

ABSTRACT

Title of Dissertation:

**THE RACE PALIMPSEST: EXAMINING THE USE
OF ANCESTRY TESTING IN THE RHETORICAL
CONSTRUCTION OF IDENTITY**

Naette Yoko Lee, Doctor of Philosophy, 2022

Dissertation directed by:

Associate Professor, Damien S. Pfister,
Department of Communication

Race is a palimpsest or layered rhetorical formulation that imbricates competing interpretations of human diversity. Efforts to understand the race concept and intervene in the effect of systemic inequity have been premised on the treatment of race as a social construction. However, the ascendancy of genetic ancestry testing and related biotechnologies have spurred the reiteration of biological categories, rivaling, or supplanting the constructivist perspective. In this dissertation, racial constitution is a rhetorical process that determines how novel understandings of human diversity are interpreted and integrated into the racial palimpsest. This project proposes a theoretical model for understanding the discursive interaction between genomic testing and current racial categorizations. Three case studies were conducted to demonstrate the operation of Kenneth Burke's positive and dialectic terms for order in this process. The cases examine the genetic test reveal genre and situate their discursive circulation in digital media ecologies. The findings elucidate the operation of

rhetorics of genetic certainty, heritability, and narrative invention through which publics process genetic test results and integrate them into understanding of human difference. This dissertation identifies the need for more accurate discursive terms to make sense of ancestry testing and disrupt the integration of genomic data into the palimpsest of race.

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RHETORICAL CONSTRUCTION OF IDENTITY

by

Naette Yoko Lee

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Advisory Committee:

Associate Professor Damien S. Pfister, Chair
Associate Professor Anita Atwell Seate
Associate Professor Catherine Knight Steele
Associate Professor Scott Wible
Associate Professor Carly Woods

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Dedication

For Francis, Frances, and Francis.

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This project would not exist but for Rachel Hall who convinced me that when it was dark in Egypt, there was light in Goshen. It also belongs to my people in Trinidad who laughed at my doubts and promised me that I belonged. Karina, Brent, Megan, and Avalon, my uncles who believed, my aunts who prayed, and the cousins who listened. Thanks also to Steve Mohammed who taught me how to run in the goodness of the Lord.

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Chapter 1: The Rhetorical Palimpsest

In Salman Rushdie's *The Moor's Last Sigh*, a character named Muhammad muses that "perhaps the whole country, was a palimpsest, under world beneath over world, black market beneath white; when the whole of life is like this, when an invisible reality moved phantom wise beneath a visible fiction, subverting all its meanings."¹ In many ways, the racial history of the United States is very much like Muhammad's country: it appears to be a narrative of the common good, drafted over earlier version of the story that threaten to obscure its current meaning. Racialized routines have become habits. After centuries of etching the identity of its people into the national fabric, the cultural and legal bearings of the United States shift, emphatically erasing the lines and replacing them with a new narrative. Except, the offending scripts are never completely erased. The original ideas live, now only as shallow grooves that contour the new manuscript and change its intended meaning.

I draw on the metaphor of the palimpsest to conceptualize the persistence of racial categories in the United States and their centrality to the continuation of racial stratification. My perspective is reminiscent of Hutcheon and O'Flynn's *palimpsestuous intertextuality*, which is a theory of *adaptation* that makes sense of how later variations of original artistic works are "haunted at all times by their adapted texts."² Where Hutcheon and O'Flynn see the interpretation of the original text as altered by its subsequent versions, I see current modes of racial categorization as modified by their predecessors. I also believe that these versions "having taken meaning and shape at a particular historical moment in a socially specific environment, cannot fail to brush up against thousands of

¹ Salman Rushdie, *The Moor's Last Sigh*. (Toronto: Vintage, 1996), 184–85.12/20/22 10:36:00 AM

² Linda Hutcheon and Siobhan O'Flynn, *A Theory of Adaptation*, 2nd ed (London; New York: Routledge, 2013), 6.

living dialogical threads woven by socio-ideological consciousness around the given object of utterance; it cannot fail to become an active participant in social dialogue. After all, utterance arises out of this dialogue as a continuation of it and a rejoinder to it – if it does not approach the object from the sidelines.”³ So, to understand race in America, the keen observer must look for discrepancies in the script; she must pay attention to the *scriptio inferior* that runs through the narrative and corrupts what would otherwise be an ode to justice, freedom and equality.⁴ This dissertation project describes the process of inscribing the genomic science story into the United States’ race palimpsest.

The most pressing social issues in the U.S. cannot be considered without addressing the issue of race.⁵ News reports about healthcare, policing, immigration and citizenship, poverty and education are festooned with references to disparate access to resources. The United States’ situation is not unique. Rhetorical racial categorization and its inevitable inequitable stratification is a global phenomenon. For the moment, however, my research interest leads me to consider the U.S. as an example of the effect of racial undercurrents on the molding of a society. The history of the United States is replete with institutional efforts to undermine the forces of systemic racism and still the manifestations of inequality continue to dominate the contemporary conversation. Even as twenty-first century Americans publicly reject the horrors of the Holocaust, there is evidentiary support for the character of the German atrocity being defined by efforts to mimic white supremacy in the

³ Mikhail Bakhtin and Michael Holquist, *The Dialogic Imagination: Four Essays* (Austin: University of Texas Press, 1981), 276-277.

⁴ As a child of the Americas, I am intimately aware that the United States is not the only America. It is not merely for the sake of convenience or poetry that I have chosen to, at times, refer to the United States as America but also as an acknowledgement of the dominance of U.S. American ways of thinking in the rest of the world, including the other Americas. In this way, the America I refer to here is neither Vespucci’s or de Tocqueville’s but the constructed America that has exported its values, including its perspectives on race, to the far reaches of the globe.

⁵ Ta-Nehisi Coates, “Hitler on the Mississippi Banks,” *The Atlantic*, January 16, 2014, <https://www.theatlantic.com/international/archive/2014/01/hitler-on-the-mississippi-banks/283127/>.

United States. When in 1934 German lawyers met at a conference to discuss how to set up a racist regime, many turned to the writings of Heinrich Krieger who specialized in white supremacist legal codes at the University of Arkansas School of Law.⁶ In spite of the historical efforts, the United States continues to be a, if not *the*, global leader in racism. This research finds its impetus in the curious discrepancy between what appear to be overt efforts to stamp out race-based inequality and the simultaneous thriving of racial ideas. This dissertation, therefore, proposes additional resources for thinking about a perennial issue that threatens both the U.S. democratic experiment and those parts of the world that are influenced by it.

Commercial genetic testing is racialization's most recent manifestation.⁷ I suggest that the advances in genetic testing may be better understood by developing a theoretical counterpoint to current perspectives on race, rather than by extending the existing framework. To do so, I describe the racial rhetorical situation in the United States of America from a different theoretical perspective and identify a point of intervention that de-links genetic ancestry research from the thinking that inspires systemic racism. As my review of the literature suggests, there have already been challenges to the United States racial hierarchy and some of what I will say in this dissertation has been said before by other disciplines at other times. This project, however, is a novel attempt to interpret the addition of genetic test results to the matrix of racial categorization and identification. Moreover, the value of my contribution is its interrogation of the accepted conceptualization of race as a social construct. As I will explain later, my perspective interrupts the view of the evolution of the race concept as linear - moving through religious, biological, historical, social, and genetic layers. Instead,

⁶James Q. Whitman, "What America Taught the Nazis," *The Atlantic*, November 2017, <https://www.theatlantic.com/magazine/archive/2017/11/what-america-taught-the-nazis/540630/>.; Wilkerson, Isabel. *Caste: The Origins of Our Discontents*, First edition (New York: Random House, 2020), 81.

⁷ In some of the literature this is referred to as direct-to-consumer or DTC testing. It is a term I sometimes use, though I prefer to reiterate the commercial nature of the practice since it does not obscure the role of capital in contemporary genomic science.

I suggest that race, is conceptualized through co-creative rhetorical layers that are inextricably bound to each other and that seeing them as such may be useful in addressing its effects.

This analysis also contributes significantly to the field of Communication, especially to the ongoing scholarship on Kenneth Burke. It is an opportunity to access the latent potential of Burke's body of work as a theoretical approach for understanding race specifically. As Bryan Crable has demonstrated, while Burke does not make explicit claims to critical race theory, his conceptual framework lends itself to unravelling the age-old tensions that plague American society.⁸ This project, therefore, resuscitates part of the Burkean canon and redirects its analytical force toward systemic issues traditionally defined as racial. This project theorizes the extent to which the way we conceive of human diversity undermines efforts to combat structural inequality. While we know that there are very real expressions of ancestry and equally real social consequences to belonging, I suggest a new point of intervention that precedes the categorizations of ancestry as racial.

Conceptual Framework

The aim of this dissertation is to examine the rhetorical usage of genomic data in the constitution of racial identity. I offer this explanation as a first step to disrupting the reintroduction of biologically essentialist terms to racial discourse. To this end, I treat our understanding of race as a palimpsest, or a layered rhetorical text, the original iterations of which obscure and direct the interpretation of later versions. The concept of the palimpsest has been used as a heuristic tool in a range of disciplines. It has appeared in the field of Communication, Linguistics, and Literary Criticism as a way of interpreting written texts.⁹ Aune invokes the palimpsest in his reading of the

⁸ Bryan Crable, *Ralph Ellison and Kenneth Burke: At the Roots of the Racial Divide*. (Charlottesville: University of Virginia Press, 2012).

⁹ Sarah Dillon, "Reinscribing De Quincey's Palimpsest: The Significance of the Palimpsest in Contemporary Literary and Cultural Studies," *Textual Practice* 19, no. 3 (January 2005): 243–63, <https://doi.org/10.1080/09502360500196227>; Marko Juvan, "The Palimpsest of Ruins: Cultural Memory, European Literary Intertext, and Post-Romanticism in Simon Jenko's 'Picture VII,'" *Neohelicon* 37, no. 2

“lost” passages of Burke’s *Permanence and Change* restored in the California edition of that publication. His analysis considers how Burke’s arguments shift under the constraints of the historical moments in which they were written and together, reveal the author’s multiple modes of thought. Of that text he says, “it is also a wonderful irony that the author who has done so much to enlighten us about the importance of perspective should finally give us a text that embodies, in the form of a palimpsest, his own shifting historical perspectives.”¹⁰ The palimpsest model has multiple applications as a theoretical and methodological instrument. It is especially useful for taking several iterations of an idea together and understanding the ways in which they interact.

The value of the palimpsest as an analytical lens is also recognized in Theological Studies, History, Mathematics, and the sciences, including the field of genomics.¹¹ However, it is in the field of Archaeology that I find the most instructive and relevant usage to this research project.

According to Bailey, “palimpsests are shown to be a universal phenomenon of the material world, and to form a series of overlapping categories, which vary according to their geographical scale, temporal resolution and completeness of preservation.”¹² In other words, the process of human

(December 2010): 537–43, <https://doi.org/10.1007/s11059-009-0030-4>; Robert Ziegler, “The Palimpsest of Suffering: Léon Bloy’s *Le Désespéré*,” *Neophilologus* 97, no. 4 (October 2013): 653–62, <https://doi.org/10.1007/s11061-012-9337-x>; John Arthos, “Who Are We and Who Am I? Gadamer’s Communal Ontology as Palimpsest,” *Communication Studies* 51, no. 1 (March 2000): 15–34, <https://doi.org/10.1080/10510970009388507>.

¹⁰ James Arnt Aune, “Burke’s Palimpsest: Rereading *Permanence and Change*,” *Communication Studies* 42, no. 3 (September 1991): 234, <https://doi.org/10.1080/10510979109368338>.

¹¹ Charles F. Delwiche, “The Genomic Palimpsest: Genomics in Evolution and Ecology,” *Bioscience* 54, no. 11 (2004): 991–1001; Michael Philip Penn, “Moving Beyond the Palimpsest: Erasure in Syriac Manuscripts,” *Journal of Early Christian Studies* 18, no. 2 (2010): 261–303, <https://doi.org/10.1353/earl.0.0324>; Jean Christianidis, “The Archimedes Palimpsest: The Definitive Edition: Reviel Netz, William Noel, Natalie Tchernetska and Nigel Wilson (Eds): The Archimedes Palimpsest, 2 Vols. Vol. I: Catalogue and Commentary; Vol. II: Images and Transcription (The Archimedes Palimpsest Publications Series). Cambridge: Cambridge University Press, 2011, 344+342pp, £150.00 HB,” *Metascience* 22, no. 1 (March 2013): 137–42, <https://doi.org/10.1007/s11016-012-9682-1>; Alexander Lee, “Goals and Scope of the Archimedes Palimpsest Transcriptions,” *BSHM Bulletin: Journal of the British Society for the History of Mathematics* 28, no. 1 (March 2013): 1–15, <https://doi.org/10.1080/17498430.2012.687974>.

¹² Geoff Bailey, “Time Perspectives, Palimpsests and the Archaeology of Time,” *Journal of Anthropological Archaeology* 26, no. 2 (June 2007): 198, <https://doi.org/10.1016/j.jaa.2006.08.002>.

living inevitably results in the accumulation of material at any given habitation site. A complete understanding of what may have happened at a particular location in time and space requires that this layering be considered. Archeological investigation, therefore, is premised on the notion that obvious material evidence is only the most recent layer in this process. My view of the rhetorical formulation of normalized concepts is similar. As terms circulate in the world, we must interpret their function in light of previous iterations. Further, any accounting of what is plainly visible must also consider those preceding layers that have given it its character and position. Bailey goes on to explain that “a palimpsest usually refers to a superimposition of successive activities, the material traces of which are partially destroyed or reworked because of the process of superimposition...But palimpsests can also involve the accumulation and transformation of successive and partially preserved activities, in such a way that the resulting totality is different from and greater than the sum of the individual constituents.”¹³ My interrogation of the interplay between genomics and racial formulation assumes that the latter cannot be extracted from its preceding contexts. Any scholarly perspective on race is a complex of all the perspectives that have gone before it. My application of the palimpsest model not only considers this particular feature of the theorizing process but attempt to use it to rectify previous oversights.

Race, therefore, is a palimpsest. The acknowledgement that race is a social construct does not and cannot fully erase its previous conceptual character. Rather, it should be seen as composite, embossed by its former interpretations, which while faint, remain legible enough to influence how it is read. Throughout this project I treat the construction of the palimpsest as rhetorical since its evolution combines sequential layers of meaning through language. Following from the rhetorical premise that naming is constitutive, in the absence of novel terms to distinguish the findings of new interpretive lenses, new research is merely subsumed under old categories. In other words, instead of

¹³ Bailey, 203.

drawing focus away from biological essentialism, social constructionism relies on the same symbols used in the original definitions of racial categories. The constituent elements of socially constructed groups are tied to the biologically based categories by their names, and by the rationale that gives those names meaning.¹⁴ Likewise, defaulting to much used racial language and geographical proxies for race to describe genomic diversity serves to fold the new science into the old framework.

Genetics, then, is incorporated into the palimpsest and provides evidence for the visual indicators of the biological and the experiential indicators of the socially constructed. At another level genomics may work to resist the social construction perspective altogether. In the public sphere, which I insist presents greater stakes than scholarship, genetic essentialism provides a far simpler argument for supremacy than systemic reasoning. Despite its obvious ill effects, the habit of defaulting to race as the best way to understand human diversity persists. While my analysis does consider this problem, it is not my primary concern. Instead, I aim to identify a point of intervention in the incorporation of genetics into the race palimpsest. As such, the case studies in this project show how and where the link between the genetic and rhetorical is made and maintained in the service of maintaining a deleterious racial order.

Conceptual Clarification

Race is a fiction that permeates the fabric of American society.¹⁵ My reading of the historical record and its scholarly interpretations, suggests that repeated efforts to combat the effects of racial inequality by reframing and reinterpreting the racially based social hierarchy have been undermined

¹⁴ To be clear, efforts to merely change racial labels are not sufficient to undermine the work of categorization. It is the complex process of placing humans into these categories first by the inherent, then by the social and now by choice, that makes the problems associated with race difficult to overcome. The modes of categorization that fund inequity are not indicative but generative.

¹⁵ Later I address the arguments that the material consequences of racial categorization challenge the term “fiction” as it is used here. For the moment, fiction is intended to refer to the notion that the biological or genetic differences correspond to the racial categories as they are used in popular discourse.

by their inability to escape the conceptual framework through which race is understood and the language through which it is expressed. The initial rationale of the racial hierarchy functions as the palimpsest's original markings, the shadows of which obnubilate the new script. Even as scholarship and policy are developed to address the problems of viewing the world in racial terms, they do so from the perspective of a world that is indeed organized by race. As I argue later, the normalization of race as a fact of nature creeps into public discourse and subtly undermines efforts to resist it. My first point of clarification, therefore, is that we must constantly and consistently reiterate the notion that our terms of reference, our definitions, are the product of a racist and colonial enterprise. They are born of, and therefore oriented to, its maintenance. Thus, my approach has an affinity with decolonial approaches that use existing terms while simultaneously reflecting on the potential of those terms to reinforce hierarchies.

The implications of treating race as socio-biological cannot be ignored. Biological essentialism or the idea that common racial terms refer to the individual's genetic makeup is, as I will explain in this dissertation, a deeply flawed perspective. The available resources for describing race are also woefully inadequate. The movement of the morphological signs that are thought to be inextricably linked to a given racial category across the boundaries of racial-dialectic formations at any given place and time, render the alignment of visual stimuli and racial terms obsolete. In other words, the movement of individuals across racial categories demonstrates not that the group boundaries are permeable, but that the demarcations are rhetorically created and recreated according to the demands of the time and place. Representations of race that are often treated as absolute are void in the absence of specific social and historical conditions.

One could argue that the social nature of racial designations can account for this slippage, since the impetus for racial categorization is contextual. Even so, the sociobiological construct relies heavily on the idea that there is some degree of truth to the "biological." Racial categories are

grounded in the idea of innateness, inherency, and essentialism. Even as scholarship analyzes the negative effects of socially constructed racial categories, it must default to biological cues to identify the communities with which they align them. Later in this project, I contend that the sociobiological construct of race does not merely guide the organization of visual stimulus into racial categories, but actually generates the morphologies to accommodate the historical moment. Racial labeling does not denote what exists in reality, but what we are instructed to see by the labels that we use. As my second case study demonstrates, naming diversity based on morphological characteristics does not populate an extant group, it creates that group. In light of these observations, racial terminology throughout this project is treated as a rhetorical device originating from a need to manage the distribution of power, even as its meaning has expanded to accommodate other functions such as social and cultural identification. Since each mention of race is a symbolic act that reifies the structure necessary for systemic inequality to occur, I treat the conceptual deconstruction of the linguistic hierarchy as symbolic resistance to the order I am trying to understand.

Distinguishing the Epistemic from the Ontological

My thinking throughout this project is governed by a modified interpretation of the term *race*. While it may seem obvious to interpret race as a social construction, this project takes a slightly different approach that must be clarified before I proceed further. The tendency to refer to race as a social or biological construct is an essentially epistemic exercise. Those definitions accommodate the socio-historical factors that have influenced interpretations of phenotype. As my case studies show, however, the deployment of the term *race* has ontological force. Commercial genetic testing is a staging ground for existential inquiry. In other words, the public pays for the right to claim belonging to an immutable group (or groups). Scholarly work that theorizes race performs a different function. The gap between the two is especially important when genomic data is introduced into the equation. While the notion that race is socially constructed exists on the

epistemic plane, consumers submitting to genetic testing treat the results they receive as ontological proof of being. My treatment of race, therefore, acknowledges the modifications that this belief must have on the constructivist model. Race as it is used here recognizes not only the varying conceptual positions on human diversity, but the tendency for these to merge, palimpsestuously, in their circulation. The theoretical frameworks that examine racial labels and their practical application are not the same. My case studies show how commercial genetic testing reveals an almost fundamental need to secure inherent group belonging in artificially drawn categories. This phenomenon calls for modifications to the social constructivism of race that account for not only how race is formulated but how it is circulated.

The problems and opportunities that this project identifies are not created by the reality of biological difference but by the inevitable connection between that difference, social action, and human motivation. Current constructions of race serve as a springboard from the epistemic to the ontological. Constructivist perspectives include a blend of the real (material consequences) and the imagined (innate biological difference) but do not make enough of a distinction between them as the concepts are operationalized. In the current understanding of race, we accept that perceived differences are not real except where those differences have material consequences. I strengthen this perspective by accounting for the instances in which the actors subject to the material consequences interpret racial belonging as an objective reality and not a conceptual designation. Explained differently, while the biological differences between *racial* groups are not significant, the social categories that we accept as constructed, become significant because the people in those categories are real and raced.¹⁶ As Bonilla Silva argues, belonging to a racial category must necessarily “involve

¹⁶ Kenneth Burke, *A Grammar of Motives* (Berkeley: University of California Press, 1955), 42.; In his discussion of heroism, Burke addresses the equivalency of potentiality and substance. To do this he points to the perception of soldiers as heroic. Given that they are capable of valiant acts in battle, the soldier on the way to war may also be construed as heroic due to the potential for bravery. Heroism, therefore, is not something that is done but instead “resides in their status as soldiers.” Likewise, the socially racial category is also

some form of hierarchy that produces definite social relations between races.”¹⁷ Substituting the socially constructed categories for the biological, then, makes them equally real.

Nexus as a Modified Definition of Race

Even as race is socially constructed, the miniscule biological distinctions between so-called *racess* remain the primary criteria for understanding human diversity. For the sake of clarity, therefore, I make a distinction here between the existing concepts of *race* as they may be intended in the literature, and the concept that I consider problematic and would like to address. Let us call it a *nexus*.¹⁸ In plain terms, a nexus can be treated as a net or location where items are bound together, especially in a manner that ensures action at one point influences action at another connected point. The term, therefore, invokes effective dynamism as a principle of formation. An individual’s nexus is not biological, objective, or phenotypical. Nor is a nexus merely a collection of social or cultural practices. A nexus is a worldview created by the rhetorical practice of linking the biological to the social symbolically - of returning to the biological as a way to measure the social. A nexus, therefore, is not a state or identifier but a series of instinctive rhetorical habits through which tangible groups coalesce around conceptual terms. Here, I return to a foundational rhetorical perspective that emphasizes the use of terms in the normalization of a given perspective. It is the habitual use of the

suggestive of a unique complex of potentialities. Burke notes that “kingship is originally an act, like heroism. But gradually inherited, it becomes a sheer state, the nature of the King’s intrinsic properties, enabling him to be a king by reason of their substantiality alone.” Racial groups as social constructions too, evolve from acts to states, reified through practice and solidified over time by the power relationships that rely on them for justification. The power of the dialectic to shape the interpretation of the positive can be better understood if “status is considered as potentiality and actus as its actualization.”

¹⁷ Eduardo Bonilla-Silva, “Rethinking Racism: Toward a Structural Interpretation,” *American Sociological Review* 62, no. 3 (1997): 469, <https://doi.org/10.2307/2657316>.

¹⁸ Philosopher Charles Mills, performs a similar thought experiment in which he creates a hypothetical social order called “quace” of randomly selected groups with no historical, phenotypical, or cultural characteristics. He compares the system of “quace”, first with a horizontal racial system in which phenotype is recognized but without historical or cultural weight and then with the prevailing racial hierarchy. His thought experiment reveals the source of the importance of racial identity and serves as a starting point for what he calls a new “metaphysics of race.”; Charles W. Mills, *Blackness Visible: Essays on Philosophy and Race* (Ithaca, N.Y: Cornell University Press, 1998), 42–44.

“race” symbol that binds the phenotypical to the constructed social. It is not that a person’s nexus is their racial identity or category, it is that race is a single dimension of their nexus, albeit a very prevalent one. I will use nexus at those points in the project where the term *race* could also refer to identification, social construction, political categorization, or history. Mine, therefore, is neither a realist nor a constructionist view. Instead, it is an intermediate position that views the two as mutually reinforcing. It is a rhetorical view in which, through language, the biological and the social are irrevocably enmeshed.

To underline this point, consider that the genetic variation governing phenotype constitutes .01% of the human genome. In other words, by almost any other metrics there are more significant variations that are entirely ignored by our current focus on what has come to be known as race. Let us call these differences *clusters*. An example of a cluster is the collection of DNA markers that govern height.¹⁹ I give this example not as a suggestion that we should focus on height as a way of understanding the world, but rather to contextualize those genetic markers governing phenotype as merely one kind of human differentiation. On the other side of the social construction equation, I identify what I refer to as *tribus*²⁰. Here, *tribus* is the manifestation of social, political, cultural, and economic practice over time. *Tribus* is complex and can be geographical, national, or cultural. No *tribus* is absolute and they overlap very often. The nexus of *race*, therefore, is a filter through which *tribal* membership is constrained by cluster. In other words, it is not that a given *tribus* or social or cultural formation is drawn from a genetic cluster but rather that the face of a *tribus* is determined

¹⁹ It is noteworthy that racial prefixes are the only elements of the genome the manifestations of which are not subject to scientific scrutiny. Generally, genomic factors are thought to predispose individuals or groups to certain conditions which are mitigated by environmental or epigenetic factors. The genes linked to phenotype are interpreted as absolute.

²⁰ While *tribe* would be an equally useful term to use here, since the purpose of the designation is to differentiate it from my usage of *cluster*, I consider critiques of the use of the term as well as my own reference to it in Chapter 4 of this project. As a consequence, *tribus* is used here to exemplify a mode of group formulation similar to the divisions of the Roman state where the term finds its genesis.

by the discursive choice to use one cluster and not the other. Over time, *tribus* and cluster merge. In Burkean terms, the social construction of race is a selection of a divisive identificatory marker - white, because not black; Latinx, but not white. Hypothetically, if another cluster lens was used to analyze a given *tribus*, there would be little to no suggestion of “racial” inherency or morphologically manifest essential characteristics. This hypothetical reframing allows us to glean the social motivation behind the construction of groups that determine lived reality. It would result in true biologically independent social constructions that indicate causal factors rather than the incidental association of negligible genomic characteristics. For example, how would records of educational performance and healthcare outcomes be interpreted differently if, instead of “race” standard biographical forms asked for blood type, height or *Tp53* - a gene commonly associated with cancer.²¹ In essence, this perspective undermines the troublesome tendency of ascribing racial characteristics which ultimately are used to shore up and perpetuate racial inequity. Ultimately, this project offers an analytical framework for redirecting attention away from the *race* cluster in order to better understand *tribal* formation.

The opportunities for deploying these terms in this project are limited. The ambition of any scholarly writing is to enter conversation with other projects and to build on the existing research. Despite my concerns with the way in which *race* is used, and the implications of that usage for understanding the work that it does, it would be nearly impossible to use the conceptual terms I have developed without losing the reader altogether. *Race* and the proliferation of terms that emanate from its study constitute a linguistic universe. It is impractical to attempt to combine the project of disrupting these usages and the aim of this dissertation, which is to intervene in the layering of genetic terminology over the existing race palimpsest. The preceding section, therefore, is

²¹ A Petitjean et al., “TP53 Mutations in Human Cancers: Functional Selection and Impact on Cancer Prognosis and Outcomes,” *Oncogene* 26, no. 15 (April 2007): 2157–65, <https://doi.org/10.1038/sj.onc.1210302>.

intended to clarify my conceptual orientation and justify several of the analytical choices I make later on.

Dissertation Overview

Genetic testing does not reveal groups but creates them. Even as the results suggest ancestry percentages of geographic belonging, they do not address the fact that geographic origin is refracted through the lens of historical and contemporary geopolitics. As such there is less correlation between points of ancestral origin and current conceptions of those geographic regions than commercial genetic testing companies might suggest to their customers. I treat genetic testing results as texts that enhance the reach of the existing racial categories by complicating the extant schema through the inclusion of nationality, ethnicity, and genetic sets. If the parameters for genetic testing emanate from a constructed reality that privileges racial belonging, then their results will naturally reflect that order. Even as the individuals who participate in commercial genetic testing gain *new* information about their ancestry, they are merely reshuffled inside of existing categories. This racial reinforcement or reassignment amplifies existing power relationships rather than resists them. My case studies are close readings of the rhetorical texts in which individual's genetic profiles are "revealed."

I treat the videos in which individuals discuss their genetic test results as "discursive sites where society deliberates about normative standards and even develops new frameworks for expressing and evaluating social reality."²² They are examples of how the new information of genetic testing is incorporated into the world view of the individuals and the society at large. Throughout my case studies I theorize normative rhetorical practices through which individuals make sense of the tangible elements of their identities in the context of the society's wider racial framework. I

²² Gerard A. Hauser, "Vernacular Dialogue and the Rhetoricity of Public Opinion," *Communication Monographs* 65, no. 2 (June 1998): 86, <https://doi.org/10.1080/03637759809376439>.

explain how palimpsestuous interaction of the positive and dialectic terms requires a layered negotiation of terms rather than negation or replacement.

The palimpsestuous process is dialogical. To explain the interaction of the positive and dialectic terms I draw on Bakhtin's concept of *heteroglossia*. Like Burke's view of language as symbolic action, Bakhtin has written that "form and content in discourse are one, once we understand that verbal discourse is a social phenomenon."²³ The understanding of the term *race* as it is used by individuals who receive genetic test results, is varied and layered. Racial terminology finds "the object at which it was directed already as it were overlain with qualifications, open to dispute, charged with value, already enveloped in an obscuring mist."²⁴ In the case studies, racial terminology, "is perceived as stratified through and through into multiple social discourses each representing a specific ideological-belief system, a way of seeing the world: heteroglossia."²⁵ In the videos, actors negotiate the struggle for primacy among social constructivist, biological essentialist, genetic and individual identification. What we are left with is a hybrid concept of race, a palimpsest, that is unique to the individual and that contributes to the overall tapestry of public opinion on race. My case studies, therefore, not only account for the polysemic utterances of race but to suggest a framework for how those multiple voices are structured.

Case Study Outlines

Racial categorization is a bridge between the complex genomic science and the simplistic discursive categories that are used to reinforce power structures. The body of this project focuses on three case studies that exemplify the interplay between the genomic and the rhetorical in the race

²³ M. M. Bakhtin and Michael Holquist, *The Dialogic Imagination: Four Essays*, University of Texas Press Slavic Series, no. 1 (Austin: University of Texas Press, 1981), 259.

²⁴ Bakhtin and Holquist, 276.

²⁵ M. M. Bakhtin et al., *The Bakhtin Reader: Selected Writings of Bakhtin, Medvedev, and Voloshinov* (London ; New York: E. Arnold, 1994), 73.

palimpsest. The first analyzes the video *Ethnically Ambiguous People Take a DNA Test*, to show how racial categorizations inform the interpretation of genomic test results. It emerges from the intersection of social media and commercial genetic testing. It is an example of a genre of content that I will refer to as the *genetic reveal video*. Typically, these videos show the reactions of ordinary people to the results of their genetic tests. In most instances, the individuals are interested in learning about their ancestry, though, in some cases they are interested in genetic testing for medical reasons. This, however, is rare or incidental. The genre is a rich resource for understanding how Burke's positive terms are translated into dialectic terms and how the distinction between the scientific and the rhetorical is obscured. Genetic reveal videos instantiate the larger argument of the dissertation about how the blurring of the scientific-rhetorical is necessary for the formation and substantiation of dialectic categories that uphold white domination in the United States. The specific text I will look at in Chapter four records the reactions of seven BuzzFeed employees who self-identify as ethnically ambiguous.

The study shows how scientific data is interpreted through the rhetorical constructs of race and ethnicity, modified and integrated into common sense understandings of heredity. These interpretations of the scientific data are then used to reinforce extant conceptions of racial essentialism. An overarching theme of the video is the understanding of *ethnic ambiguity* and how it funds current understandings of racial categorization. In this analysis I introduce the concept of the *rhetoric of genetic certainty*, a lens that I develop in each of the chapters. Genetic certainty refers to the range of ways in which commercial genetic test takers default to the science of genomics as the ultimate authority on group belonging. Typically, it suggests the immutability of genetic test results and the existence of discrete categories which can be determined visually, before offering resolution to ways of being that do not conform to the dominant racial schema. This is particularly salient in this case since *ethnic ambiguity* is indicative of an underlying necessity to apply the calculus of the

racial discourse to individuals. This is even more pertinent in an instance such as the video where individuals are driven to apply it to themselves as a route to securing a sense of identity and belonging. This chapter also discusses the role of the discursive space in the interpretation of ancestry test results and introduces the concept of geography as a racial proxy, which I elaborate upon in the next chapter.

My second case study considers National Geographic's *What Genetic Thread Do These Six Strangers Have in Common?* a text-video hybrid featured in the magazine's 2018 *Race Issue*. It provides evidence of the complex interaction between discursive terms as they are manifested as racial, ethnic, and national categories and positive terms that bridge visibility and genetic data. Ultimately, it shows the ways in which commercial genetic testing is both a reflection of and, in turn reflects, a racially based geopolitical hierarchy. The stated aim of this part of the *Race Issue* is to dispel the notion of a genetic basis for race and advance the idea that race is socially constructed. And yet, the overall argument of the text that race is a social construction is undermined by the use of genetic results to construct a biologically based hybrid group of individuals who identify in different racial categories. The Genographic Project in the second case study raises the issue of whether it is possible to contain the social construct of race within the *dialectic* realm without relying on *positive* tethers. This case study offers the opportunity to observe the operation of the Burkean schema.

My final case study is Season Two of the television series *Finding Your Roots*. Here, I consider how genetic test results are modified by the historical narrative. This case study is the most extensive, comprising both the television series and companion text authored by the show's host Henry Louis Gates. Unlike the first case studies in which the participants receive their genetic test results in a historical vacuum, *Finding Your Roots* undertakes to first establish genealogical lines before supplementing them with DNA results. Consequently, the results are read in keeping with the power relationships established in the historical narrative. This chapter then, deals with the role of

historiographical anachronism in the reading of DNA test results as well as the rhetorical strategies that users default to in order to make sense of what I refer to as *genetic inherency*. Rather than blur the lines between established racial categories, the genealogical investigations exemplified in *Finding Your Roots* reinforce the imagined lines between discursive racial groups. They translate genetic information into widely understood terms they must be simplified to reflect the existing structure. Moreover, the case study illustrates the need for genetic test results to be explained in recognizable terms in order to be usable. I conclude this project by attempting to harmonize the concepts I have developed and reiterate the case for Burkean theory as a viable lens for analyzing race.

Chapter 2: Literature Review

Race has occupied the attention of academics for several decades. There is a proliferation of scholarship that attempts to understand how phenotypical difference affects social organization and the lived realities of human beings. On the surface it would seem that every discipline has considered the question of race. However, a significant portion of the research on *race*, has to do with what scholars actually mean when the term is used. In some instances, especially in the social sciences, it is clear that the writing on race has to do with the construction of identity. In others, however, race and ethnicity are heuristic categories for understanding other phenomena. In yet others, the traditional criteria for racial belonging are examined without explicit reference to the term race. I find these areas of research particularly fascinating because the ability of its findings to subtly modify racial definitions as they circulate in the public sphere. The scientific interest in human diversity contributes to and intervenes in contemporary conceptualizations of race even though it may not necessarily be concerned with the social ramifications of racial categorization. My challenge in this part of the dissertation, therefore, has been to contextualize those contribution that help to rhetorically constitute race in the academic discourse while seeming to avoid it altogether. Treating *race* as a palimpsest requires that I consider the ways in which research that has not been traditionally concerned with race is brought to bear on the interpretations and findings of the critical race canon. This chapter sketches the rhetorical landscape in order to situate my theoretical offering in terms of the scholarly conversation, while making sense of the contributions that inadvertently revise our understanding of *race*.

My review of the literature will proceed in the following way. First, I consider relevant moments in the early stages of the history of racial categorization. I then summarize the contributions that merges research in the fields of rhetoric and genomics. I then expand my view to include those theoretical contributions from the field of rhetoric that consider race generally and not

in relation to genetic testing. I go beyond the realm of communication to consider sociological, philosophical, neuroscientific, and cognitive research into the conceptualization of race and the perception of racial categories. Finally, I consider the small, interdisciplinary body of work that directly addresses the relationship between commercial genetic testing and racial categorization.

Choosing Race in the Early United States

Race-based social stratification is ubiquitous in the United States, particularly for those whose skin color does not translate to social, economic, and political privilege. Events, such as the May 2020 killing of George Floyd by Minneapolis police officers, have shown that despite progress made from the Civil Rights struggles to the present, injustice predicated on race continues to be an issue that negatively affects the lives of many in the world. In this project, I, with Burke, see race as an expression of the basic human need to categorize. Humans have evolved to use visual cues to organize the world and meet fundamental needs for safety and community. It is in our nature to try to make sense of the diversity of humanity. What is not in our nature, however, is the tendency to default to the simplistic categorization of race as it currently exists. Racial groups are artificial designations that are reified through rhetorical practice. It is impossible not to recognize phenotypical difference. Still, if these differences were accurately expressed in the existing racial categories, that system of organization would be significantly more complicated than the six groups (White, Black or African American, Asian, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander) that are typically used in the discourse on race.²⁶ My concern then, is with how the symbols representing these classifications are deployed to maintain existing power structures, especially those that afford favor and privilege based on skin color. Further, I am

²⁶ These are the racial categories recognized in the most recent U.S. Census.

interested in understanding how the circulation of genomic rhetoric affirms or disrupts this symbol system.

The current power inequities in the United States rely on the hierarchical organization of the bio-sociological categories. I offer a framework for addressing the current hierarchical structure of race as it is expressed in language and other symbol use. The categories of race that are currently employed to organize humanity find their genesis in the corrupt and oppressive system of slavery. Their sole function is, and has always been, to maintain the social order established by the transatlantic slave trade. Even as marginalized groups claim and reclaim the designations that identify them for oppression, resistance must operate within the confines of the categories themselves. My interrogation of the race concept leads to the conclusion that the existing social order cannot be maintained in the absence of this structure.

First, I must address claims that the colonial United States were the inheritors of an ideology of racial oppression and not its creators. There is a significant body of work that suggests that the anti-black racism of the transatlantic slave trade that defined early American society takes its pattern from far older social systems. Kendi argues that the racial hierarchy can be traced as far back as Aristotle's climate theory, or the idea that extremes of hot and cold "produced intellectually, physically and morally inferior people who were ugly and lacked the capacity for freedom and self-government."²⁷ To Aristotle, Greece's intermediate climate situated its inhabitants "as the most beautifully endowed superior rulers and enslavers of the world."²⁸ Likewise, Whitaker's investigation of the relationship between blackness and sinfulness in medieval writing and culture extends the cultural horizons of anti-black racism. His read of the religious basis for racism holds that "whiteness means innocence. Blackness means criminality or, to put it in a way that is more germane

²⁷ Ibram X. Kendi, *Stamped from the Beginning: The Definitive History of Racist Ideas in America* (New York: Nation Books, 2016), 17.

²⁸ Kendi, 17.

to the majority of this book's medieval subject materials, blackness indicates unrepentant sinfulness."²⁹ While I generally agree with the idea that the formula for division on the basis of appearance and belonging to a group, the conditions under which this formula is expressed in the United States gives the American racial hierarchy a unique character and effect. This is in part ideological but also practical since the current racial climate of the United States is the result of a sustained legal, social and economic effort.³⁰ Whereas other interpretations of difference can be limited to one sphere or another, the positioning of whiteness as the center around which all other racial identities have evolved is the fruit of a concerted effort by almost every United States institution.³¹ In essence, the creation of whiteness as the unifying core identity from which all other identities could be extrapolated required legal, religious, political, social and economic synchronicity. Its emergence as a socially organizing feature is, therefore, not only an effect of this insidious harmony of institutional will, but the principles that undergird its current incarnations. My point here is that while division has taken various forms around the world and throughout history, the United States has developed a distinctive form of racism because the structure governing its racial categorization is unique.

The idea that darker skin was indicative of inferiority was not solely conveyed to the thirteen colonies from Europe aboard colonial ships, offloaded and accepted without question. It evolved in the United States. The historical record is littered with evidence to support claims that before the

²⁹ Cord J. Whitaker, *Black Metaphors: How Modern Racism Emerged from Medieval Race-Thinking* (Philadelphia: University of Pennsylvania Press, 2019), 2.

³⁰ Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America* (New York London: Liveright Publishing Corporation, a division of W. W. Norton & Company, 2017), xii.

³¹ Thomas A. Nakayama and Robert L. Krizek, "Whiteness: A Strategic Rhetoric," *Quarterly Journal of Speech* 81 (1995): 291–309. The whiteness I refer to here is not an ancestral claim or phenotype. From my perspective of race as a means of inequitable power distribution that emerged during slavery and evolved in tandem with the American society, my use of the term whiteness refers to those who are afforded power and privilege based on appearance. While I contend that the morphological characteristics that attract power are not fixed, versions of them can be called upon when necessary. Whiteness is not inherent but a relational feature that is formalized through institutional interaction.

legal invention of whiteness, some of the African and Native American inhabitants of the thirteen colonies were afforded a degree of freedom akin to equality. While there were undoubtedly gestures toward prejudice based on color and country of origin, the socio-economic organization of the colonies, with the majority of the population being bondservants of common stature, did not facilitate outright discrimination in all circumstances. With respect to the issue of the sale of Africans in Virginia during the early seventeenth century, Higginbotham argues that “sale” should be interpreted initially as sale of services and not sale of property. Even as Africans were brought to the U.S. unwillingly and without fixed terms of service, *some* were able to enter the social arena at the same level as European bondservants arriving at the same time. This phenomenon was not widespread, and my point is not to negate or qualify the horror or brutality of the system of slavery in any way. Rather, it is intended to show that the perception of inferiority did not always have its current social force. Nor was it always a matter of color. Between 1607 and 1699 eighty-three percent of immigrants to the United States were European. Of that group fifty percent were not considered free. In fact, a small percentage of that group were convicts, sent to the Americas to work without the prospect of freedom.³² Until the importation of enslaved people became numerically significant in the 1680s, the bulk of society’s lowest strata was made up of laborers who, today, would be categorized as white. Moreover, these workers were often incredibly young, ranging between 13 and 25 years of age, a condition which contributed to their social and economic disempowerment.³³ Again, this is not a moral evaluation of the historical moment but evidence for the suggestion that the force of color bias was nurtured over time by legal, religious, and social measures. In other words, choices were made.

³² Aaron S. Fogleman, “From Slaves, Convicts, and Servants to Free Passengers: The Transformation of Immigration in the Era of the American Revolution,” *The Journal of American History* 85, no. 1 (1998): 44.

³³ David W. Galenson, “The Rise and Fall of Indentured Servitude in the Americas: An Economic Analysis,” *The Journal of Economic History* 44, no. 1 (1984): 3.

Between 1619 and 1662, Higginbotham argues that “even though blacks were considered to be inferior to all other individuals in colonial society, the law did not succeed in articulating a clear rationale of, or in providing rigid enforcement for, the precept of black inferiority.”³⁴ According to Battalora, it was freedom, not color, that determined one’s treatment under the law. Citing Jordan, she notes “persons of African descent who held this status received all such rights, including the right to vote. Some free Africans held bond laborers.” Among the masses, Africans were not treated as degraded beings.³⁵ If legal personhood is predicated on freedom, the mere existence of free Africans challenges the notion of a simplistic black-white binary and suggests a grey area in which there was the potential for perceptions of race to evolve in different directions.

After 1662, a legal definition of inferiority emerged that would determine the lived reality of all people of recent African descent. Records from Virginia and Maryland show that until 1676 the law recognized “normal social standing and mobility for African-Americans that was and is absolutely inconsistent with a system of racial oppression.”³⁶ At this point status and freedom is based almost entirely on socio-economic status and not on race. Therefore, “African-Americans who were not bond laborers made contracts for work or for credit, and engaged in commercial as well as land transactions, with European Americans, and in the related court proceedings stood on the same footing as European Americans.”³⁷ For roughly half a century, there was a window of opportunity through which people in the United States could choose to define their perspectives on diversity in a way that was not intensively racialized. For almost half a century, while dark-skinned difference may have offered an opportunity to oppress, it was not always taken. Moreover, to do so was an individual decision and not a legal mandate. Let us note here that it is not merely the state of

³⁴ A. Leon Higginbotham, *In the Matter of Color: The Colonial Period, Race and the American Legal Process*, v. 1 (New York: Oxford University Press, 1978), 15.

³⁵ Jacqueline Battalora, “Birth of a White Nation,” *Understanding and Dismantling Privilege* 5, no. 1 (2015): 4.

³⁶ Higginbotham, 183.

³⁷ Higginbotham, 183.

the enslaved African that must be considered in the colonial ecology. If we consider the relational nature of the construction of racial identity, the position of European indentured laborers and Native Americans must also inform our evaluation of the extent and force of any racial hierarchy. Until the advent of whiteness as a significant cultural category, the undeniable universal formula for division by difference manifested itself economically. It is afterward, with the legal enshrinement of race or fundamental human difference, that the criteria for ascription of power and privilege shifted from wealth to color, and the system of oppression that I am concerned with understanding takes its final form. To be clear, as I will reiterate throughout this project, the issue at hand is not the human inclination toward skin prejudice and privilege. Instead, it is the rhetorical instruments through which beliefs about the inferiority or superiority of one group or another are systematized and formalized at the national level.

Given the perspective that nexal constructs are instruments for the distribution of power, my work addresses the rhetorical strategies that underlie and are used to maintain this order. Therefore, this project seeks to elucidate the mechanisms by which nexal symbols of race are maintained and deployed in spite of the physical evidence that undermines them. Even as arguments are made for racial categorization as a natural, reflexive habit based on visual cues, the spectrum of human diversity does more to dismantle these categories than to maintain them. So how do they persist? The origin of these categories is a matter of historical record. Their maintenance, however, is not as clear. I would like to explore the possibility that the mechanisms by which the system of categorization that undergirds the United States' oppressive racial hierarchy are as ordinary as they are sinister. My work takes three examples that show how individuals and communities have become habituated to racial categorization and gestures toward the work that these categories continue to do. I consider how audiences are encouraged to participate in acts of racial cataloguing and further how this repeated participation leads to the re-instantiation of these categories.

Genomic Science and Rhetoric

The human genomic map is a far more complex operation than can be expressed using current discursive categories of race. Like a sturdy bridge over murky water, the oppressive racial hierarchy that has resulted in the inequitable treatment of people of the global majority in the United States, stands on the imprecise translation of sophisticated scientific terms to common symbols. In a perversely ironic inversion, the clarity of the connection between the scientific real and the discursive imaginary is directly proportional to the muddle of the logic that supports it. To properly examine the nature of this relationship, I must first demarcate the gulf between the reality of human difference and its expression in language.

Within the last twenty years, communication scholars have turned their attention to understanding the ways in which genomics, genetics and eugenics acquire rhetorical force. Much of what has been discussed, however, pertains to how this force affects medicine and healthcare. While reference is made to race and ethnicity, it is often incidental. In what follows I summarize recurrent themes in the communication discipline's approach to understanding genomics. These include the choices made by geneticists to use or not use racial terminology, the relationship between racial categories and ethnic categories; the effect of power structures on genetic research, and the influence of historical categories on the way scientist's create population samples and contextualize them.

Discursive categories are too simplistic to accommodate the diversity of human genetics as revealed by genomic research. Attempting to translate the human genome into terms that can be understood, results in *genome geography*: elements of the genomic sequence are loosely associated with geographic locations and the individuals in possession of these traits are reported to have originated in these places.³⁸ Fujimura and Rajagopalan claim that “this inference of ‘shared ancestry’ is

³⁸ Joan H. Fujimura and Ramya Rajagopalan, “Different Differences: The Use of ‘Genetic Ancestry’ versus Race in Biomedical Human Genetic Research,” *Social Studies of Science* 41, no. 1 (2011): 17, <https://doi.org/10.1177/0306312710379170>.

understood by some audiences as isomorphic with race and ethnic categories, except that it is not.”³⁹

While the scientific evidence suggests that the clustering of humans around certain traits is not sufficient to place them into discrete racial categories, the symbols used to express the organization of the human genome are nonetheless adopted by the public and gain currency in the discourse on difference. According to Condit, “scientific outputs are also products of the match between the ontological character of particular components of being and the linguistic tools that we have available to deal with them.”⁴⁰ This shortcoming results in the present understanding of the relationship between scientific genomic categories and socially constructed ideas of race.

The inadequacy of the symbolic representation of scientific research on genetics is further exacerbated by reporting in the media. According to Condit, “the standards of accuracy applied in the popular press are set by the need for reporters to translate the precisely honed technical descriptions found in scientific writing into lively and clear summaries, using lay vocabulary.”⁴¹ A problem arises, however, when the criteria governing reporting come into conflict and reporters fall prey to the tendencies to simplify and exaggerate instead of remaining true to the scientific terminology.⁴² I discuss this issue in more detail in Chapter five of this project. For the purposes of this literature review, however, it is enough to say that the intersection of media and genomic science is a contributing factor to the misalignment of genetic categories and lay categories of race.

The inability of public discourse to adequately assimilate the complexity of research is a central premise of my project. Based on my attempts to understand the role that genomic science plays in our understanding of race, I would like to consider the liminal space between the scientific

³⁹ Fujimura and Rajagopalan, “Different Differences,” 7.

⁴⁰ Celeste Michelle Condit, “How Culture and Science Make Race ‘Genetic’: Motives and Strategies for Discrete Categorization of the Continuous and Heterogeneous,” *Literature and Medicine* 26, no. 1 (2007): 249.

⁴¹ Celeste M Condit, “Science Reporting to the Public: Does the Message Get Twisted?,” *Canadian Medical Association Journal* 170, no. 9 (2004): 1415.

