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STUDENT COMMENTS

UNVEILING COMPLEXITY:

GENETIC TESTING, BLACK ANCESTRY, AND LEGAL IMPLICATIONS

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ABSTRACT

This paper critically examines the intersection of law, systemic inequality, and social justice, focusing on the structural barriers that marginalized communities face in accessing equitable legal remedies. By analyzing relevant case law, statutory frameworks, and empirical research, the study explores how legal institutions both perpetuate and address disparities. It delves into the historical and contemporary factors that contribute to these inequities, highlighting the role of implicit bias, economic constraints, and institutional policies in shaping legal outcomes. Additionally, the paper evaluates proposed reforms and policy interventions aimed at fostering a more just legal system, assessing their effectiveness in practice. Through this analysis, the paper underscores the dual nature of law—as both a mechanism of oppression and a vehicle for social change—while advocating for strategies that enhance equity and accountability within the legal landscape.

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I. INTRODUCTION

Genetic ancestry testing has become an increasingly popular tool for individuals seeking to understand their heritage. However, questions persist regarding the accuracy and methodology of these tests, particularly in the context of populations with diverse ancestral backgrounds, such as Black individuals.

The complexities present in unraveling Black ancestry through genetic testing necessitate a comprehensive examination at the intersection of genetics, ancestry, technology, and social identity.

“The relationship between genetic ancestry and Black identity cannot be examined in isolation from the legacies of slavery, colonialism, and systemic racial categorization.” This paper explores how the historical injustices of slavery and forced migration, the impact of colonialism and imperialism, and the categorization of Black individuals within the law have influenced genetic ancestry testing and its societal implications. Furthermore, it examines the complexities of Black identity formation, the societal stratification resulting from racial categorization, and the ethical, legal, and social issues arising from genetic ancestry testing. Through an intersectional lens, this paper calls for a critical examination of how genetic technologies intersect with historical racial injustices and advocates for a more equitable approach to understanding and addressing the complexities of Black identity and heritage.

Ancestry tests play a multifaceted role in shaping, informing, and complicating modern racial identity across diverse racial groups yet its accuracy and methodology, particularly in diverse populations like Black individuals, continues to be scrutinized. The historical background of genetic ancestry and Black identity is intricately woven with a history of slavery, colonialism, and racial categorization, influencing societal perceptions and legal constructs of race. These tests not only provide insights into individuals’ genetic heritage but also intersect with broader societal constructs of race, influencing how individuals perceive and understand their own racial identities. They introduce complexities by uncovering ancestral connections that may challenge existing ideas of racial identity, particularly in a historical context marked by racial categorization and discrimination.

By shedding light on the intersectionality between genetics, ancestry, technology, social identity, and the law, this paper aims to contribute to a nuanced understanding of these dynamics, emphasizing the need for continued research and dialogue to ensure that ancestry testing accurately reflects the rich and multifaceted ancestral heritage of Black individuals within the legal framework. It calls for a critical examination of how genetic technologies intersect with historical racial injustices and advocates for a more inclusive and equitable approach to genetic research and application within legal contexts. Furthermore, it emphasizes the need for ongoing research and dialogue to ensure that ancestry testing accurately reflects the rich and multifaceted ancestral heritage of Black individuals.

Section II discusses the historical background of the transatlantic slave trade, the colonization of Africa, racial discrimination, and the societal implications of ancestry testing for Black individuals. It highlights the enduring legacy of slavery, racism, and the challenges Black people face in tracing their ancestry and hoping for accurate results due to displacement and historical injustices.

In Section III, I explore the broader societal impacts of ancestry testing, including genetic discrimination, privacy concerns, societal values, reproductive issues, and identity formation. I emphasize how ancestry testing can influence perceptions of race and identity and discuss the complexities of self-identification, especially for historically excluded communities.

Section VI dives into the concept of race as a social construct, discussing how racial categorization has been used to reinforce social hierarchies and protect privileges. It also examines the role of the United States Census in shaping racial identities over time and its significance in understanding demographic shifts and societal dynamics.

Section V discusses the legal construction of race, including the historical and contemporary perspectives on racial inequality and justice. It discusses the concept of colorblindness, legal definitions of race, and how courts have interpreted racial identity in various contexts. Here, the text discusses the intersectionality of genetics with other fields such as forensics, medicine, and human reproduction. The discussion considers how genetic technologies intersect with broader social dynamics and highlights the ethical and social implications of genetic engineering and testing.

Section VI, the conclusion, summarizes the key points discussed throughout the text and suggests ways to improve genetic ancestry understanding and application. It emphasizes the importance of an intersectional approach, alliances and collaboration, education and awareness, and policy reform in addressing the ethical, legal, and social implications of genetic ancestry.

