(d) to be connected to Africa and the African diaspora. Whiteness desires to biologize race, surveil Blackness, generate profit for predominately White-owned GAT companies, and maintain indefinite control over Black identity construction with technologies that

constantly update and proliferate White, Western conceptions of relationality. However, key tensions remain within this convergence created by the GAT industry. First, Black ancestry is still necessarily unfinished, as the GAT industry does not deliver on the closure of identity it promises. My analysis shows that GATs do not solve the problem of disrupted ancestral genealogy for Black people wishing to fix it. Instead, they compound existing frustrations about Blackness, create new questions, and generate more ethnoracial boundaries to negotiate. On average, participants in this study took GATs 2 years before participating, meaning that they have had a significant amount of time for the industry's promised "solutions" to take effect. Conversely, our conversations showed that Black GAT identity negotiation is continuous. Years later, many participants were still wondering: What does this mean for me and my family? What can I claim? How does this "fix" my Blackness or "give" me ancestral roots?

Second, GAT companies are increasingly interested in, at least symbolically, the presumed anti-racist effects of their products and the racial equity of their companies, as we see with 23andMe's recent commitments to diversity, equity, and inclusion (DEI) (23andMe, 2021a, 2022f). At face value, the interests of GAT companies to promote equity and involve people of color and Indigenous people in research endeavors (23andMe, 2022g, 2022b) might signal progress, but CRT makes apparent that such programs are profitable in a world in which DEI language is normative in most industries, without expectations of material or ideological change. GAT customers of color should be aware of the ways that GAT companies might "include" in initiatives that are more beneficial for the company's goals than the goals of communities of color. Finally, AfricanAncestry as a unique company remains difficult to place within the GAT

industry landscape. As the only Black-owned company focused on the African diaspora that can be used to confer citizenship in an African country, it noticeably challenges some assumptions about the Whiteness of the industry—particularly CRT’s critiques of ownership and data sharing. Yet, CRT allows us to see how companies that have supposedly non-racist goals and are led by people of color can still contribute to White structures of power. Given these tensions, it remains worth questioning: How do Black people benefit from GATs if we remain “incomplete” after taking tests? How do DEI initiatives within the GAT industry for people of color and Indigenous people? Can GAT companies achieve racial equity if they simultaneously commodify race? How does African Ancestry fit within the puzzle of the GAT industry? Are its goals and uses more anti-racist than other companies?⁵⁹

Racial identity negotiations theory

Elsewhere, I have argued that critical interpersonal and family communication provides a context and a lens for understanding the social construction of race (Peters, 2021). Building on this work, I forward racial identity negotiations theory, which emerged from this project’s efforts to theorize the interpersonal process of Black identity negotiation via CRT. Racial identity negotiations theory urges interpersonal communication to contextualize racial identity within structures of material and symbolic ethnoracial power. It asks us to consider how racial identity is not solely a matter of

⁵⁹ A similar question could be asked of Somos, a “Latino/Hispanic/Native American” genetic (ancestry) testing company aimed at “precision medicine for Latinos...[including] new reports for health, wellness, disease risk scores, pharmacogenetics and so on” (Somos, 2022).

micro level communication, performances, and negotiations but is always created in constant tension with the macro context of White supremacy, an ideology that permeates global institutions. This theory retains a focus on interpersonal identity negotiations without overlooking the social and political forces that shape how we occupy, traverse, and subvert racial subject positions. Significantly, it is a critical interpersonal theory that pre-supposes racial power and critiques how the racial status quo constrains and enables the social construction of race.

In this project, I utilized CRT alongside the concept of identity negotiation because interpersonal communication does not yet have a theory that fully accounts for the role of macro structures of racial power in the micro phenomenon of identity formation.

Throughout this work, CRT exposed how White supremacy and anti-Blackness shape how Black people negotiate their Blackness and African diasporic identities in the context of biotechnology. Therefore, CRT is a useful tool for understanding how racism influences individual racial identity. Minniear and Cardwell (2021) discussed the interpersonal dimensions of CRT in the way people interpersonally reproduce dominant racist ideologies, such as colorblindness. They also note how CRT furthers the interpersonal study of interracial families and racial endogamy in relationships. Similarly, racial identity negotiations theory argues that we cannot fully understand individuals' racial identities without theorizing race, racism, and power at larger scales.

The concept of identity negotiation has played a large role in interpersonal communication scholarship. Identity negotiation theory (INT) highlights how sociocultural conditions comprise people's composite identities (Ting-Toomey, 2015; Ting-Toomey et al, 2000). This theory centers intercultural and interpersonal

communication in significant ways, but does not explicitly name how White racial power shapes the communicative construction of racial identity. Similarly, muted groups theory has been used to theorize the communication of marginalized people (Kramarae, 1981; Orbe 1994; Ballard-Reisch, 2010), noting that systems of oppression contour *what* people can say and *how much* they can say. Drawing from muted groups theory, co-cultural theory more explicitly conceptualizes power. It explains how underrepresented members of a culture interact with dominant group members (Orbe, 1998a; Orbe, 1998b; Orbe & Roberts, 2012). This theory maintains that marginalized people (e.g., those marginalized by sexuality, gender, race, age, nationality, socioeconomic status, and more) adopt certain communicative strategies for better communication outcomes (Zirulnik & Orbe, 2019; Jun et al, 2021). Both muted groups theory and co-cultural theory focus on interactions between dominant and subordinate group members, which does not allow them to examine how subordinate and dominant group members negotiate identities among themselves. Finally, cultural contracts theory also conceptualizes identity negotiation by explicating how people first negotiate identity with themselves and then with cultural others, where conflict about cultural worldviews and distinctions of culture affect how relationships and communication develop (Jackson 2002; Hecht, Jackson & Ribeau, 2003). Like INT, muted groups, and co-cultural theory, cultural contracts theory does not offer an analytic for understanding how racial power actively shapes individuals' identity negotiation processes. These theories provide a valuable grounding for my articulation of racial identity negotiations theory, which recognizes that scholars must name and analyze structures of racial power to fully examine racially disenfranchised people's experiences of identity and communication.