⁴² Jeanne Fahnestock, “Accommodating Science: The Rhetorical Life of Scientific Facts,” *Written Communication* 3, no. 3 (1986): 275–96.

definitions of human difference and their discursive counterparts as the location at which racial discrimination gains its currency. To this end I turn to Condit, Parrott, and Harris who attempt to understand the role of collective wisdom in the public understanding of race. The results of their investigation support the idea that the public is capable of sophisticated interpretations of genetic science and the rules governing heredity. According to their research:

This study further suggests that the opinions and knowledge of the lay audience parallels much of what the mass media and the scientific establishment say about genetics, but these are not simple regurgitations of those discourses. Individuals and the groups in which they discuss particular issues clearly add to, sift, and rework scientific information and media discourses in terms of their social and cultural needs, interests, and values.⁴³

While this may seem contradictory to my thesis, Condit, Parrot, and Harris go on to explain that the interpretation of genomic science is colored by group experience. Public comprehension of the relationship between genetics and race is “differently inflected in varying social groups based on their experiences and interests, such that members of different demographic groups are likely to mark different exterior racial traits as central identifiers of race and likely to reconcile the dialectics of similarity and difference through different discursive formulations.”⁴⁴ In other words, it is in the interpretive phase of this process that the opportunity arises for scientific data to be skewed by the hegemonic social forces that support a hierarchical racial organization.

Whereas some focus has been on the tendency of the audience’s subjectivity to affect their interpretations of genomic science, other research considers the effect of the scientist’s subjectivity on their method. Since Condit takes the perspective that “science is the handmaiden of the dominant forces in the culture,” genetic science is “predetermined to support racism.”⁴⁵ One of the ways in which this is apparent is the inferential nature of scientist’s inclusion of racial categorization

⁴³ Celeste Michelle Condit, Roxanne Parrott, and Tina M. Harris, “Lay Understandings of the Relationship between Race and Genetics: Development of a Collectivized Knowledge through Shared Discourse,” *Public Understanding of Science* 2 (2002): 385.

⁴⁴ Condit, Parrott, and Harris, “Lay Understandings,” 386.

⁴⁵ Celeste Michelle Condit, “How Culture and Science,” 240.

as a methodological tool. A key characteristic of commercial genetic testing is the identification of single nucleotide polymorphisms or SNPs. These common genetic variations represent single DNA building blocks or nucleotides. Fujimura and Rajagopalan explain that the determination of genetic ancestry is based on the comparison of an individual's SNP variation to a reference cluster sample. They claim that the way "these reference samples are themselves labelled has implications for how test samples will [eventually] be labelled. Reference samples differ depending on the particular study, but typically rely on the researchers' assumptions about which population is 'genetically' closest to the test samples being analyzed, which usually involves geographic considerations."⁴⁶ Otherwise put, the results of a genetic ancestry test are calculated statistically and not absolutely, and are entirely dependent on the reference population used for comparison.⁴⁷ The results of the tests, however, are presented as absolutes and not estimates. The way the reference sample is determined is a matter of choice on the part of the researcher, a choice that is influenced by their own subjectivity and racial nexuses. According to Foster and Sharp "in these and other cases, researchers name the racial or ethnic communities being studied, thereby implicitly indicating that genetic features can be used to characterize contemporary social populations."⁴⁸ In order to compile their reference samples, "genomic researchers frequently rely on the "social" identities of sample donors to ensure the "biological" heterogeneity of the genetic materials they collect and analyze."⁴⁹

Socially constructed identities have also found their way into the scientific process via another route. In a surprising analytical move, Condit argues that African American willingness to embrace the idea of difference is also a social motive for the re-legitimation of race as biological. She

⁴⁶ Fujimura and Rajagopalan, "Different Differences," 15.

⁴⁷ Sandra Soo-Jin Lee et al., "The Ethics of Characterizing Difference: Guiding Principles on Using Racial Categories in Human Genetics", *Genome Biology* 9 (2008): 404, <https://doi.org/10.1186/gb-2008-9-7-404>.

⁴⁸ Morris W. Foster and Richard R. Sharp, 'Race, Ethnicity, and Genomics: Social Classifications as Proxies of Biological Heterogeneity', *Genome Research* 12 (2002): 844.

⁴⁹ Foster and Sharp, "Race, Ethnicity, and Genomics," 845.

suggests that minority groups have “integrated the similarity and difference perspectives productively into their lives,”⁵⁰ allowing for changes to the measures of equality among African Americans. This, she claims, enables support for the “medical approach that recognizes different social groups as harboring different genes.”⁵¹ Likewise, in her analysis of the translation of biological race into law, Hickman argues for the recognition of the positive outcomes of the *one-drop-rule* as a force that “united this race as a people in the fight against slavery, segregation, and racial injustice.”⁵² Other researchers have plainly argued for the inclusion of racial categories in genetic research and the potential of race-based medicine. Among these there is a consensus that social categorization has biological effects that must be considered in medical research. According to Burchard et al. the inclusion of racial and ethnic categories is important to biomedical research, and instead of helping to eradicate the social implications of racial categorization, ignoring them as indicators of disease and potential treatments undermines scientific research.⁵³ I return to these arguments in a subsequent section. However, I note here that together Condit and Hickman demonstrate the conceptual loophole in social constructivist views of race that permits the resurgence of biological essentialism. In both instances, the shared biology of the socially constructed group members is heritable, extending the temporal and spatial boundaries of that group past the social exigence. To follow Hickman’s logic, for example, children born more than a century after the Emancipation Proclamation are joined to the group that resisted slavery by the color of their skin and not by their choice or opinion. The biological group, therefore, transcends the social parameters of the construct.

⁵⁰ Condit, “How Culture and Science,” 245.

⁵¹ Condit, “How Culture and Science,” 245.

⁵² Christine B. Hickman, “The Devil and the One Drop Rule: Racial Categories, African Americans, and the U.S. Census,” *Michigan Law Review* 95, no. 5 (1997): 1166.

⁵³ Esteban González Burchard et al., “The Importance of Race and Ethnic Background in Biomedical Research and Clinical Practice,” *New England Journal of Medicine* 348, no. 12 (n.d.): 1170–75.

If we are to imagine a future in which social constructed groups are not formulated to oppress, it is counterintuitive to perpetuate their existence.

Another area of scholarly inquiry that has gained traction in the past two decades is how genetic research intended to dissolve the boundaries between the socially constructed categories, has had the reverse effect in solidifying demarcations and reinforcing arguments for innate difference between groups. Condit outlines the decline of the psychological interpretations of race as having biological basis, citing a lack of scientific legitimacy.⁵⁴ During this era, organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Human Genome Project advanced the theory that human genetic similarity far surpassed human genetic difference. In its *Statement on Race and Racial Prejudice*, UNESCO affirmed:

Groups commonly evaluate their characteristics in comparison with others. Racism falsely claims that there is a scientific basis for arranging groups hierarchically in terms of psychological and cultural characteristics that are immutable and innate. In this way it seeks to make existing differences appear inviolable as a means of permanently maintaining current relations between groups.⁵⁵

Thirty-one years later, “Francis Collins, Director of the HGP, argued that his organization’s research had proven that ‘separation of human populations into precisely defined racial categories is scientifically unjustifiable.’”⁵⁶ Less than a decade after that, a multidisciplinary group of geneticists from Stanford University would echo the UNESCO’s sentiments. Their statement sought to challenge notions of the racial ordering of intelligence, shifting the focus from biological to environmental factors.⁵⁷ Debate during the last decade of the 20th century was thus dominated by expert testimony against the transmutation of genetic markers into indicators of the intangible. But

⁵⁴ Condit, “How Culture and Science,” 242.

⁵⁵ UNESCO, ‘UNESCO Statement on Race and Racial Prejudice’, *Current Anthropology* 9, no. 4 (n.d.): 271.

⁵⁶ Celeste Michelle Condit, ‘How Culture and Science Make Race “Genetic”: Motives and Strategies for Discrete Categorization of the Continuous and Heterogeneous’, 242.

⁵⁷ Sandra Soo-Jin Lee et al., ‘The Ethics of Characterizing Difference: Guiding Principles on Using Racial Categories in Human Genetics’, 404.

this era would not last long. The same Francis Collins, along with other key personnel in the U.S. genetic establishment, had already begun to qualify and back-track on these claims. As Condit claims, “A third era was dawning, one in which a new set of characterizations would be forwarded.”⁵⁸ In a 2004 article, Collins claims:

As those ancestral origins in many cases have a correlation, albeit often imprecise, with self-identified race or ethnicity, it is not strictly true that race or ethnicity has no biological connection. It must be emphasized, however, that the connection is generally quite blurry because of multiple other nongenetic connotations of race, the lack of defined boundaries between populations and the fact that many individuals have ancestors from multiple regions of the world.⁵⁹

Collins is clear that when it comes to ancestry and the genetic manifestation of social categories the correlations are “imprecise” and the connections “blurry.” Still, his statement opens the door to interpretation since the concept of race is “not strictly” void of biological substance. This is extremely important since the acceptance of genetic test results, and other forms of testing, is predicated on the perceived objectivity and precision of the scientific method. Introducing the notion of subjective interpretation should significantly undermine the validity of such test results. It is also interesting to note here how Collins’ evaluation gives primacy to the social construction. It is not that people displaying specific phenotypical characteristics are fundamentally different to those that display other phenotypical characteristics. Instead, it is that people who display similar morphologies identify with each other as members of a socially constructed group. It is rare in the discourse on race that determinants of difference are clearly identified. This ambiguity permits for genetic research, once oriented toward unification, to be repurposed for division, and the reinstantiation of oppressive, hierarchical distributions of power.

⁵⁸ Celeste Michelle Condit, ‘How Culture and Science Make Race “Genetic”: Motives and Strategies for Discrete Categorization of the Continuous and Heterogeneous’, 243. [need short form title here]

⁵⁹ Francis S. Collins, ‘What We Do and Don’t Know about “Race”, “Ethnicity”, Genetics and Health at the Dawn of the Genome Era’, *Nature Genetics Supplement* 36, no. 11 (2004): 13.

While it is not exhaustive, the preceding section gives a sense of the way in which the genetic basis of racial categorization has been approached by the discipline. It also roughly outlines the rhetoric of science questions raised by the handful of researchers interested in understanding the discursive effects of incorporating genetic data into the discussion. While research has been concerned with the entry point of scientific data into the discourse, I hope to propose a more inclusive framework that treats these discursive moments as nodes in a much more elaborate system. In my theoretical framework, therefore, I initially step away from the specifics to propose a general theory that views the relationship between science and rhetoric of race systemically and provides a route to understanding such individual instances, as those described above.

Rhetoric and Race

There has also been considerable contribution to the subfield of racial rhetoric that goes beyond understanding the realm of genetic testing. Race and racial formulation have been considered from a number of perspectives including the study of whiteness, the role of performativity, the impact of race on the rhetorical canon, and the impact of race on the academy. I would like my theoretical perspective to be considered *in addition to* and not *instead of* the existing work on race. One of the more prominent strands of the racial rhetorical thread is the approach that focuses on understanding the social construction of whiteness in order to comprehend the relational construction of other racial categories. What has been called “whiteness studies” treats whiteness as a “relatively uncharted territory that has remained invisible as it continues to influence the identities of those both within and without its domain.”⁶⁰ Moon and Flores characterize whiteness studies as including “an impulse to mark and thus, come to understand, whiteness; a commitment to anti-racist

⁶⁰ Thomas A. Nakayama and Robert L. Krizek, “Whiteness: A Strategic Rhetoric,” 291.

or anti-white supremacist politics; and a desire to build emancipatory notions of whiteness.”⁶¹ I generally agree with the authors but also suggest that to do so we must better understand the construct of race and how it functions. It is formed by rhetorical forces and requires rhetorical forces to be undone. I recognize whiteness as a manifestation of race, or a category that under most circumstances can be used to harness institutional power.

According to Moon and Flores, whiteness must be “marked, investigated, and understood if whites are to be effective antiracists, but unless the political content of that project is kept clear and central, the study of whiteness is likely to become a form of self-help for white people in an identity crisis.”⁶² Likewise, Shome has argued that, by revealing the hidden center of whiteness, those who identify as white can move beyond the denial of its power and away from the practices that sustain it. She claims that “the goal is ‘abolish whiteness’-that is, abolish the (usually unquestioned and unseen) everyday social norms, values, and structures through which whiteness, as a privileged cultural construction, is maintained.”⁶³ Still, Moon and Flores express concern that the fundamental orientation of whiteness studies furthers the recentering of whiteness. I contend that the issue with the approach of whiteness studies is that it centers race generally and reproduces qualities that I argue are inherent in the racial terms themselves.⁶⁴ It is not so much that people must understand that they are white and that their whiteness affords them privilege. Instead, I argue that the Burkean framework I develop in the next chapter allows us to see that they are not white at all, since whiteness is an illusion. Further, the invocation of race, including efforts to dismantle it, serves to

⁶¹ Dreama Moon and Lisa A. Flores, “Antiracism and the Abolition of Whiteness: Rhetorical Strategies of Domination among ‘Race Traitors,’” *Communication Studies* 51, no. 2 (2000): 99, <https://doi.org/10.1080/10510970009388512>.

⁶² Dreama Moon and Lisa A. Flores, 99.

⁶³ Raka Shome, “Outing Whiteness,” *Critical Studies in Media Communication* 17, no. 3 (September 2000): 367, <https://doi.org/10.1080/15295030009388402>.

⁶⁴ Dreama Moon and Lisa A. Flores, “Antiracism and the Abolition of Whiteness: Rhetorical Strategies of Domination among ‘Race Traitors,’” 101.

bolster the system of categorization that is at the root of the problem. By returning to the foundational principles of racial formation, we are better able to reform the idea of diversity, potentially tethering group formation to significantly less toxic ideas.

Happe discusses a similar position taking a performative turn in the understanding of race. Her argument frames race as ideological and questions the logic whereby “race comes to explain social phenomena in discourses whose explicit aim is to, paradoxically, ameliorate the effects of racism.”⁶⁵ I agree with this assessment since it is a recurring argument in this project that any effort to undermine race based systemic inequality must abandon the circular reasoning that relies on racial referents to prove that race is an illusory construct. Citing McKerrow, Happe reminds us that “ideology is a rhetoric; as such, it exists within the discourse that gives it a name. The question with which we are faced regarding race is this: how does discourse so name it?” Happe suggests that a performative framework is useful in avoiding the trap of linguistic reinstatement since racial ontologies can exist outside of language practices.⁶⁶

Happe is supported by Flores who argues that “despite the fall of popularity of scientific and biological theories of race in the early twentieth century, the visible body retains definitional power in cultural ascriptions of race.”⁶⁷ I concur with them both, arguing throughout this project that even as race is treated as a construct, biology and morphology continue to be the primary referents of where and how this construct operates. Ideally, I would argue that the body should not be read as raced but as expressive of other kinds of diversity, but the scope of this project does not permit me to address that issue in any detail. Acknowledging that racial meanings, discursively circulating, are

⁶⁵ Kelly E. Happe, “The Body of Race: Toward a Rhetorical Understanding of Racial Ideology,” *Quarterly Journal of Speech* 99, no. 2 (May 2013): 132, <https://doi.org/10.1080/00335630.2013.775700>.

⁶⁶ Happe, “The Body of Race,” 132.

⁶⁷ Lisa A. Flores, “The Rhetorical ‘Realness’ of Race, or Why Critical Race Rhetoricians Need Performance Studies,” *Text and Performance Quarterly* 34, no. 1 (January 2, 2014): 94, <https://doi.org/10.1080/10462937.2013.849356>.

attached to bodies that are then named by racial categories, my aim is to define and explain the rhetorical process through which this happens to offer a framework for intervention.⁶⁸

Racism is a form of social ordering, the dynamism of which precludes analysis of isolated events. Because racial hierarchies are systemic, this work takes for granted that racism requires an order in which to function. It is not possible for systemic inequality based on race to function without the categories of order that enable it. Cisneros and Nakayama make the distinction between the “new” and “old” racism and argue that there has been a shift away from explicit exclusionism based on biological essentialism to the imputations of cultural “deficiencies” that elide the systemic challenges faced by some communities in the United States.⁶⁹ Essentially, Cisneros and Nakayama are pointing to the advent of *colorblindness* which purports to embrace “individual difference and diversity along with the eschewal of racial identification and/or claims of structural racism (seen as playing the “race card” or reverse racism).”⁷⁰ I am cognizant of the fact that my approach to understanding race in the United States may at some points enter into the realm of analysis rejected by Cisneros and Nakayama in that it may appear to advance claims that the solution to racism is the eradication of race. This is to the true to the extent that I am attempting to problematize the interpretation that racial categorization, especially as interpreted through rhetorics of genetic testing, is the most effective strategy for making sense of human diversity and belonging. It is not that this project rejects the idea that humans are different, or that there are cultural, geographical, and social manifestations of these differences. Rather, it considers that the range of *racial* dissimilarity is in fact narrower than the discourse of race suggests, and that there may be alternate ways of registering and treating with difference. Moreover, at various points in this discussion, I will attempt to show how

⁶⁸ Flores, 95.

⁶⁹ J. David Cisneros and Thomas K. Nakayama, “New Media, Old Racisms: Twitter, Miss America, and Cultural Logics of Race,” *Journal of International and Intercultural Communication* 8, no. 2 (April 3, 2015): 111, <https://doi.org/10.1080/17513057.2015.1025328>.

⁷⁰ Cisneros and Nakayama, “New Media, Old Racisms,” 110.

those cultural manifestations often labelled with racial terms evolve out of socioeconomic and other factors, their relationship to race being a retroactive connection made through the same rhetorical processes that this dissertation attempts to explain.

In the problematic scenario that Cisneros and Nakayama describe, *colorblindness* allows for a shift in logics of racism, “removing from personal thought or public discussion any taint or suggestion” of racism “while legitimating existing social, political, and economic arrangements” of white privilege.⁷¹ The theoretical position that I propose in the coming pages recognizes white supremacy but only as the organizing principle of a wider system that owes its very existence to the recognition of visual cues as an indicator of difference. It is not white power in itself that must be dismantled but the system of organization that empowers whiteness. In the absence of the rhetorical practices that attach significance to the fiction of race, *white*, like other *racial* identifiers, becomes an empty signifier.

In keeping with my argument, Hasian and Delgado borrow from McPhail, claiming that “even when critics have looked at race, there is a tendency to simply invert discursive binaries rather than “engage in a rhetoric that actively recognizes and seeks to transcend the illusory black and white divisions of race, gender, and the language of negative difference.”⁷² In order to circumvent this stumbling block, they issue a call for communication scholars to employ Racialized Critical Rhetorical Theorizing, an interdisciplinary approach that traces and evaluates the force of racial discourse on “histories, cultural memories, narratives, myths, and other discursive units.”⁷³ According to McPhail, “antiracist theoretical struggles are in difficulty when they ignore the assumptive grounds of the linguistic spaces in which epistemic antagonisms occur, and, thus,

⁷¹ Cisneros and Nakayama, “New Media, Old Racisms,” 111.

⁷² Marouf Hasian Jr. and Fernando Delgado, “The Trials and Tribulations of Racialized Critical Rhetorical Theory: Understanding the Rhetorical Ambiguities of Proposition 187,” *Communication Theory* 8, no. 3 (1998): 245–46.

⁷³ Marouf Hasian Jr. and Fernando Delgado, “The Trials and Tribulations,” 246.

complicitously re-articulate the problem of negative difference in their own critical discourses.”⁷⁴ To my mind this rearticulation must also include modernity’s legacy of racial construction that sees the only route to overturning inequality as an acceptance that the fiction of race, even as it is recognized as an illusion. I argue that the hegemonic control exercised by racial categorization requires that we privilege the extant manifestations of racial hierarchy as the impetus for intervention. I wish to go beyond this point and consider ways in which we can recognize and address diversity outside of a racial framework. In other words, my approach is oriented toward solving the effects of systemic inequality by first addressing its cause.

It is not lost on me that the completion of my dissertation project coincides with a shift in the orientation of the field of rhetoric. Even as I enter a hearty discussion about the politics of race in the academe, I am threatened by the current of tokenism that has come to define the space occupied both by academics of color and academics who study color. Following Baugh-Harris and Wanzer-Serrano, I recognize that “challenging the institutionalization of white normativity requires more than a shift in content. It requires shifts in form and method.”⁷⁵ My theoretical position seeks to distill the existing theoretical resources in a way that privileges and prioritizes my own perspective, as representative of various scholarly margins. I discuss these issues later in the project when I explain how my use of Kenneth Burke’s theory is an attempt to decolonize the rhetorical canon. I aim not to “merely ‘stretch’ the canon.”⁷⁶ I believe that one of the ways in which this dissertation project will contribute to the field is by answering the call of Flores, Houdek and Chakravartty et al., for a body of racial rhetorical scholarship that is not restrained by the

⁷⁴ Mark Lawrence McPhail, “Complicity: The Theory of Negative Difference,” *The Howard Journal of Communications* 3, no. 1 (1991): 4.

⁷⁵ Sara Baugh-Harris and Darrel Wanzer-Serrano, “Against Canon: Engaging the Imperative of Race in Rhetoric,” *Communication and Critical/Cultural Studies* 15, no. 4 (October 2, 2018): 337, <https://doi.org/10.1080/14791420.2018.1526386>.

⁷⁶ Baugh-Harris and Wanzer-Serrano, 337.

institutional barriers that have compromised both its writing and its writers in the past. I hope to join the trend in racial rhetorical studies that Flores describes as “rhetorical criticism that is reflective about and engages the persistence of racial oppression, logics, voices, and bodies and that theorizes the very production of race as rhetorical.”⁷⁷

Contributions from Outside Communication

Historically, the study of race has been the domain of the social sciences, with Sociology in particular being the discipline with a focused understanding of the effect of racial categorization on society. While my fundamental assumptions generally vary from sociological research, I treat my project as an extension of that corpus in a number of ways. Most significantly, my work aligns with the sociological perspective with respect to the recognition that race is central to modern social formation and has wide reaching, potentially detrimental effects on the lived realities of social actors. If our understanding of race is viewed as linear – being defined in religious and folk terms, then biologically, then by the field of Sociology as a social construction and racial formulation - my project can be interpreted as the next step in that procession.⁷⁸ The concept of race that I advance in this dissertation contains elements of each “era” since I treat the concept of race as a palimpsest--a layered configuration in which all preceding approaches exist simultaneously and are informed by each other. My approach, however, seeks to intervene even earlier in the formulation of the race concept than the Sociological contributions to the discussion. While rhetorical scholarship has really

⁷⁷ Lisa A. Flores, “Between Abundance and Marginalization: The Imperative of Racial Rhetorical Criticism,” *Review of Communication* 16, no. 1 (2016): 5, <https://doi.org/10.1080/15358593.2016.1183871>.

⁷⁸ Fox Genovese and Genovese observe the intersection between religion and race in the American South (E. Fox-Genovese and E.D. Genovese, “The Divine Sanction of Social Order: Religious Foundations of the Southern Slaveholders’ World View,” *Journal of the American Academy of Religion* 55, no. 2 (1987): 215–16.), while Morning traces “the beginnings of “race science” can be traced to eighteenth- century Europe, when the forerunners of today’s biologists and anthropologists sought to name, catalog, and describe the races of the world”; Ann Juanita Morning, *The Nature of Race: How Scientists Think and Teach about Human Difference* (Berkeley: University of California Press, 2011), 24.

only attempted to tackle race issues in the recent past, a rhetorical perspective is interested in addressing the problem at the level of the sign, meaning the operational definitions of race and how they function in broader cultures. Rhetorical analysis is among few disciplines that focus on the symbolic roots of the discourse to examine the effect of terms that other disciplines might take for granted as evident.

I treat genetic testing not so much as a return to biological essentialism because I do not see the progression as linear, but as an additional dimension that has been synthesized with other lay and scholarly theories of race. This layering is a function of recurring terms facilitated by the dearth of rhetorical resources with which to frame, interpret and understand the race concept. In this way, I do not necessarily reject the sociological contribution. Instead, I modify it by identifying the ways in which it is a manifestation of earlier conceptions of race, and how it is brought to bear on the new genetic conception of race. In this way I attempt to intervene at the level of the symbol, interrogating how it is invested with meaning and how that meaning has been deployed over time.

The following section of the literature review is divided into two parts. In the first, I briefly review key readings in Sociology that have informed my critical race perspective generally and offer some modifications to the existing framework. I then engage the literature in Cognitive and Neuroscience research that I feel provides an avenue of approach to the issue that this project is concerned with, namely how Burkean terms for order interact to create and recreate a hierarchical system that identifies intangibles characteristics using visual cues. Together, I believe these forays outside the realm of Communication proper help to situate my approach.

Sociology

Kenneth Burke has said that to “act wisely, in concert, we must use many words. If we use the wrong words...we obey false cues. We must name the friendly or unfriendly functions and

relationships in such a way that we are able to do something about them.”⁷⁹ Definitions of race are the foundation of theorizing and intervention. But neither theory nor activism is value free. As such, my research considers that the terms we use to describe nexal formulations and explain how they function are already infused with imperatives that fund the existing power structure. Among these is the sense that biological classification, even as it is veiled by constructionist explanations, is accepted as the most ready and effective system of human classification. This is my point of departure. My interpretation of accepted perspectives in critical race theory, as well as the location of my project in the discourse, is seen through this lens. To return to the question of definitions then, race has been defined in many ways by scholarship but none of these definitions are able to escape the visual cues that are based in biology. Even as contemporary discussions of race take as a fundamental premise that race is a construct – the indicator of the constructed groups into which people are placed and with which they claim to identify, still retains much of the vocabulary of biological categorization. Why does this remain? Why are the efforts toward meritocracy espoused by every nation, and embedded specifically in the governing documents of the United States, perpetually undermined by the return to biology? Some would contend that these questions have already been answered. But I suggest that some explanations remain outstanding. There is more work to be done.

The practice of superimposing new definitions of race over existing explanations, both demonstrates how the retention of race as the primary form of human categorization works and contains the explanation for how it can be addressed. I believe that defaulting to race as an organizer is a *terministic screen* that “directs the attention to one *field* (emphasis mine) rather than another.”⁸⁰ Unlike my counterparts in the social sciences that are concerned with modifying inequities perceived through this lens, I treat *race* as the field of vision itself.

⁷⁹ Kenneth Burke, *Attitudes Toward History*, Third (Los Angeles: University of California Press, 1984), 4.

⁸⁰ Kenneth Burke, *Language as Symbolic Action: Essays on Life, Literature, and Method*, Nachdr. (Berkeley: Univ. of California Press, 1966), 50.

To address this, I turn, temporarily, to another Burkean framework. In his *Attitudes Toward History*, Burke says “call a man a villain, and you have the choice of either attacking or cringing. Call him mistaken, and you invite yourself to attempt setting him right.”⁸¹ I believe that variety in the approaches to understanding systemic racial inequity are valuable. It is not my project to attempt to dispel or reject any of the contributions before mine. Instead, I propose to situate myself in the discourse as a bridge between the rhetorical and social scientific, by identifying and fulfilling those functions that only a rhetorical perspective can serve. The next section of this writing therefore contains selections of the various approaches defining conceptualizations of race to show how they intersect with my own theoretical perspective. I begin with Bonilla-Silva, whose overview of the racial definitions considers the contributions of the field of sociology to the discourse and into whose schema my own contributions fit. According to Bonilla-Silva, the theoretical evolution of understanding racism moves through Idealist, Marxist, Internal Colonialism and Racial Formation perspectives, to which he adds a Structuralist view.⁸² My project layers another perspective on these approaches, treating race as a rhetorical power construct that is both structurally and ideologically manifest in keeping with the nature of man as a symbol using animal. The social problems begotten by race can only truly be addressed by understanding how its meaning directs its modes of deployment. In other words, while the structural, ideological, and formative are excellent explanations of how inequitable interpretations of human diversity are manifested, the social scientific corpus neglects, as an epistemic function, the rhetorical work of the symbols it employs to make its case. And it is often a good case, except where there is the assumption that it is possible for any term to be without constitutive rhetorical force. Whereas the perspectives that I will consider in

⁸¹ Burke, *Attitudes Toward History*, 4.

⁸² Bonilla-Silva is critical of early ideological views of racism that define it as a set of beliefs that inform prejudicial behavior. These include Marxists whose focus on class struggles reduce race to “legitimizing ideology.” Likewise, he is critical of internal Colonialism and Racial Formation positions that give undue attention to cultural processes.

the following section treat race as a symbol that is imbued with meaning through human action, I contend that the particular human action of attempting to understand diversity's inherent conflict through the racial lens works to reinforce the symbol of race. Race does not merely exist, it is made. Moreover, race does not merely survive, it is nurtured.

After all “here, as in all other cases where we use words without having clear and distinct ideas, we talk like children: who, being questioned what such a thing is which they know not, readily give the satisfactory answer, that it is *something*.”⁸³ Theorizing race requires the ascription of terms that do not necessarily reflect the extant or aspirational nature of a thing, but instead imbues the identified thing with the nature of the conceptual universe from which the terms arise. Rhetorically, therefore, there is no unbiased racial referent as each term brings with it the prejudice of its naming. My theoretical framework, therefore, is intended not to resist the contributions that explain the effects of racial categorization, but to consider the potential for racial terminology to be understood before it is deployed - as a complex of necessity and intention.

Bonilla-Silva contends that while racism is in some ways ideological, this view does not consider the effect that ideology may have on the individual's life chances. He challenges mainstream Idealist views because they do not perceive racism as fundamental to the structure of the social system. He has criticized the Marxist view of racism as a result of an economic system of chattel slavery, claiming that it is not grounded in social relations. He says that “even though the institutionalist, internal colonialism, and racial formation perspectives regard racism as a structural phenomenon and provide some useful ideas and concepts, they do not develop the theoretical apparatus necessary to describe how this structure operates.”⁸⁴ In the next chapter, I present my

⁸³ Kenneth Burke, *Grammar of Motives* (New York:: George Brazillier, 1955), 22.

⁸⁴ Bonilla-Silva, 467.

approach as a response to Bonilla-Silva's call for a theoretical apparatus and treat the Burkean schema as a framework through which the symbolic operation of race can be better understood.

Bonilla-Silva also claims that race is treated as a static phenomenon, a point with which I agree. In a subsequent section, I borrow from Cultural Studies to show that racial prejudice is dynamic. I suggest Burke's *ultimate term* as a conceptual lens for understanding its dynamism. While I generally take Bonilla-Silva's claims to be accurate, I am suspicious of his claim that "contemporary racism is viewed as an expression of 'original sin' – as a remnant of past historical racial situations."⁸⁵ He argues that the significance of its contemporary form is downplayed by perceiving racism as a legacy. I disagree with this claim, thinking it is possible to both trace the origin of racism to economically inspired efforts at social stratification, and simultaneously, to show how the original formulation has been modified to be aligned with social and political change. In fact, I believe that maintaining a focus on the original intention of racial classification is perhaps the most important part of understanding its contemporary manifestation. I concur with both Bonilla Silva and Fields that the idea of race persists not because we have "inherited it from our forebears of the seventeenth century or the eighteenth or nineteenth, but because we continue to create it today."⁸⁶ I also contend that we must pay close attention to our inability to *not* create it, both then and now. Following the logic of the Burkean order of terms that treat symbols, such as race, as generative, inexhaustible, and ductile, I attempt to show through my case studies that it is not merely the re-creation of race-based ideologies or structures that is problematic, but the structural imperatives inherent in racial terms themselves.

I hope to contribute to the theoretical understanding of race as an interpretation of human diversity by reviewing Bonilla-Silva's work from a rhetorical perspective, specifically through the lens

⁸⁵ Bonilla-Silva, 468.

⁸⁶ Barbara Jeanne Fields, "Slavery, Race, and Ideology in the United States of America," *New Left Review*, no. 181 (1990): 117.

of Dramatism, the usefulness of which I explain in the next chapter. My aim here is not to reject the structuralist view of Bonilla-Silva and others. It is complementary to my approach. Still, Bonilla-Silva's approach has skipped a step so to speak. To illustrate the case, I refer to a summary of Bonilla-Silva's project. He claims that:

Although "racism" has a definite ideological component, reducing racial phenomena to ideas limits the possibility of understanding how it shapes a race's life chances. Rather than viewing racism as an all-powerful ideology that explains all racial phenomena in a society, I use the term racism only to describe the racial ideology of a racialized social system. That is, racism is only part of a larger racial system.⁸⁷

While I agree with him generally, and ultimately, our points of departure are not the same. Bonilla-Silva begins with *racism* as a social phenomenon. I begin with race as the foundation of racism, the *ground* on which it is premised. To use Burkean terms, race is the substance of racism since, "substance' is a scenic word. Literally, a person's or a thing's sub-stance would be something that stands beneath or supports the person or thing."⁸⁸ This may seem obvious but if we accept Burke's logic and that racism is grounded in race, then it would not be possible to address the practice without addressing the terms that govern it. To further make sense of this, Burke has also argued that a *constitution* – or what we should do about a thing – is a substance – what we have named a thing and "as such, it is a set of motives."⁸⁹ In the context of my theoretical framework, therefore, the task is to understand the calculus of motives generated by racial terminology, whereas Bonilla-Silva and others are interested in situating and explaining the work that those terms do after the calculus has already been applied.

This is an appropriate juncture to reiterate the point that what I am advocating for is not racelessness or colorblindness or a post-racial approach to social injustice. Instead, my point is that diversity is more multifaceted than persistent modes of racial categorization can represent and

⁸⁷ Bonilla-Silva, "Rethinking Racism: Toward a Structural Interpretation.," 467.

⁸⁸ Kenneth Burke, *A Grammar of Motives* (Berkeley: University of California Press, 1955), 22.

⁸⁹ Burke, 342.

significantly more pervasive than its biological expressions. In other words, race, however it may be formulated, is not the point. As such, what I am advocating for is a representation of human diversity that is closer to its reality than the rhetorical expression of its appearance. To move toward this end, we must first formulate a framework for tracking and interrogating the survival of biological essentialism. I am attempting to take a middle road. Biological difference cannot be denied, but neither can the reality that social constructions of race are in fact entangled with biological difference despite what they might purport to do. To return to this project's grounding metaphor, the palimpsest has become too cluttered with the markings of earlier traces of racial definition to give us any clear view of the real work that the concept of race does. The reality that each layer is built upon the one before it, is inescapable. The challenge therefore becomes not how to further theorize race but to "un-theorize" it.

The metaphor of the palimpsest emphasizes matters of sequence as well, reminding us that every incarnation of racial definition contains echoes of those that have preceded it and is brought to bear on those that follow it. The Burkean framework is extremely helpful in understanding the sequential relationship between racial definitions. It does not merely enable us to trace interpretations of human difference from religion to genomics but provides parameters for the way in which these perspectives interact.

Like Bonilla-Silva, Omi and Winant interpret race as a "signifier of social conflict."⁹⁰ Informed by the emphasis on sequence in my theoretical framework I contend instead that race is generative rather than reflective. While skin color may be superimposed on extant conflict it is in the naming of the difference that the struggle arises. I agree with Omi and Winant that race is the default feature of social division. But this is not because of racial difference but because of the terministic screen that privileges racial difference as a social stratifier and theoretical lens. It is my

⁹⁰ Omi and Winant, 110.

contention that without the prevailing definitions of race, the division as we know it could not exist. The ability for a symbol of skin to take on ideological value is a rhetorical invention - a form of naming that I suggest can be circumvented not by erasing the lines on the palimpsest but by changing the text altogether.

Another way in which the racial formation perspective leaves room for the central questions raised by the Burkean corpus, is that it does not account for the phenomenon of *relational constitution* outlined in the *Grammar of Motives*. The racial formation perspective does not give enough credence to the notion that categories comprising the sides of the social conflict do not exist in nature. Ascription to the camps in the conflict is artificial, with the population of one camp reflected from the other in a pattern of white centrality that is skillfully explained by Nakayama and Krizek.⁹¹ This rationale is reiterated by Mills when he says of race:

It is not an intrinsic reality in the nature of the human race - that there be sort of natural demarcators, natural lines of division among the family of humans - rather, these lines are artificially drawn by human beings, and the argument is that they are drawn in response to particular political projects.⁹²

Following Said and Burke, I take the racial and political formation of those citizens of the United States who are not white as an example of definition by negation since I treat the emergence of racial classifications primarily as an expression of power.

Contrary to the *agentive* view of racial identity, I argue throughout this project that racial identification emerged through a process of negation governed by existing power relationships, the rules for which were set in slavery but continue to pertain even as they are re-written in different

⁹¹ Thomas A. Nakayama and Robert L. Krizek, "Whiteness: A Strategic Rhetoric," *Quarterly Journal of Speech* 81 (1995): 291–309.

⁹² Charles W. Mills, "Liberalism and Racial Justice" (The University of King's College lecture series "Conceptions of Race in Philosophy, Literature and Art," Halifax, September 16, 2010), <https://www.youtube.com/watch?v=n7KVrx42aqI&pbjreload=101>.

ink⁹³ This is what race (not culture, or biology, but the construct that binds the two) was actually *for*. Racial identity is not, therefore, what one is, believes oneself to be or wishes oneself to be.

According to Mills:

The idea is that race then becomes a system and if we ask a person “what is your race?” What we are really asking is “where are you located in relation to the system?” It is not a question of the person’s natural biology or their natural genetic makeup is, what we are asking is where you are located in the system. And the system varies, so you can move from one country to another, and you can assume a different race. The system evolves over time, so if you’re racially categorized one way at a particular time you can go back a hundred years and find you’re racially categorized a different way.⁹⁴

To extend Mills’ argument, the reality of race is really the expression of the association with a power category at a given place and time. In other words, belonging to a category is temporally and spatially limited. What is not limited, however, is the calculus governing categorical belonging - the translation of phenotypic characteristics into social power. In the context of this project, therefore, this is what is meant by *race*. It is not belonging to a particular group or the individual’s identification with that group but the practice of categorization as a means of social stratification.

From this position, therefore, it is possible to be critical of Omi and Winant’s claim that “we cannot dismiss race as a legitimate category of social analysis by simply stating that race is not real. With respect to race, the Thomases’ sociological dictum is still in force: “It is not important whether or not the interpretation is correct— if men [sic] define situations as real, they are real in their consequences.”⁹⁵ While I believe there is value in the contribution of the authors, this is the juncture in their thinking where my approach and theirs is definitively separated. It is not enough to merely note that there are consequences associated with the practice of racial categorization – or to say that race is real. Instead, it is incumbent upon the theorist to deconstruct the terms thoroughly

⁹³ Charles W. Mills, *The Racial Contract* (Ithaca: Cornell University Press, 1997), 43; Burke, *A Grammar of Motives*, 23; Edward W Said, *Orientalism* (New York: Pantheon, 1979).

⁹⁴ Charles W. Mills, “Liberalism and Racial Justice.”

⁹⁵ Omi and Winant, *Racial Formation in the United States*, 110.

enough that the consequences of racial categorization can be attributed to their root cause, and not treated as a result of natural or societal difference. Also, as Fields suggests, “weary of the struggle, they throw up their hands and declare that racism, if not genetically programmed, is nonetheless an idea so old and entrenched that it has ‘taken on a life of its own’. They thereby come much closer than they realize to the views of those they ostensibly oppose.”⁹⁶ To my mind, without adequate deconstruction of the terms upon which we base our arguments against racism, those terms do more to dictate the discourse than elucidate it.

Social science methodology asks different questions than those I undertake to address. Burkean rhetoric is concerned with terms and how they live. The dominant conceptualization of race treats racial terminology as symbolic, but Burke says symbols are active. So, while the literature I review can be considered a breakthrough with respect to understanding how terms are deployed, it is not concerned with the nature of the terms themselves. An excellent example of how my perspective differs from the social scientific view is the work of Harris and Sim who attempt to understand the way in which bi-racial people identify. The authors make a distinction between *external*, *internal*, and *expressed racial identity*.⁹⁷ In this, as with several other studies on race and racism, the terms of identification are limited to the given racial groups which correspond to Burke’s dialectic terms. Those identifying as members of the given racial groups, even as they move between categories, continue to exercise a range of identification limited by the social construct. Even as this is useful for studies of internal racial identity and does illuminate the nature of identification, it is not particularly helpful to a project interested in the wider structural organization of racial categories or the discursive management of power via those categories.

⁹⁶ Fields, “Slavery, Race, and Ideology in the United States of America,” 117.

⁹⁷ David R. Harris and Jeremiah Joseph Sim, “Who Is Multicultural? Assessing the Complexity of Lived Race,” *American Sociological Review* 67 (2002): 615.

Race is a representation, and all representations are selections. Logically it should be possible to deselect the representation of human diversity or re-select another. Even as it protests its effects, dominant understandings of race are inadvertently grounded in the biological and give precedence to the visual. This dissertation project attempts to better understand the process of selection to create opportunities for it to be changed.

Cognitive and Neurological Science

In *Language as Symbolic Action*, Burke offers a “definition of man.” He says, “man is a symbol-using (symbol -making, symbol-misusing) animal; inventor of the negative (or moralized by the negative; separated from his natural condition by instruments of his own making; goaded by the spirit of hierarchy (or moved by the sense of order) and rotten with perfection.”⁹⁸ The underlying assumptions of this project are aligned with Burke’s assessment of humanity in the following ways. To begin, I argue that racial recognition is less of a state and more of a process through which phenotypical cues become signs for inherent qualities. This is the fundamental relationship between the *positive* and *dialectic* terms in the Burkean universe. While I do not argue that these symbols and what they represent are permanent, I will maintain that the invocation of race is always symbolic. The generation of these symbolic terms reflects, the “invention of the negative” since, as I show in the introduction to this project, in the U.S. context, the division of society along racial lines was a process of othering that delimited not-whiteness. While there have since been efforts to reclaim blackness as a concept, subsequent inversions of the white/not-white dichotomy, and other struggles to move outside of the conceptual boundaries of the original formulation. I might reframe Burke by arguing the imposition of racial categories is the means by which humanity is separated from its natural condition – a spectrum of diversity – into artificial categories that gain more traction

⁹⁸ Kenneth Burke, *Language as Symbolic Action: Essays on Life, Literature, and Method*, Nachdr. (Berkeley: Univ. of California Press, 1966), 16.

with each utterance. Finally, and this is what the next section of my literature review is primarily concerned with, Burke claims that humankind is goaded by the spirit of hierarchy.

Kenneth Burke is not the only scholar to recognize that human beings are incentivized by a sense of order. It is ironic that Burke is most well supported by the empirical scientific approach since the preceding sentiments, expressed first in *Rhetoric of Religion* in then 1961 and then in *Language as Symbolic Action* in 1966 follow his own criticism of “scientism” in *Permanence and Change*. Burke traces the evolution of social thought from magic, through religion to science, finally offering a corrective philosophy for what the scientific ideal lacked. According to Brock, Burke “acknowledges that a psychotic pressure favors science-technology because there is a ‘definite social need for the completion of the scientific rationalization’ but he also points to the reduction of people to machines and the ‘final culmination of man’s rationalizing enterprise’ as the eventual basis for a corrective because science ‘may be neglecting an important aspect of human response.’”⁹⁹ It is fitting therefore, and in keeping with the Burkean tendency to synthesize and harmonize antithetical positions, that the greatest support for the final part of Burke’s “definition of man” should come from the disciplines of cognitive and neuroscience.

The individuals who discuss the revelation of genetic tests results in the case studies I analyze, express perceptions of race, that if understood through the lens of the Burkean framework, help to fill a gap in our understanding of human addiction to racial categories. The fields of neuroscience and social psychology have made efforts to understand the physical and psychological processes that underlie human categorization and motivated social cognition. Still, these disciplines, in part because of their view of labels as arbitrary and neutral, are ill-equipped to address the *how* of these categorizations. Intervention from a rhetorical perspective, therefore, is useful to

⁹⁹ Bernard L. Brock, ed., *Kenneth Burke and Contemporary European Thought: Rhetoric in Transition* (Tuscaloosa: University of Alabama Press, 1995), 5.

understanding role of naming and its results and serves as a bridge between the two areas of research. To further situate my intervention, I will briefly outline the trends in Neuroscientific and Psychological research that frame the question my dissertation will attempt to answer.

For many decades cognitive science has held that human beings are motivated by a sense of order. Liberman et al. propose that humans are attracted to racial categories in particular, because they are “(a) perceptually discriminable, (b) disproportionate in size (i.e., categories with fewer members are more salient), (c) explicitly and implicitly used (e.g., if groups are segregated, one may infer that there exist meaningful differences between them and (d) labeled (e.g., Asian, Black, Latinx, White; see also Aboud, 1988; Cosmides, Tooby, & Kurzban, 2003; Hirschfeld, 1995). Racial categories are particularly important given that they are federally sanctioned (e.g., by the U.S. Census Bureau), easily employed by individuals, and because they directly tell people which racial categories to form.”¹⁰⁰ The need to categorize serves a predictive function since the ability to group items allows individuals to make inductive inferences. In other words, “the capacity to view category members as sharing important, unchanging, and possibly unobservable similarities allows people to efficiently, and perhaps even spontaneously, learn a property of a category and apply it to novel category members,” which assists in organizing and navigating the complexity of the social domain.¹⁰¹

Neuroscientific research suggests that the human need for group belonging is inherent. Under experimental conditions, individuals show immediate preference for their own group. Whether this is as a result of visual stimulus or a sense of group belonging is a matter of

¹⁰⁰ Steven O. Roberts and Michael T. Rizzo, “The Psychology of American Racism,” *American Psychologist* 76, no. 3 (April 2021): 2–3, <https://doi.org/10.1037/amp0000642>.

¹⁰¹ Zoe Liberman, Amanda L. Woodward, and Katherine D. Kinzler, “The Origins of Social Categorization,” *Trends in Cognitive Sciences* 21, no. 7 (July 2017): 1, <https://doi.org/10.1016/j.tics.2017.04.004>.

contention.¹⁰² Generally, racial identity is understood as group belonging which affects perception and the memory of faces. This is often referred to as own-race bias.¹⁰³ For some time there was consensus that recognition of and placement into racial group was an automatic and pervasive function of human cognition. More recently, however, there is evidence that group belonging need not be primarily based on visual recognition but on the way in which visual cues are gathered under group labels. Here we can consider labels to be the point at which the tangible and intangible connect, or where the tangible and intangible are paired. Racial perceptions are now seen as encoded, not mandatory, and may be mapped to group belonging or coalition – a condition which can be recoded under experimental conditions.¹⁰⁴ Racial perceptions, as indicated by stereotyping and prejudice, are not necessarily automatic, but dynamic and malleable, seemingly affected by self-image, social motives, attention and group belonging.¹⁰⁵ Research into the role of the fusiform gyrus (FG) in facial recognition and categorization has shown that individuals do not represent race when it does not signify group boundaries. In some studies, “participants showed preferences for in-group members on an implicit measure of evaluation (Van Bavel and Cunningham, 2009) and superior

¹⁰² Golby, Alexandra J. et al., “Differential Responses in the Fusiform Region to Same-Race and Other-Race Faces,” *Nature Neuroscience* 4, no. 8 (2001): 847; Tiffany A. Ito and Geoffrey R. Urland, “Race and Gender on the Brain: Electrocortical Measures of Attention to the Race and Gender of Multiply Categorizable Individuals,” *Journal of Personality and Social Psychology* 85, no. 4 (October 2003): 624, <https://doi.org/10.1037/0022-3514.85.4.616>.

¹⁰³ Jay J. Van Bavel et al., “Motivated Social Memory: Belonging Needs Moderate the Own-Group Bias in Face Recognition,” *Journal of Experimental Social Psychology* 48, no. 3 (May 2012): 707, <https://doi.org/10.1016/j.jesp.2012.01.006>.

¹⁰⁴ Leda Cosmides, John Tooby, and Robert Kurzban, “Perceptions of Race,” *Trends in Cognitive Sciences* 7, no. 4 (April 2003): 177, [https://doi.org/10.1016/S1364-6613\(03\)00057-3](https://doi.org/10.1016/S1364-6613(03)00057-3).

¹⁰⁵ Irene V. Blair, “The Malleability of Automatic Stereotypes and Prejudice,” *Personality and Social Psychology Review* 6, no. 3 (2002): 255; Christian Kaul, Kyle G. Ratner, and Jay J. Van Bavel, “Dynamic Representations of Race: Processing Goals Shape Race Decoding in the Fusiform Gyrus,” *Social Cognitive and Affective Neuroscience* 9, no. 3 (March 1, 2014): 330, <https://doi.org/10.1093/scan/nss138>; Jay J. Van Bavel, Yi Jenny Xiao, and William A. Cunningham, “Evaluation Is a Dynamic Process: Moving Beyond Dual System Models: Evaluation Is a Dynamic Process,” *Social and Personality Psychology Compass* 6, no. 6 (June 2012): 448, <https://doi.org/10.1111/j.1751-9004.2012.00438.x>.

recognition memory for in-group faces (Van Bavel et al., 2012), regardless of race.”¹⁰⁶ Others have “demonstrated that evaluations and memory for faces are characterized by biases in group membership, not race (Van Bavel and Cunningham, 2009; Van Bavel et al., 2012).”¹⁰⁷ Own group bias is motivated by the chronic need to belong and exacerbated by social exclusion.¹⁰⁸ The mechanism for perceiving race is mitigated by the context, particularly the construction of social groups. Experiments that assign individuals to mixed-race teams have shown that people categorize others according to race when it is the salient social category but categorize according to team membership (and ignore race) when team membership is salient (Kurzban et al., 2001).¹⁰⁹

Here, I would like to suggest the possibility that we invert the causal inference and think of social construction as the process of visual stimulus being gathered around labels rather than labels being attached to existing visuals. I elaborate on the process by which labels create categories, rather than simply identifying them as natural phenomena in the fifth chapter of this project. It is not that people are *raced* in any real way but that they register in the human mind as raced because of the need for group belonging and the availability of racial categories. It is not that the artificial white/not-white line was imposed in the colonial American context to represent a social or morphological dichotomy but that the artificial line created the dichotomy. As a preamble to my ultimate argument therefore, I would like to explore the possibility that race was not devised to make sense of human difference. Instead, it could be that the human tendency to think in dualities

¹⁰⁶ Kyle G. Ratner, Christian Kaul, and Jay J. Van Bavel, “Is Race Erased? Decoding Race from Patterns of Neural Activity When Skin Color Is Not Diagnostic of Group Boundaries,” *Social Cognitive and Affective Neuroscience* 8, no. 7 (October 1, 2013): 750, <https://doi.org/10.1093/scan/nss063>; Jay J. Van Bavel and William A. Cunningham, “Self-Categorization With a Novel Mixed-Race Group Moderates Automatic Social and Racial Biases,” *Personality and Social Psychology Bulletin* 35, no. 3 (March 2009): 326–27, <https://doi.org/10.1177/0146167208327743>.