II. HISTORICAL CONTEXT OF GENETIC ANCESTRY AND BLACK IDENTITY

The transatlantic slave trade stands as the most extensive forced migration in human history. “Between 1501 and 1867, nearly 13 million African people were kidnapped, forced onto European and American ships, and trafficked across the Atlantic Ocean to be enslaved, abused, and forever separated from their homes, families, ancestors, and cultures.”¹ During this time, “millions of Black people born in the U.S. were subjected to abuse, violence, and forced labor despite the young nation’s identity as a constitutional democracy founded

¹ *The Transatlantic Slave Trade*, EQUAL JUSTICE INITIATIVE 6 (2023), <https://eji.org/wp-content/uploads/2005/11/transatlantic-report-PDF-web.pdf>.

on the belief that “all men are created equal.”² Additionally, “racialized slavery was ignored, defended, or accommodated by leaders while the new nation gained extraordinary wealth and influence in the global economy based on the forced labor of enslaved Black people.”³ From New England to Texas, Black people were systematically denied fundamental liberties, subjected to legalized dehumanization, and rendered property under political and legal frameworks designed to uphold white supremacy. Slavery evolved into an enduring and inheritable institution, driven by ideologies that enforced the subjugation of Black individuals based on race long after its formal abolition.⁴ This led to enslaved persons being denied freedom, autonomy, and an overall abuse of human rights. As a result, “the abduction, abuse, and enslavement of Africans by Europeans for nearly five centuries dramatically altered the global landscape and created a legacy of suffering and bigotry that can still be seen today.”⁵

European colonization of African was driven by several factors, including economic exploitation and territorial expansion. Notable among the factors was the emergence of the industrial revolution, which brought about a rapid change in the socio-economic transformation and technology of the European countries. The industrial revolution led to an increase in production.⁶ However, what was not understood by European powers was that “the major impact of colonialism in African [sic] [would be] that it [would bring] about the under-development of African territories in many different ways.”⁷ While proponents of colonialism framed it as a mission of “civilization,” its most enduring impact was the systemic underdevelopment of African nations, which continues to reverberate across generations.”

The consequences of colonization extended far beyond economic exploitation. African societies experienced disruptions in education, technological advancement, infrastructure, urbanization, and political stability, creating systematic disadvantages that persist today. Because of this underdevelopment, racial discrimination emerged within the African diaspora. Colonial legacies established notions of racial superiority and inferiority; perpetuating biases based on skin color. These deeply embedded biases took root in various sectors, including medicine and scientific research, leading to persistent disparities in access and treatment.

² *Id.*

³ *Id.*

⁴ *See id.*

⁵ *Id.*

⁶ Stephen Ocheni, Basil C. Nwankwo, *Analysis of Colonialism and Its Impact in Africa*, 8 CROSS-CULTURAL COMMUNICATION 46, 47 (2012).

⁷ *See id.* at 51.

In the medical field, where objectivity and fairness are central, biases birthed in the colonial era continue to manifest. Black individuals, seeking to explore their genetic heritage through ancestry testing, may encounter disparities in access, interpretation, and trust. Historical injustices, such as the exploitation of Black bodies for scientific purposes during colonialism, fostered a deep distrust of medical institutions among the Black community. This mistrust, in conjunction with systemic biases, contributes to unequal treatment and perpetuates disparities in healthcare outcomes. This mistrust, rooted in historical injustices and ongoing systemic biases, significantly impacts patient-provider relationships and contributes to disparities in healthcare access, quality, and outcomes. Many marginalized communities, particularly Black and Indigenous populations, have long histories of medical mistreatment, unethical experimentation, and neglect, fostering deep-seated skepticism toward the healthcare system. This skepticism, compounded by implicit biases among healthcare providers, leads to misdiagnoses, inadequate pain management, and overall lower quality of care. Additionally, systemic barriers such as socioeconomic disparities, limited access to culturally competent care, and structural discrimination further exacerbate these issues. As a result, affected communities often experience higher rates of chronic illnesses, lower life expectancy, and worse health outcomes compared to their counterparts. Addressing these disparities requires intentional efforts to rebuild trust, implement equitable healthcare policies, and improve provider education on implicit biases and cultural competence. The underdevelopment brought about by colonialism laid the groundwork for racial discrimination and biases, which continue to shape experiences within the African diaspora and the medical field. Acknowledging this connection is vital for addressing systemic inequalities and promoting equity in genetic research and application.

Moving from healthcare disparities to legal categorization of Black identity, it is evident that systematic biases extend across social structures. While contemporary legal practices may seek to portray racial identification as a means of promoting equality and providing benefits to historically excluded groups, this perspective overlooks the historical context in which the law has often categorized Black individuals for negative purposes as well.

The lived experiences of white people are much different than Black people and other people of color; this issue is especially prevalent in terms of ancestry testing. For example, “given the fraught history of slavery and racism, finding out that [a White person] is part African makes some people feel vulnerable, even defensive, while others celebrate the discovery.”⁸ This is due to the

⁸ Tara Bahrapour, *They Considered Themselves White, but DNA Tests Told a More*

fact that “in an era when technology is partly blamed for an increased sense of polarization, it is perhaps ironic that a technological advance is helping to blow up some of that. And because users can connect with relatives on the DNA registries, some white test-takers have been fascinated to find fourth or fifth cousins who are [B]lack.”⁹

Black people have also consistently experienced separation in their families, dating back to the era of slavery: “Many enslaved children being raised away from their biological parents. So informal adoptions during and after slavery were very common among African Americans. And the U.S. census—the most widely used record in genealogy research—did not record all African Americans by name until 1870, the first census after the Civil War. (Free Black people were included by name in the 1850 census, but enslaved Black people were not.)”¹⁰ Due to this separation, Black individuals have historically faced significant challenges in tracing their ancestral roots. Many enslaved children were forcibly separated from their biological parents, leading to widespread informal adoptions among Black people. Additionally, the inadequacies of historical records, such as the U.S. Census, further complicate accurate ancestry testing for Black individuals, as enslaved individuals were not consistently recorded by name until after the Civil War, leaving gaps in ancestral documentation. Thus, Black people do not have accurate ancestry testing due to displacement.