Racial identity negotiations theory is a critical interpersonal communication theory of racial identity and power. It maintains that racial identity is always produced through negotiations with ourselves (intrapersonal) and negotiations with others (interpersonal) that are shaped by the racial structure of White supremacy and its related ideologies (e.g., anti-Blackness, anti-Indigeneity, antisemitism, anti-Latinx/a/o, and anti-Asian ideologies.) This theory asks how interpersonally-constructed race sustains, subverts, and negotiates the racial status quo and how the racial status quo enables and constrains racial groups and racial identity. In this view, racial identity is not stable and cannot be fully “complete” through effective communication by fully realized social beings. Because there is no ontological truth to race, we can never reach a stable racial identity. Rather, we always negotiate our racial subjectivities through and within racial power. If race is constantly being created, sustained, subverted, and destroyed at a macro level, then racial identity is constantly being created, sustained, subverted, and destroyed at a micro level. Consequently, racial identity negotiations theory illuminates how multiple, simultaneous negotiations constitute our sense of our racial selves, including negotiations with ourselves, negotiations within our ethnoracial groups, negotiations outside of our ethnoracial groups, and negotiations with our racial structures as they play out in various institutions (e.g., biotechnology, family, education, law).

Because it emerged from CRT and the core premises of CRT are to deconstruct White supremacy and engage in social justice (Bell, 1995b; Delgado & Stefancic, 2017), racial identity negotiations theory can also be used to critique racial power, uplift the voices of racially marginalized people, and evidence the complex nature of racialization and racism, while centering a communication perspective. Racial identity negotiations theory

allows us to ask provocative questions, such as: How does White supremacy influence the way people interpersonally negotiate racial identity? How does anti-Blackness shape Black people's diasporic relationships globally? How do the tools and logics of White supremacy, such as hypodescent, constrain and enable multiracial identity negotiation? And what does the interpersonal context of racial identity reveal about the current racial structures in a given time and space?

Industry interventions

One in 5 U.S. Americans has given DNA to DTC genetic companies (Brown, 2021), and 60% of White Americans can be identified by close relatives in genomic databases with the help of demographic identifiers (Erlich et al., 2018). As the 26 million DTC genetic testing customer base (Regalado, 2019) becomes 50 million, 100 million, and more, GAT companies should consider how their products and services can be used for anti-racism rather than reproducing inequity by adhering to racist and/or non-racist norms. This project has argued that GAT companies are fundamentally entrenched within Whiteness via the anti-Blackness of scientific racism and data surveillance. Yet, there are ways that GAT companies can shift from racist and non-racist to more anti-racist praxes. While racist approaches to the industry are firmly entrenched within racial inequality, non-racist practices recognize that racism is a problem but still adhere to functions of Whiteness such as colorblindness and post-racialism that do not dismantle racial oppression. Anti-racist practices intentionally and continually resist racism at micro, meso, and macro scales.

First, companies should expand the narratives about GATs in their marketing and communication to create representations that resonate more with the broad spectrum of experiences people of color and Indigenous people have with their products. Participants in this study roundly critiqued GAT ads for how they omit key tensions about race, racism, and history. Although companies make money via advertisements by showing GATs as appealing products, they should also consider the ethics of misrepresentation. As discussed in Chapter 3, federal regulations for advertising DTC health tests exist but do not cover ancestry tests (Green & Farahany, 2014; U.S. Food and Drug Administration, 2017). This means that companies can advertise their products in ways that do not necessarily represent how they emotionally, psychologically, and relationally affect consumers. I suggest that a broader range of advertising and communication will help companies and customers by signaling to GAT customers that there is a range of possible experiences. Corporations should take initiative to generate resources about navigating surveillance concerns, family conflict, historical implications of ancestry, and emotional and mental health via GATs. Pappas (2018) notes that there is a paucity of resources for people who come across family secrets due to GATs. Even fewer resources exist for people to make sense of the racial trauma engendered by these products. GAT companies should be at the forefront of providing resources that support people of color and Indigenous people through the adverse emotional and psychological effects their products can have, such as contributing to racial trauma. These resources would help marginalized people be able to use their products in more fulfilling and less traumatizing ways. Such resources would also benefit White customers who navigate different but still significant experiences via GATs.

Secondly, I echo the sentiments of many Indigenous communities, activists, and scholars who have advocated for genetic and genomic initiatives to partner with marginalized communities to co-determine ethical practices. For example, the Native BioData Consortium is led by Indigenous scientists and tribal members who advance Indigenous genetics and health research while keeping biological data within local communities (Native BioData Consortium, 2022). Many people advocate for Indigenous peoples to retain data sovereignty by governing their biogenetic resources (Tsosie et al., 2020). Kukutai and Taylor (2016) argue that data initiatives working with Indigenous communities face several challenges including:

devising of new methods for the international measurement of indigenous development and wellbeing; meeting the challenge of embracing indigenous epistemologies; the analysis of legal and practical limits to data sovereignty, including the impact of free-trade agreements such as the Trans-Pacific Partnership (TPP) Agreement; the construction of models for developing data governance and capacity; exploring the implications of individual versus collective rights for data linkage, sharing and use; and consideration of the threats and opportunities presented by census transformation programs and the advent of ‘big data’ and open data (p. 16).

Building upon their recommendations, I contend that GAT companies should work with the African diasporic communities—including those who are Indigenous—to determine what is ethically best for our DNA. Corporations should collaborate with Black people to embrace African diasporic relationalities in GAT technologies (e.g., digital family trees), and ensure the privacy of Black people’s data from law enforcement, given the anti-Blackness of policing. This study showed how trust/mistrust dynamics significantly shaped how people accepted and leveraged their test results. Companies should partner with Black communities to examine why and to what extent Black communities trust or mistrust their services, so that trust can be built if possible. It is incumbent upon GAT

companies to create meaningful initiatives with Black people globally, not just about us. The industry norm should not be endlessly extracting more DNA from Black people. Rather, it should synergistically establish anti-racist practices specific to our genomic landscape and individual and collective rights.