¹⁰⁷ Ratner, Kaul, and Van Bavel, “Is Race Erased?,” 755.

¹⁰⁸ Van Bavel et al., “Motivated Social Memory.”

¹⁰⁹ Van Bavel, Jay J., Dominic J. Packer, and William A. Cunningham, “The Neural Substrates of In-Group Bias: A Functional Magnetic Resonance Imaging Investigation,” *Psychological Science* 19, no. 11 (2008): 1137.

demanded, and continues to demand, that we organize the world into some form of positive or negative, us or them.

The sharp contrast of phenotype on either side of the spectrum of human morphology, therefore, is only as apparent as the demarcation that creates it suggests. According to Beale and Keil, “categorical perception” or the tendency to recognize and evaluate faces as part of a group, “might not all result from innate processing constraints but might also be expected for more artificial continua, at higher perceptual levels and where no single dimension of variation is obvious.”¹¹⁰ In other words, “what we think we’re looking at can alter what we actually see. More broadly, when we put things into a category, research has found, they actually become more alike in our minds.”¹¹¹

This is shown particularly clearly in the research that has focused on the perceptions of *mixed-race* individuals. In a study that considered the role of political ideology in the perception of racial categorization, “conservatives might maintain a stricter boundary around Whiteness (compared with liberals) because of the way they feel about racial ambiguity.”¹¹² This is interpreted as the result of conservative group membership, rather than membership in a given racial group. It is possible that “categorizing individuals by race is not inevitable and supporting an alternative hypothesis: that encoding by race is instead a reversible byproduct of cognitive machinery that evolved to detect coalitional alliances.”¹¹³ Race can be seen not as the naming of an existing group

¹¹⁰ James M. Beale and Frank C. Keil, “Categorical Effects in the Perception of Faces,” *Cognition* 57 (1995): 219.

¹¹¹ Tom Vanderbilt, “The Psychology of Genre,” *New York Times*, May 28, 2016, <https://www.nytimes.com/2016/05/29/opinion/sunday/the-psychology-of-genre.html>.

¹¹² Amy R. Krosch, John T. Jost, and Jay J. Van Bavel, “The Neural Basis of Ideological Differences in Race Categorization,” *Philosophical Transactions of the Royal Society B: Biological Sciences* 376, no. 1822 (April 12, 2021): 6, <https://doi.org/10.1098/rstb.2020.0139>.

¹¹³ R. Kurzban, J. Tooby, and L. Cosmides, “Can Race Be Erased? Coalitional Computation and Social Categorization,” *Proceedings of the National Academy of Sciences* 98, no. 26 (December 18, 2001): 15388, <https://doi.org/10.1073/pnas.251541498>.

but the creation of that coalitional group around a label, or from the Burkean perspective, a dialectic term.

Addressing the Genomic Revolution

There is a handful of texts that directly address the relationship of genomics to the construction of racial identity. They are set apart from the other research identified in my literature review in two ways. They have been written after and carefully consider what has been referred to as the *genomic revolution* or the acceleration of recreational genetic testing made possible by the availability of commercial ancestry tests. This body of literature also directly addresses the interpretation and impact of genetic test results on the construction of racial identity and belonging.

Revisiting Race in a Genomic Age is a 2008 volume of interdisciplinary contributions that raises important questions about the nature of genetic testing and its relationship to race. Authors in the volume establish a timeline of the evolution of the race concept, explore the science of genomic testing and, importantly, address the circulation of genomic-racial hybrid in the public sphere. While it is not possible to adequately reflect on all the volume's contributions, there are several points of intersection that are worth noting. The volume is, among other things, a coordinated response to efforts from within the scientific to justify race as a valid category in genomic research. As I argued in the last chapter and will continue to do throughout this project, while the social constructivist definitions of race may be heuristically beneficial, accepting them as the final word on diversity creates a conceptual loophole into which biological essentialism comfortably fits. Again, even as we accept that there is no biological basis for racial categories, the population of these created categories with individuals that appear similar creates the opportunity for scientific arguments that attempt to prove the similarities at the genetic level.

As promised, I return to the contribution of Burchard et al., who revisit the question of whether race is a biologic or social construct from the genetic perspective. They argue that socially

constructed groups “do differ from each other genetically, which has biologic implications.”¹¹⁴ Further, their claim is that the parameters of the socially constructed group serve as a basis for investigating the role of shared biology in the well-being of that group. In one example, to tether the African American community to lower socio-economic status in their reasoning, they argue that “socioeconomic status is strongly correlated with race and ethnic background and is a robust predictor of access to and quality of health care and education, which, in turn, may be associated with differences in the incidence of diseases and the outcomes of those diseases.”¹¹⁵ Essentially then, their approach is to investigate the biological as a route to addressing the medical issues that result from the lived reality of membership in socially constructed community. Socially constructed groups become populations for the investigation of genetic similarity, which in turn is used to validate the biological similarity of those groups.

This approach to genetic research also instantiates racialized, and racist, understandings of genetic admixture. Following Bolnick and Rutherford, who together take note of the role of the subjective in the creation of analytical categories, I draw attention to the how rhetorical formulations of white purity and supremacy subtly influence the scientific approach.¹¹⁶ As the starting point of their treatment of admixture, Burchard et al contend that “despite the admixture, black Americans, as a group, are still genetically similar to Africans.”¹¹⁷ This is essentially a scientific reiteration of the *one-drop-rule* especially when it is considered alongside Bolnick’s finding that “from a genetic perspective, non-Africans are essentially a sub-set of Africans.”¹¹⁸ A choice, therefore, is made to

¹¹⁴ Esteban Gonzalez Burchard et al., “The Importance of Race and Ethnic Background in Biomedical Research and Clinical Practice,” *New England Journal of Medicine* 348, no. 12 (2003): 1171.

¹¹⁵ Burchard et al., 1171.

¹¹⁶ Deborah A. Bolnick, “Individual Ancestry Inference and the Reification of Race as a Biological Phenomenon,” in *Revisiting Race in a Genomic Era* (New Jersey: Rutgers University Press, 2008), 70–85; Adam Rutherford, *How to Argue with a Racist: History, Science, Race and Reality* (London: Weidenfeld & Nicolson, 2020).

¹¹⁷ Burchard et al., “The Importance of Race and Ethnic Background in Biomedical Research and Clinical Practice,” 1173.

¹¹⁸ Bolnick, “Individual Ancestry Inference and the Reification of Race as a Biological Phenomenon,” 71.

treat the genetic markers of a group as discontinuous and to use the perceived discontinuity as the basis of medical research.

The proliferation of research that racializes genetic and medical research is troubling. Taken as natural, the racialized character of this research redirects our attention from richer and more scientifically rigorous ways of considering human diversity to make sense of the world using concepts that default to race as a master organizer. An example of this is Risch et al.'s definition of African as “those with primary ancestry in Sub Saharan Africa.” This is a worthy illustration for several reasons. Firstly, this is a foundational definition upon which subsequent arguments are made in the publication. Secondly, this definition is presented without rationale, suggesting that the ‘Sub-Saharan’ demarcation line not only makes sense but is somehow natural. Thirdly, the use of the term “primary” ancestry again suggests discontinuity where it does not necessarily exist without quantifying what primary might mean. Finally, it superimposes the retrospective geo-political Sub-Saharan line on research intended to reveal the nature of human diversity at a time when such terminology did not exist or necessarily have any demonstrable bearing on human behavior. The redirection of attention to race and racial proxies such as geography, is dealt with in more detail later in this project. However, my work is closely aligned with those who resist the notion that race, socially constructed or otherwise, is a meaningful category in scientific research, as suggested above.

Together, the contributions of *Revisiting Race* are highly critical of the ways in which genetic testing science have advanced and are being received. Bolnick takes note of the tendency for individual genetic testing to be extrapolated to groups. She writes, “although this body of work emphasizes the *individual* as the crucial unit of analysis, individual ancestry inference is closely tied to our understanding of human *groups* and the distribution of genetic variation among them.”¹¹⁹ Based on the patterns of human genetic variation Bolnick argues that “traditional notions of race

¹¹⁹ Bolnick, 71.

misrepresent human biological diversity and the evolutionary history of our species. No discrete boundaries separate humans into a few genetically distinct groups, and the members of each group are highly variable.”¹²⁰

She also addresses the use of the term ancestry, which does significant rhetorical work in my texts. While rarely well-defined, ancestry is often used to refer to the “geographic region or regions where one’s biological ancestors lived.”¹²¹ As a result, the term *ancestry* is generally thought to be more ‘specific and objective’ than the term *race*. It is also thought to be more flexible since race is reductive whereas ancestry can denote multiple geographic regions. As I do in Chapter five of this project which explores the National Geographic’s coverage of the Genographic Project, Bolnick raises questions about the geographical demarcations that are used to make sense of individual ancestry. She notes that there has been “little discussion of the size of geographic regions, how they should be defined, or what specific geographic divisions are more relevant than others for studies of human genetic variation. Nor is it always clear what time frame should be considered when determining an individual’s ancestry.”¹²² Dupre also makes the distinction between race and ancestry from the perspective of biomedical research. He contends that ancestry and race are conceptually different and “only ancestry has any relevance to the incidence of genetic disease.”¹²³ In other words, while mutation might be traced *along* an ancestral line, they do not necessarily extend *across* a self-identified group which is “at best a rough proxy for specific ancestry.”¹²⁴ In Chapter four I advance this line of questioning by evaluating the force of using geo-political labels to identify ancestry locations and conclude that these essentially function of linguistic proxies for race in spite of their

¹²⁰ Bolnick, 73.

¹²¹ Bolnick, 80.

¹²² Bolnick, 81.

¹²³ John Dupre, “Why There Are No Genes For Race,” in *Revisiting Race in a Genomic Era* (New Jersey: Rutgers University Press, 2008), 50.

¹²⁴ Dupre, 50.

intended function as neutral terms. In both chapters four and five, I grapple with commercial genetic testing's preference for recent ancestry to which recognizable historical narratives can be attached.

Other contributors to the volume note the ways in which the use of race as a category is encouraged in commercial genetic testing and scientific research. Kahn argues that the proliferation of 'race-based' genomic knowledge is intentional. His claim is that the conceptualization of race in biotechnology precipitates, "incentives for using race and ethnicity in order to maximize patent scope, duration, and viability. Federal initiatives, guidelines, and approvals thus provide specific, targeted incentives to see and use race and ethnicity in relations to biotechnological innovation in a manner that promotes, indeed, rewards the reification of race as a genetic category."¹²⁵

While it is not the central focus of my project, the role of capital in directing the evolution of genetic science cannot be underestimated. As I suggest at the end of my second case study, there is tremendous financial value to be derived from combining genetic ancestry testing with racial formulations. According to another of the volume's contributors, commercial genetic testing's ethical conundrum is two-fold. Of corporate genetics Marks argues "there is not even a word for a science in which the production of capital is so intimately associated with the production of knowledge, in close synergy with the creation of a market for that knowledge."¹²⁶ Additionally, he contends that because most of the research in commercial genetic testing is being conducted outside of the academy, there are "unprecedented questions of conflicting loyalties, interests and motivations."¹²⁷

¹²⁵ Jonathan Kahn, "Patenting Race in a Genomic Age," in *Revisiting Race in a Genomic Era*. (New Jersey: Rutgers University Press, 2008), 129–30.

¹²⁶ Jonathan Marks, "Race: Past, Present and Future," in *Revisiting Race in a Genomic Age* (New Jersey: Rutgers University Press, 2008), 27.

¹²⁷ Marks, 27.

The subject of race has been well examined by the scholarly community. Definitions of race, though varied generally concede to the formation of social groups that can be visually identified, even if the identification is not the basis of the group's formulation. In this chapter I have argued for a rhetorical intervention that anticipates the introduction of genetic research to the race palimpsest. In order to better explain how this intervention might work I have dedicated the next chapter to elucidating the Burkean terms for order and how they are applied in my upcoming case studies.

Chapter 3: The Race Palimpsest Through the Lens of Kenneth Burke

The theoretical perspective of this dissertation is fundamentally indebted to Kenneth Burke, whose theory of Dramatism provides invaluable insight into human motivation and the way symbols operate to construct reality. Burke is not typically considered a scholar of race, in part because while he does reference the circumstances of racial inequality in order to exemplify and operationalize his theory, he does not do so from the interventionist perspective of a writer attempting to problematize the racial terms as much as he might have.¹²⁸ Still, the scope and depth of his theoretical contribution and the range of resources it provides for theorizing race should not be underestimated. It is precisely the flexibility of the Burkean vocabulary that makes it most useful in projects that seek to reveal those rhetorical mechanisms that hide in plain sight. The Burkean universe is littered with concepts that lend themselves to analyzing those aspects of human communication that are invisible because of their entrenchment and normalization.

Why Burke?

In my introduction, I suggest that part of the problem with theorizing race is repurposing terms to mean something else. *Race* was a biological referent that became a representation of social construction. Each new layer of the palimpsest carries the meaning of the previous layers. In many ways, therefore, my choice to use Burkean theory to understand the role of genetic testing in race formulation is one way in which I attempt to circumvent the use of concepts that are burdened by current understandings of diversity. Moreover, the terms for order and the other concepts I rely on are not explicitly intended as frameworks for understanding diversity through a racial lens. This choice avoids the accumulation of epistemic values that direct contemporary interpretations. If I

¹²⁸ Kenneth Burke et al., *The War of Words* (Oakland, California: University of California Press, 2018), 152.; Kenneth Burke, *A Rhetoric of Motives* (Berkeley: University of California Press, 1969), 195.

argue, as I have, that part of what makes our perspective on race problematic is that we revert to much-used concepts that do not account for the pervasiveness of racialization, even in academic thought, it would be counterproductive to premise my argument on the very theoretical resources that do that.

In the *Rhetoric of Motives* Kenneth Burke is not talking about race. The Burkean concepts I apply in my research rarely address specific social situations. While frowned upon in the academy, this abstraction suggests that Burke is theorizing fundamental concepts about the operation of society and the motivations of human beings. Dramatism was never intended to converse with other theoretical perspectives *about* issues in the world. By Burke's reasoning, it was intended to examine other perspectives because those viewpoints *make* the world. Burke is concerned with fundamental principles, which he argues are manipulated in various ways to make sense of human situations. These "philosophies are casuistries, which apply these principles to temporal situations."¹²⁹ While Burke concedes that scholarly explanations of various phenomena require different philosophic idioms, he is concerned with formulating "basic stratagems which people employ, in endless variations, and consciously or unconsciously, for the outwitting or cajoling of one another."¹³⁰ This is the character of the rhetoric that Burke is attempting to understand. His theoretical framework, as a result, intervenes at the level of the grammatical resources for persuasion and focuses on symbolic actions that these resources execute. Therefore, my choice to rely on these concepts is an opportunity to look at the issue of race with a critical distance not afforded by any other perspective.

This dissertation contributes to communication theory by harmonizing hitherto disparate concepts in the Burkean canon. It joins principles from the *Grammar of Motives*, *Rhetoric of Motives*, *Attitudes Toward History*, and *Language as Symbolic Action*. While my theory is still in its nascent stages, it

¹²⁹ Kenneth Burke, *A Grammar of Motives* (Berkeley: University of California Press, 1955), xi.

¹³⁰ Burke.

is worth noting that the task of making these concepts speak in tandem is not common. While I have selected the *order of terms* as the central pillar of this project, I put the positive, dialectic, and ultimate terms in conversation with concepts of substance and constitution, actus, status, terministic screens, and transcendence. I do this partly to illustrate the relevance of Burkean theory to the conversation about race and to better elucidate the phenomena I am discussing.

The Rhetoric of Motives

In his *Rhetoric of Motives*, Burke offers a hierarchy of terms that can be used to explain how the process of racial categorization functions to order society. Further, it provides a conceptual context to locate the palimpsest's racial identification, and categorization process, which I argue solidifies the rhetorical climate in which systemic inequalities persist. In this project, I align Burke's terms with what I see as the three tiers of racial categorization. I treat the physicalist scientific vocabulary of DNA coding as reflective of what Burke calls *positive* terms - human diversity as it is conceptually tethered to the material referents of the human genome. I see the accepted racial categorization of human beings, terms like *black* and *white*, as adequately represented by his *dialectic* terms. Finally, I see white supremacy as the *ultimate* term in the culture of the United States, serving as an organizing principle coordinating the operation of dialectic terms into a developmental series.

The *ultimate* term is a lens through which human diversity is reduced to those positive characteristics that can be expressed visually and organized dialectically to distribute power. It privileges phenotypical characteristics and manipulates them into a hierarchical order of discursive categories. The identification of morphology is a superficial process. The advent of commercial genetic testing, however, has provided scientific resources for justifying claims about what might be hidden behind. This new access to the building blocks of humanity reveals how scientific data can be made to conform to the discourse, even as it rejects it. This is a fundamentally rhetorical process, and an intervention must be made at the level of the ultimate term in order to disrupt it. In other

words, I reject the idea that changing the dialectic terms or racial categories is a solution to the problem of systemic inequality. This project, however, is dedicated to understanding how the terms function in the racial context, as a first step toward intervention.

To contest the dominance of the ultimate term, I consistently draw attention to how the current racial terminology is, by its nature, always already oriented in the colonial formulation of white supremacy. I attempt to redefine the dialectical linchpin of race, not as a sociobiological construct but as a *power* construct. I do this by looking away from signifying terms such as cultural orientations and medical predispositions and gesturing toward the rhetorical work they do in distributing power unequally. It is imperative that the character of the term be foregrounded in any discussion that seeks to uncover its operation. I consider how *sociobiological* nomenclature may be a conceptual pitfall, given that it explains what dialectical categories of race accomplish after the fact rather than what they are intended to do. Their true nature is thus masked, making room for the very rhetorical function that this project seeks to disrupt.

Theoretical Framework

In his *Grammar of Motives* and *Rhetoric of Motives*, Kenneth Burke offers a framework for understanding human motivation. While the Burkean universe can be interpreted as a loose constellation of disparate notions, I attempt to harmonize its relevant themes to analyze the United States racializing logic and its implicit inequities. In the following section, I outline and interpret the hierarchy of terms for order in the *Rhetoric*. I will argue that the system of racial categorization requires that we see what Burke calls the dialectic term – or a referent to the intangible essence of a thing - as a positive term or one indicative of the physical. Assuming that discursive racial categories are positive terms leads to the assumption that the cluster of ideas tethered to blackness or whiteness represents naturally occurring states. In this way, when we use terms of motion to

describe symbolic action, we are creating a fiction and vice versa. By its very nature, language is unable to confine the rhetorical sense of the dialectic to its positive meaning. The invocation of racial categories, therefore, even as they masquerade as positive symbols, inevitably conjures dialectic implications.¹³¹ “Reality,” therefore, amounts “to a tendentious though unstable complex of ‘personal equations’ that are implicit in such a simultaneously unique and socially infused ‘orientation.’”¹³² This shared orientation or *attitude* can be equated with the influence of the *ultimate* term, which, in this instance, is white supremacy. The distribution of power according to difference as it is expressed morphologically, relies almost entirely on the interrelationship of the realms of motion and action or the interaction of the positive and dialectic terms. The nature of the positive term is to ground and justify the manipulation of the dialectic, while the dialectic is used to order positive terms in the service of the ultimate.

Terms For Order: The Positive Term

The first term in Burke’s three-tiered hierarchy of order is *positive*. These are the terms that name things with tangible being, those that are physical and existing. The entities can be defined *per genus differentiam*, an Aristotelian schema in which the characteristic of the *genus* distinguishes the things from others without some defining characteristic.¹³³ Burke makes the distinction between positive terms and fiction, relying on Bentham’s formulation of “real entities,” in contrast with the “fictitious entities” of the law.¹³⁴ Here, the fiction is the creative connection [*dialectic* term] made between the thing described by the positive term and its context. The positive term denotes what is and the dialectic, how it is. According to Burke, “a positive term is most unambiguously itself when

¹³¹ Burke, 813.

¹³² Kenneth Burke, *Attitudes Toward History*, Third (Los Angeles: University of California Press, 1984), 394.

¹³³ This selection of definition foreshadows the relationship between the hierarchy of terms and Burke’s substance and constitution since his idea of substance is predicated on a relational definition. As such, it is almost impossible to explain the nature of the positive turn without considering dialectic terms.

¹³⁴ Kenneth Burke, *A Rhetoric of Motives* (Berkeley: University of California Press, 1969), 183.

it names a visible and tangible thing which can be located in time and place.” Generally, *race* is *conceived of* as a positive term; it appears to be an obvious fact of the world. In the context of my project, the terms that correspond most closely with the Burkean positive category are the scientific notation of phenotype. In reality, tangible human difference is represented not by commonly used discursive categories but instead by the series of letters and numbers that express genetic diversity. To be clear, I refer to the scientific notation as it is limited to phenotypical difference and not any other biological dissimilarity. In the absence of access to the resource of positive terms, the tendency is to apply a discursive shorthand to denote human difference, which, I argue, undergirds the power relationships that create systemic inequality. Obscuring the reality of difference not only empowers those that would seek to privilege phenotype and ignore the economic and historical factors that explain social inequality. Its reiteration over time creates the opportunity for, and justifies the use of, phenotype-based stratification as a resource for those who would seek to seize power of any kind. The radical simplification of human diversity to categories of race is a powerful rhetorical intervention via which positive terms are deployed in the service of dialectic manipulations. To further elucidate the distinction between the positive and dialectic tiers in his taxonomy, Burke asks, “whether the names for the *relationships* among things are as positive as are the names for the things themselves.”¹³⁵ I argue that they are not since the relationships between things exist in the realm of action.

Burke makes the distinction between *motion* and *action*, which can be equated to the operation of the positive and dialectic terms. While this section is dedicated to understanding positive terms, it is almost impossible to show how they function in the absence of the next tier in Burke’s hierarchy. A significant feature of positive terms in this analysis is their relationship to dialectic terms. For this reason, the next part of this theoretical outline seeks to explain the function of the positive term in

¹³⁵ Burke, *Rhetoric*, 183.

relation to its dialectic equivalent. To be clear, positive terms - the words and symbols that represent DNA sequences, the presence or absence of proteins or other genetic markers - reside in the realm of motion. They exist but do not act. Dialectical terms, and more specifically, the mechanism by which dialectic terms functionalize the values that positive terms represent, inhabit the realm of action. In essence, genetic nomenclature is a representation of a material condition at its simplest level. In contrast, dialectic terms inhabit the realm of symbolic action. According to Burke, “though the mutation that makes speech possible is itself inherited in our nature as physical bodies (in the realm of motion), the formation of a nomenclature referring to sensory experiences is on the side of symbolic action.”¹³⁶ Unlike nonsymbolic motion, terms in the realm of action are both arbitrary and reflexive. In the first instance, they are culturally bound and have “to be learned, depending upon where the child happens to be ‘thrown,’ an accident of birth that determines whether the child learns Chinese, or French, or whatever idiom may prevail in the given locality.”¹³⁷ Terms of action are also reflexive, sometimes referring to themselves.¹³⁸ Physical difference, understood as race, occurs in the realm of nonsymbolic action. The existence of the thing is a statement. Human diversity simply *is*. It cannot be manipulated or altered. It can only be interpreted. To do so, its transmutation to the realm of symbolic action through the operationalization of terms that describe it requires rhetorical invention.

Before I continue to my adaptation of Burke’s dialectic term, it is essential to raise a conceptual bridge between how positive terms are generally perceived and how they are being treated in this discussion. Even as scholarship rejects the obviousness of race, the sociobiological formulation of human difference continues to rely on visual evidence. It is important to my discussion of positive terms that I clarify the features to which they refer. This will become more

¹³⁶ Burke, 812–13.

¹³⁷ Burke, 810.

¹³⁸ Burke, 810.

relevant in Chapter five, which examines the role of visibility in interpreting genomic data among other things. The genetic sequences that are translated into racial group belonging are divorced from the social definitions of that group. Moreover, racial categorization is as much dependent on context as it is on appearance. Scholars interested in the evolution of racial categorization have argued before me that the visual cues that “obviously” point to a person’s *race* are determined by a specific social situation rather than indicative of innate characteristics. In his investigation of the legal basis of racial categorization, Haney Lopez surveys court rulings on U.S. naturalization applications. Beginning with the 1790 Naturalization Act that limited citizenship to “free white persons” and continuing with several amendments that redefined citizenship to accommodate various permutations of whiteness, court records reflect the United States’ preoccupation with race and its enshrinement in law. Court rulings relied on two definitional paradigms of the whiteness that was a prerequisite condition of citizenship: common knowledge and scientific, the latter being a loose reference to heredity. “In *Ozawa v. United States*, the Court relied on both rationales to exclude a Japanese petitioner, holding that he was not of the type “popularly known as the Caucasian race,” thereby invoking both common knowledge (“popularly known”) and science (“the Caucasian race”).¹³⁹ Between 1790 and 1909, however, common knowledge began to surpass science as the basis for court rulings about who was white. Referring to the cases of Asian and Middle Eastern naturalization applicants who, while darker skinned, were generally categorized as white, Haney Lopez writes that “science’s inability to confirm through empirical evidence the popular racial beliefs that held Syrians and Asian Indians to be non-Whites should have led the courts to question whether race was a natural phenomenon. So deeply held was this belief, however, that instead of re-examining the nature of race, the courts began to disparage science.”¹⁴⁰ At this point, visual cues

¹³⁹ Ian F Haney Lopez, *White By Law: The Legal Construction of Race* (New York: New York University Press, 1996), 5.

¹⁴⁰ Haney Lopez, 5.

overtook *scientific* classification as the ground for the legal definition of whiteness. This case shows how, when it comes to race, the positive terms expressed as phenotype are subsumed by the prevailing white/non-white dialectical ordering despite their scientific definition.

This evolution in the identification of race is instructive since the reading of visual cues is contextually defined. Otherwise put, it helps us to understand the rhetorical impact of the dialectic on the positive. Both Haney Lopez and Jacobson make the point that context determines how morphology is perceived. Citing historian Ronald Takaki, Haney Lopez shows how early Chinese immigrants were seen as black. To be clear, their characteristics were not interpreted as the characteristics of a black-presenting person. Instead, the introduction of Chinese immigrants to the socio-economic strata typically occupied by the African diaspora in California in the late 19th century, led the citizenry to actually *see* them as having stereotypically black morphology. Relying on Takaki's findings, Haney Lopez writes.

“The Chinese migrants found that racial qualities previously assigned to blacks quickly became ‘Chinese’ characteristics. . . White workers referred to the Chinese as ‘nagurs,’ and a magazine cartoon depicted the Chinese as a bloodsucking vampire with slanted eyes, a pigtail, dark skin, and thick lips. Like blacks, the Chinese were described as heathen, morally inferior, savage, childlike, and lustful.”¹⁴¹

Takaki's analysis of the state of early Chinese migrants in the United States clearly shows what he refers to as the “Negroization” of Chinese, whereby the negative associations with blackness were linked to Asian morphology through text and, more notably, cartoon depictions.¹⁴² While some distinctions were made between them, both groups were treated as harmful to U.S. society.

¹⁴¹ Haney Lopez, 44–45.

¹⁴² Ronald T. Takaki, *Iron Cages: Race and Culture in Nineteenth-Century America*, 1st ed (New York: Knopf; distributed by Random House, 1979), 219.

Jacobson similarly seeks to explain the way in which the concept of *whiteness* was expanded or narrowed according to time and place. Specifically, he looks at the ways in which European immigrants gradually become eligible for U.S. citizenship by being included in the category 'white.' The whitening of Jews in the United States is explicated by Jacobson:

Like Irishness, Italianness, Greekness, and other probationary whiteness, visible Jewishness in American culture between the mid-nineteenth and mid-twentieth centuries represented a complex process of social value *become* perception: social and political meanings attached to Jewishness generate a kind of physiognomical surveillance that renders Jewishness itself discernible as a particular pattern of physical traits (skin color, nose shape, hair color, and texture, and the like) - what Blumenbach called 'the fundamental configuration of the face...Race is social value become perception; Jewishness seen as social value naturalized and so enforced. This is not to say that people all 'really' look-alike; rather, it is to argue that those physical differences which register in the consciousness as '*difference*' are keyed to particular social and historical circumstances.¹⁴³

To Jacobson and Haney Lopez, therefore, perceptions of race can be modified by social circumstances. This brings me to a key feature of Burke's *positive* terms. I defined the positive terms as representing the symbols that actually denote genetic composition to avoid the contextually

¹⁴³ Ian Haney Lopez, *White by Law: The Legal Construction of Race*. (New York: New York University Press, 1989), 5. The shocking similarity of the nineteenth-century classifications to currently used U.S. racial classifications is noteworthy, given the advances in both science and common knowledge. According to Haney Lopez, "In speaking of the various classifications of races, Webster in his dictionary says, "The common classification is that of Blumenbach, who makes five 1. The Caucasian, or white race, to which belong the greater part of European nations and those of Western Asia; 2. The Mongolian, or yellow race, occupying Tartary, China, Japan, etc.; 3. The Ethiopian or Negro (black) race, occupying all of Africa, except the north; 4. The American, or red race, containing the Indians of North and South America; and, 5. The Malay, or Brown race, occupying the islands of the Indian Archipelago," etc. This division was adopted from Buffon, with some changes in names, and is founded on the combined characteristics of complexion, hair and skull. . . . [N]o one includes the white, or Caucasian, with the Mongolian or yellow race." The persistence of Blumenbach's categories suggests that archaic perceptions of race remain entrenched in contemporary society; Matthew Frye Jacobson, *Whiteness of a Different Color: European Immigration and the Alchemy of Race*. (Cambridge Massachusetts: Harvard University Press, 1998), 174.

dependent modification of human perception. While it may seem obvious to the human eye that someone belongs to a specific category, those impressions are not to be trusted. In other words, despite any temptation to categorize them as such, the descriptors of morphological characteristics are *not* positive terms. The genetic markers of phenotype, however, are the only reliable indicators of the tangible.¹⁴⁴ In the next section, I will show how any references to race, other than genetic markers of phenotype, are the work of Burke's *dialectic* category. Human difference is tangible. The phenotypical characteristics that have traditionally informed racial classification can be represented by positive terms. Yet, those positive terms are not adequately matched by the dialectic racial categories that have gained currency through the transatlantic slave trade to the present-day United States. Still, references to race deploy dialectic terms: titles that serve more as descriptors that are more metaphorical than literal.¹⁴⁵

The Dialectic Term

Of the three terms in Burke's hierarchy of order, the dialectic term is perhaps the most important. While the term *dialectic* is generally used to mean a quest for truth through discussion, an etymological view of the term does Burke's usage more justice. The term dialectic can be traced to both the Latin *dialectics* and the Greek *dialektikos*. Both words can be translated as "discourse" and, by the 19th century, were taken to mean "of or pertaining to dialects." Here, a dialect is one of several related modes of speech descended from a common origin. I see the common origin of the discursive racial dialects as the vast array of available positive terms that represent human diversity. I take the linguistic usage and the conceptual structure as parallel. The dialect is derived from the original language as the dialectic term is drawn from the available positive terms. This perspective is

¹⁴⁴ Of course, the reliability of these indicators is compromised but the work of the dialectic term in our understanding of race. This is why it is important to make the distinction between the types of terms. Without such a distinction the work of the dialectic remains hidden.

¹⁴⁵ It is important to note here that in common usage, *dialectic terms* or racial categories are treated as positive.

further substantiated if one considers the root of the terms *dialect* and *dialectic*. Both come from the root *leg*, which means to “gather” or “collect.” In other words, the use of a dialect is the picking out or selection of a mode of expression from the available means. Racial dialectic terms are also a selection, a perspective that can only represent a view of reality or the *available* means to describe them. According to Burke, “men seek for vocabularies that will be faithful reflections of reality. To this end, they must develop vocabularies that are selections of reality. And any selection of reality must, in certain circumstances, function as a deflection of reality.”¹⁴⁶ Dialectic terms are, therefore, a vocabulary that expresses a selection of positive entities. In my discussion, racial categories are a reductionist expression of human difference, an expression of a selection of the range of ways this difference can be understood. Practically, racial terminology merely identifies part of what an individual is. Moreover, it is only capable of sifting for one kind of difference from the of humankind. Still, repeated use of racial referents reinforces the centrality of race to human existence. Just as Burke’s vocabulary is inherently deflective, so, too, do racial categories deflect those *positive* features that do not conform to the dialectic in a process of selection that I will later argue is governed by the ultimate terms of white supremacy.¹⁴⁷

In contrast to *positive* terms, *dialectic* terms have no strict location as they can be assigned to the objects named in words of the first order.¹⁴⁸ As is characteristic, Burke uses the term “positive” which refers to a category that he is not trying to define as an exemplar of the category that he is trying to define. In a modification of perspective by incongruity he refers to positivism as an example of a term that is not *positive*. Of positivism and other dialectic terms, he writes:

¹⁴⁶ Kenneth Burke, *A Grammar of Motives* (Berkeley: University of California Press, 1955), 59.

¹⁴⁷ Kenneth Burke, *A Grammar of Motives* (Berkeley: University of California Press, 1955), 59.

¹⁴⁸ Burke, 184.

Here are words that belong, not in the order of *motion and perception*, but rather in the order of *action and idea*. Here are words for *principle and essence* (as we might ask, “Just what is the *essence* of the positivist doctrine?”)¹⁴⁹

In Burke’s hierarchy, positive details and characteristics can be clustered under the heading of a dialectic term but are not necessarily unique to that term. Any dialectic constellation resists being understood merely as a collection of curious traits. Instead, these traits migrate between dialectical categories in the service of power relationships. If we conceptualize accepted racial categories as dialectic terms, it is possible to see how the *positive* characteristics of an individual could be common to more than one dialectic category. This is a particularly poignant insight with respect to conversations about biraciality and racial ambiguity, since the decision to cluster a person or group with a set of positive characteristics, is contingent upon the function of the dialectic heading.

The dialectic ordering of positive terms places the tangible in service of the fictitious.

According to Burke:

Titles like “Elizabethanism” or “capitalism” can have no positive referent, for instance. And though they sum up a vast complexity of conditions that might conceivably be reduced to a near-infinity of positive details, if you succeeded in such a description, you would find your recipe contained many ingredients not peculiar to Elizabethanism or capitalism at all.¹⁵⁰

Here Burke expresses the idea that dialectic terms are not tangible things but the way in which tangible things are ordered. The dialectic term is conceptual and places positive terms in relation to each other. As such, capitalism and communism would both include common positive terms. How those terms are read would be entirely different in each instance. The relationship between the two would be very different through the capitalism/communism dialectic lenses. Dialectic terms,

¹⁴⁹ Burke, 184.

¹⁵⁰ Burke, 184.

therefore, color the positive and give it character. In a similar way, racial categories invest phenotypical characteristics that would otherwise be neutral, with meaning. The changing meaning of positive terms, as they are viewed from different dialectic standpoints, is central to many contemporary conflicts. Questions about what it means to have “natural hair” in the workplace or to “bear arms” are answered differently based on the dialectic positioning of the terms “hair” and “arms,” terms that point to physical entities of indisputable meaning. If we take the example of the much disputed second amendment right of U.S. citizens to bear arms, we see how for those who are identified as white, the right to carry a weapon is interpreted as both a tradition and a safety measure. Alternately, possession of a firearm for U.S. citizens of the African diaspora is seen as a threat to public safety, evidence of wrongdoing, and a source of resistance to law and order. Guns are real but as symbols they change depending on the dialectic characteristics under which they are clustered. Even though sixty-five percent of mass shootings between 1982 and 2020 were committed by white men, not-white men are twice as likely to be shot by police than their white counterparts, often for being suspected of concealing a weapon.¹⁵¹ While the characteristics of the physical gun are inert, the reading of the symbol is directed by the dialectic frame through which it is seen.

Burke continues his discussion of dialectic terms using the example of Bentham’s fictitious entities, which in the context of Burke’s analysis would refer to dialectic terms and, in this project, to racial categories. Bentham argues that fictitious entities must be defined by paraphrase or archetyption. According to Burke, “we equate his “fictitious entities” with “dialectical terms”

¹⁵¹ Statista Research Department, “Number of Mass Shootings in the United States Between 1982 and February 2020, by Shooter’s Race and Ethnicity,” Statista, August 10, 2020, <https://www.statista.com/statistics/476456/mass-shootings-in-the-us-by-shooter-s-race/>; Lynne Peoples, “What the Data Say about Police Shootings.,” *Nature*, September 4, 2019, <https://www.nature.com/articles/d41586-019-02601-9>.

because they refer to *ideas* rather than to *things*.¹⁵² In my modification of Burke's theory, *black* too, refers to an idea and not a person. Burke distinguishes dialectic terms from positive terms because they are defined by asking how a thing behaves rather than what it is. And part of an expression's behavior, as Bentham pointed out, "will be revealed by the discovery of the secret modifiers implicit in the expression itself."¹⁵³ In other words, because of what Burke calls the fragmentary nature of rhetorical expression, the definition of dialectic terms is subject both to interpretation and context. This is important with respect to the preceding discussion since it is through this "circumstantial interpretation" that the positive terms are mapped onto the dialectic terms that describe them.¹⁵⁴ Dialectic terms, therefore, are the hinge on which the entire system moves. With respect to race, it is the category of terms that seems the most obvious and is, therefore, the easiest to access. Rhetorically, it has the most force and can elide the meaning and significance of the positive terms, neatly ordering them into the ultimate structure.

The Ultimate Term

Burke's third term of order is *ultimate*. This is the master term that organizes and resolves the conflicts that arise between dialectic terms in the rhetorical realm. While my case study choices do not focus on the operation of the ultimate term, since the terms of order are a complete system, it is not possible to avoid explaining how the ultimate interacts with the positive and dialectic. Burke's explanation of how the ultimate functions as a master term is very specific:

Now, the difference between a merely "dialectical" confronting of parliamentary conflict and an "ultimate" treatment of it would reside in this: The "dialectical" order would leave the competing voices in a jangling relation with one another (a conflict solved *faute de mieux* by

¹⁵² Burke, *A Grammar of Motives*, 184.

¹⁵³ Burke, 185.

¹⁵⁴ Burke, 185.

“horse-trading”); but the “ultimate” order would place these competing voices themselves in a *hierarchy*, or *sequence*, or *evaluative series*, so that, in some way, we went by a fixed and reasoned progression from one of these to another, the members of the entire group being arranged *developmentally* with relation to one another. The ultimate term is therefore a unitary principle guiding the “diversity of voices” in the debate at the dialectical level.¹⁵⁵

Ultimate terms describe the relationship between dialectic terms, which in turn elaborate on the nature of positive terms, which are thought to represent the essence of things. It is important here to clarify how the force of ultimate terms affects our model of racial discourse. Substituting the genetic with the positive and discursive with the dialectic raises questions about how the hierarchical function of the ultimate is performed. It may seem counterintuitive, but in the context of the history of racial discourse in the United States, the ultimate term *white supremacy* has served to place the dialectical categories of race in a hierarchical structure. Does this structure move toward an ultimate design? I contend that it does, with the not-white dialectic term being defined as aspirational to the white dialectic term through the relational demarcation of substance. Here, I see the ultimate term as less of a *term* in the traditional sense and more of a *relationship between terms*. The ultimate term directs us to organize the dialectic categories of the racial discourse into a progression. This makes sense if one considers that the ceiling of the hierarchy is whiteness.

My understanding of the ultimate term as an organizing principle harmonizes both the Burkean *terms of order* and his *terministic screens*. The Burkean concept of terministic screens is based on the idea that human perceptions of reality, and by extension, human motivation, are grounded in the use of language. Here, let us recall that the dialectic terms are linguistic headings under which positive terms are clustered for ease of use. As I noted earlier, Burke argues that because language is inadequate to express the essence of the universe, the names of a things reflect selections of reality.

¹⁵⁵ Kenneth Burke, *A Rhetoric of Motives* (Berkeley: University of California Press, 1969), 187.

Terminology essentially turns our attention in a given direction so that what we perceive is never actually an accurate representation, vantage focused by our mode of description. Burke says that “we *must* use terministic screens, since we can’t say anything without the use of terms; whatever terms we use, they necessarily constitute a corresponding kind of screen; and any such screen necessarily directs that attention to one field rather than the other.”¹⁵⁶ His discussion reveals how in the social sciences, various disciplinary perspectives affect theoretical assumptions, while in the physical sciences, “all laboratory instruments of measurement and observation are devices invented by the symbol-using animal” and are therefore subject to interpretation.¹⁵⁷

Burke refines his terministic screen concept further by suggesting that the terms with which we interpret our realities are either frames “that put things together or terms that take things apart.” That is, they are either terms of *continuity* or *discontinuity*. In this dissertation, I will argue that *white supremacy* as an ultimate term of order is “discontinuous,” and its application enables the division or separation of racial groups through naming. Essentially, terms of continuity or discontinuity determine whether things are perceived as more alike each other or more different from each other respectively. If the dialectic terms (headings under which positive terms are clustered) are organized by the ultimate term - and as I will argue, racial categorizations are, in fact, dialectic terms that direct the interpretation of morphology as indications of intangible qualities and social position - then it is the ultimate term that serves as a lens that arranges our attention. The term – or framework for interaction – white supremacy, is a terministic screen of discontinuity that, by its nature, funds the hierarchical separation of human diversity. If we treat white supremacy as a terministic screen, any institution that is founded on this concept must necessarily produce concepts, interpretations, and policies that promote and sustain this discontinuity.

¹⁵⁶ Kenneth Burke, *Language as Symbolic Action: Essays on Life, Literature, and Method*, Nachdr. (Berkeley: Univ. of California Press, 1966), 50.

¹⁵⁷ Burke, 49.

At this point, it is useful to turn our attention to the unofficial but enduring motto of the United States: *E Pluribus Unum*. Here, and throughout this dissertation, I will note how the United States constructs its view of race, identity, and citizenship. Even though at the time it was proposed the slogan was intended to describe thirteen colonies, it lays a conceptual foundation for the way in which the United States saw itself. In fact, it was only 24 years after John Adams, Benjamin Franklin, and Thomas Jefferson proposed the motto for the Great Seal of their new nation that the same nation's Congress determined that citizenship be restricted to "any alien being a free white person." While it is not my primary focus, it is important to note that initial conceptions of what it means to be an "American" provide evidence for the current social arrangement and suggest that the United States' intention to be a white nation at its founding continue to have bearing on how the diversity of the population is interpreted and addressed. While the sentiment "out of many, one" can be interpreted as a call to unity, the maxim also functions to direct attention in the opposite way. It is a recognition of multiplicity. It is typical to focus on the one, but by shifting focus to *many*, one can see how the early U.S. psyche registered the potential for conflict posed by an assorted beginning, a perception embedded in its message to itself. The motto is an "agonistic instrument" that anticipates threats to the singularity of "American" identity and seeks to preempt them. It is indicative of the deep-rooted influence of the preoccupation with diversity. Here it is not the ultimate creation of the *one* that should be the focus but the realization of the *many*. The early United States defined itself not based on the sameness of the vision of those who would form the nation but on the reality of their difference.

White supremacy is a terministic screen for interpreting human diversity as difference from whiteness. It not only directs the United States gaze toward discontinuity but ensures the survival of separation through hierarchy. The graded arrangement of racial categorization is a mechanism for the perpetuation of white purity as a safeguard against racial unity. According to Battalora, the term

white does not enter U.S. legislation until 1681 and only does so to prevent miscegenation among hitherto equal groups in the colony of Maryland. She argues that “within colonial North America, laborers of African or British descent experienced daily life on an equal basis. There was no conception of Africans as ‘Blacks’ and Europeans as ‘Whites’ at this time, and the idea of ‘race’ as applicable to humans did not exist (Allen, 1997; Smedley, 2007).”¹⁵⁸ Lawmakers, shaken by Nathaniel Bacon’s 1676 rebellion in Virginia, passed legislation that would actively divide the 69,000 chattel laborers of varying colors and creeds through the legal construction of a ‘white identity.’” It was not that the law merely separated the colony’s population by color and place of origin. In order to validate and strengthen the separation, power and privilege were conferred on one group and not the others. Demarcations along a horizontal axis were not significant enough. Stacking the newly formed racial categories vertically by investing whiteness with power incentivized disunion and increased the likelihood that the system of social control would survive. Consequently, racial distinction in the United States is inherently power-laden, and the supremacy of whiteness is its organizing logic.

The ultimate term *white supremacy*, therefore, orders dialectic terms of racial categorization in a hierarchy that ensures the perpetuation of separation and manages the positive terms that support them. It is a self-sustaining system since the institutions, values, policies, and methods that explain human difference are founded on the perception of diversity as tiered and the principle that the discontinuity of difference is validated through the unequal distribution of power. The essentialist view of DNA evidence of superiority or inferiority evidenced by descent naturally flows from the idea of this discontinuity, even as the systemic social and geopolitical explanations for it are ignored. Genetic testing provides evidence of difference and delegitimizes sameness by privileging

¹⁵⁸ Jacqueline Battalora, “Birth of a White Nation,” 3–4.

distinctions of *degree* over *kind*.¹⁵⁹ According to this perception, therefore, the commercial genetic testing enterprise is oriented toward results that bolster ideas of discontinuity, especially when those results can be summarized using the shorthand of race. Over the course of this project, I deploy Burkean terms in the hope that they can clarify the staggering challenge that rhetorical representations of genomic science represent.

¹⁵⁹ Burke, *Language as Symbolic Action*, 50.

Chapter 4: A Rhetoric of Genetic Certainty

In November 2021, I performed an experiment on myself. Perhaps I would understand the reactions in my case study videos better if I, too, had my genetic ancestry tested. Armed with a theoretical critique of the genetic testing process, I shipped a vial of hard-earned spit to 23andMe in Burlington, North Carolina and waited six weeks for the results. The readout was unsettling. Growing up in class and color-conscious Trinidad and Tobago, I had always explained the nuance of my appearance by pointing to my great grandfather George Lee who had been born to migrants on a boat from China in the early 20th century.¹⁶⁰ I knew of my enslaved ancestors and the free Africans who had arrived in the capital city, Port of Spain, in the mid-19th century, liberated on the sea by the British after the 1808 abolition of the slave trade - not enslaved but certainly exiled. And there had been talk of indigenous ancestry, which no one could confirm. I believed I understood where I was from, but the curation scientists at 23andMe had other ideas. According to them, I have no indigenous heritage, not even one percent. The 56% African ancestry made sense in the context of so many mahogany-hued family pictures. However, the 13% East Asian heritage did not quite align with my “visibly” Asian extended family that includes another George, second cousin and Adventist Minister, who, despite his Christian proselytizing, happily, goes about dispensing Chinese names to the family’s newborns. Finally, there was the missing 30%, which the report insists comes from Europe generally, mainly Britain and Ireland.¹⁶¹

The widening gulf between the ‘science’ of my ancestry and the cultures in which I had been raised did little to change my sense of identity. Instead, the fissure only proved my long-held views

¹⁶⁰ It is noteworthy that the nuance perceived in the Caribbean for over 33 years was erased in the U.S., where, until I opened my mouth to speak, everyone I met assumed I was African American. Apparently, in North America, my ‘deep-toned skin’ does not permit me to qualify as ambiguous.

¹⁶¹ One of the more curious features of the 23andMe ancestry test is its dynamism. Since category percentages are based on frequency, individual results change as the Company’s test population increases. As a result, between November 2021 and October 2022, my ancestry percentages have changed multiple times.

on the continued prevalence of the ‘one-drop rule.’ Perhaps, as I traced my ancestors, the Steele family from Ireland in the 1600s to their slave-owning empire in 19th century Grenada, or noticed that single male Scottish immigrants to the Caribbean, like my grandmother’s grandfather were famously known as “neger bishops,” I did rethink my understanding of the reparations debate somewhat.¹⁶² Where I had been comfortable with the descendants of enslavers being held financially accountable to the descendants of enslaved people, I wondered who would pay me. Would I pay myself? Was I some kind of balanced historical equation? Could the percentages in my genetic test be used to pro-rate the debt? Otherwise, there was no significant shift in my worldview.

Instead, I found myself probing the results further, ultimately stumbling upon the “physical features” tab in the 23andme app. In this section of the report - the genetic version of a “What Disney Princess Are You?” quiz – 23andMe guesses (in percentages) the likelihood of features such as cheek dimples, cleft chins, dandruff, and finger length ratio. The app also estimates eye color, hair photobleaching, hair texture, hair color, and skin pigmentation. Here, the company attempted to categorize me by features that have historically been used to divide, imprison, and murder human beings. This is perhaps how this anecdote is most relevant to this case study and the conclusions I ultimately come to at the end of this project. In my ‘trait’ readout, 23andme guessed that I likely had light brown skin (39% chance) and dark brown (67% chance), slightly wavy hair (39% chance) with the potential to get lighter when exposed to the sun (63% chance).¹⁶³ While merely estimates,

¹⁶²Stephen Mullen, “Scotts and Caribbean Slavery: Ae Fond Kiss, and Then We Sever!,” *Variant Magazine*, 2009, <http://www.variant.org.uk/35texts/AeFondKiss.html>.; After digesting the DNA report, I searched Ancestry.com using the new geographic information and family anecdotes. I traced my paternal grandmothers Phyllis Steele’s (nee) ancestors to 17th century Ireland and her paternal ancestry to Scotland; the unfortunate term ‘neger bishops’ refers to Scottish overseers who were thought to ‘minister’ to the enslaved populations under their charge.