Ancestry testing cannot tell the full, accurate story for Black Americans, as slavery stole this opportunity: “We don’t know our original names, we don’t know our original languages, we don’t even know who many of our family members really are because of the disconnection, the intentional, masterful disconnection of people that slavery required. The tests can’t tell you your ancestors’ names, what they liked to wear, that song they used to sing.”¹¹

III. SOCIETAL IMPLICATIONS OF ANCESTRY TESTING

Ancestry testing has far-reaching implications for perceptions of race and identity, touching upon issues of genetic discrimination, privacy concerns, societal values, reproductive decision-making, and the fluidity of self-identification:

Complex Story, THE WASH. POST (Feb. 6, 2018), https://www.washingtonpost.com/local/social-issues/they-considered-themselves-white-but-dna-tests-told-a-more-complex-story/2018/02/06/16215d1a-e181-11e7-8679-a9728984779c_story.html [https://perma.cc/JJ96-2G2J].

⁹ *See id.*

¹⁰ Sojourner Ahébee, *For African Americans, DNA Tests Offer Some Answers Beyond the “Wall of Slavery”*, WHYY (July 8, 2021), <https://whyy.org/segments/tracing-your-ancestry-through-dna> [https://perma.cc/TR7C-UYKQ].

¹¹ *Id.*

A. Genetic Discrimination: “Genetic discrimination is a significant concern in ancestry testing, particularly when providers exhibit biases against specific communities, notably the Black community.” Discrimination can occur if certain healthcare providers have biases or perspectives of specific communities, especially those in the Black community: “Since genetic test results are typically included in a patient’s medical record, patients should be aware that the results may be accessible to others.¹² As a result, genetic test results could affect a person’s insurance coverage or employment and “members of marginalized communities often fear that genetic information will be used to stigmatize them.”¹³ Ancestry testing results may reinforce existing stereotypes or biases about certain racial or ethnic groups. For example, if an ancestry test reveals a predisposition to a certain disease that is more common in a particular racial group, it could reinforce negative stereotypes about that group’s health or abilities. A fear in the Black community already exists that genetic information could be used to stigmatize individuals or communities. This fear stems from historical instances of discrimination and oppression based on race or ethnicity.

An example of the misuse of genetic information, which resulted in genetic discrimination, was exemplified by the Tuskegee Syphilis Study. In this study, Black men were deceived and denied treatment for syphilis, leading to immense harm and distrust in medical research.¹⁴ This egregious violation underscores the systemic exploitation and discrimination faced by Black communities, emphasizing the importance of ethical considerations and informed consent in genetic research. Another example is the DNA databases used by the criminal justice system.¹⁵ While these databases are intended to aid in solving crimes and exonerating the wrongfully convicted, they disproportionately contain DNA profiles from Black and Latino individuals due to systemic biases in policing and incarceration. This overrepresentation increases the likelihood that individuals from these communities will be implicated in criminal investigations, even if they have never committed a crime. Additionally, the retention and use of familial DNA

¹² GENETIC ALLIANCE, *Ethical, Legal, and Social Issues, in UNDERSTANDING GENETICS—A DISTRICT OF COLUMBIA GUIDE FOR PATIENTS AND HEALTH PROFESSIONALS* (2010), <https://www.ncbi.nlm.nih.gov/books/NBK132157> [<https://perma.cc/P8H2-R46P>].

¹³ *Id.*

¹⁴ *Public Health Service Study of Untreated Syphilis at Tuskegee and Macon County, AL – Timeline*, Ctrs. for Disease Control & Prevention (2022), <https://www.cdc.gov/tuskegee/timeline.htm> [<https://perma.cc/GSF3-CXL2>].

¹⁵ Office of the Att’y Gen., *Advancing Justice Through DNA Technology: Using DNA to Solve Crimes*, U.S. DEP’T OF JUST. (2017), <https://www.justice.gov/archives/ag/advancing-justice-through-dna-technology-using-dna-solve-crimes> [<https://perma.cc/76M9-CSC6>].

searching—where law enforcement identifies potential suspects based on genetic similarities to individuals already in the database—can further entrench racial disparities by disproportionately subjecting certain communities to increased surveillance and scrutiny. This misuse of genetic information raises concerns about privacy, consent, and racial profiling. Given historical injustices and systemic biases, there's a heightened risk of discrimination and wrongful targeting of Black individuals based on genetic data. This underscores the urgent need for robust safeguards and transparency to prevent further exploitation and abuse of genetic information within law enforcement practices. If genetic information is used to deny insurance coverage or employment opportunities, it could further marginalize already disadvantaged groups.

This becomes especially important when in conversation about how Black people experience implicit bias and racial disparities in health care: “Black people simply are not receiving the same quality of health care that their white counterparts receive, and this second-rate health care is shortening their lives.”¹⁶ This has been described as an “uncomfortable reality,” where “some people in the United States were more likely to die from cancer, heart disease, and diabetes simply because of their race or ethnicity, not just because they lack access to health care.”¹⁷ Within the context of genetic discrimination, biases within providers can lead to stigmatization, particularly affecting communities of color, such as Black individuals, who already face disparities in healthcare.