Further, companies should actively condemn the White supremacy and scientific racism their products reinforce. Recent statements from GAT company CEOs have called for racial equality but fail to address how their products can produce racism. Following the murder of George Floyd in May 2020, Wojicki's (2020) statement for 23andMe describes the company as an "activist brand," (para. 3) and promises the solutions of "looking at our culture, evaluating our partnerships and taking a deeper look at our product" (para. 3). Margo Georgiadis (2020), CEO of Ancestry, made a similar company statement that explained how Ancestry products "seek to democratize access to everyone's family story and to bring people together" (para. 4). Both condemn racism—or at least the racism of law enforcement in a specific encounter—but neither account for how GATs play an active role in (re)biologizing race and keeping scientific racism in discursive circulation. CRT illuminates how their products contribute to the structural racism and implicit biases that result in police brutality, to begin with. GAT companies should take responsibility for how their products naturalize scientific notions of race that can be used to further explicit and implicit White supremacist projects. Corporate DEI efforts cannot stop at hiring practices, employee diversity trainings, and representation in marketing and communication. Instead, they should actively account for how their products re-entrench inequity throughout the world by listening to those most marginalized by the GAT industry.

As a final recommendation, it remains worth questioning how GATs can facilitate global racial reconciliation projects. As GATs grow in accuracy, there will be increasing demand for their use in transnational projects for racial justice, akin to their use in Georgetown University's reparations efforts in Chapter 5's composite counterstory. A promising example is the Tulsa DNA Project—a collaborative effort between the City of Tulsa and the Intermountain Forensics in Salt Lake City—to identify victims of the 1921 Tulsa Race Massacre (Intermountain Forensics, 2022). Three hundred Black people were murdered, 1200 homes were burned, and businesses were destroyed on what was known as "Black Wall Street" in Oklahoma. This initiative will use DNA samples to identify bodies (Intermountain Forensics, 2022; M. Taylor, 2022). Mayor G.T. Bynum of Tulsa said this project is "committed to exploring what happened in 1921 through a collective and transparent process—filling gaps in our city's history, and providing healing and justice to our community" (City of Tulsa, 2022). Descendants of the Tulsa Race Massacre victims and African American leaders in the community are working in tandem with historians, scholars, and city leaders to plan, execute, and oversee the project (City of Tulsa, 2022). Although the GAT industry partakes in surveillance and racial capitalism, GAT companies can make strides toward reparations. Companies should partner with communities to learn how their databases, technologies, and resources can combat anti-Black racism, colonization, and White supremacy. JunePlum spoke about the difficulty of finding information about her enslaved ancestors, and she commented on Ancestry's role in gatekeeping that information. For her, being required to pay for these resources is troubling. She said,

I have sent so many complaints to Ancestry because I believe part of reparations should be getting free information. Not only were our ancestors sold over here,

we have to pay to get information, and we don't have a name. I feel I am just very frustrated with Ancestry in particular because they have all of these records. They just allowed us to see some of the manumissions and the slave records, but we have to pay for something after [and] we still don't know what our names are.

JunePlum raises a direct question: Why don't GAT companies actively participate in reparations for descendants of enslaved people by offering their services for free?

Companies like Ancestry hold many records that descendants do not have access to.

Creating open data sources is one tangible step GAT companies can take to help descendants of enslaved people connect with their ancestors, particularly when the price creates a barrier. Centuries of White supremacist exploitation and Black disenfranchisement have deeply embedded a Black-White wealth gap in the United States (Baradaran, 2019; Shapiro et al., 2013). Companies should consider how discounted and free services could materially support Black people. Benjamin (2016a) tells us that an "*abolitionist consciousness* is a way of conceptualizing efforts to exercise freedom and agency with and against sciences and technologies" (emphasis in original, p. 151). With an abolitionist consciousness, it is possible that GAT technologies can be used for pursuits of freedom in years to come, particularly by using their products in reparation efforts. For companies to move toward anti-racism, they should conceptualize GATs not as neutral tools but as technologies imbued with Whiteness that can be intentionally leveraged for anti-racist ends.

Limitations and future research

The first limitation of this study is the participant sample, which does not reflect the global Black diaspora and is skewed toward African Americans who were previously interested in genetic genealogy. Any study about race is challenging because race and

racialization are transnational processes with global meanings and local specificity. Throughout this project, I moved between local and global meanings of Blackness by theorizing the Black diaspora through a small sample of Black GAT customers. Although the national context of the participants and GAT companies is significant, this study is limited because it relies on U.S.-based and African American participants. However, the participants identifying mostly as Black American and African American naturally illuminates how the GAT industry functions to reproduce race within the U.S. context. As a predominately U.S.-based project, the GAT industry is fundamentally American and arises from the particularities of multiculturalism, race-making, and identity politics in the country. The sampling bias also extends to the participants who were already previously interested in GATs. By inviting only participants who have taken a GAT, I cannot fully account for Black people's communication about GATs, because it necessarily excludes people who also have valuable insight, including children, those who have chosen not to take GATs, and those without access to the technology needed to participate in the study. Further, several participants are heavily involved in genealogical research in their families and communities, meaning that their perspectives are likely different from the general population.

A related limitation of the study is the selection of advertisement samples. Because this was a critical/cultural project, I chose ads that featured Black actors and discussed topics such as identity and privacy. Therefore, the ads are not representative of every GAT company. First, I only chose ads from 5 companies (23andMe, AncestryDNA, AfricanAncestry, MyHeritage, and FamilyTreeDNA), although more companies exist. Secondly, ads exist in many forms, including static text on web pages

and embedded videos. The ads in this study came from company YouTube pages and/or appeared on TV.

Finally, as a critical/cultural communication scholar, I am not trained in (critical) science and technology studies (STS), bioethics, or (critical) data studies. Throughout my analysis, I have drawn heavily from scholars of color and Indigenous scholars who have made arguments about race and Indigeneity in the context of STS (e.g., Nelson, Tallbear, and Benjamin). Relying on their arguments, I have extended them to Black communication studies and interpersonal communication. My process represents the interdisciplinarity that is a necessity for studying commercialized genomics. Altogether, this project's limitations indicate areas for improvement and the generative nature of this topic.