¹⁶³ As is typical of 23andMe estimates, the trait percentages listed are comparative. According to the company, my chances of having light brown skin are 37% compared to 15% chance of having dark brown skin or a 27% chance of having light beige skin. Likewise, the text results indicate that there is a 39% chance of slightly wavy hair, 13% chance of big curls, a 7% chance of small curls and a 1% chance of very tight curls. I note that the sorcery to predicting phenotype relies on the subjectivity of the categories. Without an objective

23andme’s percentages not only gesture toward racial categorization but are, in my case, grossly inaccurate. The error is understandable, however, since the company’s statistical model is based on frequency.¹⁶⁴ The company is concerned with the genetic markers that are thought to govern appearance and where they occur most frequently in a sample genetic pool that is mostly European.¹⁶⁵ The frequency of the markers in the population suggests that the marker’s presence could presage the individual’s appearance. Though it is not the focus of my work, here I note the more insidious eugenic implications of this genetic gerrymandering. I draw attention to the fact that 23andme customers are encouraged to confirm these estimates after viewing the report. This suggests that the company may be testing its statistical model and drawing connections between genetic markers and appearance. This is not a revelation. According to a 23andMe board member, “the long game here is not to make money selling kits, although the kits are essential to get the base level data. Once you have the data, [the company] does actually become the Google of personalized health care.”¹⁶⁶ I argue that the company could also become the ‘Google’ of phenotype-based racial stereotyping. The company’s overwhelming potential to make profitable connections between appearance and genetics should not be overlooked.

reference for dark, olive, or beige skin, users are able to read the estimates through the lens of their self-perception.

¹⁶⁴ Troy Duster, “Ancestry Testing and DNA: Uses, Limits – and Caveat Emptor1,” in *Genetics as Social Practice Transdisciplinary Views on Science and Culture* (Surrey: Ashgate Publishing, 2014), 62.; According to Duster, who argues that the AIMs used in genetic ancestry testing are a new proxy for race, “because the companies marketing ancestry tests hold proprietary interests in their techniques, most do not make them available for possible scientific replication, and their modelling constructs are therefore undisclosed.” While the 23andMe model is based on the frequency of certain genetic markers, which markers and how frequency is determined is not publicly available. Without this information, evaluations of the relationship between the positive and dialectic in this method are limited.

¹⁶⁵ According to the 23andMe mobile application, the probability of hair photobleaching was determined using “more than 340,000 23andMe research participants of European descent other indicators are drawn from similarly constituted populations; *23andMe*, version 10.14.1 (23andMe Inc., 2022).

¹⁶⁶ Charles Seife, “23andMe Is Terrifying, but Not for the Reasons the FDA Thinks.,” *Scientific American*, November 27, 2013, <https://www.scientificamerican.com/article/23andme-is-terrifying-but-not-for-the-reasons-the-fda-thinks/>.

The remainder of this chapter will proceed in the following way. First, I will describe the widely circulated YouTube video “Ethnically Ambiguously People Take a DNA Test” (hereafter referred to as *Ethnically Ambiguously*) and discuss how its editing bolsters the argument that tangible positive terms (genomic data) can resolve the conflicts emerging from the fiction of racial categorization (dialectic terms). I will then discuss the concept of ambiguity as it is deployed in the text before proceeding to a thematic textual analysis of the video. The analysis section discusses how the discursive space in which the text resides is demarcated. It also illustrates the effect of the public perception of race on the interpretation of the test results, as evidenced through the responses to the genetic test results of Courtney, a participant in the video. It will also consider the operation of the *rhetoric of genetic certainty*. Finally, I will conclude with some thoughts about the implications of this understanding of the role that genetic testing plays in the racial palimpsest.

Video Description

Ethnically Ambiguously follows the ancestry journey of seven BuzzFeed employees, Allison, Andrea, Courtney, Daniel, Jason, Jazzmyne, and Juan, as they learn about their DNA profiles from Sam, a 23andMe Content and Curation Scientist. The twenty-minute video is produced by internet media, news, and entertainment company BuzzFeed, in collaboration with genetic testing company 23andMe. The video resides on BuzzFeed’s YouTube page, where it was uploaded on October 6, 2018. As of October 2022, the video had more than 5.5m views and 16,000 comments.¹⁶⁷ The video can also be found on the BuzzFeed Video Facebook page, where it was originally posted on October 22, 2018. This video has 1.2 million views and 744 comments. The video was reposted to the

¹⁶⁷ In a subsequent section I include comments on YouTube video in the textual analysis. I selected the 500 most recent comments and focused on those that referred to Courtney or responded to comments that referred to Courtney. I opted to analyze the YouTube comments, and not the comments posted to Facebook, since the video was posted to the YouTube platform first (October 6, 2018). Also, unlike Facebook, the YouTube video is publicly available and does not require a membership to be accessed.

Facebook page on February 10, 2020. That version of the video has 7.4 million views and 5,100 comments. The video is 19 minutes and 56 seconds long and features both scripted and unscripted on-camera contributions and off-camera commentary from the interviewees. The questioning of a BuzzFeed interviewer is implied since most of the participants' comments are responses. For the purposes of this project, I have deliberately opted not to provide descriptions of the participants. This is in part because the discussion in the video centers on the relationship between how the interviewees perceive themselves and how they are perceived by others. In doing so, I attempt to protect the reader from the tendency to apply personal lay concepts of race that have the potential to influence interpretations of both the text and my analysis. Instead, I try to understand the interviewees' rhetorical strategies on and in their own terms.

This case study emerges from the intersection of social media and commercial genetic testing. It is an example of a genre of content that I will refer to as the *genetic reveal video*.¹⁶⁸ Typically, these videos show the reactions of ordinary people to the results of their genetic tests, though in my final case study the subjects are celebrities. In most instances, the individuals are interested in learning about their ancestry. In some cases, they are interested in genetic testing for medical reasons. This, however, is rare or incidental in the genre. This type of video is a rich resource for understanding how Burke's positive terms are translated into dialectic terms and how the distinction between the scientific and the rhetorical is obscured. Genetic reveal videos instantiate the larger argument of the dissertation that the blurring of the scientific-rhetorical is necessary for the formation and substantiation of dialectic categories that uphold white domination in the United

¹⁶⁸ Alondra Nelson, *The Social Life of DNA: Race, Reparations, and Reconciliation after the Genome* (Boston: Beacon Press, 2016), 22.; Nelson theorizes the reveal genre in her book and says that the "practice became a narrative element in genetic genealogy reality television. The reveal is now an accepted stage in the genetic ancestry-testing journey, so much so that root-seekers today use social media to reproduce and perform this key moment in the arc of their experience. The reveal also reminds us that the work of reconciliation for which genetic genealogy may be used includes a larger audience to bear witness to it." In this way she gestures to the public nature of genetic test inquiries which I elaborate on later in this chapter.

States. Specifically, the case study shows how scientific data is interpreted through the rhetorical constructs of race and ethnicity, modified and integrated into common sense understandings of heredity and identity. These interpretations of the scientific data are then used to reinforce extant conceptions of racial essentialism.

An overarching theme of the video is *ethnic ambiguity*, and I am concerned with how the assumptions supporting that particular concept fund current understandings of racial categorization. Even as the production team is careful to refer to the participants' morphology as indications of ethnic ambiguity, the term "ethnic" is not being used in the strictest sense. It is often substituted uncritically with the term "racial." In the video, participants use it to refer to the absence of features that stereotypically indicate belonging to a specific racial group. In other words, their perceived ambiguity is predicated entirely on public presuppositions of racial morphology. More significantly, *ethnic ambiguity* is indicative of an underlying necessity to apply the calculus of the racial discourse to individuals. This is even more pertinent in an instance such as the video, where individuals self-apply these categories as a route to securing a sense of identity and belonging. Burkean theory can be used to explain the pervasiveness of this racial calculus since it suggests that racial constitution is a requirement for living, since without it, the individual would be void of definitive substance and lack motivation. According to Chen and Hamilton, ambiguity is only real "to the extent that monoracial categories are construed as important and non-arbitrary, such that what is obviously a continuum (race) is treated as a set of discrete, meaningful categories."¹⁶⁹ The notion of ambiguity, as demonstrated in the video, is undergirded by an abstract but pervasive taxonomy of diversity that attempts to organize the unknown into a predictable structure.

¹⁶⁹ Jacqueline M. Chen and David L. Hamilton, "Natural Ambiguities: Racial Categorization of Multiracial Individuals," *Journal of Experimental Social Psychology* 48, no. 1 (January 2012): 153, <https://doi.org/10.1016/j.jesp.2011.10.005>.

The video is an argument that combines visuals, audio, and text to convince the audience that they should interpret genetic test results as proof of racial categories. The central argument, that conflicts of identity and belonging can be resolved scientifically through genetic testing, is bolstered by the video's editing. In the absence of representative or 'pure' racial groups, the test results establish what quantities of each 'pure' group have contributed to the 'mixed' individual. This further enables categorization in the closest group or the group with which the individual has the strongest genetic affinity. As I will show, it can also serve as evidence for exclusion from groups that are defined by purity. The video suggests that genetic test results provide certainty of ancestry and resolve racial ambiguity. The first premise of the video is that there *are* people who are ethnically ambiguous and who, as a result, are "misidentified" in their daily lives. The second premise is that, despite this ambiguity, these people have a sense of ancestry developed through family history and anecdotes. The third premise is that being ethnically ambiguous poses challenges to social inclusion and can be unpleasant and difficult. The conclusion of this argument is that genetic test results resolve the questions about their ancestry. Specifically, these tests identify genetically indicated geographical regions that correspond to the categories into which these individuals *did not originally fit*, thus providing a gateway to belonging that they claim to have been denied over the course of their lives. The tests, then, provide proof of membership in socially recognizable groups.

Each of the premises in the argument is aligned with segments of the video that are separated by "bumpers" or text on screen between segments. These bumpers give the audience a brief mental break between premises. They serve as a visual comma in the argument. The shift in premise is even more explicit since the bumper text poses a specific question to guide the viewers' interpretation of the upcoming segment. The segment on anecdotal genealogy is preceded by the text, "*What Do You Know About Your Family History?*" and followed by "*What's It Like Being Ethnically Ambiguous,*" which introduces the segment on the negative experience of being misidentified (see fig.

1). The segment that follows, “*Collecting Our DNA*” is very short, and in it, interviewees are pictured collecting their saliva samples for submission to 23andMe (see fig. 2). This ten-second segment serves an important rhetorical function. The image of the participants handling bodily fluids sets the foundation for the interpretation of the results in the segment to come. It invokes a rhetoric of scientific accuracy. It constitutes the basis of the participants’ acceptance of their results, the credibility of the scientist that reads them, and lays the foundation for the audience’s belief that the results are tangible evidence of what directly and intimately proceeds from the interviewees.



Figure 1 Screenshot of video bumper or visual comma used to introduce family history segment of Ethnically Ambiguous video.¹⁷⁰

¹⁷⁰ *Ethnically Ambiguous People Take a DNA Test*, 2016, <https://www.youtube.com/watch?v=5171eGo13hs>.



Figure 2 Screenshot of video bumpers or visual used to introduce DNA collection segment of *Ethnically Ambiguous* video.¹⁷¹

The final and longest segment of the video comprises the ‘reveal’ element of the production. There are several noteworthy editorial choices made here. To begin, this segment features the only non-participant presence in the video, Sam Ancona Esselman, who is identified as a “Content and Curation Scientist at 23andMe.”¹⁷² While vague, her title contains all the necessary elements to bolster her credibility with the audience. The video format also changes somewhat during this segment as two text box overlays are introduced to the screen. The first, a much larger box, shows the DNA percentages of the individuals to whom the results are being revealed. The text box is populated in sync with Sam’s reading of the results, which underlines the appeal to scientific accuracy and reliability. At this point in the video, three elements work in tandem as proof that the results are scientifically sound: Sam’s voice as a representative of 23andMe, the on-screen text, and

¹⁷¹ *Ethnically Ambiguous People Take a DNA Test.*

¹⁷² *Ethnically Ambiguous People Take a DNA Test.*

the documentation of the participants' reactions work together to encourage the audience to accept the results as scientific. The second text box in the lower third of the screen is significantly smaller and shows the participants' 'guesses' at their ancestry (see fig. 3) The font is also significantly larger, indicating the simplistic, even puerile nature of their 'estimates'. The content in the box on the lower part of the screen also does not contain decimal points and is not organized in any order that the viewer can immediately recognize. Essentially, the text box in the lower part of the screen *could* be wrong, but the text in the upper left of the screen is certainly right. As viewers watch, there is an instinct to compare the two bodies of text with the expectation that the guesses will be disproven. Visually, the juxtaposition of the accurate 'scientific data' and the anecdotally based guesses constitutes a profound argument for the reliability of science and, by extension, the superiority of scientific evidence of belonging over lived experience.

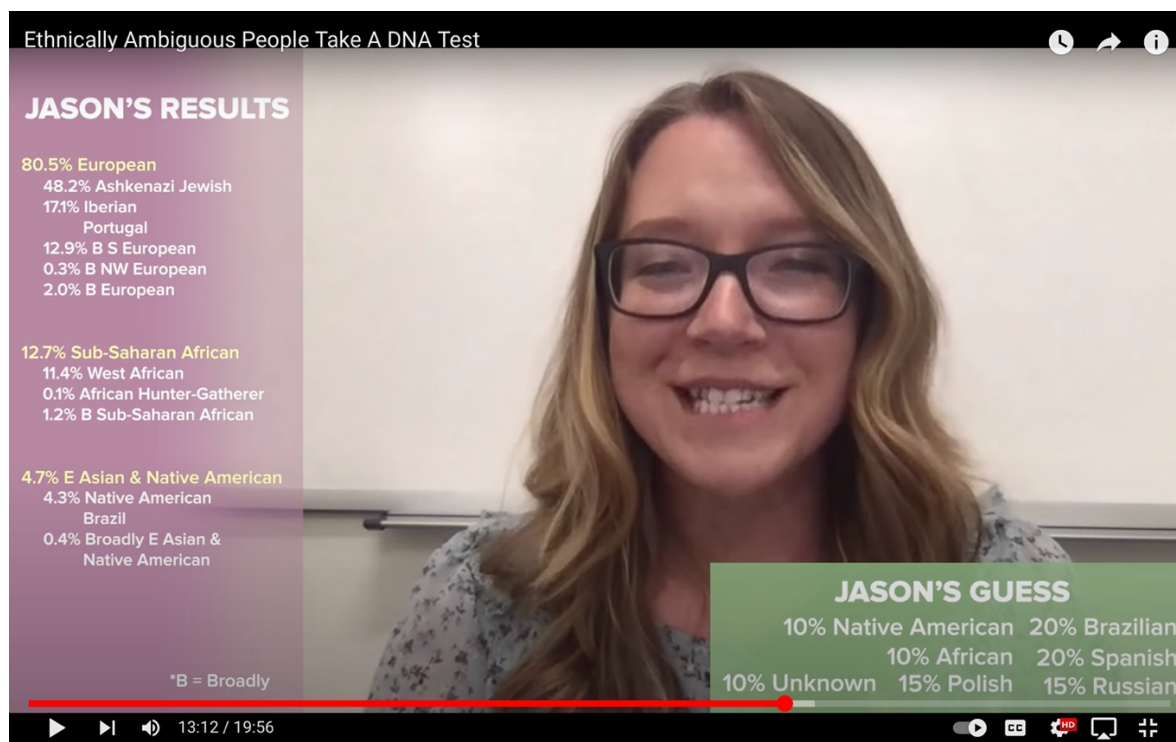


Figure 3-23 andMe Curation Scientist Sam Ancona Esselman reads DNA test results to participants.¹⁷³

¹⁷³ *Ethnically Ambiguous People Take a DNA Test.*

Another powerful editorial choice is the shift from scripted to unscripted contributions. The video's introduction is read by the participants, whose lines are spliced to enable them to complete each other's sentences. The unified script reads:

JASON: Today, a group of us who have been mistaken...

COURTNEY: for different races our whole lives...

ALLISON: we are finally getting our DNA tested with 23andMe....

COURTNEY: to either confirm what we know about our family history....

ANDREA: or find out if there's actually something to all those guesses...

DANIEL: that people have made our whole lives.

JAZZMYNE: We're gonna send in our DNA samples and in a few weeks, we'll find out our results.

This is BuzzFeed's opening salvo. Here they define the rhetorical situation: there are people in the world who, because they do not conform to phenotypical expectations, are *racially* misidentified. Genetic testing grants these individuals genetic certainty, superseding family accounts and personal identification. The text that follows is oriented toward proving this claim.

It is also important to note here the conflation of race and ethnicity. Despite the video's title, the approved script identifies the participants' conundrum as a racial misidentification. This is a theme that runs throughout the text and will be addressed in a subsequent section. The arguments for certainty made in the introduction's script are pitched against the uncertainty apparent in the subjects' own comments. Jazzmyne's first words in the video are, "I know absolutely nothing!" in reference to her ancestry.¹⁷⁴ Later Courtney confesses, "I know nothing at all, but I have always been curious."¹⁷⁵ Here the script references 23andMe's confidence in the data and the layperson's uncertainty. The charge of the video, therefore, is for the layperson to join the scientific community on more definite ground.

¹⁷⁴ *Ethnically Ambiguous People Take a DNA Test.*

¹⁷⁵ *Ethnically Ambiguous People Take a DNA Test.*

The second noteworthy choice is the decision to include the off-camera comments of those participants who are observing the ‘genetic reveal’ of the participants on camera. This serves several important functions. Firstly, the interjections of the participants in the background work as cues to significance. The off-camera banter guides the audience to react and make certain connections. For example, during Jason’s reveal, Sam says, “you have 48.2% Ashkenazi Jewish DNA, so almost 50% Ashkenazi Jewish.”¹⁷⁶ The other participants on set exclaim in unison, indicating that this is an important finding. Likewise, when Allison learns that her ancestors may have come from one of the places that her own ancestors came from, Courtney can repeatedly be heard saying, “cousins!” This is not lost on the YouTube audience, one of whom, in their snide commentary on what they characterize as Courtney’s delusions of ambiguity, responds, “cousins by marriage.” As the comments on this video suggest, the online audience of these exchanges is alert to the affective charge of these moments, perceiving the information that triggers the exclamations as important and including them in how they process the video content. Throughout the coming analysis, I will refer to this framework and the rhetorical parameters established by the video’s editorial choices. Before that, I consider the question of ambiguity and raise questions about the propensity of racial groups, both discursive and phenotypical, to be discrete. I then discuss the pivotal role that Courtney, one of the show’s participants, plays in revealing the operationalization of lay racial theories.

The Question of Ambiguity

Having established the rhetorical situation of the video, I offer here a more detailed examination of the ambiguity concept as a framework for the upcoming textual analysis. This segment of my discussion contextualizes the offering of 23andMe through the palimpsestuous lens and shows how the rhetoric of genetic certainty superimposes geographic and genomic evidence on

¹⁷⁶ *Ethnically Ambiguous People Take a DNA Test.*

the conflation of race and ethnicity. We can begin with the video's title, "Ethnically Ambiguous People Take a DNA Test," as a kind of representative anecdote of the wider argument put forward by the text. To fully understand the forces at work here, it is necessary to establish how terms such as race and ethnicity are being understood in this analysis, as well as offer some evidence for how the terms are understood in the text.

As I discussed in an earlier chapter, there is no single accepted definition of race, though there are perspectives on what constitutes a racial group and a strong consensus about the social construction of race. This agreement, however, does not dispel the public view of race as biological. The vestiges of biological racial definition continue to serve as a blueprint for social constructionism. The definition of race that this video modifies through the introduction of genetic data, a construct that I have referred to as a *nexus* in a preceding section, is, in fact, a hybrid of social constructionist views and historically grounded biological essentialism. In this conceptualization, the constructionist rhetoric demarcates groups that are defined biologically. Race, therefore, continues to rely on physical manifestations of difference that are considered hereditary. Haslanger identifies three perspectives on the nature of the race concept: eliminativism, constructionism, and naturalism. The first view suggests that we should "stop participating in the fiction that underwrites racism."¹⁷⁷ The second is that "racial justice requires us to recognize the mechanisms of racial formation so that we can undo their damage", and the third maintains that there are natural divisions in the human species that "correspond to ordinary racial divisions."¹⁷⁸ In each of these definitions, the visual-biological identification practice remains a fundamental premise of the construct. Concepts of race require what Appiah describes as criterial beliefs in his ideational account of term. Among these is "that people with very different skin colors are of different races or that your race is determined by

¹⁷⁷ Sally Haslanger, "A Social Constructionist Analysis of Race," in *Revisiting Race in a Genomic Age* (New Jersey: Rutgers University Press, 2008), 57.

¹⁷⁸ Haslanger, 57.

the race of your parents.”¹⁷⁹ Here, heredity and visibility serve as the basis for racial identification. Meanwhile, even as it emphasizes that “race is a powerful social category forged historically through oppression, slavery, and conquest and most geneticists agree that racial taxonomies at the DNA level are invalid,” Stanford University’s Gendered Innovations project does concede that race and ethnicity “were initially separated to designate ‘race’ as a biological quality and ‘ethnicity’ as a cultural phenomenon.”¹⁸⁰ Despite efforts to redefine race away from the biological to the socially constructed, its original rationale, that discrete and discontinuous human kinds exist, or can be conceptually constituted using visual markers, is inescapable.

The scope of this project is not limited to what we mean by ethnicity and race but also how the science of genomics may intervene in these definitions. According to 23andMe’s website, “DNA variants occur at different frequencies in different places across the world, and every marker has its own pattern of geographical distribution. The 23andMe Ancestry Composition algorithm combines information about these patterns with the unique set of DNA alleles in your genome to estimate your genetic ancestry.”¹⁸¹ Contrary to the appeals to accuracy that typify the genetic reveal genre, the genetic categorization process, is an *estimate* based on frequency. Genetic material, which in this project is a *positive* term, is organized by how often it occurs geopolitically, which is itself a process of discursive demarcation. Lines are drawn between geopolitical units and discursive racial categories as African and European are substituted for Black and White. In this way, another tier, genetic proof, is superimposed over existing lay theories of race.

¹⁷⁹ Anthony Appiah and Amy Gutmann, *Color Conscious: The Political Morality of Race* (Princeton, N.J.: Princeton University Press, 1996), 34.

¹⁸⁰ Stanford University, “Race and Ethnicity,” *Gendered Innovations* (blog), n.d., <https://genderedinnovations.stanford.edu/terms/race.html>.

¹⁸¹ 23andMe, “Ancestry Composition: 23andMe’s State-of-the-Art Geographic Ancestry Analysis,” October 2020, <https://www.23andme.com/ancestry-composition-guide/>.

To be clear, then, I am pointing out that even though they are correlated (and even this relationship is rhetorically defined), the geopolitical, national, ethnic, racial, and genetic schemas are distinct perspectives on diversity. Of these, only the racial – as far as it is indicated by phenotypical characteristics – and the genetic are not choices that an individual can make. The merging of these labels, which denote very different and, at times, conflicting things, is a palimpsestuous formulation. It works to obfuscate real difference, since there is legitimate genetic and social diversity that does not correspond to racial categories and enables dialectic categories that accommodate political exigencies.

Genetic testing offers categorization according to Ancestry Informative Marker,s or AIMs, which are clusters of genetic mutations or Single Nucleotide Polymorphisms (SNPs) that occur most frequently according to geography. An individual’s DNA code is made up of a series of nucleotides. In each individual, variation occurs at roughly every thousandth building block. The scientific consensus on the relationship between SNPs and the appearance of phenotypical characteristics that facilitate racial categorization is problematic; yet, it is not uncommon to find claims in the genomic research literature like “an individual’s genotypes at a group of Single Nucleotide Polymorphisms (SNPs) can be used to predict that individual’s ethnicity, or ancestry.”¹⁸² While most accounts avoid an explicit connection between genes and “race,” they do provide all the elements required for enthymematic reasoning to that end. There are two ways in which this is done. The first is methodological, with genomic studies building sample pools with individuals that self-identify racially and nationally. In one instance, a study genotyped “71 unrelated individuals from three populations: 24 European Americans, 23 African Americans, and 24 Han Chinese from the Los Angeles area.” In another study, the sample selection is described in the following way:

Ancestral samples were selected from 100 unrelated individuals representing each of the four ancestral groups: West Africans (A.F.) from Nigeria, Sierra Leone, and Central African

¹⁸² Joshua Sampson et al., “Selecting SNPs to Identify Ancestry,” *Annals of Human Genetics* 75, no. 4 (2011): 1.

Republic [Parra et al., 2001]; Europeans (self-identified “Caucasians”) (E.U.) from different U.S. locales; East Asian (E.A.) samples obtained from the Coriell cell repository (<http://ccr.coriell.org>) and first/second generation Asian Americans from different U.S. locales; and Indigenous Americans (I.A.) represented with samples obtained from Mixtec and Nahua persons from Guerrero, Mexico [Bonilla et al., 2005].

In the second study, a “pedigree questionnaire” was used to narrow the sample. To be included, “each subject described themselves, their parents, and all grandparents as belonging to either “African,” “American Indian,” “Asian,” “Caucasian,” or “Other” groups, with the option of reporting “Don’t know”.¹⁸³ Even in the selection of genetic samples, the ethnic, racial, and national are treated as equivalent. Indeed, individuals who showed an affiliation with a secondary group greater than 15% were simply excluded from the sample. In both these studies, the methodologies of which are characteristic of genetic research, scientists rely heavily on individual awareness of belonging in pre-determined ethnic and national categories. These methods are not reliant on facts of geographic ancestry or migration. The results of this research reveal not genetic similarity between individuals from geographic populations but consistency within politically constructed groups. Moreover, the phenotypical associations with these groups cannot be overlooked but are rarely accounted for in these studies. There is little in the literature to explain the relationship between morphological profiles and individual geopolitical identification.

The second way in which the scientific approach to the relationship between ancestry genetics and racial construction is problematic is linguistic. Following the distinction between race and ethnicity offered in a previous section, it is essential to point out how the race-ethnicity-phenotype equivalency coalesces into a shorthand for Burke’s dialectic category of terms. Without making the distinction between AIMs that identify phenotypical characteristics associated with sociobiological categories and genotypical characteristics organized by geopolitical categories,

¹⁸³ Indrani Halder et al., “A Panel of Ancestry Informative Markers for Estimating Individual Biogeographical Ancestry and Admixture from Four Continents: Utility and Applications,” *Human Mutation* 29, no. 5 (May 2008): 649, <https://doi.org/10.1002/humu.20695>.

ethnicity is often used as a more politically palatable way of referring to racial groups. This tendency, perhaps thought to depoliticize genomic research, serves to facilitate the maintenance of longstanding biological constructions of race and reify them through scientific findings. Therefore, in a study that seeks to understand which AIMS are most effective in objectively defining genomic populations for medical research, this declaration is confusing:

Population stratification can occur if cases and controls have different frequencies of ethnic groups or in admixed populations, different fractions of ancestry... also differ between ethnic groups. Although most genetic variation is inter-individual, there is also significant inter-ethnic variation.¹⁸⁴

This is compounded in a subsequent section which states that “the International HapMap Project has provided allele frequencies for approximately three million single nucleotide polymorphisms (SNPs) in Africans, Europeans, and East Asians. SNP variation is greatest in Africans.”¹⁸⁵

Presumably, the general term “ethnicities” mentioned earlier refers to African, European, and East Asians. Essentially, the masking of racial politics with the term ethnicity, and the connection of ethnicity to genetics, broadens the scope of the rhetorical work racial categories can achieve.

In genetics, AIMS are continentally organized through the self-identification of the sample populations. It is not that specific AIMS come from specific places. It is that the existing body of AIMS has been organized along the lines of geographic, and in some instances, such as with Ashkenazi Jews, political boundaries. This latter population, while it has retained a discrete boundary to some degree, is nested within a European population that is not identified in the same way. Genetic test “reveals” imply the way in which the geographic and cultural are used as a substitute for the physical without consideration for intervening factors, namely, migration and the scientific reliance on cultural and political racial categories. The schema that has been used to organize the

¹⁸⁴ Mary-Anne Enoch et al., “Using Ancestry-Informative Markers to Define Populations and Detect Population Stratification,” *Journal of Psychopharmacology* 20, no. 4 (2006): 19–26, <https://doi.org/10.1177/1359786806066041>.

¹⁸⁵ Enoch et al.

world racially, without political and national entities being bounded by physical characteristics, is extended to the scientific realm through observer interpretation.

In genomics, AIMs are generally used to understand and perhaps predict the implications of large ‘mixed’ groups. They are medical diagnostic tools that, when used appropriately, can yield useful information about the relationship between geography and disease, which is both good and necessary. What commercial ancestry testing does, however, is take AIMs and apply them to individuals (or rather categorize individuals according to AIMs) to reinforce political categories with less obvious benefits for public health. While the information could be interpreted otherwise, especially in the instances where genetic tests reveal that individuals cross boundaries or can be reassigned to groups, the groupings remain fixed, and the misinterpretation of SNPs as indicators of visual cues leads to the reification of political categories.

Having clarified how the terms race and ethnicity are being used in this dissertation, as well as how the conflation of these definitions serves as a context for the interpretation of genetic ancestry results, I distinguish between race and ethnicity in the literature. *Race* refers something that can be physically manifested and inherited, whether it as a self-identified feature or socially imposed on the individual. Ethnicity, however, is treated as practice. The distinction between race and ethnicity, therefore, is one of intention. Prior to a declaration of racial belonging, the assignment of an individual’s racial identity is based on how they are perceived by the external world, whereas their ethnicity is a chosen or habitual practice. Theoretically, one could desist from ethnic practices such as language, dress, or religious ritual. How an individual’s physical characteristics are perceived and interpreted by the wider society, however, is a discursive formulation over which they have more limited control. From this perspective, therefore, the title of the text is quite interesting. It invokes the idea that it is possible to be ethnically ambiguous and that DNA evidence can be used to resolve

this ambiguity. Unraveling this riddle provides the first indications of how this analysis will proceed and serves as my first main argument.

Here, I suggest that the conflation of race and ethnicity in this text belies a more general impulse to neatly gather disparate positive terms into a discursive shorthand for ease of deployment. To untangle complexity, Burke suggests that “what we want is not terms that avoid ambiguity, but terms that clearly reveal the strategic spots at which ambiguities necessarily arise.”¹⁸⁶ I have found that the identification of sites of ambiguity serves as fodder for the reinforcement of imagined boundaries. To this effect, I propose three main observations on the question of racial obscurity in this text. Firstly, the identification and clarification of ambiguity conform to the prevailing discourse. In particular, the rule of hypodescent, fundamental to which is a clearly defined cleavage between groups, is adhered to with rigor. Secondly, the impetus to resolve ambiguity can be traced to the United States’ original aspiration to be a white country. Finally, while on the surface, the very question of ambiguity suggests that it is possible for individuals to exist outside of the racial hierarchy based on their heredity, it, in fact, serves as a mechanism to reinforce the clear distinctions between groups.

In terms of this case study, we must consider the differences between what genetic ancestry testing is able to do and what it claims to be able to do or permits users to believe it is able to do. Categories of race and ethnicity attempt to understand different things. Equating the two creates discursive space for misleading assumptions. This would be the case even in the absence of genetic test results. The situation, then, is further complicated by the notion that DNA test results can tell us anything about either category. What genomic science is attempting to understand is human migration around the world over extremely long periods of time. What Duster refers to as the “statistical legerdemain” through which the frequency of AIMs becomes representative of a nation-

¹⁸⁶ Kenneth Burke, *A Grammar of Motives* (Berkeley: University of California Press, 1955), xviii.

state is a dangerous fabrication.¹⁸⁷ One example of this is provided by Duster in his analysis of the relationship between ancestry testing and DNA. After noting that the 700 million people who inhabit the African continent have the greatest amount of genetic variation in the world, he questions the African sample size against which customers are tested. He writes that “a scientifically valid random sampling of even one per cent of this population would require a prohibitively expensive research program – a database of seven million. So instead, researchers have settled for ‘opportunity samples’ – namely, a few hundred here or there, or even thousands that have been collected for a variety of reasons.”¹⁸⁸ In the absence of a representative sample, he questions whether we can have any sense of “reliability or validity for a claim that says someone is 80 per cent African – when the baseline for that claim is based upon the transparent scaffolding of chance – not purposive sampling?”¹⁸⁹ Currently, genetic ancestry testing methods are hardly able to supply proof of ancient ancestry and are even less useful as evidence for socially constructed categorization. Ethnic ambiguity, therefore, is not a real condition but the perceptual framework influencing how test-takers interpret their results.

In the following section, the discursive negotiation of DNA test results is guided by the tension between purity and ambiguity. Since an individual’s racial purity or ambiguity is determined in the public space, the first part of the analysis will focus on how this space is formulated. Next, I consider the ways in which genetic ancestry testing is superimposed over dialectic racial categories as evidence of belonging. The findings of this section are then illustrated by the public reception of Courtney’s test results.

¹⁸⁷ Duster, “Ancestry Testing and DNA: Uses, Limits – and Caveat Emptor1,” 63.

¹⁸⁸ Duster, 63.

¹⁸⁹ Duster, 63–64.

Textual Analysis

I approach the following analysis thematically, drawing on the *Ethnically Ambiguous* video to explicate those recurring themes that I believe support my view of the relationship between Burkean positive and dialectic terms. As I indicated previously, the text is a discursive site at which the definition of nexal identity is negotiated in a public space. As I suggested earlier, digitality influences the dynamics of this negotiation. Speech acts on digital platforms are extensions of identity, both on the part of the participants and members of the audience and may serve to amplify existing relations of power.

Demarcating the Discursive Space

The YouTube and Facebook platforms create almost unlimited room for the public to contribute to the construction and reconstruction of social and cultural realities.¹⁹⁰ The effect of staging the discourse on a social media platform is to change the “scale or pace or pattern that it introduces into human affairs.”¹⁹¹ Here, I am concerned with pattern as the palimpsest is a series of layers of varying definitions of diversity in a familiar order. This discursive space could be seen as a force for major cultural transformation, democratizing the debate and giving voice to previously marginalized perspectives. Nevertheless, “it is also the case that technologies do not determine social change, but are implemented and evolve in certain social, cultural, political and economic contexts.”¹⁹² I treat the social mediascape as an ecology, which, while fluid and dynamic, is also constrained by prevailing logic. Edbauer makes a similar case for the expansion of rhetorical influence from the rhetorical *situation* to a rhetorical *ecology*. Her argument is “if we are to explore how rhetoric circulates in a ‘practical consciousness of a present kind, in a living and interrelating

¹⁹⁰ Knut Lundby, ed., *Mediatization: Concept, Changes, Consequences* (New York: Peter Lang, 2009), 33.

¹⁹¹ Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964), 20.

¹⁹² Juho Ruotsalainen and Sirkka Heinonen, “Media Ecology and the Future Ecosystemic Society,” *European Journal of Futures Research* 3, no. 1 (December 2015): 8, <https://doi.org/10.1007/s40309-015-0068-7>.

continuity,' as Raymond Williams puts it (132), we need a model that allows us to discuss such movement. Rather than imagining the rhetorical situation in a relatively closed system, this distributed or ecological focus might begin to imagine the situation within an open network."¹⁹³ This project understands the circulation of racial formulations as influenced by genetic testing in the enlivened continuity of the digital media space. The boundaries of the discursive space are subject both to the nature of the medium and the forces that have shaped the medium. From the latter perspective, the text can be treated as an example of how the pattern of racial stratification is amplified or reinforced rather than disrupted through the medium.

The text is also bound by other discursive lines that can be observed through a shift in perspective. The platforms on which the discussion is hosted are public, but the formulation of the identities of the interviewees can also be seen as a public product that precedes the debate itself. These constitute a different set of discursive parameters that should also be considered. My reading suggests that even before an individual comes to identify with a particular racial group or chooses a racial identity, there is always already a racial formulation attached to them that is a fundamentally public act. When Courtney states that "a lot of people would say that I'm from Colombia"¹⁹⁴ and Jason reveals that "people have assumed either I'm Samoan or I'm black,"¹⁹⁵ these claims are being made in a "realm of our social life in which something approaching public opinion can be formed."¹⁹⁶ Here, I will acknowledge both that speech acts such as those committed in the text perform deeds of identification at the moment of utterance and that in this enactment, the

¹⁹³ Jenny Edbauer, "Unframing Models of Public Distribution: From Rhetorical Situation to Rhetorical Ecologies," *Rhetoric Society Quarterly* 35, no. 4 (September 2005): 13, <https://doi.org/10.1080/02773940509391320>.

¹⁹⁴ *Ethnically Ambiguous People Take a DNA Test*.

¹⁹⁵ *Ethnically Ambiguous People Take a DNA Test*.

¹⁹⁶ Jürgen Habermas, Sara Lennox, and Frank Lennox, "The Public Sphere: An Encyclopedia Article," *New German Critique*, no. 3 (1974): 49.

appearance of race is often taken as a sign of its internal or inherent truth.¹⁹⁷ I note this while conceding that the scope of this project does not permit me to engage the effect of the performance of identity on the palimpsest, but remembering that even as identities are enacted in the digital space, “there is only the enactment of that identity which, as a result, constitutes the category itself.”¹⁹⁸ In this way, the attention to nexus as a natural stratification schema is in itself generative of that schema.

According to Fraser, in Habermas’ public sphere, “merely private interests were to be inadmissible.”¹⁹⁹ I contend that this discussion of racial identity (again, not by choice but by the making of public common sense) occurs in the public sphere because it is a matter of public concern. It is not the private identification choice of an individual, but a publicly based categorization based on physical characteristics. The interviewees in this text are responding to the conflict between what they think of themselves, what they know of their families, and what the public has decided on their behalf—aided by commercial genetic testing. This is all played out in the context of a society that has, from its inception, aspired to whiteness - a condition that requires some degree of public agreement on the demarcation of nexal categories. The text, therefore, is a stage upon which the wider society draws on scientific rhetorics to certify the individual’s belonging to one group or another in the interest of the whole. For this to occur, ambiguity must be resolved. This process requires that the phenotype and genotype be harmonized into a cohesive unit that can be organized by existing discursive categories. The analysis portion of this chapter, therefore, begins with an understanding of how this public is constituted within the text, and the opinions its members express on the boundaries of racial categories.

¹⁹⁷ Knut Lundby, ed., *Mediatization: Concept, Changes, Consequences* (New York: Peter Lang, 2009), 33.

¹⁹⁸ John T. Warren, “Doing Whiteness: On the Performative Dimensions of Race in the Classroom,” *Communication Education* 50, no. 2 (April 2001): 96, <https://doi.org/10.1080/03634520109379237>.

¹⁹⁹ Nancy Fraser, “Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy,” *Social Text*, no. 25 (1990): 79.

As we attempt to further define the boundaries of the discursive space using cues found in the text, it becomes clear that the repeated reference to “people” generates the rhetorical situation to which the certainty of genetic test results is exigent. The ground for seeking genetic certainty is the identification of uncertainty in the public space. What is most interesting about the construction of the discursive space in this instance, however, is that the sense of belonging that these individuals seek from the genomic inquiries has been denied to them by public perceptions of race. By their own testimony, they are excluded entirely based on phenotypical features. As I explained in this project’s introductory chapter, the boundaries of the race concept are not merely movable but directed by the prevailing discourse. In other words, the features that constitute blackness or whiteness are not fixed, and the boundary between the groups moves according to the political situation in which they are being observed and used to disseminate power. The participants and the audience, therefore, engage in the discursive layering of genetic readings onto existing concepts of race. It also shows the manipulation of national, ethnic, and geographic categories to fit the current racial discourse. Remember here that in my introduction, I established that the racial discourse, and the need to categorize and identify within the boundaries of certain constructs, is a matter of attention.

In the text, therefore, misidentification of race is the first step in the public deliberation of racial identity. Even before the discussion begins, “all discourse or performance addressed to a public must characterize the world in which it attempts to circulate, and it must attempt to realize that world through address.”²⁰⁰ Before the deliberative groups are convened in the digital space, references to “people” draw the participants into the public sphere. Misidentification is a call to the deliberation of the definitions and formulations of race. Throughout the text, there is a preoccupation with the public context, the way in which the subjects have been viewed by the

²⁰⁰ Fraser, 8.

outside world. Returning to the first seconds of the video underlines the role of “the people” in constituting a public scene:

ALLISON: [we] are finally getting our DNA tested with 23andMe....

COURTNEY: to either confirm what we know about our family history....

ANDREA: or find out if there’s actually something to all those guesses...

DANIEL: that people have made our whole lives.²⁰¹

The use of the word “people” constructs the discursive space, makes it public, and invites the wider community to deliberate on the nexal categorization of the text’s subjects. The word is used a total of 23 times in the text. On 11 of the occasions that the term is used, it refers to how the external world categorizes the participants. Courtney claims that “a lot of people would say that I’m from Colombia. Half black, half white, and I’ve also been mistaken recently for Russian. That’s a new one.” Jason, meanwhile, has been misidentified by ‘people’ as Samoan. According to Daniel, “people think I’m a Latino a lot or just Mexican, I’ve gotten some sort of Asian Chinese or Korean or Japanese they just don’t know... people just generally think I’m not white.” Juan claims, “a lot of people who think I’m Asian, specifically Filipino, suddenly be like whoa, I don’t know you spoke Spanish. How do you know how to speak Spanish so well,” while according to Jazzmyne, “people often think that I some form of Latina, other than that people think that I’m mixed.” The interview subjects reveal how they have been historically interpellated by public racial identification. Their physical characteristics, here defined as positive terms, serve as the basis for the constitution of a fictional racial group separate and apart from any form of agentic identification. It is in their response to this hailing that they become part of the “raced” narrative. As a result, we cannot see the contributions of these individuals to their debate over their racial identities as extra-rhetorical but, in fact, already under the influence of a constitutive rhetorical effect that precedes persuasion. The remainder of this discussion, therefore, is dedicated to uncovering the operation of this effect as

²⁰¹ *Ethnically Ambiguous People Take a DNA Test.*

perceived through the lens of Burke's *terms for order* as they appear in the text. Namely, I will identify the palimpsestuous layering of terms for diversity, the operation of rhetorics of genetic certainty, and the *dialectical* organization of *positive* terms. Next, I will address the effect of the prevailing racial discourse on audience interpretations of genetic test results, in particular regarding Courtney. Finally, I will briefly discuss the organization of dialectically ordered positive terms along geopolitical lines that conform to the racial discourse first addressed.

A Rhetoric of Genetic Certainty

Throughout the video, participants are encouraged to buy into what I refer to as a *rhetoric of genetic certainty*. This is based on three premises. The first is that there are genetic markers that correlate to existing (socially and legally constructed) racial categories. The second is that, due to this correlation, individual categorical belonging *should* be, and usually is, visually discernible. The third is that *racially ambiguous*' individuals represent combinations of these discrete genetic categories, and the ratio of belonging to this group can be decided through genetic tests. In the following section, I identify those instances in which appeals are made to the scientific accuracy of genetic tests. I trace the movement from ignorance to knowledge and show how the palimpsestuous layering of genetic and discursive terms reinforces the existing calculus of racial identification.

This first premise of the rhetoric of genetic certainty is that the guesswork of ancestry testing can be validated using numbers without any explanation of what those numbers might represent. Rhetorically, the use of percentages mitigates risk, namely the uncertainty of the individual's family history. As my next case study will demonstrate, while existing genealogical documentation may work in tandem with genetic testing, more often than not, the 'scientific' of genetic testing is given primacy. Even as publics in the United States may embrace the generative resources of social constructionism, the racial categorization they ultimately rely upon is often underpinned by the positivist urges of biological essentialism. This is, in essence, the leap of logic operationalized across

all the case studies. In the reading of the test results, the Curation and Content Scientist from 23andMe repeatedly introduces the ancestry percentages as definitive statements of being. She tells Daniel, “You *are* 51.4% East Asian and Native American”, and Courtney, “you *are* actually 77.1% Sub-Saharan African.” Her exchange with Jason is as follows:

SAM: There’s also 4.5% East Asian and Native American, and that is almost all Native American heritage specifically. And there is evidence of recent ancestry in Brazil. So, you were right about that.

JASON: This is so cool. My family only knows it by stories. It’s always been passed down as like, oh, we’re just native here. But we have like no proof of it. This is the confirmation of this moment. Like this is it.

SAM: The evidence is in your DNA.

Unlike many of the other participants, Jason seems to have a very strong sense of his family’s origins. This is true to the extent that the 23andMe test results serve as more of a confirmation than a revelation. Still, Sam’s framing of the test results as irrefutable proof of Jason’s origins underscores the reliance on biological proof of belonging and the appeals to certitude that characterize commercial genetic testing. Percentages reinforce the idea that racial categories are discrete and real, even though those categories ought to be both socially constructed and fluid. In this case study, ambiguity, or the blending of these fictional categories, is quantified to encourage sense-making. It is not so much that this data is useful for *knowing* but rather that it is useful for *telling*. It is how proof of identity is introduced into the discourse.

The purported accuracy of the test results revealed in the video stands in stark contrast to the reality of genetic testing. As I explained in an earlier section, commercial genetic testing is based on a probability model that uses limited samples from modern-day nation-states. The failure to foreground the reality of ambiguity surrounding commercial genetic testing allows participants to believe that their test results are infallible. It also allows them to accept that these tests reveal something essential about them, rather than something essential about the system of organization that the tests perpetuate.

The video deploys this rhetoric of genetic certainty, or the discursive negotiation of belonging, through the pairing of positive genetic terms and dialectic racial categories. This is especially true where the latter is identified by ethnic and geopolitical proxies that are not explicitly “racial” but are broadly suggestive enough to allow for individual racial calculi. In other words, while it is never said that a person with Sub-Saharan ancestry is black or presents with stereotypically black phenotypical features, the genetic tests allow participants to imagine belonging to a group that looks a certain way even though they themselves do not. The video interviewees’ inquiry into their past is triggered by how they are seen by others. The enthymematic argument made by the text, therefore, is premised on the absence of clear physical cues, which it attempts to resolve through genetic evidence that connects them to a group that *is* physically well-defined.

The text also exemplifies the movement from not knowing to knowing and causes a conflict between social constructionist and biologically essentialist views of what is understood as race. While many of the participants are aware of where their ancestors originated, they all concede that their knowledge is incomplete. Their identities, therefore, seem not to be based on practice or agency but on genetic inherency. The participants’ association of identity with innate genetic traits is used to both rationalize the structure of their internal worlds and justify their projections of themselves into the external. This is particularly salient in the case of Jason, who is told that he is 50%, Ashkenazi Jew. Jason responds, “my family has a long history of Judaism, but I’m also surprised that it showed up on this. We’re still Jewish till this day.”²⁰² Surprisingly, the lifelong practice of Judaism is only validated by his genetic test results. When she learns of her European ancestry, Andrea says, “I feel kind of like overwhelmed, I’ve always had a really strong connection with my ancestors. I often call on them, make a very conscious contact with them. To hear that I have like pretty recent ancestry and that its indigenous to Mexico, [and] even goes as far as like the other side of the world, it just

²⁰² *Ethnically Ambiguous People Take a DNA Test.*

makes me feel really supported [cries] to know that I can go to some of these countries and connect with some of those energies.”²⁰³ In doing so, she melds the scientific with the spiritual, attempting to paint the unseen in the more recognizable colors of her lived reality.

After receiving their test results, the participants seem to be able to definitively claim where they came from. This shows the rhetorical and social influence of recreational genetic testing and its capacity to shape perceptions of race and ethnicity. This is a critical observation because it shows the rhetorical power of the scientific claims made by 23andMe and their circulation in the public domain. As dialectically modified test results are publicized, the racial categories that they appear to substantiate are also reinforced. Political terms such as *black*, *white*, and *Asian*, which in the text are loosely linked to geographic regions, are made real through the individuals that inhabit them. This underscores the value of the Burkean hierarchy of order as a tool for understanding the relationship between genomic science, genetic essentialism, and racial disparities. By applying Burke’s schema to the genetic reveal video, this case study shows the movement of rhetorical racial formulations through the discourse from the interpretation of the *positive* genetic code to the instantiation of the *dialectic* racial terminology that underpins the *ultimate* social hierarchy.

“Courtney you is black guhl!”²⁰⁴

Courtney is the paragon the rhetoric of genetic certainty. She is mercilessly mocked in the YouTube comments section because she questions her ancestry and claims ethnic ambiguity. Her

²⁰³ *Ethnically Ambiguous People Take a DNA Test.*

²⁰⁴ The title of this section is taken from a comment on BuzzFeed’s YouTube post. Here, a user expresses how they perceive four of the participants. It is as follows: “Daniel-you look like a mixed Asian--which you are. Courtney-you is black guhl. Andrea- you are truly mixed up...AMBIGUOUS BEYOND Juan- You are what you look like..HISPANIC.” The shift in tone from standard conversational with Daniel, Andrea, and Juan to high-context derision with Courtney is noteworthy. The ‘you is’ of the statement is intentional and suggests that she is speaking to Courtney in a separate dialect that is appropriate for her but not for the others. The spelling of ‘guhl’ also suggests a different dialect and is indicative of the distinction that the commenter is making. The statements about Daniel, Andrea, and Juan are corroborative. The statement of about Courtney is dismissive. While it is difficult to pin down the sense of the comment, the subject-verb

case is the text's clearest example of how the prevailing racial discourse and the one-drop rule continue to dominate the interpretation of genetic test results. The discussion of Courtney's racial belonging also dispels any assumptions that the references to either ethnicity or genomics in this case study are interpreted as anything but indications of phenotypical race. Her case also brings the parameters of ambiguity into sharp relief since her perception of racial uncertainty does not align with the accepted view. It also confirms that there *is* an accepted view. YouTube viewers believe her to be 'obviously black' based on her appearance in the video, an assumption that raises the problematic nature of the obviousness of any race. Even after she receives results that confirm her varied heredity, commentators insist that her dominant African heritage makes her basically black.²⁰⁵

In the universe of the text, I constitute the public through the comments left on the YouTube platform. According to Warner, a public is created both through "mere attention" and the "reflexive circulation of discourse." YouTube viewers, then, are addressed by the text and "pay some degree of attention, however nominal" through their responses.²⁰⁶ It is important to point out here that while the video claims to address cases of ethnic ambiguity, in both the comments and the text, the terms ethnic and ethnicity are never actually used, while the term race is often repeated to refer

disagreement is typical of stereotypes of African American Vernacular English in popular discourse. It recalls the meme-worthy scene from the 2011 film *The Help*, in which a black maid addresses the small white girl in her care. She says, "You is smart. You is brave. You is kind," as an affirmation that ultimately instills confidence in the girl and later advances the plot of the film. In a cruel inversion, the commenter inhabits the role of the maid Aibileen, or the black mother figure, to mock Courtney in terms that she, another black person, should understand. She is not smart, brave, or kind. She is black; User Comment. 2020. "Daniel you look like an Asian." YouTube, 2020.