B. Privacy: Privacy fears stem from the accessibility of genetic information, prompting some to seek out-of-pocket testing to safeguard their data. Genetic information prompts questions of personal responsibility and choice, shaped by individual, familial, and cultural beliefs, which influence decision-making differently across communities based on their unique historical, social, and economic contexts. Genetic information prompts questions of personal responsibility and choice, shaped by individual, familial, and cultural beliefs, which influence decision-making differently across communities based on their unique historical, social, and economic contexts. For instance, communities with histories of medical exploitation, such as the Tuskegee Syphilis Study or the misuse of Henrietta Lacks' cells, may be more reluctant to participate in genetic testing due to concerns about consent and misuse. Similarly, disparities in healthcare access and affordability limit some individuals' ability to act on genetic

¹⁶ Khiara M. Bridges, *Implicit Bias and Racial Disparities in Health Care*, AM. BAR ASS'N, https://www.americanbar.org/groups/crsj/publications/human_rights_magazine_home/the-state-of-healthcare-in-the-united-states/racial-disparities-in-health-care.

¹⁷ *See id.*

risk factors. This, in turn, worsens existing health inequities. In reproductive decision-making, ancestry tests inform considerations of genetic risk factors, while in terms of identity, individuals may selectively embrace or reject certain identities based on test results. Many people fear that if their genetic information is accessible by anyone, this could have great implications and consequences to their or their family's livelihood. Since this remains a concern, "in order to protect personal genetic information and to avoid inclusion in a patient's medical record, some patients may wish to pay for genetic testing out-of-pocket if possible."¹⁸

C. Societal values: For Black individuals, whose ancestry is often complex and intertwined with historical legacies of slavery and forced migration, the nuances of identity are particularly significant. The lack of detailed ancestral records due to the forced separation of families during slavery has made it difficult for many Black Americans to trace their lineage with certainty, leading to a deep emotional and cultural significance attached to genetic testing. However, historical abuses, such as the unethical medical experimentation on Black bodies—exemplified by the Tuskegee Syphilis Study and the non-consensual use of Henrietta Lacks' cells—have fostered longstanding mistrust toward the medical and scientific communities.

D. This skepticism extends to genetic testing, as concerns persist over the potential misuse of genetic data, racial profiling, and the commercialization of Black genetic material without consent or benefit to the community. Additionally, the categorization of genetic ancestry through Eurocentric frameworks can oversimplify or misrepresent the rich and diverse heritage of Black individuals, further complicating how they navigate their genetic identities. These historical and structural factors influence the willingness of Black individuals to engage with genetic testing services, highlighting the need for ethical transparency, community-centered approaches, and safeguards against exploitation.

E. Despite shifts in self-identification, representation within racial groups and cultural expressions remain unchanged: "Genetic information can raise several questions of personal responsibility, personal choice versus genetic determinism/fate, and concepts of health and disease. Responses to these issues will be influenced by personal factors, family values, and community and cultural beliefs. While genetic information may influence

¹⁸ GENETIC ALLIANCE, *supra* note 12.

one individual to change their lifestyle or behavior in order to reduce risk or disease severity, others may choose to respond differently.”¹⁹

F. Reproductive issues: Ancestry tests can help individuals be informed, productive decisions and receive medical care. They have the ability to educate people on “advanced maternal age, family history, multiple miscarriages, or drug and alcohol exposure”, including “risk factors for genetic conditions for which preconception or prenatal genetic testing may be considered.”²⁰ This is particularly important in the Black community, where access to accurate ancestry testing can provide vital information for making informed healthcare decisions. By understanding their genetic predispositions, individuals can better navigate reproductive health concerns such as advanced maternal age, a family history of genetic conditions, recurrent miscarriages, and exposure to harmful substances like drugs and alcohol can significantly impact reproductive health and fetal development.. This knowledge empowers individuals to seek appropriate medical care and take proactive measures to mitigate risks, including considering preconception or prenatal genetic testing when necessary. Given the historical disparities in healthcare access and outcomes experienced by Black individuals, access to accurate genetic information through ancestry testing can contribute to more equitable healthcare practices and improved health outcomes within the community.

G. Identity: Genetic ancestry tests have the potential to change how people self-identify in society. People who receive results from their ancestry tests, who may have not been previously aware of their genetic make-up, may “cherry pick” their identities. More specifically, “they cherry-pick from the results, adopting or rejecting particular identities based on which ones they view positively or negatively and their beliefs about what others will accept.”²¹ It has been argued that “non-white consumers felt a strong sense of political and cultural connection to their existing ethnic and racial groups. While they found the results interesting, they generally felt no need to change their identity in light of them.”²² Black individuals, like myself, recognize that their ancestry is mixed but generally maintain their

¹⁹ *Id.*

²⁰ *See id.*

²¹ Wendy D. Roth, *Genetic Ancestry Tests Don't Change your Identity, but You Might*, PBS (May 23, 2018), <https://www.pbs.org/newshour/science/genetic-ancestry-tests-dont-change-your-identity-but-you-might#:~:text='Cherry%20picking'%20identities&text=Those%20whose%20identities%20do%20change,about%20what%20others%20will%20accept> [<https://perma.cc/T38D-TS3T>].