Several trajectories for future research arose during this study. First, within interpersonal communication and Black communication studies, the study of the Black diaspora should be taken seriously. Interpersonal communication has largely employed a comparative model between Black people's communication and White people's communication. This has limited the study of Black interpersonal communication by theorizing us only as divergent from a White norm (Houston, 2002a). Further, it has condensed Black communication into a monolith by not recognizing the heterogeneity of Black identity and communication. If Black people are not understood as dynamic, expansive, and diverse, then we cannot fully understand the nature of Black communication studies. This study reveals how the Black diaspora is a contested interpersonal and global experience, wherein meanings of Blackness, kinship relations, and boundaries between ethnic groups are always in flux. I argue that interpersonal

communication is diasporic, and interpersonal scholars should further investigate how ethnoracial identities and communication are not neatly bound by geographic borders. As transnational flows of labor and (im)migration continue to shape our world, more communication scholars should study how Black communication is formed through local and global tensions. Interracial communication scholars who examine how people communicate across racial difference (Orbe & Harris, 2015; Harris, 2018; Brummet & Afifi, 2019) provide a solid foundation for interrogating how people communicate across diasporic difference, which will enrich our understanding of interpersonal communication, as a whole.

Another option to expand interpersonal communication and critical/cultural communication is theoretically. My project drew from CRT, but it is equally important to employ other critical theories of race to conceptualize the Black diaspora. Specifically, Black studies as theory and method is a useful tool for theorizing Blackness within the discipline. Dumas and ross (2016) argued that,

CRT is not intended to pointedly address how antiblackness—which is something different than White supremacy—informs and facilitates racist ideology and institutional practice. More, it cannot fully employ the counterstories of Black experiences of structural and cultural racisms, because it does not, on its own, have language to richly capture how antiblackness constructs Black subjects, and positions them in and against law, policy, and everyday (civic) life (p. 417).

In this project, I have employed some ideas from Black studies scholars (e.g., Dionne Brand, Saidiya Hartman, and Christina Sharpe). However, because this project focused on CRT, Black studies is not the central theoretical lens. In future projects, I plan to expand my theoretical grounding to better account for Black studies' ability to explicate "how antiblackness constructs Black subjects, and positions them in and against law, policy, and everyday (civic) life (Dumas & ross, 2016, p. 417). Towns (2022) offers a

promising example of how Black studies and cultural studies can enrich our studies of Blackness, media, and communication. If communication scholars wish to meaningfully engage with issues of Blackness and anti-Blackness, then we must use the theoretical groundings of Black studies and/or create theoretical frames that allow us to analyze Blackness with specificity, criticality, and rigor.

Another promising area of expansion is including storytelling within STS research. Chapter 5 illustrates how storytelling is a valuable tool for analyzing the interpersonal and relational impact of biotechnologies. Storytelling can help us understand the narratives of science and technologies within communities and the way everyday people make sense of them within their lives. The stories of sciences and technologies unravel across multiple spheres in micro and macro contexts. Narrative inquiry can elucidate how sciences and technologies are fragmented discourses that span medical contexts, commercialized genomics, family oral histories, and institutional efforts. Communication scholars are poised to answer critical questions about genomics discourse because we can map rhetorical patterns and critique the ideologies that undergird genomic endeavors. Although I approach this problem as a critical/cultural and interpersonal communication scholar, science communication, risk communication, and health communication all have promising foci that can expand STS. Brock's scholarship (2009; 2018; 2020) demonstrates how critical race perspectives can meaningfully expand studies of information and communication technology (ICT). Focusing on Black Americans' use and transformation of the Internet as a racialized space, Brock shows how Black people (re)invent, utilize, and subvert communicative technologies and how

the Internet is raced. Building from Brock's work, I seek to examine Black people's (re)invent, utilize, and subvert biotechnology.

Finally, this study has brought to light many remaining questions about the intersections of race and gender in the GAT industry. The majority of participants were women, and Chapter 3 shows how they rightfully critiqued representations of GAT ads that minimized the violence against Black women. Further inquiry into the gendered components of GAT companies and audiences could yield useful insights. There are several inherent gendered assumptions about the industry (e.g., mtDNA, Y-DNA), which certainly deserve attention. However, I am specifically interested in the gendered labor of Black family genealogy and ancestral pursuits. Future research might interrogate: Who performs the labor to constitute family identities and preserve family narratives? And, how does genetic genealogy become a gendered practice, narrative, and space?

Conclusion

This project unfolded over several years, as I became interested in researching questions first about Blackness and identity, then families, media, and biotechnologies. As I incorporated my interests into a cohesive study during my Ph.D. program, the world reminded me of what is at stake when White supremacy is omnipresent and anti-Blackness persists. During my second year, the coronavirus pandemic hit, and Black communities were devastated. One in every 291 Black Americans has died from COVID-19 (Gawthorp, 2022). The rise of the pandemic in the United States coincided with police officer Derek Chauvin murdering George Floyd, by kneeling on his neck for over 9 minutes (Hill et al., 2022). Ensuing months saw global protests against anti-Black police

brutality in what was called a “summer of racial reckoning” (Chang et al., 2020). This “reckoning” was swiftly followed by an ongoing White backlash, evidenced by coordinated attacks against CRT and race-conscious perspectives in schools and workplaces around the nation (Greene, 2022). During my fourth year, a White supremacist made a bomb threat against the Black Cultural Center at my university (Tanner, 2022), and a White supremacist gunman targeted a grocery store in a predominately Black neighborhood in Buffalo, New York, killing 10 people (Levensen et al., 2022). These are just a few moments that vividly depict how anti-Blackness and White supremacy persist in real and material ways. As I wrote to critique White supremacy in the GAT industry, I continued to live within Whiteness’ grip, and I will continue to do so far after this project is complete. Yet, I believe that the fight against White supremacy is necessary and that “the fight in itself has meaning and should give us hope for the future” (Bell, 1992, p. 378).

As I close, I remain struck by the unfinished nature of our identities and the persistence of race and racism. Benjamin (2016b) described race as a technology, one that needs routine maintenance and upgrades. The GAT industry is yet another upgrade to the project of race, a way of re-structuring racial language via biogenetic samples and databases and algorithms. Yet, I sympathize with the idea that GATs have something to offer to Black people, because we have lost so much, and because we have always pursued being whole. In *Lose Your Mother: A Journey Along the Atlantic Slave Route*, Hartman (2008) wrote:

If I had hoped to skirt the sense of being a stranger in the world by coming to Ghana, then disappointment awaited me. And I had suspected as much before I arrived. Being a stranger concerns not only matters of familiarity, belonging, and exclusion but as well involves a particular relation to the past. If the past is

another country, then I am its citizen. I am the relic of an experience most preferred not to remember, as if the sheer will to forget could settle or decide the matter of history. I am a reminder that twelve million crossed the Atlantic Ocean and the past is not yet over. I am the progeny of the captives. I am the vestige of the dead. And history is how the secular world attends to the dead (pp. 17-18).