²⁰⁵ To at least partially protect the privacy of commenters on this video, I have decided to redact the names of YouTube users. This middle-ground approach is, I believe, a satisfactory response to the ethical dilemma of citing internet comments that were not necessarily meant to be the subject of academic research. While I appreciate the need to protect privacy, the material being discussed here is not highly sensitive or overly disclosive of intimate and protected personal details. It is, instead, commenting on and making meaning of a public text. Since the circulatory power of the internet and public reception of talk about race and genetics is a fundamental premise of this research, I believe that it is valuable to register and analyze these comments. My choice, however, registers the move in recent scholarship to extend more privacy protections to these kinds of exchanges.

²⁰⁶ Michael Warner, "Publics and Counterpublics (Abbreviated Version)," *Quarterly Journal of Speech* 88, no. 4 (November 2002): 419, <https://doi.org/10.1080/00335630209384388>.

to the identities of the participants. This suggests that, as mentioned previously, even as efforts to understand the connection between genetics and heredity might be framed as ethnic or otherwise, discursively, these terms are used as synonyms for race. The concept of race is then extended to include socially and politically constructed features, thereby irrevocably linking genetic readouts to a broader complex of ideas.

Among other things, the comments provide insight into accepted modes of racial categorization, which come into direct conflict with Courtney's claims of ambiguity. The discussion raises questions about the physical and genetic boundaries of ambiguity. Among the prevalent themes is the idea that Courtney is visibly black and not entitled to ambiguous status. Following Courtney's apparent blackness is the notion that her claims of ambiguity are delusional.²⁰⁷ This is supported by a calculus of racial heredity that is common to the commentators. This entrenchment of the calculus is particularly telling because it is often in direct conflict with the DNA evidence presented in the text, and still, the scientific evidence is interpreted along the lines of this logic instead of dispelling it. Courtney's interest in potential ambiguous categorization is read as self-hatred. The ascription of motivation is a recurrent theme in the text and warrants discussion.

As mentioned before, the idea of racial ambiguity is predicated on the existence of pure racial groups. Even as their genetic composition is revealed (there is not a single instance in which any of the participants can claim 100% ancestry from any group), the participants' phenotype plays a significant role in the way their test results are interpreted by the audience. This is certainly the case with Courtney, whose claims that she has been misidentified by the public are rejected outright by the YouTube audience. Here I am not concerned with whether Courtney's narrative is true or even with how Courtney appears in the video. Instead, I treat her case as an instance of how racial

²⁰⁷ In fact, in the comments I reviewed for this project, delusional - or holding a belief that is at odds with reality - was the insult most commonly leveled at Courtney in response to the video. In other words, the public holds that there is one "reality" with which Courtney is in conflict.

categorization functions despite the individual's choice to identify, variations in individual perception of phenotype, or genetic evidence. This condition is indicative of the rhetorical force of Burke's *dialectic terms* over and above the salience of *positive* phenotypical indicators. The dialectic term "black" expands and contracts to include or exclude genetic data and visual cues in different contexts. Even though Courtney supposedly had 30% ancestry from outside of Africa, at its widest, the discursive elasticity of black still accommodates her varied ancestry. This is so, even as the narrowest interpretation of *black* excludes other video participants who may be visually similar to Courtney. Overall, the responses to Courtney show how YouTube commenters take advantage of scientific ambiguity in to reinscribe the default schema of racial categorization.

Courtney's interest in her ancestry is roundly criticized. Several commenters find her claims of ambiguity humorous, saying that "Courtney not acknowledging she's black is the most hilarious thing I've seen on the internet all day" and "just came to see the comments about Courtney believing she looked anything but black!"²⁰⁸ Others point out that she is obviously black and unfit to claim ambiguous status. "Def just a 'regular' black girl in America," "Sis must be blind not to see she's black," and, "Courtney said racially ambiguous and then laughed after cos even she knew she was lying to herself. I cannot! Sis, You're black!"²⁰⁹ These comments suggest that blackness has clear boundaries and is, in fact, absolute. Once defined as black, Courtney does not have access to ambiguity, genetic or otherwise, because even as the boundaries of the category are flexible, the

²⁰⁸ User Comment. 2020. "Courtney not acknowledging she's black is the most hilarious thing I've seen on the internet all day." YouTube comment, 2020. <https://www.youtube.com/watch?v=5171eGo13hs>; User Comment. 2020. "Just came to see the comments about Courtney believing she looked anything but black!" YouTube comment, 2020. <https://www.youtube.com/watch?v=5171eGo13hs>.

²⁰⁹ User Comment, 2020. "Just a regular black girl in America." YouTube comment, 2020. <https://www.youtube.com/watch?v=5171eGo13hs>; a.m. 2019. "Sis must be blind not to see she's black." YouTube comment, 2019. <https://www.youtube.com/watch?v=5171eGo13hs>; User Comment 2019. "Courtney said racially ambiguous and then laughed after cos even she knew she was lying to herself. I cannot. SIS YOU'RE BLACK!" YouTube comment, 2019. <https://www.youtube.com/watch?v=5171eGo13hs>

application of the category to an individual is fixed. This is seen in opposition to other participants, like Jason, who has claimed categorical status their entire lives but still qualifies as ambiguous.²¹⁰ The fixity of blackness and its ability to supersede all other forms of nexal categorization harkens to an era in which any traces of African ancestry disqualify membership in another group and access to power and privilege. Even as Courtney's genetic data suggest some degree of non-African ancestry, the *positive* qualities indicating blackness, both physical and genetic, supersede any other claims of identity. These comments are predicated on the notion that ambiguity and blackness are mutually exclusive. Moreover, there is a general suspicion that Courtney "low-key wished she was more European."²¹¹ Any identification, therefore, that Courtney may have had with another nexal group is read as a rejection of blackness, which here is equated with African ancestry. The conflict, therefore, is a failure of the dialectic to keep pace with the positive. In other words, there are too few linguistic symbols to represent the multiplicity of genetic configurations expressed physically and proven by genomics. Further, as identities are negotiated in the public space, linguistic limitations constrain not only what can be discussed but what might actually exist in the rhetorical realm. Manifestations of ambiguity such as Courtney's veer dangerously close to the boundaries of blackness, which, to this audience, is an absolute formulation. Courtney violates the rules of an inadequate naming convention, and, as a consequence, the audience defaults to and vigorously defends the terms that they know.

In a discussion of the racial identity of U.S. Vice President Kamala Harris, whose parents are from Jamaica and India, Chittal argues that despite the growing size of the multiracial identity group,

²¹⁰ In his genetic test reveal, Jason claims to be able to trace his family history to the 1500s. He is told that he is 80.5% European, 48.2% of which is Ashkenazi Jewish.

²¹¹ User Comment, 2020. "She low key wished she was more European." YouTube comment, 2020. <https://www.youtube.com/watch?v=5171eGo13hs>

“Americans still don’t know how to talk about multiracial people.”²¹² While not a rhetorical scholar, Chittal is referencing the work of the dialectic term. Here the number of *positive* terms is greater than the number of *dialectic* terms that denote them. This shortage requires that either evidence of the positive is made void in service to the rhetorical order, or that positive terms are shifted to an approximate dialectic category. Political scientist Karthick Ramakrishnan argues that “one of the reasons Harris might be more commonly portrayed as Black in the media is because of America’s history of using the ‘one-drop rule,’ a racist practice that dates back to slavery.”²¹³ The power of this legacy continues to organize and ascribe dialectic labels that govern not only how people identified as black are perceived by out-groups but how they perceive themselves. As with Harris, a dearth of linguistic resources results in a quick and complete categorization as black since, to preserve the notion of racial purity, ambiguity and blackness must be mutually exclusive.

Unlike Harris, Courtney’s claims to multiraciality emerge in the context of DNA testing. On the surface, and if we accept that genetic testing is a valid indicator of group belonging, her test results should serve as evidence of her multiraciality. After all, 30% of her ancestry is not from the African continent. The opposite, however, seems to be the case. This interpretation of what the genetic data might mean shows the hierarchical relationship between the genomic and the rhetorical. Here, testing does not prove belonging to a genetic group but becomes evidence for placement in a discursive group. Courtney’s case shows clearly how scientific data is subsumed by the dialectic, even as it resists the governing racial categorization.

The debate over Courtney’s ambiguity is also the location in the text where the relationship between the constructed *black* and DNA connections to the African continent is most pronounced.

²¹² Nisha Chittal, “The Kamala Harris Identity Debate Shows How America Still Struggles to Talk about Multiracial People.,” *Vox*, January 20, 2021, <https://www.vox.com/identities/2020/8/14/21366307/kamala-harris-black-south-asian-indian-identity>.

²¹³ Chittal.

If we were to replace the use of *black* in the comments with *diasporic African*, it would resolve the conflict between Courtney's claims of ambiguity and the consensus in the comments. It is possible for Courtney to be both African-descended *and* ambiguous. But, as the text suggests, this is not possible with the term *black*, even as the commenters who deploy the word as a reference to both Courtney's appearance and her genetic profile do so with the assumption that it is synonymous with 'African descended.' This is a clear instance of the dialectic nature of the term and the inherent ability of such terms to arrange and rearrange tangible, *positive* terms to various ends. Blackness contracts to contain Courtney's identity and leaves room for little else. Despite being used in a host of other ways, the absolute nature of the term *blackness* in the discursive realm of this text negates Courtney's agency.

I have established the inability of the dialectic categories to contain the growing range of genetic variations in human diversity. While this project does not cover the role of Burke's *ultimate* term, which I have previously argued organizes dialectic categories in a white supremacist hierarchy, it is useful to point out how I perceive this arrangement as affecting the audience's interpretation of Courtney's genetic test reveal. Courtney's initial estimate of her genetic composition was "30% African, maybe another 30% of some kind of European, 10% maybe South America kind of this the last 30% unknown cuz I don't even know where else I would go."²¹⁴ When it is later revealed that Courtney is 77% Sub-Saharan African, the comments become openly hostile, and respondents are almost jubilant that her delusions of ambiguity have been corrected. There is a great deal of condescension with commenters referring to her as 'darling' and 'sweetie.' Even more find her results humorous, with one person saying that "I busted out laughing when Courtney was humbled with that 77% African."²¹⁵ Overall, though, Courtney's reaction to her test results is interpreted as

²¹⁴ *Ethnically Ambiguous People Take a DNA Test*.

²¹⁵ User Comment. 2020. "I busted out laughing when Courtney was humbled with that 77% African." YouTube comment, 2020. <https://www.youtube.com/watch?v=5171eGo13hs>.

disappointment. However, a dominantly sub-Saharan African genetic profile is only a disappointment when read through the lens of a racial hierarchy in which African heritage, interpreted as blackness, is inferior to other racial identities. The audience has assumed this to be Courtney's perspective and impute motivations to her that are not supported by the video itself. Courtney "looked so embarrassed" and "seemed unpleasantly surprised at her 77% African heritage" but "super happy at her minor percentages."²¹⁶ "Watch closely," one respondent says, "and you can see the tears in Courtney's eyes when she's told that she is 80% sub-Saharan African."²¹⁷ Another commenter claimed to see her "whole demeanor" shift when she found out she was black.²¹⁸ A handful of respondents reject this interpretation of Courtney's reaction, but generally, Courtney's initial claims of ambiguity and subsequent interpretations of her reaction to her results are read as self-hatred. One commenter says she is "just a SELF HATER, she HATED her AFRICAN Roots.....she is SICK!!!!!"²¹⁹ One jeers, "lmao Courtney you're black, I guess sorry? Since she was hoping to be mostly European," and "People are making funny comments about Courtney, but it actually hurt me to see her so in denial about her own blackness. I really said a small prayer for her to get to a better place. Black is beautiful, be proud."²²⁰ Based on her physical presentation, Courtney's inquiry into her ancestry is deemed an embarrassing rejection of her African Ancestry.

²¹⁶ User Comment. 2019. "Courtney looked so embarrassed that she is 80% African." YouTube comment, 2022. <https://www.youtube.com/watch?v=5171eGo13hs>; User Comment. 2020. "Courtney seemed unpleasantly surprised at her 77% African heritage. Lol she was super happy at her minor percentages." YouTube comment, 2020. <https://www.youtube.com/watch?v=5171eGo13hs>

²¹⁷ User Comment. 2022. "Watch closely, and you can see the tears in Courtney's eyes when she's told that she is 80% sub-Saharan African." YouTube comment, 2022. <https://www.youtube.com/watch?v=5171eGo13hs>.

²¹⁸ User Comment. 2021. "Courtney's whole demeanor shifted once she found out she was black, she looked so upset. I feel bad for her, self-hatred is a sickness." YouTube comment, 2021. <https://www.youtube.com/watch?v=5171eGo13hs>

²¹⁹ User Comment, 2020. "she just a SELF HATER, she HATED her AFRICAN Roots.....she is SICK!!!!!" YouTube Comment, 2020. <https://www.youtube.com/watch?v=5171eGo13hs>

²²⁰ User Comment, 2022. "People are making funny comments about Courtney, but it actually hurt me to see her so in denial about her own blackness. I really said a small prayer for her to get to a better place. Black is beautiful, be proud." YouTube comment. <https://www.youtube.com/watch?v=5171eGo13hs>; User Comment, 2020. Lmao Courtney's comments "were cousins," "welcome to the long list club...lmao Courtney

The comments on the genetic reveal video suggest that this audience treats race as a set of physical traits that are visually verifiable, even when presented digitally and on a single occasion. The dialectic terms, or language for describing race, are limited and, especially with respect to “blackness,” mutually exclusive. Racial categorization is a perceptually motivated public act. Even as racial phenotype is linked to geographical ancestry through genetic testing, this analysis of the comments suggests that the public ascription of a discursive category based on phenotype can, and does, supersede genetic evidence of group belonging. Moreover, challenges to the lateral and hierarchical ordering of the racial groups that these discursive terms describe are often neutralized by invoking the terms themselves. The public perception of Courtney as ambiguous, then, requires that the public expand the dialectic category using positive evidence and, in essence, permit her to occupy more than one ‘category’ at a time. This is a task which, it would appear, is virtually impossible without a deliberate replacement of the phenotypical *positive* qualities in the dialectic group with genetic *positive* qualities.

Geopolitical Genomics and Racial Stratification in Test Results

The references to geographic locations are generally a result of either the individuals identifying themselves or the terminology used in the test results. The tests’ results reinforce geopolitical stratification that aligns with racial hierarchies in the United States. Returning to the Burkean premise that the identification of a thing’s substance through its naming is indicative of how it should be treated, I see the labeling of genetic testing categories of ancestry as an instrument of white supremacy. Specifically, the test result categories are labeled in a manner that reinforces modern, nation-state-centric conceptions of whiteness as complex and civilized while reducing and

you’re black, I guess sorry? Since she was hoping to be mostly European. Honestly, it’s weird to see people get all excited about being less than 1% of something.” YouTube comment, 2020.
<https://www.youtube.com/watch?v=5171eG013hs>

obscuring those identities that are not white. Here, the distinction between white and not-white is drawn from the United States racial categorization template that I gestured to in the introduction of this dissertation and will examine further in the coming paragraphs. As such, white ancestry is identified by nation-state, while non-white ancestry is marked merely by direction or region. This is, of course, a direct result of the racialization of genomic science, which draws its initial genetic pools primarily from European sources. It is also a manifestation of a colonized language system that limits naming options in the conceptual stages of the scientific process. European genetic pools serve as the basis or norm for genetic tests, while non-European pools, being constituted later, are smaller and more rare.²²¹ The accuracy with which European heredity is determined is, therefore, significantly higher. It is also important to note the rhetorical effect of the choice to align the ancestry category labels with prevailing geopolitical structures. *Hailing* non-white populations by regional titles obscures their history and erases complex social legacies, many of which are tied up with European colonialism. It also renders them less familiar to an audience than their European counterparts, whose social and political legacies have been made more accessible through colonially backed titles.

As a result of this, the video's mentions of the place of origin, and the way in which these places are described, serve as a mechanism for the construction of the discursive universe in which the racialization of genomic science is normalized. In this world, as in the United States, European ancestry is more specific and identifiable than the generalized other. While the naming convention of the test result categories may appear to be rational in the context of genetic testing, a comparison to conventions of racial identification and its relationship to geography suggests that the choice to

²²¹ Alice B. Popejoy and Stephanie M. Fullerton, "Genomics Is Failing On Diversity," *Nature*, October 13, 2016; Giorgio Sirugo, Scott M. Williams, and Sarah A. Tishkoff, "The Missing Diversity in Human Genetic Studies," *Cell* 177, no. 1 (March 2019): 26–31, <https://doi.org/10.1016/j.cell.2019.02.048>; Duster, "Ancestry Testing and DNA: Uses, Limits – and Caveat Emptor1."

refer to “Sub-Saharan Africa” rather than by nation-state but refer to European territories by name is a reinforcement of a geopolitical hierarchy. In the following discussion, I refer to the text and suggest that the naming of categories in the genetic test reveal is correlated to norms governing who is permitted to identify as white in the United States.

All the participants in the video, except Daniel, have African ancestry. Courtney’s 77% sub-Saharan African and Allison’s 0.1% sub-Saharan African frame a spectrum on which most of the participants are represented. The opportunities, therefore, to provide more specific references to recognizable places of origin in Africa abound. Still, in all the instances in which their African heritage is mentioned, the category is regional: North, East, or West. It is a vague spatial designation and not a country, tribe, or cultural reference. Sam tells Juan, “You are also 3.7% sub-Saharan African. 2% is West African. It’s actually really common for Central and South America to have a little bit of West African heritage.”²²² She explains to Jason that he has “12.7% sub-Saharan African heritage and 11.4% is west African.”²²³ Further, she reveals that “0.1% is this African hunter-gatherer heritage.”²²⁴ She tells Allison that she has “0.1% sub-Saharan African heritage” and Jazzmyne that she is “33.5% sub-Saharan African 28.8% and most of it is West African. 0.9% East African. 0.3% African hunter-gatherers.”²²⁵ The regional references are typical of the African heritage reveal. All participants are from either North, East, West, or sub-Saharan Africa.²²⁶ These categories are further divided into hunter-gatherer or not. It would appear that this distinction is significant in the context of genetic ancestry testing. Likewise, references to Asia are also regional.

²²² *Ethnically Ambiguous People Take a DNA Test.*

²²³ *Ethnically Ambiguous People Take a DNA Test.*

²²⁴ *Ethnically Ambiguous People Take a DNA Test.*

²²⁵ *Ethnically Ambiguous People Take a DNA Test.*

²²⁶ While the scope of this project does not permit me to expand on the topic more fully, Mashanda makes an eloquent case for the harmful nature of the term Sub-Saharan that is worth considering; Tatenda Mashanda, “Rethinking the Term Sub-Saharan Africa,” *The Herald*, May 10, 2017, <https://www.herald.co.zw/rethinking-the-term-sub-saharan-africa/>.

There is one instance of a reference to Korea, but otherwise, all Asian descent is demarcated by region. Juan, therefore, is “1.7% Western Asian,” and Jason is “7% East Asian.”²²⁷ Native American heritage is obscured even further, presented as an entirely homogenous group without internal diversity or structure.

The treatment of European ancestry is decidedly different. Even as YouTube commenters insist that she is ‘black,’ Courtney is told that she has “19.7% European. Of that 6.8% British and Irish recent ancestry in the United Kingdom and 0.5% Iberian that’s 0.3% Scandinavian,” Jazzmyne is told, “you have 60.2% European ancestry. 12.8% of that is Eastern European, 10.3% French and German. 4.3% British and Irish with evidence of recent ancestry in the United Kingdom. Then 1.6% Iberian and again, that’s Spanish and Portuguese.”²²⁸ Juan, meanwhile, learns that he is “is 41.7% European and of that 26.9% is Iberian and that’s again something like Spanish or Portuguese in addition you are 0.6% Balkan.” In Juan and Jazzmyne’s cases, even where the ancestry category itself is archaic, a vigorous effort is made by Sam to connect their results to modern Europe. No such efforts are made on behalf of participants whose ancestry is African or Asian.

Here I will note that it is not that European populations do not have hunter-gatherer DNA markers.²²⁹ The term hunter-gatherer is not specific to Africa in genomic research. Moreover, anthropological researchers have identified and named several specific hunter-gatherer groups. Lachance et al. have “sequenced the whole genomes of five individuals in each of three different hunter-gatherer populations at >603 coverage: Pygmies from Cameroon and Khoesan-speaking Hadza and Sandawe from Tanzania.”²³⁰ The use of the term hunter-gatherer, therefore, to identify

²²⁷ *Ethnically Ambiguous People Take a DNA Test.*

²²⁸ *Ethnically Ambiguous People Take a DNA Test.*

²²⁹ Anne Tresset and Jean-Denis Vigne, “Last Hunter-Gatherers and First Farmers of Europe,” *Comptes Rendus Biologies* 334, no. 3 (March 2011): 182–89, <https://doi.org/10.1016/j.crv.2010.12.010>.

²³⁰ Joseph Lachance et al., “Evolutionary History and Adaptation from High-Coverage Whole-Genome Sequences of Diverse African Hunter-Gatherers,” *Cell* 150, no. 3 (August 2012): 457, <https://doi.org/10.1016/j.cell.2012.07.009>.

the ancestry of present-day individuals is reductionist at best. Despite the dearth of genomic research, it is also true that African DNA clusters can be organized by nation-state, at least to some degree. This would require, as Duster suggests, an effort be made to develop testing populations that are more inclusive. This, however, is the primary bias of commercial genetic testing. The rationale of 23andMe is to catapult over evidence of migration, language, and culture and connect DNA to a more general discursive categories. While it is possible to organize genomic evidence through the lens of history's rich social and cultural milieu, I contend that this would undermine the project of sustaining our era's simplistic understanding of human diversity. In essence, such a move would destabilize the foundations of the racial concept. So, even in the absence of a sufficient data pool, the simplification of ancestry from the African continent could have been offset by the naming of equivalent 'hunter-gatherer' groups in Europe. Instead, a choice is made to represent Europeans by nation and non-Europeans by region. This choice is correlated to notions of whiteness and the demarcation of the white group in the United States.

While it is accepted that individuals with European ancestry are identified as white by the United States Census Bureau and their ancestry is represented by nation-state names, a more interesting case study is the group referred to as Middle Eastern-North African or MENA.²³¹ Even as the MENA cohort comprises individuals whose ancestors hail from the African continent and who steadfastly contend that identification as white erases their heritage, the perception of their grouping is manifest in the roll-out of genetic test results.²³² Middle Eastern ancestry is named by state, and North African ancestry is identified by region. As such, Jazzmyne is told that her ancestry might be described "as the Middle East: spanning from Iraq and Iran all the way over to Turkey,

²³¹ Dalia Azim, "I Am Middle Eastern. Not White.," *The Washington Post*, August 12, 2021, <https://www.washingtonpost.com/opinions/2021/08/12/i-am-middle-eastern-not-white/>.

²³² Neda Maghbouleh, Ariela Schachter, and René D. Flores, "Middle Eastern and North African Americans May Not Be Perceived, nor Perceive Themselves, to Be White," *Proceedings of the National Academy of Sciences* 119, no. 7 (February 15, 2022): e2117940119, <https://doi.org/10.1073/pnas.2117940119>.

Lebanon, and Syria.”²³³ Daniel, too, receives a similar readout, being told that his ancestors came from “countries from Iran, Iraq to Turkey, Syria, and even places in the Caucasus region.”²³⁴ This qualification of Daniel’s results is perhaps most telling since it is an overt reference to the ability of individuals from that region to claim whiteness in the U.S. context. After all, the term *Caucasian* has been misused as a euphemism for white for some time now. The word ‘*even*’ in the explanation of Daniel’s results serves as an intensifier, revealing the unexpected bridge between those countries whose lexical injunctions stereotypically invoke political unrest, Islam, terrorism, and anti-American sentiment and the rhetorical home of civilization: whiteness. Daniel and Jazzmyne’s ancestry, therefore, is named and associated with a recognizable cultural system. In other words, their ancestors are humanized. Courtney, however, is told that she has “North African heritage. Specifically, 0.1% is North African and Arabian,” and Andrea that she has “0.6% Western Asian and North African DNA.” Scientific as they are, their test results do little except move them from an undefined present to an undefined history. In the ancestral imaginary, the locations of whiteness and not-whiteness could not be more different.

Conclusion

The framing and enunciation of the genetic test results in the text serve several rhetorical purposes. To summarize, the visual and linguistic framing of the test results argue for the power of science to reconcile socially constructed racial ambiguity. This is made possible through the parallel usage of disparate categories of ethnicity, race, and nationality. This clustering of terms allows for notions of white supremacy to thrive and circulate in, and beyond, the test. In my analysis of *Ethnically Ambiguous* I have found that the structures underwriting the dialectic organization of

²³³ *Ethnically Ambiguous People Take a DNA Test.*

²³⁴ *Ethnically Ambiguous People Take a DNA Test.*

positive terms, both physical and genetic, are strong and pervasive. This is the palimpsestuous nature of racial definition in the United States. As new ways of understanding diversity, such as DNA testing, emerge, they are commandeered and collapsed into the prevailing structure of power relationships. In essence, unifying proof of sameness is forced through a filter of racial difference and read as evidence of the latter, evidence that is made to conform to an overarching view of white dominance at every turn. In the following chapter, I will explore another video, and its companion article in National Geographic's *Race Issue*. At the outset, these artifacts appear to advance the claim that race is entirely socially constructed. Still, the approach to doing this subtly gestures toward dialectic ordering in a similar way to the BuzzFeed text. Relying on both the Burkean terms of order and scholarship in visual rhetoric, I will examine the ways in which these artifacts turn our attention toward and convince us to adopt norms of racial categorization.

Chapter 5: The Geography of Meaning

The social constructionism approach has been instrumental in framing and operationalizing our current understanding of race. The perspective offers a way of processing systemic inequality that reveals the effect of power structures on the interpretation of biology. It has partially dismantled biological essentialist approaches to diversity to reveal what are essentially rhetorical strategies for social stratification. The advent of commercial ancestry testing, however, takes advantage of the perspective's weakness, namely that socially constructed racial groups rely on biological features for their assignment. The genomic revolution's ability to attribute the seen biological to the unseen genetic has made the cause of disrupting race even more urgent. My concern in this chapter is how the racial discourse, especially the polysemic term *race*, symbolically modifies our understanding of ancestry test results. This case study shows how ancestry test results can be rhetorically manipulated to reintroduce biologically essentialist elements into the racial construct. Using genomic data as a metric for race resuscitates arguments of biological inherency.

This case study examines the video entitled “What Genetic Thread Do These Six Strangers Have in Common?” and the accompanying magazine article.²³⁵ While the video is housed on the *National Geographic* (NatGeo) YouTube channel and the *NatGeo* website, membership is required to view the article. The print and online versions are significantly different. The print version is a simple gallery of the participants' photographs accompanied by an extended caption. The video on the website is two and a half minutes long, followed by a significant body of text, including captions that name the individuals and where they live, with quotes from each of them. The video and article are elements of April 2018 *NatGeo's Race Issue*, published a year before the Genographic Project

²³⁵ While the video is listed as “What Genetic Thread Do These Six Strangers Have in Common?” the article in NatGeo's issue is entitled “The Surprising Way Saliva Brought These Six Strangers Together.” I analyze the two concurrently as a composite text.

(GP) ended. The publication marked the 50th anniversary of the assassination of Martin Luther King Jr. and claims to explore the meanings of race in the 21st century.

The GP, a “collaborative genetic anthropological study of human migration,” aimed to analyze over 100,000 DNA samples collected from indigenous peoples and tens of thousands of samples contributed by the general public.²³⁶ It was the most extensive study of its kind at the time. By the project’s completion, more than one million samples had been collected from participants in over 140 countries. According to the project’s privacy policy, analyzing participants’ genographic genetic information would produce deep ancestry insights. *Deep insights* are defined as ancestry indicators that can be traced through human populations for thousands of years.²³⁷ In 2006, the project was condemned by the Indigenous Peoples Council on Biocolonialism, and the United Nations Permanent Forum on Indigenous Issues requested that the project be suspended. Most Native Americans refused to participate in North America, arguing that the project’s consent form did not fully explain inherent risks.²³⁸ The individuals in the case study video are participants in the GP study.

The video is narrated by six strangers who, according to the *NatGeo* website, have a “shared genetic profile.”²³⁹ The genetic profile to which the video refers is a list of admixture percentages. More specifically, the project categorizes each participant as roughly 32% Northern European, 28% Mediterranean, 21 % Sub-Saharan African, and 14% Southwest Asian.²⁴⁰ The participants are Cam

²³⁶ Kara Rogers, “Genographic Project,” in *Britannica*, February 9, 2012, <https://www.britannica.com/event/Genographic-Project>.

²³⁷ National Geographic, “The Genographic Project® Geno 2.0 Next Generation Helix Product Privacy Policy,” July 1, 2020, <https://www.nationalgeographic.com/pages/article/genographic?loggedin=true>.

²³⁸ Kara Rogers, “Genographic Project.”

²³⁹ Together the video and article are rich resources for this case study. While the video is short, my analysis will also consider how it is structured and edited to make visual and textual arguments about the participant’s resemblance. The video script and article text also contain significant insights into public perceptions of *race*.

²⁴⁰ Elaina Zachos, “What Genetic Thread Do These Six Strangers Have in Common?,” *National Geographic Magazine*, March 12, 2018, <https://www.nationalgeographic.com/magazine/article/race-genetics-geno-dna-ancestry>.

Meyer, Julie Bond, Jason Carter, Brenda Yurkoski, Ty Wilhelmsen, and Milo Ronald Dehi Johnson. In the video, they are asked to respond to images of each other after learning that they share the genetic profile. Typically, they respond that the faces of the others “seem familiar” or “look alike.”

The stated aim of the *NatGeo Race Issue* is to dispel the notion of a genetic basis for race and advance the idea that race is socially constructed. This entire project is carefully worded and avoids the linguistic and conceptual pitfalls of the other texts I analyze in this project. It is possible that some of the responses were vetted if not scripted. As expected from a journalistic institution, NatGeo’s narration and copy text is expertly curated to circumvent linguistic terms that reinforce the idea of race as biological. And yet, the overall argument of the text, that race is a social construction is compromised by using genetic data to construct a biologically based group of individuals, even as they identify with different racial categories. To prove that race is socially constructed, NatGeo creates an entirely new biologically based group that conforms to the discursive rules of racial categorization.

In this chapter, I argue that the use of current modes of genetic testing are neither adequate nor appropriate for understanding human diversity. This is because human migration is currently conceptualized in a racialized framework. Rather than dispute claims that race is biological, ancestry testing works to reconstitute these notions. I first consider the arguments made in the NatGeo text and suggest that, in the face of racial ambiguity, genetic research is used to facilitate a new genetically based, visually identified racial category. I analyze the racialization of genetic test results by identifying how the relationship between dialectic and positive terms is influenced when genomic test results move from the scientific realm to the public sphere. I also consider how the conflation of geographic, national, and genetic terms facilitate the discursive ordering of scientific data.

Having established a framework for analysis I focus on how the social and biological are stitched together under the auspices of the genetic. I then turn to the visual arguments made by the

images that appear in both the video and the print and online articles to interrogate one of the fundamental premises of the text: that these individuals look the same because of their genetic ancestry. To do this, I establish the limitations of genomic research and suggest that in the absence of a clear connection between visibility and genomics, one is constructed in the text using geographic proxies and lay theories of genetic inherency. After discussing the visual argument, I consider the relationship between genomics and time, specifically, how the location of ancestry in modern history generates narratives that make genetic test results usable. Finally, with an understanding of the ways in which visibility, geography and time intersect in the construction of the reveal genre, I suggest that it is the absence of appropriate dialectic terms for describing genomic data that commercial genetic testing is racialized.

Textual Analysis

The text is an example of a new mode of racialization based on genetics. This racialization conforms to the prevailing racial schema not in content but in form, by supposing the connection between biology and visibility. The merging of genotype and phenotype, as it is performed in the text, supposes that geographic ancestry can be calculated based on visuals. This assumption re-instantiates the essentialist notions that undergird visually based distinctions. In this section I pay special attention to the relationship between *dialectic* and *positive* terms to illustrate how they interact to facilitate genetic racialization. Specifically, I show how the absence of an accurate dialectic framework for organizing genomic data results in a return to racial categorization.

The article begins by establishing that individual human beings are “utterly unique,” differentiated by fingerprints, gait, and speech. It says “even the shape of your ears and the patterns of your retinas are specific to you. But some traits are more than skin-deep, and it’s

possible you have something big in common with total strangers.”²⁴¹ The argument of the text first establishes the significance and immutability of genetic evidence. It stresses the inherency of genetic similarity, establishing a baseline against which all subsequent statements must be considered. The claim here is that genetics is a definitive fact of identity that surmount individuality.

The next premise of the argument is that the text’s subjects share a *genetic profile*. When combined with the previous statements this can be taken to mean that the participants share immutable elements of identity. According to the article “the test revealed that these people are each roughly 32% Northern European, 28% Mediterranean, 21% Sub-Saharan African, and 14% Southwest Asian.”²⁴² The geographic categories or regions into which the participants are placed are collections of inherently limited and sovereign imagined political communities. Europe, Africa, and Asia are not naturally delineated but have evolved through human negotiation. The geographic categories into which they are placed, therefore, are composite constructions that rely on our ability to accept fictional boundaries of nation. This is the first challenge to the narrative offered by the text. The use of these geographic boundaries as indicators of inherency is temporally determined, a reflection of present, human-created borders and not naturally demarcated territories. Claiming a shared genetic profile suggests that either these boundaries have always existed, and people were unable to cross them, or that the participants all possess genetic markers that emerged in those places at the same time. Neither of these options is likely.

The formulation of genetic profile itself also demonstrates how Burke’s *positive* and *dialectic* terms interact. Regional and country names such as Sub-Saharan Africa, Mediterranean and southwest Asian invoke racial categories. Even as researchers intend them as spatial indicators,

²⁴¹ *The Surprising Way Saliva Brought These Six Strangers Together* (National Geographic, 2018), <https://www.nationalgeographic.com/magazine/article/race-genetics-geno-dna-ancestry>.

²⁴² *The Surprising Way Saliva Brought These Six Strangers Together*.

discursively they function as indicators of race. The movement from the scientific discourse to the public sphere changes the sense in which these terms are understood. Geographic terms that function as racial proxies are dialectic. According to the theoretical framework of this project, the role of the dialectic is to describe and deploy positive terms in order to organize them hierarchically. Even as they point to the tangible DNA material, geographic references always already carry with them racial meaning. It is, therefore, impossible to separate the constructed reality of geographically oriented race from the factual reality of biology as the terms circulate in the text.

How Do Ancestry Test Takers Read Race?

To further explain the dialectic-positive relationship, I turn to the participants' commentary on their *genetic profile*. A significant part of the video is dedicated to the interviewees reciting the profile to the camera. As in *Ethnically Ambiguous*, the subjects' reading of the profile is edited in such a way that the subjects complete each other's sentences. The narration proceeds as follows:

JULIE: 32 %
MILO: Northern European
JULIE: 28 %
BRENDA: Mediterranean
CAM: 21 %
MILO: Sub-Saharan African
JULIE: 14 %
JASON: Southwest Asian.²⁴³

Apart from the unifying effect of having the subjects' many voices say the same thing, this segment of the video establishes that they have been made aware of the genetic profile. It is noteworthy, therefore, how they process the *positive* information they receive. I analyze their comments through their use of the dialectic terms.

²⁴³ *The Surprising Way Saliva Brought These Six Strangers Together.*

The clearest interpretation of what the positive terms might mean to the group comes from Ty, whose statement “one person is not just one race” ends the video.²⁴⁴ Despite efforts by NatGeo to show that race is not biological, Ty’s interpretation of the data serves not as evidence that race is not visible, but that races are not mutually exclusive. To him, the positive genetic terms seem to serve as proof of racial categories, and he treats genomic results as evidence that he represents a blend of them. Without additional rhetorical resources with which to reframe the meaning of genomic data, Ty’s understanding of diversity cannot be processed outside of the racialized construct. In this text, his utterances constitute genomics as evidence of race.

Taking a broader view, the text itself appears to be a conversation between the scientific and the discursive, often revealing conflicts in perspective on the boundary between the dialectic and the positive. Genographic Project Science Manager Miguel Vilar claims that “we were just looking at numbers. They could look the same on a pie chart, and yet they could look very differently and would identify ethnically very differently and racially very differently.”²⁴⁵ Here he makes a clear distinction between the positive terms (numbers representing DNA results) and the dialectic terms (ethnicity and race). Vilar’s comments also support constructivist notions. By blindly selecting participants, the GP did not plan for racial, visual, and genomic overlap. In fact, random selection was intended to avoid it. However, the article goes on to say, “from there the researchers found a few dozen people who also share similar geographic backgrounds, knowing that the larger percentages in their genetic makeup would account for skin color and other physical traits.” In this section, aptly called *Bridging the Divide*, a conceptual tether is drawn between the geographic (dialectic) and the genetic (positive). The author of the article combines the two positive categories of visibility and genetics and links them irrevocably to the dialectic terms which

²⁴⁴ *The Surprising Way Saliva Brought These Six Strangers Together.*

²⁴⁵ Elaina Zachos, “What Genetic Thread Do These Six Strangers Have in Common?”

are proxies for race. Moreover, the text seems to suggest that the pool of subjects was deliberately narrowed to increase the chances that they would look alike, harmonizing the two terms for order.

I treat what appears to be an inconsistency in the text's reasoning as the resolution of a challenge to the racialized order. Essentially, the GP's research would prove there is no visual basis of race since, when applied, socially constructed racial categories would contain individuals of separate visual presentation. This finding would significantly undermine the notion of race as a biological construct since there would be no phenotypical consistency within the group. This in turn would demand better rhetorical resources for describing the project's results. In Burkean terms, the author's voice represents the constitution-beneath-the-constitution, the overarching logic that resolves conceptual conflicts in an accepted order. It is the rationale that prevails when there are conflicting *oughts* in the 'recipe of wishes.' In the struggle between the scientific and the discursive voices, the writer succeeds in bringing the positive into an alignment with the dialectic through scientific accommodation. Scientific accommodation, a theory popularized by Fahnestock, explains how scientific writing is adapted to popular audiences.²⁴⁶ It relies on Aristotelian genres to explain how the media digests the esoteric jargon of science to facilitate public consumption. Here I would like to amplify Fahnestock's contribution, by suggesting that when Accommodation Theory is applied to the dissemination of genomic science, it must also account for the influence of the racial discourse. Whereas Fahnestock has previously attributed the loss of scientific authenticity to a shift in genre, I would add that writing about genomics must also be interpreted in terms of the rhetorical connection between human diversity and race. The association of dialectic terms with positive data, inevitably alters what that data might mean.

²⁴⁶ Jeanne Fahnestock, "Accommodating Science: The Rhetorical Life of Scientific Facts," *Written Communication* 3, no. 3 (1986): 275–96.

Racialization thrives on the dearth of terms to explain human difference. Without language that accurately conveys the meaning of genomic data, common sense racial and geographical terms are used in its stead, ultimately leading to the racialization of terms that were intended as neutral representations of variation. In other words, in the absence of new dialectic categories for organizing positive data, the science can only be expressed through the racially charged shorthand. These rhetorical substitutes are deployed in a number of ways but are most evident in the parallelism of race, ethnicity, and nationality in the discussion of genetic ancestry tests.

Combining Race, Geography and Nationality in the Ancestry Test Reveal

The imbrication of dialectic and positive terms continues with the equivalency of racial and geographic labels. In the text, no distinctions are made between the geographic area of Europe and whiteness, or geographic Africa and blackness. This further illustrates how geographic language functions as a proxy for race. Brenda, one of the video subjects, says, “my dad used to joke and say, oh you’re Black-Irish, you’re Black Irish. And guess what? I’m Black-Irish.”²⁴⁷ This conflation of racial and national/ethnic terms is typical of the text. To Brenda, the 21% Sub-Saharan African is black, and the 32 % Northern European is Irish. It is clear that Brenda is either privy to some other information that is not available to the audience, namely the specific location of European ancestry, or that she has assumed this based on prior knowledge. Even so, the tendency to combine terms that are not equivalent exemplifies the relationship between the positive and dialectic terms. Let us recall that the distinction between dialectic and positive terms is functional. Indicators of the tangible and words that describe them achieve different purposes. The trouble with the racialization

²⁴⁷ *The Surprising Way Saliva Brought These Six Strangers Together*; *Black-Irish* is a complex formulation that has been used to mean different things at different times including a political epithet, a reference to the Iberian settler presence in Ireland, as well as the Irish presence in Jamaica. My research has not yielded any such iterations in the U.S. and as such I assume that Brenda is referencing not an established community but is juxtaposing identity labels.

of genetics is that dialectic terms are deployed as organizers but received as referents. In Brenda's instance, the dialectic *black* attracts and assimilates those positive percentages of the genetic test attributed to Africa. Race, the organizing term, is translated as a defining term. It is transfigured by the genographic evidence that supports it. The shorthand of race, therefore, can be easily deployed in the place of terms that represent a more complex history of human migration.

As a reminder, DNA test results are literal indicators of existing physical entities, while racial terms are figurative and exist in the dialectic realm where they perform an organizing function. The racializing narrative holds that people in the Western world who are visually identifiable as black can trace their lineage to Africa, and those who are identified as white can trace their lineage to Europe. This rationale allows for the substitution of terms in the discourse. Therefore, the dialectic term black and the positive term Africa becoming interchangeable. Even in their geographic proxy form, dialectic terms promote racialization. When DNA tests suggest that markers indicate origins in sub-Saharan Africa, then, those DNA tests are invoking blackness as a dialectic construct.

Racial dialectic terms, such as *black* and *white*, are the point around which positive terms of genetics and geography revolve and through which they intersect. According to the Burkean framework, dialectic terms should describe the positive terms. Essentially, this would mean that the dialectic term somehow describes the positive term. In practice, this would look like someone being called *black* or *white* based on their phenotypical characteristics because genetics are thought to influence appearance. *Blackness* in this framing is a referent to dark skin. Instead, to better explain my point, I offer an alternative line of reasoning: dialectic terms are independently existing constructs into which positive terms are gathered. The descriptive work of the racial term is subsequent to the creation of the racial category. Someone is black, not because of how they look but because they have been discursively located in the *black* dialectic category. In the absence of what would be considered the stereotypical black phenotype, such a category would continue to exist. If one was to

say, “there goes a black man,” it is not that the man is independently and objectively *black*. Instead, this individual is gathered into an existing dialectic category that must be filled. After it has been filled, connections are drawn between its members to evidence its existence. This framing helps us to explain instances in which individuals may not present as part of a given group but are categorized as such based-on ancestry.

While an individual may be *white* in one place and *not-white* in another, the terms white and black persist suggesting that the terms do not describe inherent qualities but spatial and temporal designations. Racial dialectic terms do not describe phenotype; they create it. Even the term *phenotype* refers to the observable characteristics of a given group. The group is constituted around the existence of similarity. While the *pheno* of phenotype might be absolute, tangible, and denoted by positive terms, *type* is a created group, manufactured by the perception of similarity. It is in the *typing*, or the grouping and labeling of individuals based on visual cues, that the dialectic term is occupied. In this text, a straight line is drawn from phenotype, here referred to as resemblance, to genomics. In its effort to rescind the presumed connection between genetics and socially constructed racial groups, the text inadvertently makes an argument for a fundamental connection between genetics and visibility. These assumptions recall the problematic sampling choices made in commercial genetic testing that I identified in the previous chapter. Outside of the scientific context, however, it does the discursive work of conforming new data to the prevailing logic. When confronted with individuals of *mixed* ancestry, the text defines it as a new group characterized by the same criteria of the biological groups it claims to reject.

The Rhetoric of Genetic Certainty Returns

In the previous chapter I theorized a rhetoric of genetic certainty. In this case study, the deployment of discursive strategies to give genetic tests primacy over lived experience and resolve misidentification by the public is also present. This is evident both in the participant’s acceptance of

the test results and assumptions about the validity of the test itself. At the beginning of the video, Cam expressed confusion about his ancestry, again invoking the public sphere through the use of the term *people*. He says, “people have always asked me kind of where I’m from, what my race is, and I was not totally sure.” Likewise, Milo says, “my mom would say you’re black, but you’re also white. I didn’t understand what that meant.” And Jason admits to viewing himself as “other, something different. Not quite black, not quite white.” It is noteworthy that in all the initial contributions from the participants, a white-black dichotomy is established. With the exception of Brenda, who initially identifies as “African American” but then conceded to being Black-Irish, the source of the subjects’ internal conflict appears to be the inability to identify as one racial group or the other. As in the preceding case study, upon learning about their ancestry percentages, the participants seem to come to terms with their ambiguity. It is interesting that none of the subjects seem aware of or interested in the Southwest Asian heritage identified by the results since it did not figure in their initial genealogical estimates.

This tendency of new genetic data to provide a sense of closure to participants is borne out in Nelson’s research. In her discussion of what she refers to as “genealogical disorientation,” or instances in which individuals learn new and unexpected information from genetic tests, she characterizes the other end of the affective spectrum:

These roots narratives follow a now predictable arc: DNA testing, feelings of completion, and the assumption of the subject’s unwavering confidence in the genetic test outcome.

Press accounts such as these leave little doubt that genetic truth of identity and kinship will out, that social categories such as ‘race’ and ethnicity are being made anew from the whole cloth of As, Cs, Gs and Ts.²⁴⁸

²⁴⁸ Alondra. Nelson, “Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry,” *Social Studies of Science* 38, no. 5 (2008): 774.

In this case study, as in the first, genetic test results add a new, verifiable layer to the subjects' personal palimpsest.

The force of the rhetoric of genetic certainty is amplified by the emotional responses of the participants. The affective charge of the moment that the participants view images of each other is foregrounded by the production team's editorial choices. As Brenda looks at the images, she says, "They all look like they are related to me. This looks like my family, like literally, you have...." and appears unable to complete her thought as his voice trails off to silence. While viewing the images, Milo begins to cry. He says, "I have no idea why this makes me emotional." It is a private moment, yet the camera is held on him while he resists sobs. Julie claims that the images "feel familiar," making yet another reference to the emotional connection the video participants feel to this assembled genetic group. Rising violin instrumentals contribute significantly to the audience's reception of footage, and lateral pan shots of the participant image gallery mimic the guests' point of view when confronted with the images for the first time. While subtle, these editorial choices reinforce the narrative of self-discovery's emotional element. As the audience's attention is directed toward the individual stories of the participants, there is no room to question the method of genomic testing or to interrogate what these tests might mean.

The video genres' emotive emphasis also gives viewers permission to apply personal lay theories of race. Brenda's claim that "they all look like they are related to me" carries within it the implicit reasoning that they resemble each other because of their genetic makeup, reasoning that could be extended to suggest that anyone with this combination would look alike. Even if it is done inadvertently, this rationale works to create a new racial group comprising individuals with the genetic profile. It also reinforces ideas of essentialism using genetic evidence. Just as the socially constructed categories of blackness and whiteness are thought to have genetically inspired

phenotypical characteristics, this new group can be also identified visually, because they share a certain genetic *mix*.

Like the preceding case study, the NatGeo video advances the rhetoric of genetic certainty as participants move from confusion and doubt about their identity to a secure place within given communities. The text also overlooks false equivalencies between categories of diversity such as ethnicity, race, and nationality, using the terms interchangeably to support its central argument. The video element of the text is intentionally edited to advance its key arguments. This case study stands apart, however, since, in its bid to argue for the social construction of race, it inadvertently creates a group that is defined through the logic of racialization. The participants constitute a hitherto non-existent group that exemplifies the view that shared genetics can be seen. In the next section of this chapter, I interrogate the visual sameness of this constructed group and consider the extent to which the racial discourse prescribes it.

A Visual Argument for Sameness

National Geographic Magazine is renowned for its captivating portraiture. The “Afghan Girl” featured on the June 1985 cover and the 1969 image of Buzz Aldrin standing on the lunar surface are among the cultural touchstones the magazine has contributed to the public imagination. There is no shortage of scholarship on the influence of images on social attitudes.²⁴⁹ The potential for the

²⁴⁹ Cloud, Dana L. ““To veil the threat of terror”: Afghan women and the (clash of civilizations) in the imagery of the US war on terrorism.” *Quarterly Journal of Speech* 90, no. 3 (2004): 285-306.; Dolf Zillmann, Rhonda Gibson, and Stephanie L. Sargent, “Effects of Photographs in News-Magazine Reports on Issue Perception,” *Media Psychology* 1, no. 3 (September 1999): 207–28, https://doi.org/10.1207/s1532785xmep0103_2; Andréa Barbosa, “Meaning and Sense in Images and Texts,” *Visual Anthropology* 23, no. 4 (July 15, 2010): 299–310, <https://doi.org/10.1080/08949468.2010.484995>; Rhonda Gibson and Dolf Ziillmann, “Reading Bewteen the Photographs: The Influence of Incidental Pictorial Information on Issue Perception.,” *Journalism and Mass Communication Quarterly* 77, no. 2 (2000): 355–66; Laura M. Arpan et al., “News Coverage of Social Protests and the Effects of Photographs and Prior Attitudes,” *Mass Communication and Society* 9, no. 1 (February 2006): 1–20, https://doi.org/10.1207/s15327825mcs0901_1.

images in this text to permeate the public discourse should not be underestimated. As such, I now consider the claim, made in the text, and supported by the images, that the participants resemble each other. On the surface, they all have dark hair, though one of them is bald and appears to resemble the rest of the group the least. In the promotional images and in the video, they are all dressed in black t-shirts and sit in front of the same background. In the images, a filter is applied that assists with the appearance of uniformity. In other words, some post-production work has been done in order to shore up the argument of resemblance. More importantly, whether they resemble each other is debatable since they are, in fact, presented together. There is no way to tell if they would appear to be related if presented separately. In the upcoming section of the project I rely on theories of visual rhetoric to explain that “visual symbols convey their meaning in a gestalt, not a linear, form; images ‘do not present their constituents successively, but simultaneously, so the relations determining a visual structure are grasped in one act of vision.’”²⁵⁰ Otherwise put, it is noteworthy to consider the extent to which the strength of the visual argument that “they look like family,” is in part based on how the images are presented.²⁵¹ Before I continue with the argument for visual sameness it is useful to clarify how well current modes of genetic testing are able to predict phenotype.