²² *Id.*

self-identity based on cultural, social, and personal affiliations rather than genetic test results. Additionally, it has been found that those “who have taken a GAT are not only more likely to self-identify as multiracial, they are particularly likely to select three or more races.”²³ However, this does not change representation with the group or expression of culture and tradition. The government is still concerned “. . . that if respondents report more distant ancestry as their current racial identity, that would alter the meaning of federal government data collected to monitor racial discrimination in areas like housing and political representation.”²⁴

IV. SOCIAL CONSTRUCTION OF RACE

Understanding the complexity of Black identity and heritage is crucial, as it shapes social constructions of race beyond ancestry and DNA testing, influencing cultural practices, societal perceptions, and historical narratives. Ancestry is how people define themselves and DNA testing leads to racial categorization, which enforces a social hierarchy. Racial categorization has been a process by which people are forced into a particular racial identity and develop an epistemology about race. For example, the “one-drop rule” in the United States historically dictated that anyone with even a trace of Black ancestry was legally classified as Black, regardless of their physical appearance or cultural upbringing. This imposed racial identity not only reinforced segregation and discrimination but also shaped how individuals understood and navigated their racial identity, influencing perceptions of belonging, privilege, and systemic oppression. Individuals are classified into these distinct racial groups based on physical characteristics such as skin color, hair texture, facial features, and how people carry themselves in the world to name a few.²⁵ Throughout history, racial categorization has been used as a way to protect whiteness.²⁶ Take, for instance, the anti-miscegenation laws central to *Loving v. Virginia*, which aimed to safeguard the “purity” of white lineage. Similarly, in cases like *People v. Hall*, *Gong Lum v. Rice*, and *Doe v. Louisiana*, the court aimed to maintain the legal definition of “White” by employing “Black” as a broad category into which any non-white individual could be classified, thereby avoiding acknowledgment as

²³ Sandra Feder, *Genetic Ancestry Test Results Shape Race Self-Identification, Stanford Researchers Find*, STANFORD NEWS SERV. (May 17, 2021), <https://news.stanford.edu/press-releases/2021/05/17/ancestry-tests-af-identification>.

²⁴ *See id.*

²⁵ VICTORIA F. B. TREITLER, *THE ETHNIC PROJECT: TRANSFORMING RACIAL FICTION INTO ETHNIC FACTIONS* 31–33 (Stan. Stud. in Compar. Race & Ethnicity, Stan. Univ. Press 2013).

²⁶ *Id.*

white. Through such means, racial classification has been utilized to bolster the racial hierarchy and preserve Whiteness as a privileged and exclusive asset.

In “Race as Social Construct,” Omi and Winant argue that racial projects shape both the perception of racial identities and the distribution of resources such as power, wealth, and cultural capital.²⁷ They assert that “racial projects connect what race means in a particular discursive or ideological practice and the ways in which both social structures and everyday experiences are racially organized, based upon that meaning.”²⁸ The concept of the social construction of race advances the idea that there are no inherent scientific or biological distinctions among humans. Instead, race is a product of societal construction, where specific meanings are assigned to various identities and physical characteristics. This construction is evidenced by the changing interpretations of racial significance across different historical periods. Omi and Winant’s concept of racial projects suggests that the meaning attached to race within a given discourse or ideology influences how social structures and everyday experiences are organized along racial lines. This idea is relevant to ancestry testing and race because it highlights how the interpretation of genetic ancestry can shape perceptions of racial identity and influence social structures and interactions. Ancestry testing provides individuals with information about their genetic heritage, which can contribute to the construction of racial identities. Depending on how this information is interpreted and integrated into social discourses, it can impact how individuals perceive themselves and how they are perceived by others in terms of race. Additionally, the use of ancestry testing results in various societal contexts, such as healthcare, employment, and personal relationships, can reflect and perpetuate existing racial hierarchies and inequalities.

In “In The Social Life of DNA,” Alondra Nelson explores the intersection of genetics and social issues, particularly regarding race.²⁹ She examines how genetic genealogy is being used to address historical injustices such as slavery, fostering reconciliation, establishing ancestral ties, rethinking citizenship, and making legal claims for reparations.³⁰ Nelson emphasizes that while DNA can provide insights into the past and present social traumas, it alone cannot resolve systematic issue.³¹ She argues that science can be a powerful tool in activism for

²⁷ See generally MICHAEL OMI & HOWARD WINANT, *RACIAL FORMATION IN THE UNITED STATES* (3d ed. 2015).

²⁸ See *id.* at 125.

²⁹ Alondra Nelson, *The Social Life of DNA: Racial Reconciliation and Institutional Morality After the Genome*, 69 *BRIT. J. SOC.* 3 (2018).

³⁰ *Id.*

³¹ *Id.*

social change, but readers must exercise discernment.³² This becomes important when understanding the implications of ancestry testing.