I resonate with Hartman's narrative and also add my own in the context of the GAT industry:

If I had hoped to skirt the sense of being a stranger in the world by taking a genetic ancestry test, then disappointment awaited me. And I had suspected as much before I took the test. Being a stranger concerns not only matters of familiarity, belonging, and exclusion but as well involves a particular relation to the genome. If the genome is a map, then I am a location it seeks to describe. My body and my genes are a relic of an experience most preferred not to remember, as if the sheer will to forget settle or decide the matter of history. I am a reminder that twelve million crossed the Atlantic Ocean and the past is inscribed on our contemporary bodies. I am the progeny of the captives. I am the vestige of the dead. And the genome is how the secular world attends to the dead.

The truth is, I did not take a 23andMe test expecting the genetic report to make me any less of a "stranger" to Africa or its diaspora, despite the company's promises to tell me who I am. And I did not believe that writing a dissertation about GATs and Blackness would answer all of my questions about the vexing relationship between Blackness and technoscience. Far from a panacea, GATs seem to create as many problems as they attempt to solve. If GATs authorize the completion of identities through science, then they create new identity politics and modes of belonging (Rabinow, 1996) that are necessarily incomplete. If GATs democratize family history, then they call into question: What constitutes a family? Who decides who belongs? If GATs can be tools for Black reparations, then they also re-entrench anti-Blackness via scientific racism. The questions that GAT companies purport to answer only produce more questions that are compounded by the weight of Whiteness and the power of technoscience.

GATs, I have learned, are terrible at *answering* questions, but they may be better suited for *attending* to them. Answering implies GATs' ability to provide closure our questions of identity, while attending signifies the way they are always near those questions. As I said above, "the genome is how the secular world attends to the dead." The genome is also the way we attend to pressing questions about who we are and who we belong to and where we belong. GATs might not precisely answer these questions, but perhaps they are present with our questioning. Maybe, for now, that is enough for me. My GAT report is simply present with my ancestry, coexisting with my racialized body, lived experience, and familial and community narratives that evidence long histories of Black persistence. If I am still a "stranger" to Africa, my GAT report does not make me less estranged, but it is a presence I cannot ignore. For many more people, GATs are also a felt presence, a discourse we cannot escape, an industry that seeks to make us as we make ourselves. Bell argued that racism is here to stay (Bell, 1992), and so are the industries of commercialized genomics. GATs—as tools, imaginaries, forces, ideologies, and Whiteness—are, in a sense, only beginning.

APPENDIX A

DEFINITIONS OF KEY TERMS IN GENOMICS AND SCIENTIFIC RACISM

Term	Definition	Reference
Admixture, Admixed Population	“[when] the migrations of populations from one place to another...yields human mixture, referred to as admixture, resulting from interbreeding between two or more previously isolated populations.”	(Chimusa et al., 2018, p. 144)
Allele	“An allele is one of two or more versions of a gene.”	National Human Genome Research Institute (NHGRI) Talking Glossary of Genomic Terms
Autosome or autosomal chromosome	“An autosome is any of the numbered chromosomes, as opposed to the sex chromosomes. Humans have 22 pairs of autosomes.”	NHGRI Talking Glossary of Genomic Terms
Direct-to-Consumer (DTC) Genetic Ancestry Tests (GATs)	GATs “work by assaying variations in an individual’s DNA, using a statistical algorithm to compare these to reference databases of samples from diverse populations around the world, and then to make inferences about the individual’s ancestry based on specific links between them.”	(Panofsky & Donovan, 2019, p. 656)
Epigenetics	“a field of study focused on changes in DNA that do not involve alterations to the underlying sequence. The DNA letters and the proteins that interact with DNA can have chemical modifications that change the degrees to which genes are turned on and off. Certain epigenetic modifications may be passed on from parent cell to daughter cell during cell division or from one generation to the next”	NHGRI Talking Glossary of Genomic Terms
Gene	“The gene is the basic physical unit of inheritance....Humans have approximately 20,000 genes arranged on their chromosomes.”	NHGRI Talking Glossary of Genomic Terms
Genealogy	“External, visible, and relational processes, which establish links between bodies”	(Huell, 2020, p. 112)

Genetics	“Genetics refers to the study of a particular gene.”	NHGRI Talking Glossary of Genomic Terms
Genomics	“Genomics refers to the study of the entire genome of an organism.”	NHGRI Talking Glossary of Genomic Terms
Genotyping	“the process of determining which genetic variants an individual possesses....[which] require(s) prior identification of the variants of interest.”	(23andMe, 2022e)
Haplogroup	“Haplogroups describe individual branches, or closely related groups of branches, on the genetic family tree of all humans. All members of a haplogroup trace their ancestry back to a single individual.”	(23andMe, 2015)
Human Genome Project (HGP)	“the international, collaborative research program whose goal was the complete mapping and understanding of all the genes of human beings. All our genes together are known as our ‘genome.’”	(U.S. Department of Energy, 2018)
Single Nucleotide Polymorphisms, SNPs	“A type of polymorphism involving variation of a single base pair.”	NHGRI Talking Glossary of Genomic Terms
Pharmacogenomics	A type of precision medicine that seeks to tailor medical treatment to groups of people based on DNA.	Adapted from (Centers for Disease Control, 2022)
Phrenology	“Phrenology was a science of character analysis based on the theory that the human mind could be divided into thirty-seven faculties with distinct locations in the brain. For any individual, the strength or weakness of these various 'organs' could be measured through an examination of the skull.”	(Bank, 1996, p. 389)
physiognomy	The belief that a person’s physical features indicated their instincts, behaviors, character, moral disposition, and soul.	Adapted from (Hartley, 2005)

APPENDIX B

23ANDME BLM STATEMENT

May 25, 2021

A year ago the world was shaken. George Floyd was murdered at the hands of a white police officer and the world witnessed it. The subsequent outcry and widespread protests were evidence of a growing call for change; to finally address the systemic racism and ongoing violence against people of color. These are not new issues but it feels like I am just starting to understand how systemic racism is integrated into the world we live in and what we need to do to make a difference.