What Can Genetics Tell Us About What We See?

The interpretation of genomic data in the text follows a biologically essentialist logic: that it is possible to use physical traits as a form of ancestral identification and categorization. Attempts to trace the origin of these traits to a geographic area are premised on a schema that does not adequately reflect the complexity of human migration over time. Clearly, there are distinctions in

²⁵⁰ Randall A. Lake and Barbara A. Pickering, “Argumentation, the Visual, and the Possibility of Refutation: An Exploration,” *Argumentation* 12 (1998): 81.

²⁵¹ *The Surprising Way Saliva Brought These Six Strangers Together.*

human phenotype and patterns that seem to reflect ancestry. Around the world, people with ancestors from equatorial regions present with darker complexions than those whose ancestors did not. This seems to be an obvious indicator of some genetic coding that is passed between generations. And to some degree, it is, especially if the line of descent is as recent as the last five hundred years. However, the markers identified by commercial ancestry testing evolved and were exchanged over tens of thousands of years. The continuous movement of humans around the planet during that time, therefore, raises the question of when specific groups began to show these genetic markers. In other words, *when* did the geographically based African, European, or Asian group that genetic ancestry tests identify actually emerge? This is not a question that commercial ancestry testing is able to answer readily. This gap in the translation of genotype to phenotype allows for the false assumption that there is a genetic link between the visual and the modern geopolitical. The genomic drift out of Africa was neither permanent nor unidirectional. At the time of the mass enslavement and transportation of Africans to the Americas, the genetic pool already contained markers that evolved outside of Africa and vice versa. Rutherford argues that the dispersal of genetic markers does correspond with land masses to some degree. Yet, “there is huge variation, and at the edges and within these groups, there is continuity of variation...Genetics refuses to comply with these artificial and superficial categories. Skin color, while being the most obvious difference between people, is a very bad proxy for the total amount of similarity or difference between individuals and between populations.²⁵² The notion that a visual schema for recognizing genetic ancestry exists is flawed.

While there is strong evidence that, because of the complexity and duration of human migration, visibility is a poor indicator of ancestry, there is also evidence that accepted techniques of genomic analysis are a poor predictor of visual markers. Understanding how rhetorical forces

²⁵² Rutherford, *How to Argue with a Racist*, 58.

operate within the text to substantiate such claims is crucial. The implicit argument of the text is that participants look alike because of a shared *genetic* profile. The idea here is that one or a combination of several genomic markers can be translated into a common appearance. The audience is encouraged to use the genetic estimates offered to account for how the individual looks.

The idea that genetic markers consistently manifest as a given phenotype is gradually being dismantled by geneticists who challenge the racialized underpinnings of genomic research. Specific alleles such as SLC24A5 (among others), which are thought to allow for lightening in the skin of Europeans and Asians, occur regularly in Botswana, Ethiopia, and Tanzania.²⁵³ Thus, the genetic indicator of lighter skin tones, which has traditionally been the basis of exclusion, turns out to be common to groups that are defined as not-white. Again, it is important to reiterate here that the common human tendency to attribute physical features to a racial group or geographical region depends not on any inherent feature but on the lived reality of the individual performing the attribution. As I explained in my introductory chapter, the ascription of racial features is more the result of what one expects to see than what is actually there. While it is not accurate to extrapolate genotype from phenotype, it is also not possible for current scientific methods to predict phenotype from genotype.²⁵⁴ The argument, therefore, that the participants in the NatGeo text present the physical manifestations of a specific genetic composition is not only misleading and false, but indicative of the interpolation and assimilation of new data into the prevailing discursive order.

Instead of treating the genomic data as a challenge to a given mode of categorization, we are encouraged to interpret and modify it to meet the criteria of racialization. The language of human diversity limits the range of interpretation. Unrelated geographical and genomic categories, therefore,

²⁵³ Michael C. Campbell and Sarah A. Tishkoff, "The Evolution of Human Genetic and Phenotypic Variation in Africa," *Current Biology* 20, no. 4 (February 2010): R166–73, <https://doi.org/10.1016/j.cub.2009.11.050>; Floyd A Reed and Sarah A Tishkoff, "African Human Diversity, Origins and Migrations," *Current Opinion in Genetics & Development* 16, no. 6 (December 2006): 597–605, <https://doi.org/10.1016/j.gde.2006.10.008>.

²⁵⁴ Rutherford, *How to Argue with a Racist*, 56.

invoke race by default. Consequently, *positive* genomic terms subsumed under *dialectic* racial terms are read and circulated as synonymous, feeding and sustaining the racial discourse through which we interpret visual characteristics as inherently biased.

I offer the following explanation for how this process works. Genetic test results are presented to the audience in a scientific vacuum. The audience, therefore, does not entirely understand how these tests are performed or what the results indicate. Without more specific language to denote what genetic testing is able to show, the results could be interpreted to mean anything. The audience, therefore, must rely on the video to explain the results in terms it can understand. In the absence of context, the results are interpreted according to individual lay theories of race, which are irrevocably tied to the prevailing racial discourse. Without questioning if visuality and genomics are connected and, if so, how they are connected, the audience can only assume that the genetic test results are definitive precursors of phenotype. The text participates in and encourages this assumption. Moreover, the genetic data is reintegrated into perceptions of race as evidence of their inherent truth. This faulty logic requires that the temporal element of human migration be ignored. Without the benefit of temporal context, the audience treats the emergence of genetic groups as both static and recent. In order to make sense of genomic evidence, the audience assumes human migration to have occurred in the world, not as it was then, but as it is now. In the text, human diversity is understood the context of modern geopolitical formulations.

The Burkean Palimpsest

With this understanding, we can harmonize the Burkean order of terms and the palimpsest. The dialectic terms are sticky, attracting positive genomic terms that serve as proxies for visual indicators of race.²⁵⁵ The genomics data is brought into alignment with the visual data and those

²⁵⁵ Ahmed's *Affective Economies* utilizes the idea of stickiness in the same way that I do here. In her discussion of the symbol of the flag, she explains, "Rather, we can consider how the flag is a sticky sign, whereby its

characteristics stereotypical of a racial group, here indicated by geography, are gathered together under a dialectic heading. The palimpsest's original logic as a social organizer prevails. The interpretation of human diversity continues to be perceived through physical characteristics even when those markers do not indicate phenotype. The lines of categorical definition are drawn, not based on significant genomic differences, but according to socio-historical factors that have shaped the reality into which the genomic data is introduced. The rhetorical palimpsest is intent on racialization. Instead of grouping humanity by actual genetic difference this case study divides it along genetic lines that *should* indicate physical cues. It is an enthymematic form of logic that takes for granted the relationship between the geographic and the racial and uses them interchangeably. In this way, this case study also demonstrates how the racial discourse resolves conflicts to its prescribed order.

In the absence of clear racial categories, the rationale of the palimpsest is applied to generate a new racial category. While it remains unnamed, this category shares the characteristics of the original racial groups. It is differentiated only by its genomic grounding. The individuals in the case study have a similar racially defined genetic makeup, look alike, and therefore belong to a group. The implication of this statement is that other individuals who have similar genetic makeups should also look alike. To be clear, I do not make the claim that genetics has no bearing on appearance. That would be preposterous and easily disproven by a handful of family photos. What is happening in the text is not the relationship between actual genomic composition and phenotype. It is the causal relationship between a constructed genomic makeup and visual markers thought to indicate it.

stickiness allows it to stick to other 'flag signs,' which gives the impression of coherence (the nation as 'sticking together')." For the flag to function as a symbol it must gather other related (or perhaps unrelated) symbols to itself for potency and coherence. Its adherence to other signs of nationhood allows its ideographic spread through the discourse. In the same way, I see the dialectic racial terms as having the capacity to attract and attach positive terms to themselves in order to increase the momentum of their circulation and their potency; Sara Ahmed, "Affective Economies," *Social Text* 22, no. 2 (2004): 130.

Genetic profiles do not arise *de novo*. They are composites of politically engineered geographic formulations.

Genetic inheritance and recombination is complex and its expression as phenotype cannot be anticipated by genealogical calculations. The range of phenotypic expression of the genome is significantly more complex and broad than the text suggests. This new order of racial simplification presents different problems. Instead of redirecting and complicating interpretations of diversity, the language of the text co-opts genetic data, centering it in the racial discourse. While common sense understandings of genetics prevail, they do not accurately reflect the science of genomics. It is true that DNA determines phenotype. But how ancestry is ordered in, and acts on, DNA, can lead to a wide range of appearances. This is also true of skin pigmentation. A range of genes work together to give a human being their particular color. The rationale that those populations higher latitudes have lighter skin tones holds but “does not account for the differences we see in pigmentation at the same latitude. It is simply not the case that everyone who lives on the equator has the same darkness of skin.”²⁵⁶

Ironically, one of the best explanations for why similar DNA might produce different phenotypical outcomes can be found in the same issue of NatGeo magazine. The issue’s cover story, “These Twins Will Make You Rethink Race” tells the tale of Marcia and Millie Biggs, a pair of fraternal twins who appear to be of different races. According to the article, “When a biracial couple has fraternal twins, the traits that emerge in each child depend on numerous variables, including where the parents’ ancestors are from and complex pigment genetics.”²⁵⁷ The article goes on to say that “in genetic terms, skin color is not a binary trait” with only two possibilities. It’s a quantitative

²⁵⁶ Rutherford, *How to Argue with a Racist*, 62.

²⁵⁷ Patricia Edmonds, “These Twins Will Make You Rethink Race,” *National Geographic Magazine*, April 2018, <https://www.nationalgeographic.com/magazine/article/race-twins-black-white-biggs>.

trait, and everyone has some gradient on this spectrum.”²⁵⁸ Even as my text suggests that a shared DNA profile can be seen, in this article, NatGeo otherwise contends that it is possible for two individuals with the same DNA profile to not to look alike. I highlight this second article for two reasons. Firstly, it explains why DNA does not equate to visual sameness. Secondly, and more importantly, it demonstrates the fluidity of genomic evidence when it is incorporated into the racial discourse. In a single publication, it is possible to see two radically different interpretations of genomic science.

Thus far, I have attempted to dismantle the assumption that underlies the central argument of the text, that it is possible to “see” genetics and that the participants’ shared “genetic profile” is responsible for their similar appearance. Next, I interrogate the veracity of the claim that these individuals actually do look alike and suggest instead that the racial framing of the project directs our attention to visual qualities and cues that reinforce the idea that race is the physical manifestation of biological inherency.

Phenotype and the Rhetoricity of Vision

The analysis of this particular text is ambitious because it rejects the notion of objective sight. Human beings are evolutionarily and culturally wired to believe that what they see is what exists. As a result, scholarship on race often takes for granted that phenotypical descriptors, while subjective, are indicative of something that exists in reality. The idea then, that what we see has more to do with what we have previously seen and what we are told to look for, is difficult to accept. This, however, is the fundamental premise of the argument I make in the next section of this project.

Following Burke, Poole argues for the rhetoricity of vision.

Seeing is an integral part of interpretation. In other words, stressing the act of seeing as much as what is seen exposes the deep roots of bias, showing how ways of seeing become rhetorical processes that are not always consciously employed.... As vision loses its

²⁵⁸ Edmonds.

abstraction, three elements for the study of image in rhetoric come into focus: an attention to lived experience, a heightened sensitivity to sensation as elemental to rhetorical work, and the practice of sense-inflected rhetorical criticism that identifies the entrenchments and slips of the senses.²⁵⁹

Poole treats visuality as a basis of orientation. Burke defines orientation as a “system of meanings, an altered conception as to how the world is put together.”²⁶⁰ Orientation, then, relies on our lived experience to construct a template not only for how we should interpret visual stimulus but also for what we should expect to see. According to Burke, “our orientation largely involves matters of expectancy,” and “the subject of expectancy and the judgment as to what is proper in conduct is largely bound up with the subject of motives, for if we know why people do as they do, we feel that we know what to expect of them and of ourselves.”²⁶¹ Poole continues that “orientation, then, is the way that a symbol-using animal sorts information into meaningful relationships – but this sensing package (the notion of what goes with what) is not pre-determined or universal.”²⁶² As a result, any stimulus an individual encounters, linguistic or otherwise, must be interpreted through their orientations. Human beings are only able to see what their orientations permit.²⁶³ The NatGeo text, therefore, orients its readership toward racialization and then presents it with a gallery of images to be *seen*. The audience is told what to expect and invokes their own conceptions of the racial calculus as a basis for interpreting the images that are presented. More practically, they are instructed to look for visual cues such as skin color, hair texture, eye color, and other morphological features that are traditionally, and might I add mistakenly, associated with race. The reaction of both the participants and the audience, therefore, is filtered through the terministic screen of race.

²⁵⁹ Megan Poole, “Orientation: Seeing and Sensing Rhetorically,” *Western Journal of Communication* 84, no. 5 (2020): 4.

²⁶⁰ Kenneth Burke, *Permanence and Change: An Anatomy of Purpose*, 3rd ed., with a new afterword (Berkeley: University of California Press, 1984), 81.

²⁶¹ Burke, 18.

²⁶² Poole, “Orientation: Seeing and Sensing Rhetorically,” 8.

²⁶³ Poole, 6.

The language of the text - specifically the references to DNA that go unexplained except for the common-sense notion that genetics are the basis of appearance – invokes the racial discourse. Unable to see beyond their lived experience, the audience focuses in on the set of characteristics that they believe denote race. Even as individual lay theories of the physical manifestations of race differ, when prompted by linguistic cues, what Hawhee refers to as communicative synesthesia takes over, and the text's viewers are able to conjure a visual framework against which to evaluate the images with which they are presented.²⁶⁴ As Poole suggests, these images are then rendered through the lived experience of the individual and the habitual categorization to which they are both accustomed and into which they have been prompted by the text's linguistic cues. As such, the reader of the NatGeo text is primed to see the images as a coherent whole bound by racially associated phenotypical characteristics. Following the directive of the participants, attention is drawn to similarity. Even therefore, as the accompanying long-form article argues that race is a social construction, this text relies heavily on the traditional formula to homogenize the six images.

By presenting the images of the participants as they do, NatGeo provides pictorial support for the argument that genomics can be visualized. In 1972 Douglas Ehniger suggested that rhetoric should be defined as the ways in which “humans may influence each other's thinking and behavior through the strategic use of symbols.”²⁶⁵ Since then theorists have argued for a move beyond the human realm to animals and non-sentient things and even the inadvertent rhetorical influence. According to this definition, however, the text under consideration is certainly rhetorical to the extent that symbols, in particular, visual symbols, are strategically used to construct an argument. Moreover, the images presented meet the generally accepted criteria of a visual argument. This

²⁶⁴ Debra Hawhee, “Looking Into Aristotle's Eyes: Toward a Theory of Rhetorical Vision,” *Advances in the History of Rhetoric* 14, no. 2 (July 2011): 140, <https://doi.org/10.1080/15362426.2011.613288>.

²⁶⁵ Sonja K. Foss, “Theory of Visual Rhetoric,” in *Handbook of Visual Communication: Theory, Methods, and Media*, vol. 141 (New Jersey: Lawrence Erlbaum Associates, 2005), 141.

gallery of participants' photographs "can be construed as rationally meaningful support for the verbal part of the respective argument."²⁶⁶ Further, the images are accompanied by contextualizing words, are non-redundant to the text by offering information that goes beyond an illustrative function to support the conclusion of the overarching argument.²⁶⁷

Even so, my contention is not merely that the image gallery serves an argumentative function. I am also concerned with the nature of this function. Specifically, I concur with Rothberg that the images are not merely an example of racialization but an act of racialization. I treat the use of photographs in this text in the same way that Rothenberg interprets film in his Fanon-inspired analysis of Nazi cinema. Rothenberg argues that "within that institutional space racialization takes place through the simultaneity of conflicting forms of identification. In other words, cinema plays at least a double role in the process of racialization; as text, film seems to offer a set of naturalized identifications while, as institution, the cinema produces what Mary Ann Doane has called a space of 'identificatory anxiety' in which text and context exist in tension with each other".²⁶⁸ The images in the text not only depict the formation of a new racial group but also work to create the group. By photographing this new racial sub-group, *NatGeo* instructs the audience what to look for in assigning group membership. The hitherto separate individuals are lumped together under the auspices of social construction as an example of visual expressions of biology. Taken together with the foregoing argument that the work of visibility is guided by attention, and the conclusion of "resemblance" that both the participants and the audience arrive at, is a function not of how race is manifested visually but how race ought to manifest visually.

²⁶⁶ Ioana Grancea, "Types of Visual Arguments," *Argumentum. Journal of the Seminar of Discursive Logic, Argumentation Theory and Rhetoric* 15, no. 2 (2017): 16–34.

²⁶⁷ Grancea, 22.

²⁶⁸ Michael Rothberg, "In the Nazi Cinema: Race, Visuality and Identification in Fanon and Klüger," *Wasafiri* 24, no. 1 (March 2009): 14, <https://doi.org/10.1080/02690050802588984>.

The NatGeo image gallery and video are also enhanced to increase the similarity between the individuals in the group. As I indicated in the introduction to this chapter, the staging of the photographs is identical in terms of filter, background, wardrobe, and angle. In the print version of the text, all the participants are captured with their faces turned slightly away from the camera. They all wear the same black, cotton, round-necked t-shirts and appear in front of a slightly blurry, dark grey and white background. They are all lit from above, a technique that would create similar shadows on most human faces. There is no way to tell if the participants are wearing make-up, but it is unlikely that they were photographed without some being attended to in some way.

There is also no way to be certain what kind of photographic filters were used in the post-production process and to what extent. The texture of the images, however, is identical, suggesting that choices were made in the editing of the images. In spite of any differences in appearance, such as eye color and hair texture, it is again important to note the absence of variation in skin tone. One can speculate about whether these choices were made to enhance real-life similarities or to create them. The only method to accurately determine if the skin tone of the participants was altered to appear more similar would be to compare these images to other images of the participants taken under different circumstances. This approach is not feasible. As such it is not possible to say with certainty that the images were modified to make the subjects look alike. It is possible, however, to note the opportunities for such enhancements in the editing process that might explain the visual consistency of the images. Regardless of their genetic composition, it is unlikely that six randomly chosen individuals would all photograph with the same skin tone. Even in nuclear families where there is a resemblance, skin tones vary. The similarity between the subjects therefore is the first indication that the final images do not represent the subjects skin tones in the real world. That said, at its most basic level, professional photography requires that images be edited in post-production for aesthetic purposes. Whether the editing choices that result in the skin color similarities are

argumentative or aesthetic, this image gallery is presented as evidence of sameness, a crucial element in the text's argument.

The NatGeo text argues inductively, suggesting to the audience that they can extrapolate a way of understanding how inherent genomics might be manifested visually from this single case. The intent to have the reasoning extended beyond the case is inherent in the nature of the publication, which makes very general claims about the nature of race as a social construction. In fact, the text itself attempts to make general claims about the socially constructed nature of race using the same textual-visual argument. While making the case that people who do look alike actually identify as different racial groups, the inclusion of the DNA material common to the individuals creates a parallel enthymematic argument that people who have similar genomic constitutions are likely to resemble. It is important to show that the unspoken premise of this argument is patently false. The elements of genomic similarity that are offered in the experiment are entirely constructed and do not represent a natural division, spontaneous or evolutionary, in the spectrum of human diversity. These divisions have been imposed through a series of choices made in the commercial genetic testing industry, which, I contend, mirror modern geopolitical conditions that are necessary for the racialization of humanity.

Genetic Tests and Racial Narratives

The final feature of the *NatGeo* case study is time. Historical narratives are an essential element of the reveal genre, as individuals attempt to negotiate their identities by incorporating new genetic information. I offer that it is possible that genomic data does not influence perceptions of identity as much as identity affects the interpretation of ancestry testing results. Rather, perceptions of identity seem to affect the interpretation of genomic results as individuals attempt to negotiate who they are in the world. In her study of black 'root-seeking' Nelson determined that "the scientific

data supplied through genetic genealogy are not always accepted as definitive proof of identity; test results are valuable to ‘root-seekers’ to the extent that they can be deployed in the construction of their individual and collective biographies.”²⁶⁹ In other words, tests are not valuable unless they can be described in recognizable terms that are already in discursive circulation. The value of genetic testing then becomes its narrative agility or the power to allow the customer to tell a story others can understand.

Genetic testing is the crucible through which historical narrative is made usable in the present. Genetic test results that do not point to a widely recognizable historical account have significantly less value to the public. Users attempt to understand their own lived realities by interpreting their genomic lineage through the lens of contemporary power relationships. Genetic history, therefore, “derives its cultural and political significance from a broader discursive field: a distinctly modern sensibility in which we have come to understand who we are, as individuals and as collectives, in terms of our pasts.”²⁷⁰

Borrowing from Foucault, El Haj contends that “anthropological genetics is a ‘discourse of the continuous’ (Foucault 1972, 12). It presupposes and generates an understanding of the past as continuous with and a precursor to our present, to our existence.”²⁷¹ The subjects in the video can create a link between the histories their genetic tests allow them to envision and their current realities. In order to do this, history and the present are collapsed in the terms used to explain that tests results mean. ‘Ethnic lineage’ and ‘spatio temporal’ testing that trace ancestors across as many as 100,000 years of history do not meet this requirement.²⁷² Typically, users are unable to picture the

²⁶⁹ Nelson, “Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry,” 761–62.

²⁷⁰ Nadia Abu El-Haj, *The Genealogical Science: The Search for Jewish Origins and the Politics of Epistemology*, Chicago Studies in Practices of Meaning (Chicago ; London: The University of Chicago Press, 2012), 220.

²⁷¹ Abu El-Haj, 222.

²⁷² In her work, Alondra Nelson takes great care to make the distinction between the different types of testing in order to show that the choice of method is indicative of how the customer intends to use the genetic data; Nelson, “Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry,” 765.

world that long ago and are therefore unable to create a coherent narrative about their ancestors. Racio-ethnic composite testing, however, compares an individual DNA sample against panels of proprietary SNPs that are deemed to be ‘informative’ of ancestry. Algorithms are “used to analyze the samples and infer the individual’s ‘admixture’ of three or four statistically constituted categories – African, Native American, East Asian, and European – according to the presence and frequency of specific genetic markers said to be predominate among, but importantly, not distinctive to, each of the ‘original populations.’”²⁷³ Because migration is a process, different modes of genetic testing situate ancestors at different locations on the earth at different points on the timeline. As El Haj reminds us, percentage tests that are now synonymous with commercial genetic testing “were designed to identify genetic markers that could distinguish one “continental” group from another.”

²⁷⁴ Admixture percentages are concerned with what degrees of continental ancestry an individual’s DNA might contain. Although these degrees are unreliable precisely because they identify the extent to which an individual belongs to a fabricated group, there is a discernible preference for genetic testing methods that reveals more recent ancestry and obscures the more ancient *when* that has the potential to pre-date modern conceptions of race. This is a distinctive feature of the reveal genre.

The focus on modern history, as opposed to deep ancestry, is a kind of “trained incapacity.” Borrowing from Veblen, Burke explains that “the poor *pedestrian* abilities of a fish are clearly explainable in terms of his excellence as a *swimmer*. A way of seeing is also a way of not seeing – a focus upon an object A involves a neglect of object B.”²⁷⁵ The prioritization of relatable history, as expressed through geographical rendering of ancestry test, requires the neglect of the ancient since a broader lens would dissolve contemporary constructions of human diversity. It is not possible to see

²⁷³ Nelson, 766.

²⁷⁴ Nadia Abu El-Haj, “The Genetic Reinscription of Race,” *Annual Review of Anthropology* 36 (2007): 288, <https://doi.org/10.1146/annurev.anthro.34.081804.120522>.

²⁷⁵ Burke, *Permanence and Change*, 70.

through the two lenses of time simultaneously. Burke explains that “trained incapacity” is a method of means selection. He says, “one adopts measures in keeping with past training – and the very soundness of this training may lead him to adopt the wrong measures.”²⁷⁶ As a consequence, direct-to-consumer genetic testing’s emphasis on recognizable narratives in which humanity is innately organized into races or racial proxy groups erases the complexity of the human migration narrative. The “scientific terminology...designed for the purpose of naming” serves as a terministic screen that enhances the hermeneutic boundaries of scientific inquiry and obscures other potential modes of organization. This case study reveals the overall focus of commercial genetic testing on modern historical narratives. Specifically, it shows how customers can raise conceptual bridges between the vast landscape of human migration and their own individual stories.

The focus on modern history is not the only way in which the role that time plays is ignored in commercial genetic testing. Test results are also presented as definitive and absolute, even as the test subjects receive them in a temporal vacuum. While the emergence of the genetic markers that are thought to distinguish groups are a dynamic and lengthy process that is difficult to explain clearly, customers are permitted to go away with the impression that genetic groups that correspond to modern communities emerged at a fixed point in history and, thereafter, remained the same. When interviewee Jason identifies as “not quite black, not quite white,” and Julie as “mixed race,” they are primed to interpret their test results as evidence of membership in clearly identifiable, genetically stable groups. There is no question of when or where these groups emerged in history or if these groups have evolved genetically since their emergence. In other words, the fullness of time is not factored into either their original group identification or the identities as they are modified by the test results.

²⁷⁶ Burke, 18.

Even the scientific understanding of the role of time in migration is limited and varies between groups. El Haj's investigation of Jewish priestly lineage raises the issue of time of genetic origin or "coalescence time." She says "estimating coalescence time is a complex process. At a bare minimum, it depends on knowing the 'normal' rate of mutations in the Y-chromosome, specifying what is referred to as the 'molecular clock.' In addition, it requires assuming the time of a generation—15, 20, 25, or 30 years."²⁷⁷ These estimates are relevant to the haplotype under consideration in El Haj's work but are by no means universal. Cultural and religious practices have made the modern Jewish community easier to study. The coalescence time of other groups is more difficult to establish. Population size has a profound effect on such estimates, and "studies have had to assume simplified demographic models with few parameters that do not provide a precise date for the start and stop times of the bottleneck."²⁷⁸ Scientists are unable, therefore, to determine exactly when a genetic group takes on the characteristics currently associated with a modern geographical location. It is important to be clear that ancestry testing can only offer evidence of genetic markers for specific groups at a given time. Without identifying the specific time frame in which this happens, the claim that genetic tests can indicate group belonging is merely conjecture. Yet, this is neither foregrounded nor made clear in direct-to-consumer genetic testing. Again, the focus on the modern obscures other ways of interpreting ancestry. Without the rhetorical resources to reposition forbears, the customer situates them in the familiar narratives of modern history. This process both creates and upholds racialized narratives as users transfer their inherency from historical power relationships to their modern incarnations. Without this connection, direct-to-user testing loses its value. According to Nelson, "effectual test outcomes are those that offer test-takers a usable past."²⁷⁹

²⁷⁷ Abu El-Haj, *The Genealogical Science*, 36.

²⁷⁸ Heng Li and Richard Durbin, "Inference of Human Population History from Individual Whole-Genome Sequences," *Nature* 475, no. 7357 (July 2011): 492, <https://doi.org/10.1038/nature10231>.

²⁷⁹ Nelson, "Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry.," 768.

For the conceptual link between the ancestral past and the modern-day to hold there must be a tether that joins the modern and ancient world. This requires that modern and ancient rhetorical sites be described similarly if not synonymously. To create meaning by insinuating themselves into the historical narrative, the customers in the NatGeo case study must recognize the dialectic schema by which the genetic material is organized. The scientific object, the genetic test results, must be invested with social meaning. Hardly neutral, the percentages read out in the reveal video are interpolated into “long historical processes that embed past contestations and settlements.”²⁸⁰

The Available Means of Persuasion

Reading the text through the Burkean terms for order allows us to separate the positive from the dialectic and show how they interact. This is especially useful for identifying those instances in which dialectic terms which orient us toward race are deployed to describe unrelated positive terms. After all, Europe, Asia, and Africa as we know them do little to help us understand the people that inhabited them 10,000 years ago. Attempting to extrapolate inherent qualities from an ancestor whose lived reality cannot even be accurately reconstructed is borderline futile. Yet, when presented with the results of the Genographic Project, NatGeo can only frame it in terms with which the audience is familiar. These terms, unfortunately, harken back to a perspective of race as a geographically determined biological construct. Throughout this project, I have treated the racial lens as a master term for social organization, an *ultimate* term that I identified as white supremacy in the introductory chapter of this project. The NatGeo case study is an example of what happens when a new expression of diversity is adapted to the racial discourse. My review of the

²⁸⁰ Jenny Reardon, *Race to the Finish: Identity and Governance in an Age of Genomics*, In-Formation Series (Princeton: Princeton University Press, 2005), 10.

field of genomic research suggests that attempts to separate the genomic view of human diversity from the racial schema result in a conceptual loop since there are not sufficient *dialectic* terms to make sense of new *positive* information. Nash argues that “even before the issue of interpreting and ordering the data on global human genetic variation arises, there is the issue of how the data are produced through the ways in which research projects conceptualize their sources of genetic material.”²⁸¹

One of the ways scientists have attempted to circumvent the influence of the racial discourse on their work is by referring to genetic groups as “populations.” Despite these attempts at neutrality, “populations are not found in nature but are constituted in diverse ways through laboratory practices, technologies, and routines and in terms of race, national boundaries, and genetic markers.”²⁸² The very selection of criteria upon which genetic populations are demarcated is biased by a racialized worldview and bent on repeating the historical view of humanity that undergirds continental-nation state divisions. “Population” then becomes a dialectic synonym for race, ethnicity, region, or state. Thus, in another case study that attempted to break the link between skin color and racial categories in Brazil, the scientists’ methodology illustrates the conceptual loop that plagues projects of this nature. They write, “our data suggest that in Brazil, at an individual level, color, as determined by physical evaluation, is a poor predictor of genomic African ancestry, estimated by molecular markers.”²⁸³ Even so, to make this argument, the scientists say their method was able to tell apart, with no overlaps, 20 males from northern Portugal from 20 males from São Tomé Island on the west coast of Africa. We also tested 10 Brazilian Amerindians and observed that

²⁸¹ Catherine Nash, *Genetic Geographies: The Trouble with Ancestry* (Minneapolis: University of Minnesota Press, 2015), 35.

²⁸² Nash, 37.

²⁸³ Flavia C. Parra et al., “Color and Genomic Ancestry in Brazilians,” *Proceedings of the National Academy of Sciences* 100, no. 1 (January 7, 2003): 177, <https://doi.org/10.1073/pnas.0126614100>.

their AAI values fell in the same range as the Europeans.”²⁸⁴ In their bid to untangle the biological from the social, their work was conceptually phalanxed by *a priori* geographic categories. The only way to show they could show that Brazilians were not categorizable by color is through comparison to color-coded European, African, and indigenous communities. According to Nash, “the practical problem of selecting, naming, and categorizing samples within what is understood to be a geographically graded pattern of genetic variation is always a political issue of human categorization and differentiation and the power of doing so biologically.”²⁸⁵ What Nash gestures toward is the circulation of racial terms in the discourse. Attempts to understand diversity without a new schema of categorization inevitably leads to the reinstatement of racial groups.

The *NatGeo* case study’s efforts to demonstrate the social construction of race are undermined by a lack of rhetorical resources. According to Burke, “scientific terms are designed for the purpose of naming whereas the spontaneous symbols of communication are hortatory, suggestive, hypnotic.” Even if the science could withstand the bias of the scientists themselves, once released in the world, the orientation of the data is decided by the dialectic terms that allow humans to interpret and negotiate its meaning. If the available terms are racially charged, any new data is commandeered and becomes evidence for these terms. This was also the fate of the Human Genome Diversity Project, an ambitious genetic study that attempted to balance the obvious bias of genetic research toward white communities. Reardon argues that even as the scientists behind the Project rejected the category of race, their attempts to diversify the pool of genetic samples available for analysis were accused of “reinscribing old racial categories.”²⁸⁶ According to Reardon, “In an ironic turn, in the face of these critiques, some Project organizers began to explicitly employ racial

²⁸⁴ Parra et al., 171.

²⁸⁵ Nash, *Genetic Geographies*, 36.

²⁸⁶ Jenny Reardon, *Race to the Finish: Identity and Governance in an Age of Genomics*, In-Formation Series (Princeton: Princeton University Press, 2005), 5.

categories. Representing what appeared to be a turnaround from the earlier disavowal of race, some leaders of the initiative now argued that the Project would include the genomes of African Americans and other “major ethnic groups,” and in this way would serve as an “affirmative action” response to the Human Genome Project (Weiss 1993).²⁸⁷ My case study belongs to a category of research projects that, despite their original anti-racist sentiment, are ultimately co-opted to the racialized cause. The turn appears to be inescapable. I contend that this is a result of our inability to frame the science of diversity in terms other than race.

Conclusion

The NatGeo case study is an example of the racialization of genetics, or how genomic study is folded into the racialized narrative of social organization. A new layer is added to the rhetorical palimpsest of race. Genetic testing customers interpret their results through the lens of race and appear unable to do otherwise. This is in part because genomic science is already infused with the racialized narrative as it is represented by geographic proxies. It is also because, in the absence of dialectic resources, data on human diversity can only be read through and circulated by existing racial terms. In the first decade of the 20th century, the debate in genomic scholarship revolved around the value of racial categories in biomedical study. Since then, the commercial genetic testing industry has provided a wealth of resources for understanding how genomics circulates in the public and its relationship to the idea of race. Even so, my reading of the field suggests that efforts to do so have been unsuccessful.

Direct-to-consumer genetic testing is a thriving industry. The ability to market and sell testing kits to the public depends on a company’s ability to offer the public information they are interested in learning and to frame testing as a useful procedure. In other words, genetic testing must

²⁸⁷ Reardon, *Race to the Finish*, 5.

solve a problem for the customer. According to business analytics outfit Research and Markets, “the global consumer DNA (Genetic) testing market is expected to grow at a compound annual growth rate of 12.25% over the forecast period to reach a market size of US\$1,095.5794 million in 2026, from US\$487.909 million in 2019.”²⁸⁸ A recent surge in demand in Europe and North America has resulted in 26 million customers being added to the four major health databases and commercial ancestry.²⁸⁹ With significant profits at stake, commercial genetic ancestry testing companies will continue to offer their customers recent ancestry insights as tools for intervention in identity negotiation. How these tools are used will be determined by the extent to which the audience can grasp the scientific meaning of the tests and rests on our ability to translate the science without defaulting to the language of race.

²⁸⁸ Research and Markets, “Consumer DNA (Genetic) Testing Market - Forecasts from 2021 to 2026,” Forecast (Dublin: Knowledge Sourcing Intelligence LLP, May 2021).

²⁸⁹ Research and Markets.

Chapter 6: The Influence of Narrative on Genetic Interpretation

My third case study further explores iterations of the reveal genre through the PBS series *Finding Your Roots* (FYR). Thus far, I have identified several themes in the treatment of DNA testing that result in genomic data being interpreted according to the prevailing racial structure. I have looked at the rhetoric of genetic certainty, the relationship between visibility and race, the conforming of positive terms to the dialectic structure, and the question of how time affects the interpretation of genome geographies. This case study revisits, and provides further evidence for, the operation of these concepts in the reveal genre. As a reminder, this type of video documents the responses of individuals who have submitted to genetic ancestry testing. As I explain in the introduction to this project, this video genre adds another element to the discourse on race. The inclusion of genealogical research in this case study facilitates the superimposition of the dialectic-genetic composite on document-based historical narratives. I have observed that the parameters of racial-dialectic categories, informed as they are by contemporary discourses, are often at odds with the circumstances of the historical moment in which they are identified. Still, the injection of contemporary identity constructs into much older stories is indicative of this text's sense-making function. Through this interpretive lens, the guests and audience of *Finding Your Roots* (FYR) are given the opportunity to reconcile their personal beliefs with the historical record.

The Boundaries of the Text

As I have done in the last two chapters, I will first review the text and comment on the editorial and structural choices which sustain its primary arguments. This is the most extensive of my three texts, comprising both the second season of *FYR* and the companion book written by host Henry Louis Gates, Jr. As of September 2022, eight seasons of the *FYR* series have been televised. Each season contains ten episodes, and each episode features three guests. I selected the second

season randomly and have chosen to focus on one guest per episode. To select these subjects, I organized the participants of each episode alphabetically. I then selected the first name in this alphabetical list. *Finding Your Roots: The Official Companion to the PBS Series*, hereafter referred to as “the companion book”, comprises eleven chapters, including the introduction. Each of the chapters is roughly forty pages in length and includes elements of the guest interviews not aired during the program. Apart from the dust jacket that carries images of six of the show’s guests and the host, there are no pictures in the book.

According to the PBS website, “Dr. Henry Louis Gates, Jr. has explored the ancestry of dozens of influential people from diverse backgrounds, taking millions of viewers deep into the past to reveal the connections that bind us all.”²⁹⁰ As I have argued throughout this project, I see the advent of genetic testing and the ensuing “reveal” genre, as the most recent layer in the rhetorical palimpsest of racial identity. In other words, it is how the old racial schema is circulated under the guise of new scientific data. Genomic data is interpreted according to and made to align with pre-existing notions of human diversity. More specifically, the human genome is read as evidence of racial belonging. I interpret this process through the theoretical lens of Kenneth Burke.

The show’s title is the first indication of the work it intends to do. Finding one’s roots suggests that a person’s ancestry is an indisputable fact that has been lost and must only be located to understand one’s own historicity. The subjects of genetic genealogy are bound to the past, and “unlike ties based on physical attraction or political expediency, for example, which are often quite transient, genealogical ties are considered immutable.”²⁹¹ The title thereby elides the interpretive function of genealogical and genomic research. Further, the show’s host Henry Louis Gates, Jr.

²⁹⁰ PBS, “Finding Your Roots,” n.d., <https://web.archive.org/web/20140918004128/http://www.pbs.org/wnet/finding-your-roots/about/>.

²⁹¹ Eviatar Zerubavel, *Ancestors and Relatives: Genealogy, Identity and Community* (Oxford: Oxford University Press, 2012), 54.

equates the act of “finding one’s roots” with self-discovery. Without some tethering to one’s ancestral past “individuals often experience genealogical ‘bewilderment’ and deprivation leading to the deep sense of existential vacuum.”²⁹² FYR narratives capitalize on this sense, presenting the genetic-genealogical hybrid as a scientifically backed method of situating oneself in time and place. The reality of a living human is then best understood through the interpretive lens of their ancestral DNA markers.

Apart from episode 10, which broaches questions about the relationship between genetic testing and race, each of the episodes follow the same format. Gates introduces the guests to the audience by listing their accomplishments over a montage of establishing stock footage. For example, Stephen King is seen signing copies of his book and interacting with fans of his work, Anderson Cooper appears in a montage of on-location news reports and Nasir ‘Nas’ Jones is seen performing at a concert. After each guest is introduced, viewers see the show’s opening credits. It is a visual representation of the genetic-genealogical process. Gates is seen sitting behind a desk in what appears to be an archive’s reading room. There is a large, open book in front of him. From the book, a computer-generated image of a tree emerges. Gates looks at the “tree” as it sprouts branches and leaves. Sepia-colored text of the words “journey of discovery,” “lost histories,” and “family secrets” hover inside the tree branches that are now strewn with black and white photos which hang like fruit among the leaves. The tree is then pictured atop what appears to be a map, beneath which the double helix of a DNA strand winds down like roots, through a deluge of photographs and images of historical documents. The introductory segment is analogous to the show’s interpretation of the relationship between genealogy and DNA. The ubiquitous ‘family’ tree is symbolic of the individual’s genealogical lineage, while the roots represent its complex, hidden genomic foundations. The governing idea is that the excavation of the genomic can explain what is seen above the surface.

²⁹² Zerubavel, 7.

The words “book of life” then appear on the screen, following by Henry Louis Gates Jr. emphatically closing the book that began the segment, signaling the end of the search.

To begin each guest’s segment, they are pictured on set, sitting across a table from Gates. The interview settings vary and at times Gates briefly explains the choice of location to the audience. Cooper, for example, is interviewed at *Brandeis House*, “one of his family’s former upper east side mansions.”²⁹³ After some light banter the guests are presented with a large black scrapbook-style document, referred to throughout the series as their “book of life.” The book is the culmination of the show’s genealogical research. It includes reproductions of historical records such as marriage certificates, immigration documents, land titles, and slave registers. Parts of these documents are transcribed, and the text is printed on small rectangular labels that mimic the kind of explanatory “post-it notes” one would expect to find in an amateur genealogist’s scrapbook. Throughout the episode Gates prompts the guests to move through their book of life with the words “please turn the page.” As guests survey the book of life, they learn new information about their family histories. Each page of the scrapbook is a chapter in an ancestral journey that ends with the guest themselves. In this way, the scope of the genealogical data is temporally bound by the guest and what Gates refers to as their “original ancestor.” Gates’ narrative frame delimits FYR, with each “case” being styled as a story with a definitive beginning and end.

The genealogical investigation in each episode is divided into two parts. First, the guests are shown the historical record, including reproductions of historical documents. They are then shown their DNA analysis. In Episode 1, Gates introduces the genetic genealogy portion of the show by saying, “we had reached the end of the paper trail for all three of our guests so it was time to see what DNA analysis could tell us about their more distant past. Genetic genealogy allows us to look

²⁹³ “Our American Storytellers,” *Finding Your Roots* (PBS, October 7, 2014).

back thousands of years to discover our guest's deepest origins."²⁹⁴ Genetic genealogy, then, answers questions that the historical record cannot. This is an echo of the rhetoric of genetic certainty from my first case study, where science is the benchmark against which the historical narrative is evaluated.

The DNA testing for each guests varies. At times they are either given a geographic breakdown of their ancestry, like the ones outlined in my first case study. In other episodes, showrunners conduct a Y-DNA analysis that attempts to fill specific gaps in the family tree. Here, Gates defines the first kind of testing, or the DNA admixture readouts, as "the percentages of their ancestry from different worldwide populations."²⁹⁵ At the end of each episode, the guests are presented with a large, brightly colored poster of their family tree beginning with the name of an identified ancestor and ending with their own name.

Content of the Text

Generally, the show's episodes and book chapters are arranged thematically. Episode 1, "In Search of Our Fathers", features Stephen King, Gloria Reuben, and Courtney Vance. Each of these guests lost their father in their early childhood by death or abandonment. Episode 2, "Born Champions", features athletes Billie Jean King, Derek Jeter, and Rebecca Lobo. Episode 3, "Our American Storytellers," features journalist Anderson Cooper, film director Ken Burns, and actress Anna Deavere Smith. Ben Affleck, Ben Jealous and Khandi Alexander are clustered in Episode 4 due to their ancestral or personal association with the Civil Rights Movement. Chefs Ming Tsai, Aaron Sanchez and Tom Colicchio are featured in Episode 5, "Melting Pot." Nasir Jones, Angela Bassett, and Valerie Jarrett are featured in the sixth episode "We Come from People" which focuses on African Ancestry. Alan Dershowitz, Carole King, and Tony Kushner are featured in "Our

²⁹⁴ "In Search of Our Fathers," *Finding Your Roots* (PBS, September 23, 2014).

²⁹⁵ "In Search of Our Fathers."

People, Our Traditions,” the episode on Jewish Ancestry. The series addresses British ancestry in the United States through the genealogies of Sting, Deepak Chopra, and Sally Field in the “British Invasion.”²⁹⁶ Tina Fey, David Sedaris and George Stephanopoulos are featured in the episode “Ancient Roots.” The final episode, “Decoding Our Past,” tells the stories of Jessica Alba, Deval Patrick and the host, Henry Louis Gates Jr. Since it is impractical to attempt to examine the text in its entirety, my analysis focuses on the stories of Stephen King, Derek Jeter, Anderson Cooper, Ben Affleck, Tom Colicchio, Angela Bassett, Alan Dershowitz, Deepak Chopra, Tina Fey, and Jessica Alba. Even so, there are instances in which I refer to other guest’s genetic genealogies where their narratives intersect with major themes.

Even though it was selected randomly season two of *FYR* has some unique features that make it an especially interesting text for analysis. Firstly, its thematic organization reveals the fixation on modes of identification that become apparent over the course of the text. As I will discuss in the coming sections the idea of heritability is a consistent theme throughout the text. “Born Champions,” “American Storytellers” and other episodes ask whether it is possible for talent to be genetically passed from one generation to another. Another consistent theme is the default to ethnic and racial grouping. “Our People, Our Traditions” and “We Come from People” are episodes in which one ancestral trait is used to create the category to which the guests belong. Even as Nasir Jones, Angela Bassett and Valerie Jarret are told that their ancestry is complex and varied, they are brought together in this episode on account of their enslaved ancestors. Likewise, Alan Dershowitz, Carole King and Tony Kushner’s Jewish identity takes precedence among their common features.

Season 2 is also set apart in another way. It is the only season in which the host also investigates his own ancestry. In the tenth episode, Gates turns the camera lens on himself. This

²⁹⁶ Chapter eight of the companion text is named “British Empire.” It is the only instance in which the title of the book chapters and episodes vary.

episode also investigates the questions of why race continues to be important in the face of genetic testing. Gates says:

Negotiating the politics of identity is not as simple as Black or White. For every guest in the series, DNA analysis reveals the patchwork of ancestral regions they carry within their genomes. And learning the complexity of their genetic makeup almost always takes my guest by surprise.²⁹⁷

This statement is followed by a video montage of the guests expressing surprise at their genetic genealogies. Gates continues, “so if DNA reveals that our ancestry is so mixed, why do people feel so strongly about embracing just one identity. Why does American society insist on labeling its citizens as belonging to a single race?”²⁹⁸ Even as the question is posed, it appears in the tenth and final episode of the series. It is, therefore, subsequent to the circulation of positive DNA test that are dialectically organized and offered as proof of racial identity over the course of nine previous episodes.

Gate’s personal story is not the only one that demonstrates how the narratives emerging in *FYR* circulate in the public domain. Following the revelation of his slave-holding ancestry on the show, Ben Affleck surreptitiously requested that part of his genealogical record be redacted from the series.²⁹⁹ The request was discovered in 2015 after thousands of Sony Entertainment’s internal emails were published by Wikileaks.³⁰⁰ Affleck’s slave owning lineage was not mentioned in the fourth episode *FYR*’s second season, leading PBS to temporarily suspend the program pending an internal

²⁹⁷ “Decoding Our Past,” *Finding Your Roots* (PBS, November 25, 2014).

²⁹⁸ “Decoding Our Past.”

²⁹⁹ Soraya Nadia McDonald, “Ben Affleck’s Deleted ‘Finding Your Roots’ Segment Shows His Savannah Ancestor Owned 25 Slaves,” *Washington Post*, April 23, 2015, sec. Arts and Entertainment, <https://www.washingtonpost.com/news/arts-and-entertainment/wp/2015/04/23/ben-afflecks-deleted-finding-your-roots-segment-shows-his-savannah-ancestor-owned-25-slaves/>.

³⁰⁰ Jenn Selby, “Ben Affleck Asked TV Chiefs to Hide Slave-Owning Ancestry, New Hacked Sony Emails Published by Wikileaks Claim,” *The Independent*, April 22, 2015, <https://www.independent.co.uk/news/people/ben-affleck-asked-tv-chiefs-to-hide-slaveowning-ancestry-new-hacked-sony-emails-published-by-wikileaks-claim-10187521.html>.

review.³⁰¹ In a subsequent section, I explore the intersection of genetic genealogy and historical narratives using this episode of *FYR* as an example.

Before I continue to the analysis, it is important to note one of the questions that it is not within the scope of this project to resolve but must be accounted for to some degree. In some instances, the *FYR* guests are interested in learning about their ancestors, rather than where those came from. Particularly, in the episode “In Search of Our Fathers,” Stephen King, Gloria Reuben and Courtney Vance seem primarily interested in learning about the paternal ancestry as a means of filling their fathers’ absences in their lives. In doing so, their ancestral lines stretch across historical events that imbue their forbears with social and cultural significance. Is this what they were looking for? Perhaps not, but in the process of learning about their fathers’ ancestors they are confronted with their own racial positionalities. In these interviews, discoveries of this nature ultimately take primacy and the familial *who* of their histories are subverted by the racio-ethnic *where* of their lineage. In the search for her father Gloria Reuben learns of Jamaican Jewish ancestry and says, “so I’m a Jewish Girl in a black body.”³⁰² The centralizing of racial identity as both incidental and unavoidable typifies the investigations in the show. While my research focus is not the psychological impact of genetic test results on the customer, the propensity for the racial discourse to permeate and dominate the personal discovery of ancestry cannot be overlooked.³⁰³ The next section of this project will analyze the text thematically, identifying those places in which the rhetoric of genetic certainty, visibility of race, positive-dialectic interplay, location in time, and narrative invention are seen in text.

³⁰¹ Daniel Kreps, “PBS Suspends ‘Finding Your Roots’ After Ben Affleck Slave Controversy,” *Rolling Stone*, June 25, 2015, <https://www.rollingstone.com/tv-movies/tv-movie-news/pbs-suspends-finding-your-roots-after-ben-affleck-slave-controversy-43610/>.

³⁰² “In Search of Our Fathers.”

³⁰³A detailed analysis and examples of the bearing of genetic test results on human self-perception can be found in Nelson, “Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry.”