V. WHAT IS THE CENSUS? AND WHAT DOES IT ACCOMPLISH?

The United States Census “counts every resident in the United States” and is required by the United States Constitution to take place every 10 years.³³ In order to collect demographic data, the Census asks questions that include sex, age, race, household relationships, and property ownership. Additionally, “the Census Bureau works with tribal, state, county, and local officials, as well as agencies such as regional planning commissions, to accurately define the different geographic units used in the U.S. Census and American Community Survey.”³⁴

In theory, the Census is fundamentally political; it creates groups and assigns people to them based on predefined categories. For example, “the first census in 1790 separated free “white” people from other free people and enslaved people. In 1890, the census identified African Americans by the fraction of their African heritage: “Black,” “mulatto,” “quadroon” and “octoroon.”³⁵ These terms stamped in old documents are a stark reminder of U.S. history.”³⁶ This proves that race is a socially constructed category. There is nothing genetically based about how people choose to identify in the Census or are identified by other people: “With 24 decennial censuses so far, race options have changed more than a dozen times, as new groups have been added and others deleted. We noted the historical implication for each change, but we’ve only scratched the surface of what this trove of historical documents show us.”³⁷

As societal attitudes evolved and legal frameworks concerning slavery shifted, the Census adapted its racial classifications to reflect changes in public perception and policy directives. This transition away from enumerating enslaved individuals towards defining the Black population with new terms underscores the dynamic relationship between racial categorization and the prevailing socio-political landscape: “Historically, some edits to census race boxes reflected changes in policy or public sentiment. As the nation’s laws on

³² *Id.*

³³ U.S. Census Bureau, *What We Do*, CENSUS.GOV (2023), <https://www.census.gov/about/what.html#:~:text=The%20U.S.%20census%20counts%20every,takes%20place%20every%2010%20years> [https://perma.cc/PNM5-ATRV].

³⁴ *Id.*

³⁵ K. K. Rebecca Lai, *Fitting Race in a Box*, N.Y. TIMES (Oct. 28, 2023), <https://www.nytimes.com/2023/10/28/us/census-history-race-ethnicity.html> [https://perma.cc/F5VJ-VBPC].

³⁶ *Id.*

³⁷ *See id.*

slavery shifted, the census began phasing out the counting of enslaved people and instead introduced new terms to define the Black population.”³⁸

On Ancestry.com, under the section titled “Collection Information”³⁹, it explains the importance of Census data and what it is used for: “Census records can be rich with details about your ancestor. Be sure to look at each and every question that was asked and think about what the answer meant to your ancestor. Those answers tell your family’s story. They also provide clues that will help you to locate even more records. Many countries took periodic censuses to keep track of various aspects of the population. Where available, these records often include helpful details about your ancestors and their families and allow you to pinpoint their location at a particular point in time. While the questions in census records vary from place to place, and year to year, you can find information like names of other household members, ages, birthplaces, residence, occupation, immigration and citizenship details, marriage information, military service and more.”⁴⁰

Ultimately, the United States Census serves as a vital tool for understanding demographic shifts and societal dynamics. However, its historical evolution illustrates the political and social constructs that shape racial identity and categorization, influencing how individuals and communities are defined over time. As we reflect on the significance of census data, it becomes evident that each enumeration not only records population statistics but also preserves a narrative of historical context and societal evolution for future generations to examine and learn from.

VI. LEGAL CONSIDERATIONS

Historical race is more than skin color; it serves as a framework for understanding how history has shaped social stratification based on race. It looks at past and continuing racial subordination and how race has been used to disadvantage certain groups and advantage others. This also brings into account the idea of colorblindness. In “A Critique of ‘Our Constitution is Colorblind,’” Professor Neil Gotanda critiques colorblindness as the notion that decisions concerning individuals or groups should not consider race or ethnicity, advocating for equal treatment regardless of these factors.⁴¹ According to this perspective, legal or political distinctions based on skin color or race are rarely

³⁸ See *id.*

³⁹ *Census & Voter Lists*, ANCESTRY, <https://www.ancestry.com/search/categories/35> [<https://perma.cc/Z667-SS43>].

⁴⁰ See *id.*

⁴¹ Neil Gotanda, *A Critique of “Our Constitution Is Color-Blind”*, 44 STAN. L. REV. 1 (1991).

justified, and any law that acknowledges race is deemed constitutionally suspect, regardless of its intent to address discrimination. However, Gotanda argues that this approach ignores historical and systemic racial inequalities and assumes an equal playing field that does not exist in reality.⁴² He asserts that this approach assumes a level playing field for everyone, disregarding how race and ethnicity intersect with other social dynamics to shape individuals' opportunities in life.⁴³ Colorblindness ignores historical race, as it overlooks the oppression certain groups have faced throughout history. However, there are dangers that come with only thinking about race in historical terms. More specifically, (1) sometimes when we focus on race as being simply historical, we tie our hands on how to remedy discrimination taking place in the present; and (2) it may lead some to see something as racism only if it occurred in the past which shifts responsibility from people in the present who are reaping the benefits of historical racism.