The discussions, transparency and focus on change over the last twelve months make me believe that the world is changing. Change doesn't happen quickly, but the world does change. When we started the company, gay marriage was illegal and Obama even stated he was against it. But thanks to the activism of thousands of individuals, the world did change. Change is absolutely possible, but it requires work from all of us.

23andMe is an activist brand and I want us to be part of driving change. The best thing we can do is lead by example and impact all the lives connected to 23andMe. That means looking at our culture, evaluating our partnerships and taking a deeper look at our product. In the spirit of our core values, "we will make mistakes but we will learn from them and keep blazing forward."

On this day of remembering George Floyd, honor his life by thinking about what you can do to help drive change. Embrace uncomfortable conversations. Push yourself to learn. The way that we will make change is to question the environment we currently live in, keep learning from others that have different experiences than us, and actually change behaviors and actions.

Today my thoughts are with Mr. Floyd's family, and the families of so many others in the Black community who have unnecessarily lost a loved one to hate and racism. I am committed to personally and professionally being part of the community of people that will eliminate systemic racism and make the world equitable and fair for all.

Anne Wojcicki
CEO and Co-founder, 23andMe

APPENDIX C

DESCRIPTION OF ADVERTISEMENTS

Company	Advertisement	Link	Length in minutes
AncestryDNA	Krystina	https://tinyurl.com/e8947zpt	00:28
AncestryDNA	AncestryDNA A Surprise Discovery Expert Series Ancestry	https://youtu.be/xeA1wZY7X4Y	4:30
AncestryDNA	Testimonial: Lezlie	https://www.ispot.tv/ad/AZf4/ancestrydna-testimonial-lezlie	0:30
23andMe	100% Nicole	https://tinyurl.com/zwurh9xn	1:00
23andMe	History Channel: Roots	https://www.ispot.tv/ad/ASSC/23andme-history-channel-roots	0:40
23andMe	23andMe: Making New Connections	https://youtu.be/nkvIBiJC-7k	0:30
MyHeritage	Instant Discoveries	https://www.ispot.tv/ad/AZIV/myheritage-instant-discoveries	1:55
MyHeritage	Tribal Quest Papua New Guinea	https://youtu.be/qV-nXPPacHU	2:28
MyHeritage	What Makes You, You?	https://youtu.be/613ZoKlRPvM	0:30
FamilyTreeDNA	FamilyTreeDNA Promise	https://youtu.be/0zGdJuBY0k0	1:01
FamilyTreeDNA	The Story of You - Discover Your Journey	https://youtu.be/bSHYSq6q95s	2:00
FamilyTreeDNA	Traditions to Discover	https://youtu.be/t6PtYxR8T44	0:50
AfricanAncestry	Afa Testimonial	https://youtu.be/Hm_iqaZc0sM	3:23
AfricanAncestry	Have You Taken the Right Test?	https://youtu.be/DdsG-uq8htQ	1:00
AfricanAncestry	African Ancestry - About Us	https://youtu.be/0r1RUoXvSCc	3:45
			Total: 21.9

APPENDIX D

SEMISTRUCTURED FOCUS GROUP PROTOCOL

Introductory Questions

- Please introduce yourself by saying your name, what genetic ancestry test you took, and when you took the test.
- Why did you decide to take a GAT?
- From your perspective, what does it mean to be Black?
- How, where, or by what means did you learn what it means to be Black?
- What impacts did taking a GAT have on your understanding of Blackness?

23andMe Advertisement

Video: 100% Nicole (1:00)

Link: <https://www.ispot.tv/ad/wbfO/23andme-the-golden-23-sweepstakes-100-nicole>

- In the video, Nicole's genetic ancestry is 46% West African, 29% East Asian, 12% Middle Eastern, and 3% Scandinavian. What, if anything, do you think the video reveals about Nicole's race?
- If you had Nicole's genetic ancestry, would you feel more or less Black? Why or why not?

AncestryDNA Advertisement

Video: Krystina (00:30)

Link: <https://www.ispot.tv/ad/nISA/ancestrydna-krystina>

- Krystina says, "I am from Cameroon, The Congo, and the Bantu people." What is your response to Krystina claiming to be from these countries and this people group?
- Krystina says, "I just felt more connected to who I am." What is your response to the claim that GATs can inform people about themselves?
- What is your response to the claim that GATs can inform people about their Blackness?

FamilyTreeDNA Advertisement

Video: The FamilyTreeDNA Promise (1:01)

Link: <https://youtu.be/0zGdJuBY0k0>

- This commercial encourages audiences to "read the fine print" and promises that FamilyTreeDNA does not sell genetic data, unlike other companies. As a Black person, what concerns do you have about surveillance and privacy now that one or more GAT companies have your DNA?
- Many people upload GAT results onto genetic genealogy sites, some of which law enforcement can access to apprehend suspects. Since you have taken a GAT, how do you feel about this information?
- What relationship do you see between law enforcement's access to genetic genealogy sites and anti-Black racism?

AncestryDNA Advertisement

Video: AncestryDNA | A Surprise Discovery | Expert Series | Ancestry (4:30)

Link: <https://youtu.be/xeA1wZY7X4Y>

- In this video, Nicka Smith and Crista Cowen discuss how they find they were related, despite being different races. What are your thoughts on the belief that GATs can be tools to help address racism and white supremacy?
- What are your thoughts on the belief that GATs are harmful because they reproduce harmful connections between race and science?

AfricanAncestry Advertisement

Video: Afa Testimonial (3:23)

Link: https://youtu.be/Hm_iqaZc0sM

- Afa says, “You want to know, you want to be right, you want to be accurate.” How accurate do you believe GATs are?
- What doubts or concerns do you have concerning the accuracy of GATs?
- What doubts or concerns do you have about the transparency of GATs, given that you cannot test the accuracy for yourself or know exactly what kind of tests and analyses they use?

Closing

- After watching these advertisements and answering these questions, would you recommend GATs for other Black people? If yes, why? If no, why not?
- What do you think it’s important for Black people to know about GATs?
- Is there anything else you’d like to share with me today?