Another Rhetoric of Genetic Certainty

I begin my analysis with those instances in which, what I have described as the rhetoric of genetic certainty, is evident in the show's discourse. Recall how, in chapters three and four of this project, I considered the power of genomic evidence to confirm or refute the meaning individual lived experiences. In my first case study, *Ethnically Ambiguous People Take a DNA Test*, Jason 'learns' of his Jewish ancestry through his genetic test even though he comes from a long lineage of practicing Jews. Likewise, in the National Geographic case study, Brenda's ancestry test proves that she is the "Black-Irish" her father always told her she was. The preeminence of scientific evidence is also replicated in the *FYR* text. At the end of the first episode Gates comments that, "Stephen King, Gloria Reuben and Courtney Vance all close their books of life with a much fuller idea of the ancestors from whom they descended and with that a clearer sense of who they are today."³⁰⁴ In keeping with the theme that everyone has hidden roots that are immutable and absolute but need only be discovered, Gates treats the guests' book of life as irrefutable proof that they *are* one thing or another. The test results both challenge and confirm the guests' sense of identity, racial and otherwise. When asked what it is like to "see all those generations restored to you?" Stephen King answers that it "makes them real. It makes them real. You see that there's a real foundation underneath you."³⁰⁵ At 66 years of age, King frames his identity as finally solidified by the genetic proof of his lineage.

The irony of the deployment of the rhetoric of genetic certainty in this text is that it is often predicated on dubious understandings of the ancestry tests. This is the case, when, in an exchange with Gates, chef Aaron Andres Sanchez expresses an interest in his potential Native American heritage:

SANCHEZ: I was hoping to know if there was any indigenous blood in my family.

³⁰⁴ "In Search of Our Fathers."

³⁰⁵ "In Search of Our Fathers."

GATES: Native American.

SANCHEZ: Native American. That's something that calls to me a lot and I want to see if it's actually true.³⁰⁶

Gates explains to Sanchez that he is 24% Native American and says: "24 % native American translates to having one grandparent who was fully Native American."³⁰⁷ Here, Gates is facilitating a dangerous racial calculus, reducing the mystery of human diversity, migration, and ancestry to a simple equation. This thinking resuscitates and reinstates the "the perverse arithmetics of blood mixture [which] comprises not only a discourse of oppression and exclusion, but a tragically necessary discourse of survival and solidarity."³⁰⁸

To better elucidate the error in Gates' reasoning, I turn to the example offered by Chromosome painting, a technique popularized by 23andMe, in interpreting how bio-geographical data should be read (see fig. 4). Chromosome paintings shows the distribution of ancestrally linked DNA across the individual genome.

³⁰⁶ "The Melting Pot," *Finding Your Roots* (PBS, October 21, 2014).

³⁰⁷ "The Melting Pot."

³⁰⁸ Pauline Turner Strong and Barrick Van Winkle, "Indian Blood?: Reflections on the Reckoning and Refiguring of Native North American IDENTITY," *Cultural Anthropology* 11, no. 4 (1996): 554.

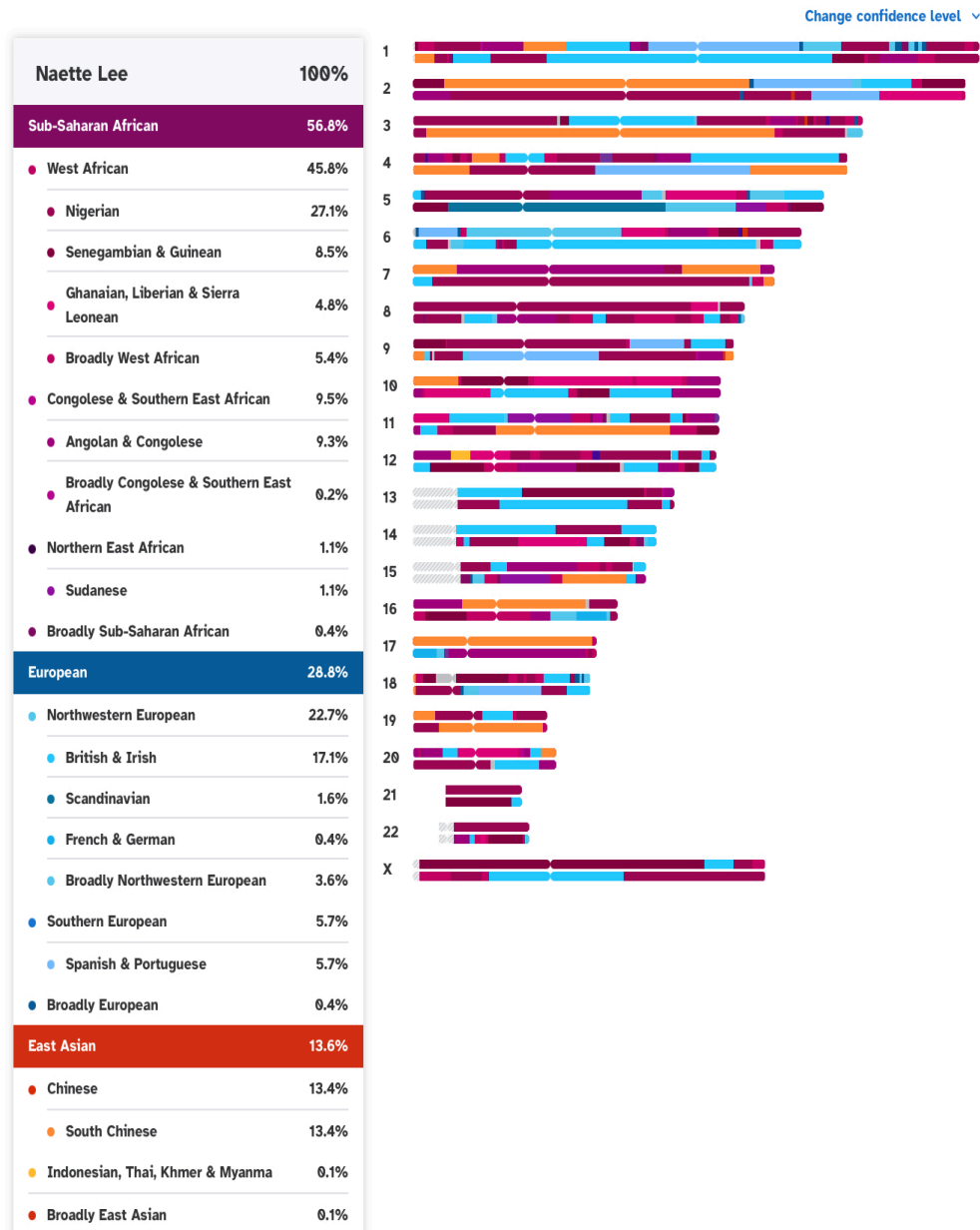


Figure 4 Chromosome painting depicting the distribution and recombination of bio-geographical data in my 23andMe ancestry test results as of 2021. Since then the composition of the ‘painting’ has changed reflecting 23and Me’s growing dataset.

Usually, in these depictions, regional ancestry is represented by different colors. The result is a brilliant and unique depiction of different bio-geographic contributions to the individual’s 22

chromosomes. This representation and others like it show the dispersal of inherited DNA across the individual genome. Instead of a tree-like structure in which direct contributions are made from one's ancestors, it reflects the complexity of genetic inheritance. According to 23andMe, "DNA is passed from parents to their children, the two chromosomes in each pair are randomly shuffled together in a process called recombination."³⁰⁹ What the painting also suggests is a timeline of bio-geographic inheritance. Thus, the company also notes, "the long, unbroken stretches of color ...are evidence of recent admixture, while the short segments of different ancestries on the right suggest admixture many generations ago."³¹⁰ What Gates' reasoning essentially suggests is that one of the fragmented colors can be compressed into a single ancestor. This conceptual sleight-of-hand not only defies the logic of genomics but suggests that it is possible to have an "ancestor" whose chromosome painting is monochromatic. The notion that 24% Native American is the equivalent of a fully native grandparent, deliberately evokes the image of a single individual from which all the individual's native American ancestry has proceeded. Essentially, Gates conjures a native American grandparent who is visually and culturally definitive. This kind of reductionism is typical of FYR's interpretation of ancestry testing because it elides the complexity of genetic heritability and reduces its parts to a digestible calculus. This mode of expression, I contend, reflects the inadequacy of the terms whereby we conceptualize genomic data.

By presenting the admixture percentages in this way, Gates is coalescing potentially thousands of years of bio-geographical input into a single recent ancestor. This approach gives Sanchez temporal and spatial access not only to indigenous ancestry but to indigenous culture in the way a child with an indigenous grandparent, whom they know or at least have some contact, would. Moreover, this fabricated grandparent would not only be definitively native but also *entirely* native,

³⁰⁹ Sarah Laskey, "Meet Your Chromosome Painting," *23andMe Blog* (blog), December 15, 2016, <https://blog.23andme.com/ancestry-reports/meet-your-chromosome-painting/>.

³¹⁰ Laskey.

having no bio-geographical indicators from anywhere else. So jarring is the logic of Gates' calculus that even Sanchez, having by his own admission no knowledge of Native American ancestry, is stumped and asks "so really? That's how you would break it down?"³¹¹ To which Gates replies with certainty, "that's how you break it down. So, you have—a quarter of your genome is native American."³¹² The exchange and others like it across my case studies demonstrate the rhetorical power of scientific evidence to reconstruct the experientially-grounded sense of self and introduce entirely unanticipated facets of identity.

Both Stephen King and Alan Dershowitz also gesture toward the notion of genetic certainty in their interviews, but in different ways. While Gates's interaction with Sanchez illustrates the tendency to oversimplify ancestry test results, Dershowitz and King's opinions gesture toward genetic essentialism. In the companion book, Gates poses the following questions: "What do we inherit from our ancestors? Are we the sum total of their experience and their genetics? Where did Stephen's genius and drive come from? Could ancestors who were previously invisible to him have played a part in making him the person he is today?"³¹³ King's response is instructive. He says:

I believe very firmly that nature trumps nurture in most cases. There is something genetic. We see it again and again, where some person will rise above their situation the way that some of my ancestors did to become something more than you would expect from their surroundings. You get certain equipment. You're like a car that rolls off the assembly line. Some people get the radio and some people don't.³¹⁴

King's emphasis on the genetic significantly increases the value of his DNA test results. While there is no way Gates could anticipate King's position he does not refute or modify it, but reproduces it in the companion text, which was published two years after the show was aired. Likewise, genetics take primacy in Alan Dershowitz's view of human nature. For him, his identity as Jewish is genetic. When

³¹¹ "The Melting Pot."

³¹² "The Melting Pot."

³¹³ Henry Louis Gates, *Finding Your Roots, Season 2: The Official Companion to the PBS Series* (Chapel Hill: The University of North Carolina Press, 2016), 22.

³¹⁴ Gates, 22.

asked what makes someone Jewish, Dershowitz replies, “for me, it’s clearly my DNA. When I think about the leadership qualities and the boldness that some of my relatives showed over time, clearly there’s something I’ve inherited.”³¹⁵ Together, Dershowitz and King represent an attitude that appears throughout the series. Their perspective combines the infallibility to DNA testing with the notion that such testing reveals fundamental truths about individual proclivities and serves as a conveyor of intangible qualities from one generation to another.

A Rhetoric of Heritability

Like the rhetoric of genetic certainty, the idea that genetic evidence can reveal unknown parts of ourselves that have been transmitted through our ancestors, is also prevalent in the text. Like many others featured on the program, Tina Fey also has ancestors that “played a dramatic role in another struggle for independence.”³¹⁶ John Hewson, Fey’s fifth great grandfather, was born in England before the American Revolution. Looking at his picture she says “that looks so much like my dad. That’s bananas.” According to *FYR* researchers, Hewson was a quilt maker who moved to Pennsylvania at the behest of Benjamin Franklin. Fey reads excerpts from the introductory letter Franklin wrote on Hewson’s behalf. After learning that her ancestor’s quilting work hangs in the Metropolitan Museum of Art Fey says, “I tried to make a quilt once, I didn’t finish.” Gates says: “so maybe you didn’t get the quilting gene” and Fey replies “I didn’t get it. I didn’t get the quilting gene.” Even jokingly, Fey’s reference to heritability, that I think of as the genetic transference of intangible traits, skills, or attitudes, is a benchmark of the series. The ‘gene’ carries all things. This perspective not only diminishes agency but predestines the descendant to look, think and behave in certain ways. As unlikely as it sounds, a latent belief in heritability is expressed repeatedly in the *FYR*

³¹⁵ “Our People, Our Traditions,” *Finding Your Roots* (United States: Public Broadcasting Service, November 4, 2014).

³¹⁶ “Ancient Roots,” *Finding Your Roots* (PBS, November 18, 2014).

series. As a result, I am carefully to make the distinction between those attitudes or practices the guests on the show believed they have learned directly or through cultural practice, and those that are ‘genetically’ linked to ancestors with which they could not possibly have had contact.³¹⁷

Throughout the text, humorously or otherwise, there is repeated reference to the inheritance of intangibles.

In his introduction to Episode 2 of the season, “Born Champions,” which explores the ancestry of three athletes, Gates says, “we’ll explore how they become champions. Did they come to greatness through hard work and individual effort? Is their talent simply encoded in their genes? Could it be these three athletes were molded in ways they never could have imagined by the lives of their ancestors?”³¹⁸ Later in the episode he says, “I wanted to see if the hidden history of their families might offer an even deeper explanation as to how they achieved such phenomenal athletic success.”³¹⁹ He asks Rebecca Lobo if she has ever wondered if she “inherited her basketball skills or determination from her ancestors.”³²⁰ Here, Gates merges the biological with the intangible, presenting “basketball skills” and “determination” as a composite heritable entity. Lobo initially resists the idea but finds a middle way, “yeah of course” and returns the discussion to genetic transmission of biological traits with the admission: “You know a part of it is where did your height come from.”³²¹

³¹⁷ I have grappled with the question of where the temporal boundary for cultural transmission could be drawn. It is not possible to say with certainty how much time would have to elapse before a given attitude or practice would no longer be considered as transmissible through a familial connection. However, stretches of time that pass between the lives of the ancestors ‘discovered’ in the series and the guest’s own lives is considerable. I am trying to establish that the synchrony between the attitudes and beliefs of the guests and their forebears is not learnt. It is not actively passed through generations but passes inadvertently through descent. This is supported by the fact that many of the guests did not know of their ancestor’s existence ahead of the show.

³¹⁸ “Born Champions,” *Finding Your Roots* (PBS, September 30, 2014).

³¹⁹ “Born Champions.”

³²⁰ “Born Champions.”

³²¹ “Born Champions.”

The argument for the heritability of non-physical traits is plain throughout the text. Outside of inheritance of physical traits and the passage of more general cultural practices, there is evidence that *FYR* guests believe that learning about their ancestors' moral choices helps them make sense of their own beliefs. Among these is Ben Affleck, who learns for the first time that one of his ancestors played a role in the American Revolutionary War. Affleck's sixth great grandfather Jesse Stanley volunteered to serve in the Patriot Army under George Washington. About this, Gates tells Affleck, "You are descended from a Patriot."³²² The host relates the tale of 18-year-old Stanley who participated in a pivotal battle in what is now New York. Gates says, "your ancestor was part of it. He fought in that battle."³²³ In response, Affleck comments, "that is really, really something, I'm developing a movie about the Revolutionary War. Now I see why I was drawn to it."³²⁴ The cognitive operation illustrated by this statement requires Affleck to place himself in the position of his ancestor as they are depicted in the narrative, divine their intentions in the context of the story, compare his own, and either express solidarity or rejection of their motivations. In exchanges such as these, guests on *FYR* typically look for a similarity between them and their ancestors that can serve as a doorway through which they can emotionally inhabit the story they have heard. It is an attempt to understand themselves in terms of a verified history. This vicarious occupation of the historical space is a key feature of genetic genealogy that I will elaborate on later in this project. More significantly, these exchanges, however, are indicative of the framework in which the DNA tests are received later in the program. Positive genetic data becomes evidence of the retention of both tangible and intangible traits across generations.

Like Affleck, Angela Bassett contemplates her potential role in her ancestors' narrative. Of her enslaved forbears struggles, she says, "at times I try to place myself in that situation. How would

³²² "Roots of Freedom," *Finding Your Roots* (PBS, October 14, 2014).

³²³ "Roots of Freedom."

³²⁴ "Roots of Freedom."

I have survived? Who might I have been?”³²⁵ It is typical of guests to attempt to interpret their genealogies in modern terms by placing themselves in their ancestors’ social position or, in some instances, by placing their ancestors in their own. In this way they perform a kind of morality check, attempting to measure their life choices and opinions against the actions of those that came before them. This kind of thinking becomes especially relevant when Gates’ rendering of the past situates the guests’ ancestors in historical conflicts that are analogous to contemporary struggles. It seems that the easier it is for the interviewees to align a polarizing historical discourse with a contemporary one, the more urgent their need to connect or disconnect from their ancestors.

Bassett sees her personal faith journey through the ancestral lens. She learns that, like many of her current family members, many of her ancestors were preachers. Let us recall here that the connection being made here through the legacy of faith is not cultural. Bassett’s ancestors died hundreds of years before and until the *FYR* episode she could not name them. While arguments can be made for the survival of faith practices over long periods of time, it is difficult to determine along which branch of a family tree a specific practice may have travelled. Therefore, the connection to a specific ancestor speaks to a more general belief in the transition of intangibles than it does to a learned behavior. This, again, relies on a key distinction between those things that may have been taught to recent generations and those things thought to have been passed without teaching. From this perspective, the host’s reply is informative: “It’s like you got the religious gene, the religious chip.”³²⁶ By using “gene” and “chip” synonymously, Gates invokes the lexical field of computer programming. Genes are to humans what chips are to machines; they govern processes and determine outcomes. Moreover, a machine cannot do anything other than what its programming dictates. The invocation of this mechanistic rhetoric is also telling since, as with genomics, the public

³²⁵ “We Come From People,” *Finding Your Roots* (PBS, October 28, 2014).

³²⁶ “We Come From People.”

understanding of how computers function is vague and relies heavily on individual lay theories. In general, audiences undoubtedly know what a computer is and that it is programmed and potentially, what that programming ultimately causes the computer to do. The specifics of how this is accomplished, or more importantly, how to intervene in the process to change those outcomes, remains a mystery. Gates' comment then takes advantage of this conceptual opacity and places him in a position of authority in the process. This becomes significant later on when the work of the "gene" is considered in the context of the historical record, over which Gates, as a scholar of history, has interpretive authority.

While the cord from genetic to the intangible is drawn, the process of getting from one end to the other is vague enough for each audience member to perform their own personal calculus. Gates leads Bassett to recognize the pattern when she does not do so independently. Later in the episode, she tells a story of her grandfather, the preacher who was known to dramatically cast down his handkerchief on the altar as an exemplification of "casting his burdens on the Lord." Gates fortifies the heritability narrative by describing the more recent ancestor as having a "theatrical air," a direct reference to her own career in theatre. Apparently, talent on the stage, too, might be genetic.

Just as Bassett may have inherited her theatrical ability, Stephen King connects his success in the horror genre to his Irish ancestry. It is important to note here that at the beginning of the episode King identifies as being from Maine. With little to no knowledge of his paternal line, King treats his current location as the site of his genealogical genesis. It is surprising, therefore, how much of his literary orientation he attributes to an ancestry that he only suspects. Without any definitive genealogical evidence, he refers to the "Irish imagination" and says, "I don't know how much of that is true...I've always had that appreciation for fairies and ogres and boggarts and things of that nature. So that sheds a lot of light."³²⁷ King also learns that his sixth great grandparent's daughter

³²⁷ "In Search of Our Fathers."

Margaret was a writer whose work appeared in an 1869 book about New Hampshire folklore. In Margaret's story the children in her home are left alone on a snowy night, "a slave with a 'good voice' providing the evening's entertainment," when a stranger comes to the door.³²⁸ Margaret's story tells of how, "no sooner had she opened it than she saw what she thought was Satan himself. The figure was white with a horrible black face, deep in a white lopped hat which was hanging down over each shoulder."³²⁹ The monster, it turns out, was "but faithful slave Nathaniel Jackson."³³⁰ Gates recounts how King "relished reading every word of the story's conclusion" realizing that "he wasn't alone in his ability to send a chill up a reader's spine."³³¹ King describes the experience of reading his ancestor's writing as "enlightening; it's eye-opening. It's wonderful to know that that sort of thing carries through. Now, maybe it's a coincidence, but I don't really think it is. It's something that's as common as a family resemblance. Runs in the blood."³³²

The chefs featured in Episode 5 are also encouraged to make a connection between the work they do and their ancestor's attitudes and skills. After learning that his ancestors hail from the Italian village of Vallata, Tom Colicchio says, "I have to book a flight to Vallata very soon. Because I cook, I need to unearth dishes and food from this region and understand it more, because maybe that will unlock a key as to what I do and why I do it."³³³ Here we see the intersection of the rhetorics of genetic certainty and heritability. Firstly, the genetic evidence is infallible. Colicchio does not question that Vallata is his ancestral home and that he is genetically connected to its early 20th century residents. Secondly, this connection can tell him something about himself that has always been the case but that he could not identify in the absence of his genetic history. Certainty and

³²⁸ Gates, *Finding Your Roots, Season 2*, 20.

³²⁹ Gates, 20.

³³⁰ Gates, 20.

³³¹ Gates, 20.

³³² Gates, 20.

³³³ "The Melting Pot."

heritability merge to give Colicchio a believable depiction, not only of his ancestors, but of himself. Having traced his ancestry to Vallata, he feels that he can understand the work that he does better. It is almost as if his entire career was guided by an unseen force that his genetic genealogy allowed him to identify. Colicchio hopes to pull on a thread that leads not to the root of his skill or choices of cuisine but a metaphysical home that can explain his motivations.

While Colicchio's connection to his past is at least reflected through professional choices, Gates invites another chef, Aaron Sanchez to explore an even more ephemeral link to his ancestors. At the end of his genealogical journey Sanchez reflects on what he has learned:

This is very interesting because now I'll be able to speak so much more confidently about who I am as a person knowing where I'm from. It's not a guessing game anymore. Now I can speak very concretely with a lot of pride about my ancestry, my lineage. Now as I hear their stories I can understand where elements of my personality come from and that's another real insightful part of this exercise.³³⁴

As the "elements of his personality" remain unclear to the audience, Gates does not hesitate to fill in the dialectic blank again by clarifying, "You mean the macho warrior part." To which Sanchez replies, "the macho warrior part, you know."³³⁵

A review of the Sanchez's ancestral narrative reveals a single character who could be construed through the lens of history as a "macho warrior." Hilario Gabilando, a commander in the Mexican Army is credited with the 1857 defeat of American filibusters attempting to claim the town of Caborca. Gates asks Sanchez to read from a letter written by Gabilando. It says, "with the help of the angels, the filibusters will receive an exemplary punishment, the victory will be ours because my heart tells me so."³³⁶ After six days of fighting the Americans were forced to surrender and Gabilando was ordered to execute the filibusters. He spared the youngest of the group, a 16-year-old boy.

³³⁴ "The Melting Pot."

³³⁵ "The Melting Pot."

³³⁶ "The Melting Pot."

According to newspaper records, Gabilando oversaw the mutilation and decapitation of the filibuster leader Henry A. Crabb. His head was then preserved in mescal and kept in Mexico. The bodies of the other “Americans were left in the desert to be eaten by birds.”³³⁷ The newspaper headlines called the event the “Massacre of Henry Crabb” and “Horrible Atrocities.” How or why Gates aligns Sanchez and Gabilando’s attitudes is a mystery. There is nothing in either text to suggest that Sanchez has displayed “macho warrior” qualities, whatever those might be. It is informative, however, that Gates, without prompting, chooses to equate the chef and the commander behaviorally and not based on similarities that can be corroborated in any verifiable way. Not only is it a leap of logic, but it requires that he stereotype both his guest and his guest’s ancestor.

In this case study, the rhetoric of genetic certainty creates space and a framework in which the genetic data can be interpreted. On several occasions the show’s host interprets similarities in intangible qualities such as talents, attitudes, values and beliefs between the guests and their ancestors as being genetically determined. The term “gene” is meant as a symbol of immutable inherency that can be passed from one generation to the next. The extent of genetic heritability and what DNA test results can mean, however, is limited by the rhetorical context in which they are presented. In the other case studies, historical narratives are implied. In *FYR*, however, the show’s content includes ancestors’ stories as they have been pieced together through historical records. The guests’ assumptions about the historical narrative are guided by the show’s host and ultimately lead to the view of genetics that holds that it is possible to see the manifestation of intangibles along a line of descent. This becomes even more important as we consider the ways arguments for heritability unfold in the context of the interaction of dialectic and positive terms. As a precursor to

³³⁷ “The Melting Pot.”

my discussion of the heritability to intangibles associated with the dialectic categories of race, the next section considers how positive terms are translated into dialectic categories in the text.

*“So pure it’s amazing.”*³³⁸

In Episode 10 of FYR, Henry Louis Gates Jr. raises many pertinent questions about the relationship between identity, genetics, genealogy, and race. A large segment of this episode is dedicated to the genetic genealogy of Deval Patrick, the first African American elected governor of Massachusetts and the second black governor in U.S. history. Of this Gates says, “that means the second Black person ever elected as governor in this country has direct maternal and paternal lines that lead directly to Europe and not to Africa. In addition, Deval’s admixture reveals that over a third of his ancestors were also European.”³³⁹ Many of the show’s moments suggest that *FYR* is intended to cleave the dialectic from the positive in the U.S. American psyche, creating space for new ways to consider what identity might mean in the context of ancestry and DNA. In Patrick’s case it does so by undermining the connection between perceived blackness and African descent. The use of the dialectic and positive terms in Gates’ statement is reminiscent of the conceptual loophole I referred to in a preceding chapter.

Efforts to make sense of socially constructed groups in the context of genomics often confound themselves by reifying biologically essentialist concepts. This occurs in the following way. To establish that blackness is socially constructed, Gates must first equate *positive* African ancestry

³³⁸ Gates, *Finding Your Roots, Season 2*, 272.; in Chapter 7 of the companion book Gates recounts, Alan Dershowitz response to learning that he is 99.9 percent European: “so pure, it’s amazing.” Having explained the methodology and implications of bio-geographical testing in the previous chapter, this comment reveals how guests interpret their DNA test results. While the potential of any DNA to be purely anything is entirely dependent on the number of categories test-makers choose to include, Dershowitz’s reading of the results suggests that there may be personal a priori categories that are satisfied by the genetic testing process. I maintain that the lay understanding of race and the superimposition of dialectic categories over genomic results allow commercial test users to interpret their results as evidence for the groups they perceive, rather than belonging to objectively existing groups.

³³⁹ “Decoding Our Past.”

with *dialectic* blackness. Patrick is identified as part of a dialectic category even though he belongs to an unrelated positive category. In doing so, however, he establishes three characteristics of the dialectic-positive framework that governs the program's logic. Firstly, he must assume that there are genetic categories that correspond to socially constructed categories. As the preceding chapters have shown, this is not the case. Secondly, he must assert that these groups are mutually exclusive. Even though his ancestry is presented in percentages, it is not possible for Patrick to be both black-African and white-European. Together these assumptions lead to the third feature of the FYR orientation: the *blackness* Gates is describing must have a genetic basis.

In the absence of the genetic element, the argument for social construction is sensible enough. However, equating African and black, Gates creates the logical conditions for the audience to transition from the notion that African descent can be genetically proven, to the notion that blackness can be genetically proven. Genetic test results can show genomic evidence on individual's ancestors' movement in and around the geographic location we refer to as Africa. Genetic test results cannot provide genomic evidence of an individual's visual presentation or cultural leaning. Assuming that the latter is possible is a consequence of merging positive and dialectic terms.

The text is riddled with genetic-racial equivalencies such as these that reinforce the notion that socially constructed categories can be populated genetically. This is a dangerous but almost unavoidable rationale that defaults to race as the most logical and understandable way to explain human diversity. While some of the positive-dialectic constructs are clearly being used to generate rapport between the host and his guests, there are instances in which both parties seem unable to describe the DNA test results without references to race.

In Episode 1, Gates identifies Gloria Reuben's "white Jewish Family" in her genetic genealogy. Without knowing who these individuals are there is no evidence that her Jewish family from 18th century Jamaica were in fact what would be called "white" today. There is simply no way

to tell from the genetic record if they would present as white or be coded as white, then or now. Still the term is bandied about with impunity. In another case, upon learning his genetic makeup Stephen King exclaims “oh oh oh oh! I’m 99 percent European baby! I am the whitest man you’ve ever interviewed.”³⁴⁰ Again, Europe with all its diversity is translated simply as white and the connection between the two is reinforced. Interestingly, no further examination of King’s ancestry seems to be required. Likewise in Episode 9, George Robert Stephanopoulos learns that he is mostly European. Gates says, “You’re 98.9% European, my brother. You’re a white man. You are.”³⁴¹ Whiteness and genetic material that can be traced to Europe is synonymized.

In another episode Aaron Sanchez’s 3% of Sub-Saharan ancestry is revealed and Gates jovially notes “you’ve got some brother in you.”³⁴² Here he not only invokes the dialectic category of blackness, but all the constructs linked to the term’s lexical field. The suggested interpretation of the term’s meaning is colored by Gates’ own positionality and his status as a scholar of African and African American Studies. The hypernym *brother* is associated not merely with familial ties but is a culturally loaded term that invokes the dialectic black category. Gates uses *brother* as a synonym, not merely for male black person, but for the genetic material thought to carry blackness. Whether or not Gates intends to include Sanchez in the discursive black family, his word choice confirms that membership in the socially constructed group is heritable. The 3% of Sanchez’s genome that can be traced to Sub-Saharan African is translated dialectically in a manner characteristic of the show’s interactions.

The genealogical discussion that precedes each episode’s reveal is an interpretive framework against which the DNA results are measured and circulated. Gates’ conversations with the guests situate genomics in the discursive realm and indicate how they should be understood. As harmless

³⁴⁰ “In Search of Our Fathers.”

³⁴¹ “Ancient Roots.”

³⁴² “The Melting Pot.”

and as natural as they seem, racio-ethnic references create a universe of which DNA results are a part. Gates' interview with Carole King begins in the following way:

GATES: How did a nice Jewish girl from Brooklyn end up writing some of the greatest R&B records in history. Was there an epiphany when you heard something black and you went wow, it just blew my mind?

KING: The minute. The first time. Tell me what better lyric has ever been written than a wop bop a loo mop a wop bam boom.

King is referred to as a “nice Jewish girl” more than once in this episode. While the reference can be read as a playful attempt by the host to engage his guest and establish rapport, it needs to be deconstructed because it illustrates how insidiously the positive and the dialectic are harmonized and circulated as a single concept.

Though I have been unable to find the genesis of the ‘nice Jewish girl’ trope, it is a complex cultural reference that can be traced as far back as the *Belle Juivre* in 19th Century Romantic Literature and has been invoked as recently as Julie Merberg’s 2022 biographical compilation *Nice Jewish Girls*. The earliest uses of the term invoke “a very special sexual signification.”³⁴³ The character is a Jewish woman who resides in a Christian world who is frequently violated and may escape dishonor through death. More recent references serve a redemptive function, reclaiming Jewish femininity as empowered and progressive.³⁴⁴ The *Nice Jewish Girls* podcast is one such instance. The program promises to “redefine the way we see Jewish women—not as Jewish American Princesses, not as nags or klutzes, not as bossy or loud. As strong, as smart, as fearless.”³⁴⁵ The reference to King as a nice Jewish Girl is loaded and opens the door for the dialectic constructions of race and ethnicity to inform the interpretation of the scientific.

³⁴³ Jean-Paul Sartre, *Anti-Semite and Jew* (New York: Schocken Books : distributed by Pantheon Books, 1995).

³⁴⁴ Julia Jassey, “Tova Friedman - We Remember,” *Nice Jewish Girls*, n.d., <https://jewishunpacked.com/podcast-series/nice-jewish-girls/>.

³⁴⁵ Unpacked, “Nice Jewish Girls,” Media, n.d., <https://jewishunpacked.com/podcast-series/nice-jewish-girls/>.

Gates' inquiry is an indefinite question which invests King with synecdochical status in the Jewish community. Fahnestock explains the distinction between the definite and indefinite and its effect as follows:

Quintilian illustrated this difference with the examples "Should a man marry?" versus "Should Cato marry?"—questions which survived as set themes for composition into the sixteenth century, when Erasmus also recommended them (1963, 60–64). More importantly, Quintilian noted that the indefinite question was always more comprehensive [amplior] than the definite, and that "we cannot arrive at any conclusion on the special point until we have first discussed the general question."³⁴⁶

This argumentative strategy is executed by shifting from the level of the hypothesis to the level of the thesis. It is a generalization of the argument. King is transferred from the specific category of individual to the general dialectic category of Jew. Her response, therefore, is representative of the nature of the relationship between the entire Jewish dialectic category and the dialectic Black category associated with R&B. Had Gates posed the question "How did you end up writing some of the greatest R&B records in history?" King could ostensibly answer from the position of her own lived experience. Instead, Gates centers her racio-ethnic identity and relates it to for her musical choices. The primary function of King's answer becomes a demonstration of the transgression of the cultural against the genetic. Her response crosses an imaginary line drawn by Gates' question. King is not a cultural icon, but a composite of ancestry informative markers that indicate Jewishness.

The terms that arise in the discussion of Derek Jeter's genetic genealogy also illustrate the unnecessary merging of the dialectic and positive. The examination of Derek Jeter's family history suggested that one of Jeter's ancestors may have been an enslaver who fathered children with Charity, an enslaved woman from Virginia. To prove Jeter's connection with this ancestor, the show's researchers conducted a Y-DNA analysis to establish his paternal line. According to Gates, "we reached out to white descendants of James Jeter and asked to test their DNA. If James Jeter

³⁴⁶ Jeanne Fahnestock, *Rhetorical Style: The Uses of Language in Persuasion* (New York: Oxford University Press, 2011), 67.

was in fact Green's father, Derek would have inherited some of James' DNA."³⁴⁷ This is curious phrasing because even if Jeter's turned out to be related to the slave owner, while the original forbear undoubtedly presented as white, the descendants to which the show reached out to need not have been. The designation of the entire line as "white" is not only unnecessary but suggests a kind of simplified ordering. It gives the impression of discrete groups that merge at the point of Jeter's shared ancestors. Moreover, it suggests that these groups thereafter remained discrete. The turn of phrase could have been excused had Gates not repeated it during the reveal of Jeter's family tree.

The voiceover introducing the reveal includes the following: "we were able to trace the white Jeter line, all the way back to 17th century England." During the reveal itself, he tells Jeter, "You're looking at your white family tree on the Jeter side of the family. These are all your ancestors. Just like Green and Charity are your ancestors on your black side, these are your white, blood ancestors."³⁴⁸ The dialectic framing of the findings that prove Jeter's connection to his ancestors is emphasized through repetition and references to blood. This cleavage between a *white side* and a *black side* is established in the DNA record, even as Jeter himself serves as living testimony to the transgression of these boundaries over time. These instances present an opportunity to map the default use of dialectic or racial terms to describe genetic findings. Instead of orienting the audience away from the racialized schema, language choices in the *FYR* series reinforce racial essentialism by treating genomic data as evidence for race.

The rhetorics of genetic certainty and heritability are funded by the notion that genetic test results can serve as evidence for the existence of dialectic categories. The arguments made in season two of *FYR* significantly undermine social constructions of race since they inadvertently support the rationale that socially constructed groups have a factual biological basis. Moreover, it implies that the

³⁴⁷ "Born Champions."

³⁴⁸ "Born Champions."

social and cultural expressions of these groups are not only inherent but genetically heritable. This perspective provides a backdrop for the following section of this project in which I identify the narrative strategies that the show's guests use to interpret their genomic results. My fundamental argument is premised on the findings of the previous case study that genetic ancestry is only usable if it is described in recognizable terms and that these terms are most apparent in the narratives of recent history. Following from Nelson and others, I suggest that commercial genetic testing is in part problematic because audiences are most interested in those test results that allow them to interpret historical situations using a contemporary lens and to inhabit their ancestors' identities as a litmus test of their own moralities.³⁴⁹ For genetic testing to have value, it must create an opportunity for the user to both understand and inhabit history.

This case study allows me to advance this argument since it contains a strong narrative element. As indicated in the introduction to this chapter, the first part of each guest interview is a review of the historical record. This is the only one of my case studies in which the participants are encouraged to contextualize their genetic test results in tandem with a verifiable genealogical record. In contrast to the BuzzFeed text in which the genetic read-out was compared to anecdotal evidence and family lore, the *FYP* case study provides archival evidence for the structure of the guests' family trees. The following section, therefore, elucidates the role of narrative in the interpretation of DNA evidence. Here I consider the narrative liberties taken by the show in framing the individual genetic test results. Before this, I briefly discuss the impact of visibility on the understanding of both the genetic and genealogical. Specifically, I note those instances in which lay theories of racial morphology color the guests' expectations and the acceptance of their test results.

³⁴⁹ Nelson, "Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry."; Nelson, *The Social Life of DNA*.

“High cheekbones, straight black hair, that kind of thing?”³⁵⁰

While its incidence is certainly lower in this case study compared to the other two, the assumption that morphology can definitively indicate ancestry does emerge in the *FYR* series. In his interview with Stephen King, Gates asks: “Did you know that you had paternal ancestors from Ireland?” King responds, “I never knew but I always thought to myself, ‘you look like an Irishman.’” As indicated in a previous section, King goes on to connect his literary orientation to Ireland as well, claiming what he refers to as the “Irish imagination” or interest in the supernatural. Angela Bassett too claims to be able to *see* her indigenous ancestry in the morphology of her living family. She says:

I think my grandmother on my father’s side had some Indian in her. High cheekbones and, you know, just very poised. And I look at one of my half-sisters, the complexion of her skin definitely had some black and Indian. I think there had to be a connection there.³⁵¹

It is useful to reflect on Bassett’s observations through the lens of my previous discussion on the relationship between visibility and genetics. As I explain in the preceding chapter, morphological characteristics are not objective but refracted through the prism of individual experience and the prevailing racial schema. Moreover, lived experiences instruct us to interpret what we see as indicative of race and ethnicity, rather than identify traits that necessarily denote a single socially constructed group. We therefore see what we expect to see based on what we have seen before. It is also interesting to observe the characteristics that Bassett associates with indigenous people in her statement, in particular the attribution of “poise” or elegant bearing.³⁵²

³⁵⁰ “We Come From People.”

³⁵¹ “We Come From People.”

³⁵² Terry Jay Ellingson, *The Myth of the Noble Savage* (Berkeley: University of California Press, 2001). Poise and dignified bearing have been a recurrent theme in the characterization of the “noble savage” stereotype for hundreds of years. In his analysis of the myth of the noble savage Ellingson cites the work of 19th Century American explorer George Caitlin who describes his encounter with “a delegation of some ten or fifteen noble and dignified-looking Indians, from the wilds of the ‘Far West’.” He also notes that the myth has persisted, penetrating “so deeply into academic culture that it even appears in a standardized curriculum for fifth-grade arts classes where students are taught to recognize the Noble Savage in apparently any early portrayal of American Indians as handsome, strong, or dignified individuals.”

Bassett's conclusions are mirrored in Gate's narration of the segment. He reveals that Bassett's grandmother Brownie had wondered if her own mother, Snow Younger had Native American ancestry. Gates notes, "Angela herself, with her high cheekbones and almond shaped eyes, had been often told that she looked Native American, and the name Snow peaked [sic] our interest."³⁵³ Gates offers what he perceives to be key Native American morphological traits in order to explain Bassett's potential for indigenous ancestry. Later, Bassett's DNA test would show that her Native American ancestry was 0.6 percent. Even though her grandmother "had light skin, and Angela showed signs of mixed ancestry, without documentation there was no way to resolve this quandary."³⁵⁴

Angela Bassett's interview is not the only one in which Gates assists the guests with visualizing their ancestors. In his interview, Ben Jealous claims that his grandmother and her family have "a strong Native American look."³⁵⁵ If there was any doubt as to what this could mean, Gates responds with a list of visual cues for the audience. He says, "high cheekbones, straight black hair, that kind of thing?" It turns out that Jealous has no native ancestry at all. Throughout the case study, the proof of genetic belonging is thought to be reflected through facial morphology and other biological traits. The categorization of the phenotype, however, is neither measurable nor accurate. Instead, it is composite of stereotypes funded by the racialized schema and refracted through the prism of individual lived experience. This thinking not only works to reinforce fictional divisions between socially constructed racial groups but serves as evidence for the genetic categories that buttress them. As with the genetic-racial calculus applied to Deval Patrick's ancestry in an earlier section of this chapter, morphology can be used as a bridge between genomic groups and racial groups. Where phenotypical traits are perceived as occurring in both the scientifically and social

³⁵³ Gates, *Finding Your Roots, Season 2*, 234.

³⁵⁴ Gates, 235.

³⁵⁵ "Roots of Freedom."

identified categories, they are treated as evidence that those categories are equivalent. Without a more sophisticated understanding of how genetics influences visual presentation, or more precise language to describe that understanding, genetic test results can be received in service of the status quo. Context plays a significant role in the interpretation of visual stimulus. Contextual data, such as historical narratives, and media representation of a given group, therefore, are taken as evidence morphological characteristics might indicate.

Narrative Invention in the Text

The Limits of History

Through the second *FYR* season, Henry Louis Gates Jr, offers the show's guests historical documents that record the lives of their ancestors. Together Gates and the guests construct a narrative in which the motivations and beliefs of their ancestors are discerned through comparison with their own life stories. While some reference is made to why an individual may have done one thing or another, the motivations are ascribed in retrospect. From the perspective that the *FYR* is, among other things, constructing or writing the histories of its guests and by extension the history of the United States, this is a particularly rich case study. While there is much to say on the issue, a detailed analysis of the show's historiographic successes and failures is beyond the scope of this dissertation. Instead, what follows is an analysis of the historiographic anachronisms that permit the guests to trace the thread of heritability through the documents and reconcile their ancestors' motivations and actions with their own positionality. This approach allows guests to do several things. Firstly, they are able to interpret historical events contemporarily by reading them through the lens of 21st century power dynamics. Secondly, it permits them to harmonize the less palatable elements of their lineage both through adaptations of the historical record and through reactions that permit them to resolve motivational conflict.

FYR is a historiographical exercise through which the long dead are resuscitated through the discourse between Gates and their descendants. While the stories that are told take their cues from well-established historical narratives, the negotiation of the details and their repose in the record occurs on the set of the show. In this way, *FYR* is a digital archive of identification in 21st century United States that is created through the interpretation and ordering of primary sources. As the host of the show, Gates wields the power of the *archon*, sorting, editing, and storing the documents for posterity. Derrida notes that “the archons are first of all the documents’ guardians. They do not only ensure the physical security of what is deposited and of the substrate. They are also accorded the hermeneutic right and competence. They have the power to interpret the archives.”³⁵⁶

As I have indicated before, Gates often functions as a guide to the guests’ interpretation of both the documentation and the DNA test results. Just as he tells Aaron Sanchez that his 24% Native American DNA is the *equivalent* of having one Native American grandparent, he tells Bassett that her 0.6 percent Native American DNA translates “roughly to the equivalent of DNA one would inherit from a fifth or sixth grandparent.”³⁵⁷ In the absence of alternative guidance, Gates introduces a hermeneutic calculus that governs the interpretation of the scientific data throughout the series. These interpretations are powerful since they establish the interpretive boundaries of the series and resist readings that extend beyond them. This facility is defined by Derrida in the following way:

The archontic power, which also gathers the functions of unification, of identification, of classification, must be paired with what we call the power of *consignation*. By consignation, we do not only mean, in the ordinary sense of the word, the act of assigning residence or of entrusting so as to put in reserve (to consign, to deposit), to a place and on a substrate, but here the act of *consigning* through gathering together signs. Consignation aims to coordinate a single corpus, in a system or a synchrony in which all the elements articulate the unity of an ideal configuration.³⁵⁸

³⁵⁶ Jacques Derrida and Eric Prenowitz, “Archive Fever: A Freudian Impression,” *Diacritics* 25, no. 2 (1995): 10.d

³⁵⁷ “We Come From People.”

³⁵⁸ Derrida and Prenowitz, “Archive Fever: A Freudian Impression,” 10.

FYR, therefore, both accesses the archive and becomes the archive. The final product, like the documents that are used to produce it, are “a complex negotiation of the space between thing and theory...The archive may include voices of dissent, yet these are framed and fragmented by the commentary—and the cataloging—of the authorities who silenced them.”³⁵⁹

The genealogical record against which the genetic tests are read is already infused with the narrative of the moment at which they were lodged. The *FYR* series is, therefore, a doubly filtered record, reflecting both the tensions of the historical moment and the selected narrative for understanding the relationship between genetics and race in the contemporary United States. In her analysis of Arthur Schomburg’s “transnational archive of black culture,” Holton, too, illustrates the phenomenon of the archive that ‘comes after’ and has “supplementary relationship to dominant historiographic knowledge.”³⁶⁰ I concede to this claim and, in the spirit of the palimpsest, re-invoke Bhabha’s notion that “the supplementary strategy suggests that adding ‘to’ need not ‘add up,’ but may disturb the calculation.... Insinuating itself into the terms of reference of the dominant discourse, the supplementary antagonizes the implicit power to generalize, to produce the sociological solidity.”³⁶¹ The historical record is not only read in addition to the *FYR* archive, but through it. Any assumption that the repository from whence the *FYR* team extracts these genealogical records is not already tainted by that era’s dominant racial schema would be horribly misguided. Moreover, the *FYR* digital archive has, built into it, “the instrumental, historical, and cultural meanings of whatever media it includes.”³⁶² The following analysis, therefore, make senses

³⁵⁹ Helen Freshwater, “The Allure of the Archive,” *Poetics Today* 24, no. 4 (2003): 731–32.

³⁶⁰ Adalaine Holton, “Decolonizing History: Arthur Schomburg’s Afrodiasporic Archive,” *The Journal of African American History* 92, no. 2 (2007): 220.

³⁶¹ Homi K. Bhabha, *The Location of Culture*, Routledge Classics (London ; New York: Routledge, 2004), 155.

³⁶² Ellen Cushman, “Wampum, Sequoyan, and Story: Decolonizing the Digital Archive,” *College English* 76, no. 2 (2013): 116.

of the narrative invention that underpins the *FYR* archive with the knowledge that its formulation too is palimpsestuous, bearing the mark of earlier discursive selections.

In terms of the way in which genetic test results are understood by the public, guests negotiate their narrative intervention in the record by posing two kinds of questions, the answers to which help frame their final reading of the genealogical – genetic hybrid. The first is “what elements of this narrative can I recognize in order to situate myself as a product of this history?” and the second “in what ways can I read this story of my genetic lineage that are true to how I currently perceive myself?” In this way, Gates and the guests work in tandem to make meaning of the genetic data that the tests reveal, determine their usability in the context of the historical narrative and register their value as a tool for understanding individual racial identity. My interrogation of the *FYR* archive, therefore, proceeds in two parts, exploring these questions in turn and illustrating the relationship between genetic testing as proof of an historical conceptualization of race in the United States.

Creating Usable History

Joseph Campbell has written that “it has always been the prime function of mythology and rite to supply the symbols that carry the human spirit forward.”³⁶³ In many ways the guests on *FYR* are working with Gates to interpret the composite of history and genetics in a way that does this. The inventive strategies put to work in this television series are treated here as efforts to manage this emphasis. Our estimates of how much genetic test results can plausibly reveal, is a matter of attention. Racial categorization and the focus on recent history are ways to manage the limits of genetic meaning. Guided by the principle of heritability, which tethers the living to their ancestors, Gates wends a path through history that ends with the individual being interviewed.

³⁶³ Campbell, *The Hero with a Thousand Faces*, 10.

The narrative imperative is essential to the acceptance of the genetic test results themselves. To understand history, guests must see themselves in history; to see themselves in history they must first be able to see history. This results in anachronistic viewings of the historical text, most often manifested through the tropes used to make sense of the record. For example, in episode 6, Nasir “Nas” Jones learns that he may be descended from Vikings. The term is used discretely despite the temporal and spatial span of the population we call “Vikings” today. In response to the news, Nas says, “you just imagine this huge ship with these dudes coming out of the mist with swords. That was a wild bunch.”³⁶⁴ The representation of Vikings in the *FYR* discourse is colored by media stereotypes. This is true for many other historical groups identified in the show’s conversations. The narrative of *FYR* relies on tropes that are familiar to the guests and viewers. This becomes increasingly complicated when the show attempts to depict historical power relationships using contemporary terms.

A good example of the anachronistic negotiation of the historical narrative is Stephen King’s ancestor Enoch Bowden, the Methodist Minister who left North Carolina for Indiana. This information is revealed to King in the following exchange:

GATES: Why do you think your ancestor moved his family from Tennessee, right, out to this frontier? Why move to Indiana? Any ideas?

KING: Oh, if I had to guess I might guess that they just, ah, saw a good deal in another part or wanted a fresh start. All kinds of possibilities.

GATES: could you please turn the page

KING: yeah

GATES: This is a page from a book published in the year 1901 and it’s about the pioneers of this county.

GATES: Oh my God! Oh my God! Look at this! Good for them! [reading from the “book of life”] Enoch Bowden and his wife like many others, left their native state on account of slavery there.

GATES: How about that?

KING: Its good.

GATES: Its good.

³⁶⁴ “We Come From People.”

KING: Its good. It's something to be proud of. It's better than turning the pages and finding out he left because he shot somebody in a barber shop.³⁶⁵

Gates explains to King that at the time almost 20 percent of the population of Tennessee was enslaved. To which King responds:

KING: No, I didn't. Can I believe that they didn't like it on a moral basis?

GATES: Of course. As a matter of fact, you're absolutely right. As a Methodist Minister Enoch may very well have opposed slavery on moral and religious grounds.

KING: How about that?

GATES: Pretty good guy.

KING: Yeah, yeah.³⁶⁶

In this excerpt, King is unsure of the significance of his family's migration to Tennessee. He expressly inquires as to how he should interpret their actions. Gates then functions as the *archon* and gives him permission to assume that Enoch's move was morally based citing the 1845 split in the Methodist Church. In the voiceover that follows this segment he says, "Stephen's ancestor's belief had been profoundly tested and ultimately they had made courageous choices."³⁶⁷ The 1901 text from which the information is taken is not critically assessed and other explanations for the family's move are not mentioned even if they were considered. The source, which is itself written after the 1865 abolition of slavery, already carries the moral weight of the slavery debate and its ultimate outcome in the United States. Without further information on the source, it is not possible to ascertain how it may be biased. Gates' interpretation foregrounds the slavery issue as being the most significant feature of the time and the driving force behind the Bowdens' actions. By the end of the segment this perspective is represented both in the 1901 text and the *FYR* text. In this instance, Stephen King answers both of this section's guiding questions. He frames the historical data in

³⁶⁵ "In Search of Our Fathers."