The legal construction of race refers to the different ways courts have defined race over time. Courts have drawn lines in the sand that determine what race a person is based on the different legal objectives they are pursuing. As Haney Lopez stated, "to say race is socially constructed, is to admit at least in part, that race is legally produced . . ." ⁴⁴ For example, in *Shaare Tefila v. Cobb*, race is defined as "identifiable classes of persons who are subjected to intentional discrimination solely because of their ancestry or ethnic characteristics."⁴⁵ On the other hand, in *Rice v. Cayetano*, race is defined as "identifiable classes of persons . . . solely because of their ancestry or ethnic characteristics."⁴⁶ Courts have manipulated legal definitions of race to grant or withhold privileges from people of color. For example, in *Ozawa v. United States* (1922), the Supreme Court ruled that a Japanese immigrant could not be naturalized as a U.S. citizen because he was not considered "white" under the law, despite his light skin and cultural assimilation. Similarly, in *United States v. Thind* (1923), the Court denied citizenship to a South Asian man, arguing that although he was scientifically classified as Caucasian, he was not "white" in the common understanding of the term. These cases demonstrate how racial definitions were strategically applied to exclude people of color from legal rights and reinforce white supremacy. Additionally, these legal constructions compel individuals with multiple

⁴² *Id.*

⁴³ *Id.*

⁴⁴ Ian F. Haney López, *The Social Construction of Race: Some Observations on Illusion, Fabrication, and Choice*, 29 HARV. C.R.-C.L. L. REV. 1, 47 (1994).

⁴⁵ *Shaare Tefila v. Cobb*, 481 U.S. 615, 617 (1987).

⁴⁶ *Rice v. Cayetano*, 528 U.S. 495, 496 (2000).

racial identities, as recognized by the law, to select one side or the other to access legal and social advantages.

Stratification and inequality are closely linked. According to Douglas S. Massey, stratification is the “unequal distribution of people across social categories that are characterized by differential access to scarce resources.”⁴⁷ Stratification arranges individuals “vertically” within society, which distinguishes people between the top and bottom; the “top” symbolizes people who have access to and enjoy greater resources than those at the “bottom”; who do not have access to these same resources. While related, stratification and inequality are distinct concepts. Inequality refers to the uneven distribution of resources, opportunities, and power, whereas stratification pertains to the hierarchical organization of individuals and groups within a society. Inequality emerges from stratification, which represents the underlying social structures that breed inequality. Massey argues that all forms of stratification result in inequality, characterized by the perpetuation of inequality over time and generations.⁴⁸ Stratification and inequality stem from exploitation and the monopolization of opportunities. Massey argues that slavery incorporated the most extreme form of inequality, showcasing the two trailblazers to such inequality.⁴⁹

The concept of genetic race, suggesting that humans can be categorized into discrete racial groups based on genetic variances, intersects with discussions of social construction, where racial identities are understood as socially constructed rather than biologically determined. As Dorothy E. Roberts explains in “Fatal Invention: How Science, Politics, and Big Business Re-create Race in the Twenty-first Century,” according to this theory, individuals belonging to the same race share more of their recent ancestry and therefore are more genetically similar to each other than those of other races.⁵⁰ Scientists then create groupings that are inferred from the statistical frequencies of particular DNA sequences sampled from distinct populations around the globe.⁵¹

Genetic and statistical race has been widely criticized as seriously flawed. Although most scholarship recognizes the existence of geographically based genetic variation, it also shows that such variation is not consistent with biological definitions of race. Indeed, genomic scientists have fallen victim to confirmation

⁴⁷ DOUGLAS S. MASSEY, *CATEGORICALLY UNEQUAL: THE AMERICAN STRATIFICATION SYSTEM* 1 (Russell Sage Found. 2007).

⁴⁸ *Id.* at 1–2.

⁴⁹ *Id.* at 6.

⁵⁰ DOROTHY E. ROBERTS, *FATAL INVENTION: HOW SCIENCE, POLITICS, AND BIG BUSINESS RE-CREATE RACE IN THE TWENTY-FIRST CENTURY* x-xii, 62–64 (The New Press 2011).

⁵¹ *Id.* at 63.

bias. Rather than discovering race in our DNA, they are taking already accepted racial categories from society and searching for genetic differences between these groups to reinforce these differences and verify them scientifically. In this way, Omi and Winant argue that genetic and statistical race views race as objective—rooted in biological differences, ranging from such phenomic markers as skin color, hair texture, or eye shape, to more obscure human variations occurring at the genetic or genomic levels.⁵² Science and technology also play a role in shaping racial categories. “Intersectionality and Science and Technology Studies” by Jenny Brian and Richa Bhatia e explores the intricate connections between various fields such as genetics, forensics, medicine, and human reproduction.⁵³ Particularly, the discussion revolves around genetic technologies and their multifaceted impacts on society.

At the forefront of this discourse lies the controversial topic of genetic modification and its associated safety and social risks. Genetic engineering and testing, while holding promise for advancements in medicine and agriculture, also raise profound ethical and social questions. Brian’s work delves into the complexities of these issues, shedding light on how they intersect with broader social dynamics.⁵⁴ One significant aspect highlighted in Brian’s analysis is the creation of social inequalities through genetic engineering and testing.⁵⁵ As these technologies become more accessible and prevalent, disparities in access, affordability, and understanding emerge, exacerbating existing social divisions.⁵⁶ Moreover, concerns arise regarding the potential for discrimination based on genetic traits, further deepening societal stratification. Through a critical lens informed by intersectionality, Brian underscores the need to examine these developments within a broader framework that considers intersecting axes of identity such as race, class, gender, and disability. This approach reveals how genetic technologies intersect with existing power structures, reinforcing or challenging prevailing inequalities.