APPENDIX E

SEMISTRUCTURED INTERVIEW PROTOCOL

- Earlier in our focus group, we spoke about taking a GAT. Can you elaborate on why you decided to take a GAT?
- How did the GAT meet, exceed, or fall short of your expectations?
- Earlier in our focus group, we spoke about how we learned what it means to be Black. Can you elaborate on how, where, or by what means you learned what it means to be Black?
- Earlier in our focus group, we spoke about how GATs might impact our understanding of Blackness. What impacts did taking a GAT have on your understanding of Blackness?
- From your perspective, what is the relationship between race and genetic ancestry?
- From your perspective, what is the relationship between Blackness and genetic ancestry from Africa?
- The GAT industry is worth billions of dollars. What are your thoughts on the claim that GATs sell people identities?
- According to research, over 26 million people have taken GATs. In your opinion, what are the impacts millions of people taking GATs?
- In your opinion, are GATs valuable products? Why or why not?
- In one of the videos we watched in the focus group, a person who is Black and person who is White find out they are related to each other. Using examples like this, some people believe GATs are useful for addressing racism. What are your thoughts on the claim that GATs are helpful for causes of anti-racism?
- Other people believe that GATs are harmful because they make concepts like race and ethnicity seem biological, even though race and ethnicity are not biological. What are your thoughts on the claim that GATs are harmful because they make race seem biological?
- GATs are often critiqued because of issues related to data surveillance and data privacy. How do you feel about your genetic data being available to one or more GAT companies?
- Issues of data surveillance and data privacy also extend to genetic genealogy sites, where people can upload GAT results. How do you feel about the fact that law enforcement can access some genetic genealogy sites to apprehend suspects?
- Given the history of using science to justify anti-Black racism and the history of racism within law enforcement, what are your thoughts on the claim that GATs contribute to anti-Black racism?
- After participating in the focus group and interview, how are thinking about GATs in new ways?
- If you could summarize your thoughts about GATs and Blackness right now, what would you say?
- Is there anything else you'd like to share with me today?

APPENDIX F

SOCIAL MEDIA POST

VOLUNTEERS WANTED FOR A
RESEARCH STUDY ABOUT

GENETIC ANCESTRY TESTS AND BLACK IDENTITY

PARTICIPANTS MUST:

IDENTIFY AS BLACK

**SPEAK ENGLISH
AND BE 18 +**

**HAVE TAKEN A
GENETIC
ANCESTRY TEST**

THE PURPOSE OF THIS STUDY IS TO UNDERSTAND HOW
BLACK PEOPLE EXPERIENCE AND UNDERSTAND GENETIC
ANCESTRY TESTS.

GENETIC ANCESTRY TESTS INCLUDE
ANCESTRYDNA, 23ANDME, FAMILYTREEDNA,
AFRICANANCESTRY, MYHERITAGE, HOMEDNA,
LIVING DNA, NATGEO'S GENO & MORE

PARTICIPANTS WILL COMPLETE A DEMOGRAPHIC SURVEY, A
90-MINUTE VIRTUAL FOCUS GROUP, AND AN OPTIONAL
FOLLOW-UP SURVEY.

SCAN ME!



RECEIVE \$25 FOR PARTICIPATION

**CONTACT CHARNELL PETERS AT
CHARNELL.PETERS@UTAH.EDU.**

**THIS STUDY HAS BEEN
APPROVED BY THE UNIVERSITY
OF UTAH INSTITUTIONAL
REVIEW BOARD.**

APPENDIX G

SOCIAL MEDIA ADVERTISEMENT

volunteers wanted for a research study about

GENETIC ANCESTRY TESTS AND BLACK IDENTITY

Any person may participate who (a) is 18 years or older (b) speaks English (c) identifies as Black, and (d) has taken a genetic ancestry test.

Genetic ancestry tests include 23andMe, AncestryDNA, FamilyTreeDNA, AfricanAncestry, MyHeritage, Living DNA, HomeDNA, Nat Geo's Geno & More!

Participation will include (1) a demographic survey, (2) a 90-minute virtual focus group, and (3) an optional follow-up survey.

By attending a focus group or interview for at least 30 minutes, you will receive a \$25 gift card.

contact charnell.peters@utah.edu

This study has been approved by the University of Utah Institutional Review Board



APPENDIX H

INFORMED CONSENT FORM

You are being asked to participate in a research study called, “Genetic Ancestry Tests and Black Identity.” **Participation in this study is voluntary.**

Purpose: The purpose of this research is to better understand genetic ancestry testing impacts Black identity. This information will help us better understand how genetic ancestry testing companies and their customers make sense of race and genetic ancestry. The study is being conducted by Charnell Peters, a doctoral student in the Department of Communication at the University of Utah.

Participants: Any person may participate who (a) is 18 years or older (b) speaks English (c) identifies as Black (d) has taken a genetic ancestry test, and (d) is be able to participate in a virtual focus group using Zoom. By Black, I mean participants who may identify with labels including but not limited to African descended, African diasporic, Afro Latinx, Afro-Indigenous, African American, Afro Caribbean, multiracial, and biracial. By genetic ancestry test, I mean genetic tests that use DNA to estimate a person’s biogeographic origins, genetic ethnicity, and/or composite racial and/or ethnic groups (e.g. AncestryDNA, 23andMe, AfricanAncestry, HomeDNA, LivingDNA). There are no known benefits to individuals participating in this study, but your participation may contribute to greater knowledge about genetics and race.

Procedure: Your participation will take place in 3 steps.

1. You will complete a short demographic survey.
2. You will participate in a 90-minute virtual focus group via Zoom with up to 12 other people and one researcher. I will be asking you questions about your experiences taking a genetic ancestry test and your beliefs about genetic ancestry tests. We will watch several genetic ancestry test advertisements. You may discontinue participation at any time, and you may choose to skip any questions you do not want to answer.
3. After the focus group, you may choose to complete a follow-up survey reflecting on your experiences in the focus group. You may also be contacted and invited to participate in 1-2 90-minute follow-up individual interviews via Zoom.

Honorarium: You will be provided a \$25 gift card as a thank you for your time. To receive \$25, you must attend the entire focus group. If you decide to discontinue participation in the focus group, you will not receive the honorarium. You will be provided a second \$25 gift card as a thank you for participating in a follow up 90-minute virtual individual interview and for any interviews thereafter.