The discourse surrounding genetic modification and its associated risks intersects with the practice of ancestry testing in significant ways. Genetic engineering and testing, while holding promise for advancements in medicine and agriculture, also raise profound ethical and social questions. Brian’s work delves into the complexities of these issues, shedding light on how they intersect with

⁵² OMI & WINANT *supra* note 27.

⁵³ See Patrick R. Grzanka, Jennifer D. Brian & Richa Bhatia, *Intersectionality and Science and Technology Studies*, SCI., TECH. & HUM. VALUES (2023).

⁵⁴ *Id.*

⁵⁵ *Id.* at 6–7.

⁵⁶ *Id.*

broader social dynamics. Additionally, concerns emerge regarding discrimination based on genetic traits, further entrenching societal stratification. Brian's critical examination, informed by intersectionality, emphasizes the importance of analyzing these developments within a broader framework that considers intersecting axes of identity such as race, class, gender, and disability. This approach reveals how genetic technologies intersect with existing power structures, reinforcing or challenging prevailing inequalities.

By incorporating insights from Science and Technology Studies (STS), Brian's work provides valuable perspectives on how the intersection of genetics with other fields shapes societal norms, policies, and practices.⁵⁷ It underscores the need for a nuanced understanding of these intersections to navigate the complexities of genetic advancements responsibly and ethically, thereby helping to mitigate the perpetuation of social inequalities.

VII. CONCLUSION

Interest convergence, a theory by Derrick Bell, suggests that racial equality advances only when Black interests align with those of white individuals or powerful elites.⁵⁸ This theory suggests that white people, particularly those in positions of power or influence, must perceive some benefit or advantage in supporting initiatives aimed at racial equality. In the context of interest convergence, white institutions might support accurate DNA testing for Black individuals if it serves their interest, such as fostering inclusivity or maintaining scientific credibility. Ensuring accuracy could also help mitigate criticisms of bias in genetic research and protect the industry's reputation. This could include factors such as maintaining credibility, avoiding legal liability, or promoting social harmony. Without such convergence of interests, there might be less motivation to invest resources or effort into ensuring the accuracy of DNA testing, especially if doing so is perceived as threatening the status quo or the privileges of certain groups.

In the case of *Brown v. Board of Education*, interest convergence was evident in the Supreme Court's decision to strike down segregation in public schools. The interests of Black people in achieving educational equality aligned with broader societal concerns, including international reputation and national security during the Cold War era. As a result, the Supreme Court's ruling was not solely driven by a commitment to racial justice but also by considerations of national interest and reputation. Similarly, in present-day discussions

⁵⁷ *Id.*

⁵⁸ Derrick A. Bell, *Brown v. Board of Education and the Interest-Convergence Dilemma*, 93 HARV. L. REV. 518 (1980).

surrounding DNA testing, interest convergence might manifest in white individuals or institutions recognizing the importance of accurate testing to uphold their credibility and legitimacy in scientific, legal, or social spheres. This recognition could lead to greater investment in research, technology, and policies aimed at improving the accuracy and fairness of DNA testing, particularly in cases involving racial or ethnic minorities.

Overall, Bell's theory of interest convergence highlights the complexity between racial dynamics and power structures in shaping societal progress towards racial equality.⁵⁹ It underscores the importance of recognizing and addressing the underlying interests and motivations that drive decisions and actions related to racial justice issues.

There are several ways we can improve genetic ancestry understanding and application:

A. **Intersectional Approach:** Recognizing that genetic ancestry intersects with various aspects of identity such as race, gender, and disability is crucial. This approach helps in understanding the complexities involved in genetic technologies and how they impact different communities differently. By acknowledging these intersections, we can more effectively address the challenges and inequalities that arise from genetic technologies.

B. **Alliances and Collaboration:** Building alliances between different social justice movements, including reproductive justice, racial justice, women's rights, and disability rights activists, can amplify voices and efforts in addressing issues related to genetic ancestry. Collaboration among these groups fosters a more comprehensive understanding of the ethical, social, and legal implications of genetic technologies, particularly concerning issues of race, gender, and disability.

C. **Reproductive Genetic Technologies:** Addressing reproductive genetic technologies requires a nuanced understanding of how they intersect with various social issues. For example, discussions surrounding disability in genetic technologies should actively involve disability rights advocates to ensure that the rights and dignity of individuals with disabilities are respected and protected. By incorporating perspectives from diverse communities, we can develop more inclusive and ethical frameworks for the use of reproductive genetic technologies.

D. **Education and Awareness:** Promoting education and awareness about genetic ancestry, its implications, and the importance of an intersectional approach is essential. This includes educating the public, policymakers,

⁵⁹ *Id.*

and healthcare professionals about the potential biases and inequalities embedded within genetic technologies. Increased awareness leads to more informed decision-making and policies that promote equity and justice in genetic ancestry research and application.

E. Policy Reform: Advocating for policy reforms that address the ethical, legal, and social implications of genetic ancestry is crucial. This includes implementing regulations that protect against discrimination based on genetic information, ensuring informed consent and privacy rights, and promoting equitable access to genetic testing and counseling services. Policy reforms should be informed by input from diverse stakeholders and guided by principles of justice and equity.