Confidentiality Protection: We will keep your identity confidential in all reports, presentations, and papers associated with the outcomes of this study. You will select a pseudonym for us to use when we report this data, or a pseudonym will be chosen for you. **Please note:** While as researchers we will maintain your confidentiality, we cannot guarantee that other participants in focus groups will not share your identity. All digital copies of your contact information and interview documents, including recorded files and transcripts will be stored in a password-protected file on my personal computer. All hard copies of interview

documents, including interview notes, will be stored in a locked cabinet. I am the only person who will have access to these documents. This study does not require participants to share detailed genetic information about themselves, including but not limited to haplogroup, neanderthal ancestry, health reports, or ancestry components. Instead, questions focus on your experiences with and understanding of genetic ancestry tests.

Risks: Participation in this study involves minimal risk; the risk of participation is no greater than that experienced in daily life. I will be asking questions regarding your experiences that may feel personal to you. As mentioned above, your participation is entirely voluntary and you may leave the study at any time. Some people may experience discomfort from participating in this study as a result of discussing difficult subjects like race, ancestry, and ethnicity. You may sign out of the focus group or interview at any time. If you experience discomfort or distress as a result of participating, I recommend contacting the National Alliance on Mental Illness at 800-950-6264 or info@nami.org.

If you have any questions about this research project, please contact me (Charnell Peters, Principal Investigator) at charnell.peters@utah.edu. Or you may contact this study's Advisor, Dr. Rachel Alicia Griffin at rachel.a.griffin@utah.edu.

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

By clicking next on this page, you are giving your consent to participate in this research study. Thank you.

APPENDIX I

DEMOGRAPHIC SURVEY

Instructions: Please provide information about yourself by answering the following questions.

1. Please fill in your name:
2. Please indicate your:
 - a. Age:
 - b. Gender (e.g., woman, man, nonbinary, queer, etc.):
 - c. Pronouns (e.g. she/her; he/him; they/them):
 - d. Sexual Orientation (e.g. pansexual; heterosexual; queer):
 - e. Race (e.g. Black; Black and Japanese biracial):
 - f. Ethnicity (e.g. African American; Kenyan-American):
 - g. Nationality (e.g. Canadian):
 - h. Indigenous or tribal affiliation (e.g. Navajo; Igbo):
 - i. Education background (e.g. some high school, a BA/BS degree):
3. Which genetic ancestry test(s) did you take? (e.g. AncestryDNA, 23andMe, AfricanAncestry, HomeDNA, LivingDNA). Note: Some genetic tests offer health reports. For the purposes of this study, you will need to have received ancestry results.
4. How long ago did you take your genetic ancestry test(s)?
5. Please indicate the email address that you would like to use for communication about this research study.
6. Please indicate a pseudonym that will be used in place of your name for the written results of this research study. (This could be the name you admire, a city, a book character, etc.):
7. Please attach a form of proof that you have taken a genetic ancestry test. (e.g. a confirmation email from the GAT company, a portion of your GAT report with your name, a picture of your GAT test materials, etc...)

APPENDIX J

EMAILS SCHEDULING FOCUS GROUPS AND INTERVIEWS

Focus Group

Subject: Genetic Ancestry Tests and Black Identity Participation Confirmation

Attachment: Consent Form

Dear _____,

Thank you for signing up to participate in my research study, “Genetic Ancestry Tests and Black Identity.” Your 90-minute focus group is scheduled for [date] [time] M.T. To access the virtual focus group meeting, please use the following Zoom details and password:

[Zoom details]

The informed consent sheet is attached in case you want to review details of the study. When you come to the focus group, please have your GAT results on hand for your own reference if possible. Please let me know if you have other questions or concerns.
Sincerely,
Charnell Peters

Interview

Subject: Genetic Ancestry Tests and Black Identity Participation Confirmation

Attachment: Consent Form

Dear _____,

Thank you for signing up to participate in my research study, “Genetic Ancestry Tests and Black Identity.” Your 90-minute interview is scheduled for [date] [time] M.T. To access the virtual interview, please use the following Zoom details and password:

[Zoom details]

The informed consent sheet is attached in case you want to review details of the study. When you come to the interview, please have your GAT results on hand for your own reference if possible. Please let me know if you have other questions or concerns.
Sincerely,
Charnell Peters

APPENDIX K

POST FOCUS GROUP SURVEY AND POST INTERVIEW SURVEY

Post Focus Group Survey

Instructions: Please reflect on your focus group experience by answering the following questions. As noted in the consent form, all answers are voluntary. Therefore, you may skip questions if you do not feel comfortable answering them.

What moment, statement, or story stands out to you from your focus group?

What advertisement do you remember the most from the focus group?

How did your ideas or experiences connect with others' ideas and experiences in the focus group?

How did your ideas or experiences differ from others' ideas and experiences in the focus group?

From your perspective, what was an important moment or topic of conversation during the focus group?

Please add any additional thoughts, comments, or concerns here.

Post Interview Survey

Instructions: Please reflect on your interview experience by answering the following questions. As noted in the consent form, all answers are voluntary. Therefore, you may skip questions if you do not feel comfortable answering them.

What moment, statement, or story stands out to you from your interview?

From your perspective, what was an important moment or topic of conversation during the focus group?

Following the focus group and interview, are you thinking about genetic ancestry tests differently? If so, how?

Following the focus group and interview, are you thinking about Blackness different? If so, how?

Please add any additional thoughts, comments, or concerns here.

APPENDIX L

POST PARTICIPATION FOLLOW UP EMAIL

Subject: Genetic Ancestry Tests and Black Identity Honorarium and Follow Up
Attachment: Debriefing form

Dear _____,

Thank you for participating in my research study, “Genetic Ancestry Tests and Black Identity.” Attached is a debriefing form, which you can use to contact me, the Faculty Supervisor, or the University of Utah’s IRB.

Here is a link to your virtual gift card as a thank you: [link]

You may also choose to fill out the following optional post focus group/interview survey. I value your insights and will use your responses to help me make sense of our conversations.

Participate in the optional survey at this link: [link]

Sincerely,
Charnell Peters

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