³⁶⁶ "In Search of Our Fathers."

³⁶⁷ "In Search of Our Fathers."

contemporary terms, foregrounding a simplified version of the slavery debate and reading that record in a way that allows him to be comfortable with his family's choices.

A similar anachronistic distortion occurs in the reading of Jessica Alba's ancestry. During the Depression Era, Mexican Americans in California were subject to discrimination that increased as the national economy worsened. According to the companion book, "as jobs became more and more scarce, anti-immigrant sentiment directed at Mexican Americans intensified."³⁶⁸ In response to being excluded from education opportunities, Alba's ancestor joined with other Mexican immigrants to found the East Barrio School, where "children could practice reading and writing in Spanish and they even studied Mexican history."³⁶⁹ In response, Alba says "they felt racism every day but they still wanted to instill pride in the children about who they are and where they came from, so they didn't lose touch with their roots."³⁷⁰

Together, Gates and Alba present the East Barrio School as dedicated to cultural retention that supplemented the education offered in public school. At the same time, however, the language Gates uses to describe the situation of Mexican Americans in California during the late 1920s and early 1930s performs a curious function. In the television series he poses a question to Alba, "Do you think your great grandfather founded the El Barrio school as a way of fighting back against the back-of-the-bus treatment he was receiving."³⁷¹ "Back-of-the-bus" is a very specific reference to Rosa Park's 1955 refusal to take a seat at the back of bus in the "colored" section that would ultimately lead to her arrest and precipitate the Montgomery Bus Boycott. The boycott has been treated as pivotal to the Civil Rights Movement in the United States both in scholarship and popular

³⁶⁸ Gates, *Finding Your Roots, Season 2*, 381.

³⁶⁹ Gates, 381.

³⁷⁰ Gates, 381.

³⁷¹ "Decoding Our Past."

culture.³⁷² ‘Back-of-the-bus,’ therefore, is historically and emotionally charged. It is deployed as an emphaser and serves the ideographic function of ascribing the facts and myth of the Civil Rights Movement to the circumstances of Alba’s ancestors.

There is no question that, like immigrants to the U.S. today, Mexican American immigrants of the 1920s faced tremendous hardships. My point here is not to devalue the contribution of Daniel Martinez and the El Barrio School. Instead, it is to point out how, as *archon*, Gates transfers the weight of the Civil Rights movement to events in 1927 California through his linguistic choice. And it is a choice that he repeats. In the companion text, Gates writes, “Like African Americans throughout so much of the twentieth century Mexican Americans in Depression-era California were relegated to the back of the bus; soda fountains wouldn’t serve them because they were the wrong ethnicity.”³⁷³ Here Gates succeeds in layering hundreds of years of slavery and oppression onto a group whose numbers, history and access to resources for resistance in the United States was very different. Furthermore, the “back-of-the-bus” term and what it signifies to his audience occurs almost half a century after the events in the text.³⁷⁴ In this way, Alba, and by extension the audience, can translate her ancestry into usable terms. The anachronism here, then, is not in the reading of the

³⁷² The figure of Rosa Parks is perhaps one of the most well-documented of the Civil Rights Movement. Scholarship has examined the legal, historical, and social implications of her resistance and used her story to understand the role of gender in the Movement. Parks also gained iconic status through film and television representations in which she is the central character including but not limited to *Boycott* (2001), *The Rosa Parks Story* (2002), *Mighty Times: The Legacy of Rosa Parks* (2002), *Doctor Who* “Rosa” (2018) and *Behind the Movement* (2018). Parks has also been put to symbolic use in hip-hop music and is mentioned by Common, Kanye West, J-Real, Jay-Z, Nas, Wale, and Outkast. There is little question that at the time of *FYR*’s second season both Alba and the viewing public had attached great significance to Parks and the term “back-of-the-bus.”

³⁷³ Gates, *Finding Your Roots, Season 2*, 382.

³⁷⁴ In Episode 8 of *FYR* season 2, Gates interviews Deepak Chopra about his family history. Chopra’s ancestors hail from India, a country that occupied by British imperialists for almost 200 years. Of this era, Chopra says, “Actually, Indians refer to those days as the days of slavery. They use that word. The British, in hindsight, they were pirates.” It is noteworthy the care with which Chopra deploys the term “slavery”, almost justifying its use by the Indian people. He draws attention to the potential for Gates and the viewer to question the equivalency and so specifies that it is how the time was perceived by Indians. This treatment of a loaded term brings Gates’ own loose usage of “back-of-the-bus” into question and suggests that, comparatively, his invocation of the lexical field of the Civil Rights Movement may not have been accidental.

history but in its deployment in a more recent, discursively potent form. Here it is not interpretive anachronism but creative anachronism that is significant.

Burkean Transcendence in the Narrative Invention of Henry Louis Gates Jr.

The way those with troubling histories are treated by Henry Louis Gates Jr. in the *FYR* series provides an opportunity to further complicate and enhance the application of Burkean theory to this project. This next section then, undertakes both an analysis of the text and a theoretical adaptation that sharpens my approach by integrating another concept from the Burkean universe. According to Zappen, “in a world filled with a cacophony of conflicting voices, such as Burke’s or our own, transcendence offers not more persuasion or even identification in its simple and limited sense, but a promise of larger unities -transcendences - that encompass individual and group differences.”³⁷⁵ These are the terms in which Gates helps his guests to understand the historical record and situate themselves in the narrative of their lineage.

In the rhetorical *mélange* of positionality, guests are given the opportunity to reconcile the conflict of their contemporary moral commitments and their ancestors’ sins, a resolution intensified by the rhetoric of heritability and its premise that motivation is genetically transferrable. According to Brummett, “Burke argues that typically there are two ways of resolving guilt and one way of avoiding it altogether which allow a return to the haven of hierarchy,” where hierarchy refers to the accepted moral order.³⁷⁶ The *FYR* interactions provide several examples of mortification or the open confession of sin, scapegoating or the punishment of an object that has been invested with sin, and transcendence or the reframing of sin as “as a virtue or as the requirement of some higher and

³⁷⁵ James P. Zappen, “Kenneth Burke on Dialectical-Rhetorical Transcendence,” *Philosophy & Rhetoric* 42, no. 3 (2009): 281.

³⁷⁶ Barry Brummett, “Burkean Scapegoating, Mortification, and Transcendence in Presidential Campaign Rhetoric,” *Central States Speech Journal* 32, no. 4 (December 1981): 255, <https://doi.org/10.1080/10510978109368104>.

nobler hierarchy.”³⁷⁷ The textual material that follows illustrates how those tethered to history by their genetics reinterpret the past with the assistance of Gates’ redemptive strategies.

Gates’ interaction with guests who encounter disquieting historical evidence follows a familiar structure that is repeated throughout the text. Initially, as in the case of Anderson Cooper, Derek Jeter, and Ben Affleck, he states the historical fact of their ancestors’ sins. Among these are slavery and sex crimes. Having received the information and expressed guilt, the guests are given the option to adopt their ancestors’ infractions, confessing that they have sinned and accepting a kind of retrospective punishment in which their family name is tarnished. Cooper accepts that his ancestor was a slave owner and rejoices to learn that he was ultimately murdered by a slave with a farm hoe. The journalist pronounces his own judgment, “I don’t feel bad for him. Honestly part of me thinks that is awesome.”³⁷⁸ Cooper is thus absolved of the crime. Jeter learns that one of his ancestors was the product of what was likely a forced relationship between his ancestor and an enslaved woman named Charity. He too is given an opportunity to absolve his ancestor by descent. In this instance, Gates reframes encounter by asking Jeter “What do you think the relationship was between your third great grandparents, the slave owner and the slave Charity?”³⁷⁹ Jeter accepts guilt: “not consensual I would guess.”³⁸⁰ Gates then reassesses Charity’s circumstances and responds, “But on the other hand, he obviously, he took care of his son”³⁸¹ invoking a higher and nobler hierarchy, Jeter transcends the guilt, “very true, very true so...[pauses] I’d like to think it was a good relationship. How about that?”³⁸² Free of the burden of his ancestor’s actions, Jeter is then able to laugh.

³⁷⁷ Brummett, 256.

³⁷⁸ “Our American Storytellers.”

³⁷⁹ “Born Champions.”

³⁸⁰ “Born Champions.”

³⁸¹ “Born Champions.”

³⁸² “Born Champions.”

Gates takes a similar approach to the situation of Ben Affleck. While Affleck's case is certainly more controversial and involved, ultimately, he is offered similar opportunities. After identifying Affleck's slaveholding ancestor, one Benjamin Cole, Gates proceeds along a convoluted path of tax documents to show that Cole was not in fact a slave owner but the executor of a slave owner's estate. Here he is suggesting that Cole retained and managed the enslaved people out of a sense of duty to successive wives. The guilt of owning human beings is modified by Cole's commitment to his family. Gates allows Affleck (via Cole) access to the compound redemptive strategy: transcendence or avoiding guilt by subsuming his slave ownership under the heading of family duty *and* scapegoating or blaming the women whose property he managed with the original sin of acquiring the slaves. In this instance, both Benjamins are redeemed.

Finally, the opportunities Gates creates for the guests to evade the guilt of ancestral sin is typified by repetition. In each of the aforementioned instances, Gates reiterates the absolving claim at least twice, granting the interviewee a chance to emphasize both the recognition of guilt and the strategy for absolution. I note these strategies in the upcoming analysis and observe their effect when combined with the interpretive function of the archon.

Narrative Invention and the Absolution of Guilt

While the first inventive branch of the *FYR* narrative leads the audience to view the past through the lens of the present, the second permits the show's guests to manipulate the historical record so that it aligns with their own values. Here the guests inhabit the past so deeply that they almost take responsibility for the ancestor's actions and answer the question "in what ways can I read this story of my genetic lineage that are true to how I currently perceive myself?" This is particularly true in those instances where white-presenting guests encounter slaveholding in their histories. In the upcoming discussion, I first discuss how the similar historical circumstances of Anderson Cooper and Angela Bassett's ancestors are treated differently to align the guests' personal

narratives. Next, I examine the ways in which guests negotiate the uncomfortable historical contexts of their genetic identities. I begin with Anderson Cooper's slaveholding legacy, then discuss Deepak Chopra's ancestors' alignment with British Imperialism, and Tom Colicchio's criminal ancestry are heroically reframed. Finally, I conclude by examining Ben Affleck's attempts to expunge his slaveholding ancestry from the *FYR* archive.

In episode 3 of *FYR*, Anderson Cooper learns that his family was "part of a wave of settlers who migrated south seeking their fortunes cultivating cotton. The inventions of the cotton gin created the biggest economic boom in American history. Planters like Anderson's ancestors wanted a piece of the action."³⁸³ According to Gates, most White Southerners "did not own big plantations" or slaves. Cooper's ancestors, however, did support the confederacy, ultimately serving as soldiers in the Confederate army. So much so that Gates tells Cooper, "Your family was like a one-family confederate army."³⁸⁴ He maintains though that even though they "fought for the confederacy even though they had little to no financial stake in the Southern way of life."³⁸⁵ And here, in his negotiation with Cooper over the moral sentencing of his ancestors, Gates makes a fine distinction between those that supported slavery and those that supported the confederacy as a political ideal. Gates resists the notion that enlistment in the confederate army was indicative of any moral position on slavery.

Still, three episodes later Gates infers that the slaveowner to which Angela Bassett's ancestors belonged was in fact in support of slavery, not because he owned slaves but because he enlisted as a confederate soldier. Noting that the slaveowner in Bassett's history was the first in his county to volunteer for the army, Gates says "and if there were any doubt of their master's feelings about emancipation, we found out that he was the very first man in his county to volunteer for the

³⁸³ "Our American Storytellers."

³⁸⁴ "Our American Storytellers."

³⁸⁵ "Our American Storytellers."

confederate army.”³⁸⁶ While there are mitigating circumstances, such as slave ownership and rate of enlistment, two very different conclusions are drawn from very similar circumstances. In one instance, enrollment in the confederate army is not taken as support of slavery. In the other, it is definitively interpreted as support of slavery. This presents a conflict in Gates’ overall reading of the historical text. It is a conflict that can be resolved if the *FYR* interviews are treated as a kind of negotiation, in which the guests reconcile their ancestor’s moral positions with their own.

The primary purpose of this section of my project is to understand the ways in which the genealogical record influences the users’ interpretation of genetic test results and having accepted these results, how they make sense of the historical record with respect to their ancestors. As I have suggested earlier, notions of heritability characterize the *FYR* text. Guests seem to believe in the transference of intangible attributes across time through genetic descent. Genes are thought to carry not only skills, attitudes, and beliefs but also morality. When history is read through the framework of the contemporary lens and current power relationships are superimposed on the past, *FYR* guests often appear emotionally conflicted about their ancestors’ actions. The sense-making discourse between Gates and the guests regularly becomes an exercise in the alignment of ancestral motivations and contemporary positionality. To this end, enrollment in the confederate army takes on different significance for Anderson Cooper than it does for Angela Bassett. Bassett’s genetic connection to the enslaved grants her membership in the marginalized group, a discursive location in the enslaver-enslaved power relationship. In other words, her genetic thread places her on the right side of history and the face-saving work of explaining the slaveowners’ confederate allegiance is unnecessary. In fact, his zeal to join the pro-slavery side is counted as evidence of his inherent immorality. For Cooper, however, the operation is more complex. Given his current liberal

³⁸⁶ “We Come From People.”

positionality, efforts must be made to soften the blow of learning that his ancestors may have supported the enslavement of human beings.

Even though Cooper manages to evade the confrontation with his history on the first count, the legacy of his paternal ancestors is more difficult to explain away. Cooper's fourth great-grandfather Burwell Boykin is documented as owning 12 people ranging in age from one to sixty years old. In the footage, Cooper expresses shock but then says, "having family from the deep South I'm not surprised that there are some, at least one, slaveholder. But I also kind of always thought my relatives were so poor they wouldn't have had slaves."³⁸⁷ At this point in the interview, it becomes clear that the idea of genetic morality is at odds with Cooper's sense of self. There are, however, several opportunities for Cooper to reconcile his own morality with the reality that he is descended from Burwell Boykin. First, he expresses empathy saying, "it's really depressing. Especially when you see the ages and the fact that there are no names. I just find it so disturbing. I'm sort of curious about the blank spaces on this ledger."³⁸⁸ When Gates asks the disturbing question "what kind of master do you think he was?" Cooper replies, "I shudder to think," giving Burwell no room for redemption.³⁸⁹ Later he is told that according to the 1860 U.S. Census shows that Burwell Boykin was killed by one of his slaves at age 80. The "killed by negro" census entry allows Cooper to further double down on his discursive position and achieve absolution. The exchange is as follows.

GATES: Boykin was killed by a rebellious slave. Your ancestor was beaten to death with a farm hoe.

[Gates and Cooper smile at each other]

COOPER: Oh my God [chuckles and put his hand up to his forehead]. That's amazing. This is incredible. I'm blown away.

GATES: You think he deserved it?

COOPER: Yeah. I have no doubt.

GATES: It's a horrible way to die Anderson

COOPER: He had twelve slaves. I don't feel bad for him. Honestly part of me thinks that is awesome.

³⁸⁷ "Our American Storytellers."

³⁸⁸ "Our American Storytellers."

³⁸⁹ "Our American Storytellers."

GATES: He was your blood ancestor.

COOPER: I don't want to offend other relatives of mine. I feel bad for the man that killed him. I feel bad for the 11 other unnamed people who, God only knows what happened to them. [soft piano music rises]. I wish I knew more. I wish I knew the name of the slave. When you think about how many people's names history just never remembers and people whose stories are never told. It's shameful and I feel such a sense of shame over it. At the same time, it's the history of this country.³⁹⁰

In the exchange Gates is sure to elaborate on the circumstances of Boykin's death. Instead of merely indicating that he had been killed, he paints a brutal picture by invoking the manner of death. This specification might tempt someone to feel sympathy for Boykin but Cooper embraces his mortification. Gates tempts him a second time by saying explicitly that "it was a horrible way to die." It is almost an appeal to the guest's humanity, intensified by his use of Cooper's first name. In response Cooper reiterates the charge, recentering the conversation on the nature of Boykin's sin. In almost biblical fashion, Gates tempts him a third time, invoking his blood relationship to Cooper. But Cooper holds his position. By the end of the conversation, he has sufficiently disassociated himself from Boykin the enslaver.

The Affleck-Finding Your Roots Controversy

"It's important to remember that this isn't a news program."³⁹¹

Unlike Anderson Cooper, Ben Affleck's reconciliation with his past was more troubled. The episode in which Affleck is featured, ironically named *The Roots of Freedom*, is saturated with references to heritability. Affleck suggests that his family past has agency through him. According to the companion book, "Ben's third great-grandfather eventually became New Jersey's chief inspector of food and drugs, while his fourth great-grandfather was a police marshal and Trenton's health

³⁹⁰ "Our American Storytellers."

³⁹¹ In his public apology following the Finding Your Roots controversy, Affleck reminds the audience that the television show is a "creative collaboration", suggesting that its content need not be factual. Mike Flemming Jr., "Ben Affleck Provides His Own Side On 'Finding Your Roots' Controversy," *Deadline*, April 21, 2015, <https://deadline.com/2015/04/ben-affleck-finding-your-roots-defense-1201413915/>.

inspector. To this he replies, “my family wanted to be regulators. No wonder I’m a Democrat. We believe in regulation.”³⁹² Likewise, as I have mentioned earlier he attributes his interest in Revolutionary War films as inherited from his ancestor, Jesse Stanley’s participation in the War of Independence.³⁹³

Against this backdrop of heritability, it is interesting how both Affleck and Gates intervene in the historical narrative to reconcile the actions of Affleck’s earlier ancestors. I must note a divergence between the *FYR* television episode and the companion book. The episode was aired in 2014, while the book was published in 2016. In the intervening years, Affleck became the subject of a scandal precipitated by the WikiLeaks release of Sony entertainment’s internal emails. In April 2015, “WikiLeaks published a database leaked from Sony Pictures comprising 173,132 emails and 30,286 documents.”³⁹⁴ Among these emails is correspondence between Gates and Sony Pictures head, Michael Lynton in which they ultimately decide to redact Affleck’s slave-owning history from the show’s records. This real-life intervention in the narrative is an extreme example of how emotional entanglement with genetic genealogy helps to guide reading of the historical narrative. Moreover, this example demonstrates how the *FYR* archive is constructed through the revision of historical records that enable the guests to select the historical context their ancestors inhabit to support contemporary norms.

Historical Revisionism and Textual Erasure

The fourth episode of *FYR*’s second season does not include any mention of Ben Affleck’s slave holding ancestors. In April of 2015, after the release of the WikiLeaks emails, the *Independent*

³⁹² Gates, *Finding Your Roots, Season 2*, 134.

³⁹³ Gates, 136.

³⁹⁴ Russell Brandom, “Wikileaks Has Published the Complete Sony Leaks in a Searchable Database,” *The Verge*, April 16, 2015, <https://www.theverge.com/2015/4/16/8431497/wikileaks-sony-hack-emails-north-korea-julian-assange>.

released a transcript of the redacted segment. In his voiceover, Gates introduces Benjamin Cole, Affleck's third great-grandfather and "one of Savannah Georgia's most prominent citizens- a wealthy landowner and sheriff of the entire county." The following exchange ensues:

AFFLECK: That's amazing. I got a...we have a house in Savannah.

GATES: Really?

AFFLECK: Yeah.

GATES: Did it ever occur to you that you had deep roots there?

AFFLECK: No, it didn't. It didn't at all. I had no idea I had any southern roots at all, so this is remarkable.

GATES: This is the slave schedule of the 1850 Census. In 1850, they would list the owner of slaves in a separate Census.

AFFLECK: There's Benjamin Cole, owned 25 slaves.

GATES: Your third great-grandfather owned 25 slaves. He was a slave owner.³⁹⁵

Gates notes that in 1850 only 10% of all slaveholders owned 20 slaves or more, placing Affleck among the Southern elite. To which Affleck responds. "God. It gives me kind of a sagging feeling to see, uh, a biological relationship to that."³⁹⁶ At this point in the interview, rhetorics of genetic certainty and the heritability of intangibles collide with Affleck's public image and the carefully curated legacy of social justice. Having ascribed to these rhetorics in the construction of the narrative through which he understands his genetic connection to the past, Affleck must now account for the potential acquisition of less desirable attributes through his ancestry.

After Affleck comes to terms with the reality of his slaveholding ancestry and his genetic connection to an immoral past, Gates follows the familiar pattern of offering absolution through mortification and symbolic penance.

GATES: But consider the irony, uh, in your family line. Your mom went back fighting for the rights of black people in Mississippi, 100 years later. That's amazing.

AFFLECK: That's pretty cool.

GATES: That's pretty cool.

AFFLECK: Yeah, it is. One of the things that's interesting about it is like we tend to separate ourselves from these things by going like, you know, oh, well, it's

³⁹⁵ Selby, "Ben Affleck Asked TV Chiefs to Hide Slave-Owning Ancestry, New Hacked Sony Emails Published by Wikileaks Claim."

³⁹⁶ "Roots of Freedom."

just dry history, and it's all over now, and this shows us that there's still a living aspect to history, like a personal connection. By the same token, I think it's important to recognize that, um, in looking at these histories, how much work has been done by people in this country, of all kinds, to make it a better place.

GATES: People like your mother.

AFFLECK: Indeed, people like my mother and many others who have made a much better America than the one that they were handed.³⁹⁷

However, Affleck was not satisfied with the final narrative. His efforts to revise the history of his family were successful and the content was removed. The Wikileaks expose, however, occurs in the years between the September 2014 airing of FYR season 2 and the 2016 publication of the companion text. The temporary suspension of the FYR series and internal review undoubtedly had some bearing on the inclusion of the offensive details in the book version of the series. While the discrepancies between the two are obvious, I draw attention to the strategies employed by Gates to balance the “editorial integrity” of the book project and what, at that point, is the sensitive nature of the content. The companion text identifies not one, but two slaveholding ancestors in Affleck’s family tree. The first is Nathaniel Stanley whose relationship to Affleck was unearthed in a 2015 article by the British Daily Mail newspaper. The article claims that Stanley was one of Affleck’s three slaveholding ancestors. It reads, “The Batman star’s distant family can be traced to Connecticut and in 1728 they paid 80 pounds for a slave called Tobe who they kept until he was grown up.” This is instructive since it draws attention to how Gates performs his *achronic* role, reframing Affleck’s connection to slavery in the final version of the printed text.

Gates’ treatment of Benjamin Cole in the companion text is a drastic departure from the original depiction in the redacted part of the television episode. In the television interview with Affleck, Gates declares with certainty that Cole was wealthy, powerful, and owned slaves. The Benjamin Cole of the television series is also sheriff of the county, a fact that suggests negative

³⁹⁷ Selby, “Ben Affleck Asked TV Chiefs to Hide Slave-Owning Ancestry, New Hacked Sony Emails Published by Wikileaks Claim.”

consequences for those under his control. In the companion text a different story is told. There, Gates claims that Cole was a widower who, having assumed responsibility for his mother-in-law Ann S. Norton, also gained control of her property which included enslaved people. The text further asserts that Cole also came into control of his second wife Georgia Speissegger's property which included the eight slaves. Even though this information suggests a pattern indicative of Cole's social milieu and values, Gates writes:

But a closer look at the surrounding documents either filed by Benjamin Cole in which he was named raised questions about whether he was actually the owner. To clarify, the Municipal Records of Savannah, Georgia, included multiple tax and probate records that did not support the fact that he was a slave owner, but rather a trustee or an executor overseeing the estates of close relatives who themselves owned slaves.³⁹⁸

In the eight paragraphs it takes Gates to explain the complexity of the nineteenth century Georgian tax regime, his talent for equivocation reaches staggering extremes. In service to Cole's absolution, Gates again adopts the anachronistic lens, leveraging arguments for the paternalistic nature of the society at the time. The result is a characterization of Cole as an unfortunate widower is saddled with the inconvenient wardship of 25 slaves. In a dizzying juxtaposition of constructs, Gates simultaneously describes a society in which women's property was controlled by their male relatives *and* invokes a misogynist rationalization that blames Cole's womenfolk for his involvement in slavery. He did not acquire these slaves themselves but had them thrust upon him by circumstance which he dutifully managed to fulfill his role as a husband and son-in-law. As a result, "one fact remained consistent: over the years, on tax records Benjamin Cole filed for himself through the end of the Civil War, there is no evidence he ever paid taxes on a single slave himself."³⁹⁹ The overall effect of this convoluted reasoning is to break Affleck's genetic link to slavery. The fine distinction between slave owner and slave trustee effaces the reality of the 25 human beings that were held against their will and

³⁹⁸ Gates, *Finding Your Roots, Season 2*, 142–43.

³⁹⁹ Gates, 143.

forced to work to the benefit of the household that included Cole. Through Cole's absolution, Affleck evades the moral deficiency that enables a man to justify owning human beings as property. The patriotic, social justice lineage to which he aspires in the narrative of his mother's activism is thereby restored.

Conclusion

Together the interviews in the *FYR* television series and companion book are a parable of the dangers of introducing a genetic dimension to the racial discourse. Even as the social constructionist perspective on racial belonging is thought to dominate the conversation, the inclusion of positive data to the dialectic negotiation of identity has very serious consequences. I treat these examples as evidence of the genetic essentialism that ancestry testing introduces to the discourse on race. In tandem with rhetorics of genetic certainty and heritability, narrative invention works to distort to historical record to reflect contemporary values and positionalities. The *FYR* archive is a repository of American Dream narratives that are arrived at through the systematic interpretation of history through the anachronistic lens and the revision of troubling ancestral details. Unlike the preceding case studies, this is the only iteration of this project in which the discursive framing of the genetic is explicit. However, in much the same way that the BuzzFeed and National Geographic case studies do, it raises important questions about the uses and impact of genetic ancestry testing in the work to understand identity.

Chapter 7: A Future of Genetic Stereotyping

Burkean theory treats language as constitutive symbolic action. His order for terms, as presented in the *Rhetoric of Motives*, distinguishes between *positive*, *dialectic*, and *ultimate* terms. The interaction of the order's hierarchical tiers describes the way in which human beings follow a deeply rooted imperative to order the stimulus we encounter. In this process we use words to make sense of the world. Positive terms are words that represent the tangible. They point to things that exist objectively. Dialectic terms are discursive handles that both describe and organize positive terms. However, as I explain in the third chapter of this project, the relationship between the positive and dialectic is guided by the dialectic imperative and not the nature of the positive. The dialectic, therefore, does not necessarily point to a feature of the thing identified by the positive. The thing is imbued with certain qualities, not because they are inherent, but because of the dialectic category in which the thing resides. *Ultimate* terms, meanwhile, are master categories that inform us of the hierarchical ordering of the dialectic. Burke intended this schema for understanding any situation in which human beings communicate their motivations and interpret the motivation of others. In this dissertation I have applied Burke's schema to three case studies that show how the concept of race is modified by genetic test results. I treat the content of genetic test results as *positive* since they point to objective quantities of biological material. Genetic test notation represents these quantities. Racial labels, however, are *dialectic* since they are used to organize the positive terms that represent genetic material. While I do not engage the *ultimate* term in this project, I have explained that in my adaptation of the schema the *ultimate* term is white supremacy.

My interpretation of Burke's order of terms provides an opportunity to rethink how race is conceptualized in the face the genomic revolution. Reconsidering how race is understood is necessary given the capacity for genetic data to reconstitute biological rationales of difference. The distinction between the positive and dialectic in the terms for order, allows us to account for the

variance between the data that genomic researchers are able to produce and how this data is represented in the public domain by racial terminology. This distinction is necessary to understand the effect of genomic research on rhetorical race formulation. It is also important to make sense of how modified interpretations of race are publicly circulated. To this end I have proposed a palimpsest model that registers variations in the construction of race but also the ways in which these variations interact in circulation. As I have said earlier, the inclusion of genetic evidence in racial formulations is the most recent layer in the race palimpsest. It is a translucent layer through which earlier biological constructions of race and more recent social constructions of race appear conjoined.

My first case study, *Ethnically Ambiguous* follows the ancestry journey of seven BuzzFeed employees who learn of their genetic composition through a 23andMe ancestry test. This chapter considers the treatment of *ethnic ambiguity* and how it is resolved through rhetorics of genetic certainty. In this chapter, I note that racial identification is not internally generated but occurs in response to being hailed in the discursive space and, ultimately, conforms to accepted rules of racial categorization. The rhetoric of genetic certainty suggests that genetic markers correlate to racial categories, are able to quantify visually discernable combinations of ancestry and provide scientific evidence of group belonging. This case study also shows how genetic test results are read in the context of the existing racial hierarchy and how the premise of the 'one-drop-rule' is extended through the genomic data. Here positive terms are read through the dialectic lens.

My second case study examines a National Geographic text and is concerned with how geographic ancestry is interpreted as a race proxy and how challenges to racial purity are resolved. This case study is an example of the calculus of racial categorization and shows the alignment of the visual, genetic and geographic. It also demonstrated how challenges to the concept of racial purity are answered through the manipulation of images and the interpretation of geographic as proof of

race. The unique visual feature of this text also provided the opportunity to examine the ways in which racial categories influence the genomic research process and how the tenets of racialization are brought to bear on science. In this chapter I identify dual influence of race on genomics: its ability to orient inquiries into the nature of diversity toward the fulfillment of racial categories and its subsequent interpretation of genetic test results as evidence of race. Finally, this chapter showed how genomic data can be used to consolidate racial groupings instead of disbanding them.

My final case study examines the second season of the television series *Finding Your Roots*, hosted by Henry Louis Gates Jr. In that chapter I emphasize the role of recent history and historiographical anachronism in the reconciliation of ancestral actions and the test-takers identity. This chapter also consider the rhetoric of heritability and the suggestion that values and attitudes can be passed on through genetics. As in the previous case studies, this text demonstrates how the dialectic-positive relationship is negotiated in the public space. Moreover, it illustrates the palimpsestuous interposition of genetic data in the racial discourse, since, throughout this particular text, genetic genealogy is used to rationalize and contextualize racial belonging.

The cause of understanding the influence of genomics on the rhetorical construction of race is urgent. As I point out later in this chapter, genomic evidence is being interpolated into the race palimpsest at an exponential rate. Recreational ancestry testing and academic interest in the genetic roots of phenotype have set the stage for criminal justice interventions that rely on many of the problematic assumptions I have identified in this dissertation. In the next section, I briefly analyze a fourth text that further shows how the application of my theoretical model.

The Palimpsest in Process: Parabon Nanolabs Snapshot Technology

On Tuesday October 4, 2022, the Edmonton Police Department in Canada issued a press release bearing the composite image of a suspect of a 2019 sexual assault. Unlike ‘mugshots’

publicized by the Department this was the first to be rendered through DNA phenotyping (Snapshot). Edmonton police praised the technology that allowed them to generate an image of the attacker from a DNA sample left at the scene of the crime. The image was tweeted and later removed. The press release, however, remained on the police department website. It explains that “the service used in this case was DNA phenotyping, the process of predicting physical appearance and ancestry from unidentified DNA evidence. Law enforcement agencies use the company’s Snapshot DNA Phenotyping Service to narrow suspect lists and generate leads in criminal investigations.” Parabon Nanolabs (Parabon), the company that created the image calls Snapshot “a cutting-edge forensic DNA analysis service that provides a variety of tools for solving hard cases quickly.”⁴⁰⁰ Allegedly, it combines genetic genealogy which can identify a subject by searching for relatives in public databases, DNA kinship inference which suggests kinship between DNA samples to six degrees of relatedness, and DNA Phenotyping, which it claims can predict physical appearance and ancestry of an unknown person from their DNA.⁴⁰¹

The description of how *Snapshot* works that appears on the company’s website is disturbing. According to the website “by determining how genetic information translates into physical appearance, it is possible to “reverse-engineer” DNA into a physical profile. Snapshot reads tens of thousands of genetic variants (“genotypes”) from a DNA sample and uses this information to predict what an unknown person looks like.”⁴⁰² Parabon relies on “SNP technology to read the parts of the genome that actually code for the differences between people.”⁴⁰³ Throughout this project I’ve referred to the *race* term’s power to draw focus attention on phenotypical expressions of difference as the most effective way of organizing humanity. I have argued that it is not. Moreover, I

⁴⁰⁰ Parabon Nanolabs, “Snapshot Genetic Genealogy,” Parabon Nanolabs, 2022, <https://snapshot.parabon-nanolabs.com/intro>.

⁴⁰¹ Parabon Nanolabs.

⁴⁰² Parabon Nanolabs.

⁴⁰³ Parabon Nanolabs.

have argued that describing genomic science in racial dialectic terms further complicates and empowers the race palimpsest. Against this backdrop, Parabon's claim to be able to "code for the differences between people" is instructive. It limits the interpretation of diversity.

The company claims to be able to "translate" SNP information from a DNA sample to predict physical traits. Like 23andMe, Parabon gives the impression that not only are there direct correlations between specific genetic mutations and measurable phenotypical characteristics, but that these relationships are stable. While SNPs do "contribute to coding for certain characteristics, biogeographical ancestry is predicted based on, both the frequencies of biomarkers that are associated with certain geographic population groups, and some specific coding genes, e.g. for skin pigmentation (Halder et al. 2008; Phillips et al. 2007; Phillips 2015)," the role SNPs play in phenotypical presentation is not as well defined that the company might suggest.⁴⁰⁴ The scientific community's responses to Snapshot's 2015 launch have been critical. Among the concerns expressed was "the confident portrayal of the technology as being able to reconstruct faces from DNA (e.g., Pollack 2015), and discomfort about the lack of information on how Parabon's analysis software works."⁴⁰⁵ Schneider et al. compared Parabon's test system to similar DNA test systems in the field of biotechnology and noted that the DNA markers, statistical model and test reliability were all unknown. In their remarks they note, "test assay contains additional DNA markers for other purposes. No information available on DNA markers used, test accuracy, statistical model, forensic validation; no publications in scientific journals."⁴⁰⁶ Despite its public confidence, Parabon's *Snapshot*

⁴⁰⁴ Matthias Wienroth, "Socio-Technical Disagreements as Ethical Fora: Parabon NanoLab's Forensic DNA Snapshot™ Service at the Intersection of Discourses around Robust Science, Technology Validation, and Commerce," *BioSocieties* 15, no. 1 (March 2020): 34, <https://doi.org/10.1057/s41292-018-0138-8>.

⁴⁰⁵ Wienroth, 37.

⁴⁰⁶ Peter M. Schneider, Barbara Prainsack, and Manfred Kayser, "The Use of Forensic DNA Phenotyping in Predicting Appearance and Biogeographic Ancestry," *Deutsches Ärzteblatt International*, December 23, 2019, 875, <https://doi.org/10.3238/arztebl.2019.0873>.

technology functions in obscurity. Nonetheless, my focus here is not the shortcomings of the methodology but the masking of inconsistencies in the discursive space that is problematic.

The guesswork of *Snapshot's* frequency model is compounded by the *data mining* and *data modeling* steps of the company's process. In the first part, the company says it performs "large-scale statistical analysis on hundreds of thousands of individual SNPs and billions of SNP combinations to identify genetic markers that are associated with a trait." In other words, the existing data pool which my research has already established is biased, is tested against "measures of phenotype." Again, as my research shows, phenotypical attribution is neither objective nor scientific. The two premises of the first step in the process then create opportunities for racialized rhetoric to bias the process. The data modeling phase of the *Snapshot* method also uses "machine learning algorithms to combine the selected set of SNPs into a complex mathematical equation for the genetic architecture of the trait."⁴⁰⁷ The company assesses its accuracy by "making predictions on new subjects with known phenotypes ("out-of-sample predictions"). By comparing predicted versus actual phenotypes, Parabon scientists are able to calculate confidence statements about new predictions and, more importantly, exclude highly unlikely traits."⁴⁰⁸ The company is suggesting there are objective phenotypical representations that can be placed into corresponding geographical groups, against which their model can be tested.

The problem with the Snapshot method is rhetorical not scientific. Whatever the accuracy of the technology be, its outcomes are constitutive. Because the composites are intended as an investigative tool and not a means of identification (for now), they essentially generate suspect pools on the basis of loose indicators of race. In a 2015 interview, Parabon's Director of Bioinformatics, Ellen McRae Greytak, admitted that "our goal is not to produce a profile that is perfectly accurate

⁴⁰⁷ Parabon Nanolabs, "Snapshot Genetic Genealogy."

⁴⁰⁸ Parabon Nanolabs.

and there is only one person you've ever seen who could match that profile. Really our goal is to produce something that will look similar enough to a person that it will jog a memory and, at the same time, make it clear which people it is not."⁴⁰⁹ The combined lack of scientific specificity and surplus of discursive certainty makes *Snapshot* dangerous.

The *data modeling* phase of Parabon's process also raises questions about implicit bias in machine learning. While I am not able to address them fully here, it is important to note that recent research has cast doubt on the neutrality of algorithms.⁴¹⁰ Scientists worry that "the black-boxing of scientific practices in a package service does not permit users—such as laboratory scientists—to understand the mechanisms through which the analysis takes place. This means that information which would be used as basis for investigative interpretation and decision-making would have to be taken at face value."⁴¹¹ The problems with *Snapshot* then, is as much about transparency and regulation as it is about methodology.

In the absence of sufficient accountability regulation there has been resistance to the deployment of this technology and its application in the field of criminal justice. However, the extent to which discourses on race have been reverted to their biological essentialist roots is evident in the commentary. Jennifer Lynch, the Surveillance Litigation Director of the Electronic Frontier Foundation commented that "releasing one of these Parabon images to the public like the Edmonton Police did recently, is dangerous and irresponsible, especially when that image implicates

⁴⁰⁹ Francie Diep, "Modeling Suspects' Faces Using DNA From Crime Scenes," *Popular Science*, January 29, 2015, <https://www.popsci.com/new-service-reverse-engineers-faces-dna-samples-crime-scenes/>.

⁴¹⁰ Sendhil Mullainathan, "Biased Algorithms Are Easier to Fix Than Biased People," *The New York Times*, December 6, 2019; Jacqueline G. Cavazos et al., "Accuracy Comparison Across Face Recognition Algorithms: Where Are We on Measuring Race Bias?," *IEEE Transactions on Biometrics, Behavior, and Identity Science* 3, no. 1 (January 2021): 101–11, <https://doi.org/10.1109/TBIOM.2020.3027269>; Gina M. Vincent and Jodi L. Viljoen, "Racist Algorithms or Systemic Problems? Risk Assessments and Racial Disparities," *Criminal Justice and Behavior* 47, no. 12 (December 2020): 1576–84, <https://doi.org/10.1177/0093854820954501>; Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Cambridge: Harvard University Press, 2015).

⁴¹¹ Wienroth, "Socio-Technical Disagreements as Ethical Fora," 38.

a Black person and an immigrant.”⁴¹² Lynch’s response does not interrogate Parabon’s methodology or question the validity of a technology that claims to generate a racialized image from DNA. Instead, she expresses concern for marginalized communities that may be targeted using the service. Lynch is locating the potential for racial bias in the public domain instead of within the scientific discourse where it emerges. Again, from the perspective of this project the issue is not that Parabon’s work marginalizes communities but that it makes *marginalized communities*. The genomic perspective becomes biological proof of innate difference.

Even as the methodology of Parabon labs is suspiciously opaque, as of October 2022, the website also contained 59 testimonials from law enforcement professionals from around North America. Responses to the technology seem to take for granted that it is possible to accurately generate an image based on *phenotyping*. Captain Ted Bow of the King County Washington Sherriff’s Office says “It’s way better than a sketch. I think it gives you a much better ability to see what the person looks like.”⁴¹³ Major Pedro Abut, of Florida’s Hallandale Beach Police Department says, “what’s amazing is that instead of letters and numbers, it can turn DNA into a face.”⁴¹⁴ While Sergeant Tim Pinckney of the Arlington, Texas Police Department says “having the ability to predict the physical appearance and ancestry of an unknown suspect from a DNA source is an invaluable tool for investigators.”⁴¹⁵ Other testimonials seem to ignore the potential for such “technology” to be biased. Sergeant Ray Kelly of Alameda County Sheriff’s Office in California rejoices that “[Snapshot] allows us to eliminate populations that we don’t have to waste our energy on.”⁴¹⁶ Kelly

⁴¹² Chloe Xiang, “Police Are Using DNA to Generate 3D Images of Suspects They’ve Never Seen,” Vice, October 11, 2022, <https://www.vice.com/en/article/pkgma8/police-are-using-dna-to-generate-3d-images-of-suspects-theyve-never-seen>.

⁴¹³ Parabon Nanolabs, “Snapshot Testimonials,” Parabon Nanolabs, 2022, <https://snapshot.parabon-nanolabs.com/testimonials>.

⁴¹⁴ Parabon Nanolabs.

⁴¹⁵ Parabon Nanolabs.

⁴¹⁶ Parabon Nanolabs.

has already extrapolated from individuals to groups, pointing to Snapshot’s most dangerous feature, its capacity to serve as a tool, for *genetic stereotyping*. Whereas stereotypes have generally required visual cues for generalization, new genomic technologies are able to generalize from DNA.

Parabon Nanolabs is not a scientific outlier that can be addressed through regulation. This company and its work represent a trend in genomics that is mirrored in and supported by similar projects in recreational ancestry testing and academia. Genomic analysis platforms that use machine learning to compare SNP’s sample populations and test the results on “out-of-sample” cases are very similar to 23andMe’s “trait guesswork” that I bring attention to in my introduction. There are also academic equivalents to Parabon that are determined to show the relationship between genetics and appearance. Purdue University’s Walsh Labs is dedicated to performing “fundamental research in an effort to understand how and why we look the way we look.”⁴¹⁷ Its current projects include studies of quantitative pigment association and prediction - eye, hair and skin color and facial morphology association and prediction. As uncomfortable as it is to consider, research of this kind is increasingly common.

Whether they intend it or not, the scientists at Parabon and Walsh are the authors of the racial palimpsest’s newest layer. This can be attributed both to public interest in genomic potential to improve forensic analysis and to the migration of expertise rhetorics from the scientific to the public sphere. The scientists advancing *Snapshot’s* underlying reasoning are not confined to the laboratory setting. Parabon’s Chief Genetic Genealogist Cece Moore is something of a celebrity. Not only does she guide Henry Louis Gates Jr through his own genetic genealogy in Episode 10 of *FYR*, she has also appeared alongside other Parabon scientists on *ABC’s* television show *Genetic Detective*.⁴¹⁸ The

⁴¹⁷ Walsh Lab, “Overview of Our Research,” Walsh FDP Lab, 2022, <https://walshlab.sitehost.iu.edu/pages/research.html>; Parabon is one of two biotech companies recognized for this type of DNA forensic analysis. *Identitas*, a company with facilities in the United Kingdom and Canada also offers similar services.

⁴¹⁸ “Decoding Our Past.”

television channel website, encourages viewers to watch as “CeCe Moore uses her unique research skills to transform the face of crime solving.”⁴¹⁹ Advocates of this new direction in genomics not only influence rhetorics of race through their research but also through direct communication with the public.

A Burkean Analysis of *Snapshot*

The image published by the Edmonton Police is an excellent opportunity to demonstrate the effectiveness of my theoretical framework for analyzing the racialization of genomics. In what follows, I briefly illustrate my theoretical contribution to the field of rhetoric through a close reading of the image. I have argued that the challenge of the genomic revolution is in the movement of scientific discourse to the public sphere without new, adequate linguistic resources to frame the work that genomic testing does. I have theorized the current framing of racial categorization as a palimpsest that layers new perspectives over older ways of conceptualizing race instead of dispelling them altogether. In this project, I have highlighted how advances in genomic research have been superimposed over the narrative of race as a social construct. While social construction is the dominant perspective on race, dominance does not guarantee singularity. Social constructions, therefore, exist alongside the biological and not instead of it. While social constructionism currently speaks more loudly than biological essentialism, both perspectives maintain definitive categories of distinction based on visual markers. The next layer of this palimpsest, however, whispers the authority of science in the discursive’s subtle tone. To understand it, we must pay equal attention both to what it utters and how.

⁴¹⁹ ABC, “The Genetic Detective,” ABC Television, 2022, <https://abc.com/shows/the-genetic-detective>.

Snapshot Prediction Results
Phenotype Report
 Case #19038742

Contact: Edmonton Police Service
 780-423-4567

Sex: Male ♂

Age: Unknown
 (Shown at age 25)

Body Mass: Unknown
 (Shown at BMI 22)

Ancestry: East African

Region	Percent
Africa - East	50.43%
Africa - West	26.54%
Africa - South	20.87%

Skin Color 89.9
 NOT: Light Brown / Very Fair / Fair (99.4% confidence)
 Dark Brown / Brown (99.4% confidence)

Eye Color 96.6
 NOT: Blue / Green (99.99% confidence)
 Brown / Black (50.3% confidence)

Hair Color 86.4
 NOT: Blond / Brown (99.99% confidence)
 Black (99.99% confidence)

Freckles 6.6
 NOT: Few / Some / Many (97.8% confidence)
 Zero (97.6% confidence)

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Figure 5 - Screenshot of bulletin containing composite image of a suspect, published by the Edmonton Police Department.

The poster published by the Edmonton Police Department clearly depicts a *black* man (see Fig. 5) There are a number of textual elements that appear to substantiate the claim that this is a reliable image of the suspect and explain the relationship of the concepts I develop in this project. The case number “19038742” at the top right-hand corner of the bulletin creates the impression that this composite image is one of several either that Parabon has generated or that the Edmonton police have used. It is likely that it refers to something much more mundane. However, its presence

positions the text in a much larger framework of routine police work. The bulletin itself is also labeled as a ‘report’ which has more significance as an official document. It also suggests that this document is the final product of a procedure with well-defined steps. Together these characteristics suggest effort and order on the part of the police and Parabon Nanolabs.

One of the more interesting features of the ‘report’ is the demographic information offered under the categories “sex, age, height and ancestry.” While the reasoning is unclear, the image text confirms that the height and age of the suspect are unknown. However, Parabon Labs suggests that it is possible to not only know the facial features of the suspect based on his DNA but also to generate renderings of him at different ages and body masses. This is a peculiar turn since it relies on two distinct stages of conjecture. At the first, assumptions must be made about the morphology of a given geographical group based on biased samples. Secondly, a permutation of that morphology based on an estimate of age is generated. Much remains unanswered including how much DNA can tell us about exposure to the factors that accelerate or slow visible signs of aging or how these effects can be measured.

The treatment of ancestry in the text is also instructive. Given the limitations of DNA samples from the African continent I identify throughout the project, the report’s confidence levels are noteworthy. The reliance on opportunity samples significantly undermines the claim of percentage ancestry “when the baseline for that claim is based upon the transparent scaffolding of chance – not purposive sampling.”⁴²⁰ The categorization of the individual as East African also follows the formula I elaborate on in the *Ethnically Ambiguous* case study. Like 23andMe, Parabon identifies African ancestry regionally. As I have already explained, this is an inaccurate and dehumanizing move since it elides the complexity of the societies on the continent. The suspect is being constituted not as a citizen of a fixed nation state. Instead, he “belongs” to vast areas of the

⁴²⁰ Duster, “Ancestry Testing and DNA: Uses, Limits – and Caveat Emptor1,” 64.

African continent. This framing both works to dehumanize him and to include anyone else with ancestry from the region.

This formulation brings us to the relational constitution of the subject's race. Having established that the subject is from Africa and published an image to support that finding, Parabon then constitutes his identity in relation to the other racial constitutions that he is *not*. The *sub-stance* of the individual is extrinsic. This is shown in the *skin color, eye color and hair color* scales at the bottom of the image. Having determined genetic ancestry from the African continent, which ostensibly leads to presentation with a darker skin tone, the text presents this information on a visual scale. The words superimposed on the scale do not indicate where the subject resides, but the negative space around it. The implicit rationale offered by Parabon is that the best definition of what the subject *is*, is a demarcation of what he is *not*. Burke deals with this kind of relational constitution in his *Grammar of Motives*. He relies on Spinoza's paradox of contextual definition *omnis determination est negatio* or "all determination is negation" to show that no single thing can be conceived of by itself.⁴²¹ Instead, any definition (a composite that includes the prefix *de-* to take from and the verb *finire* – to bound or to limit) exists in opposition to the universe it inhabits. Defining a mode of existence requires the negation of other modes of being. Defining or bounding a racial category, then, prompt us to treat the exclusivity of the category as evidence of its existence. From a Burkean perspective the formulation of the Parabon suspect's race, *requires* his exclusion from other racial categories.

The scale and its labels are also quite strange. The subject registers at 89.9% but there is no indication of what this percentage means. While presumably, 89.9% is not the end of scale since it is a percentage the choice is made to label the subject as "dark brown/brown." Without clarity on the boundary of the proposed color categories and how these categories align with the percentages, we are left to question why the subject is both "dark brown/brown" and not "brown/light brown." I

⁴²¹ Burke, *A Grammar of Motives*, 25.

suggest that this is a scientific representation of the *one-drop-rule*, that elides the complexity of the scale's darker end. It is compounded by the orientation of the scale itself, that appears to begin at traits associated with *whiteness* and move toward traits associated with *blackness*. This curious presentation of the findings serves fix the subject in an expanded *black* category that is determine but the fact that it is not "light brown, fair and very fair."⁴²² It also visualizes the demarcation line between this visually *black* person and the rest of the scale and gathers all others with African ancestry behind this line. Because this person's *race* and their criminal potential are the only two "known" entities, this line also represents the separation between the criminal and everyone else.

My third case study considers the persistence of the unscientific notion that ancestry is a conduit for intangible attributes such as talents and opinions. While the scope of this project does not permit me to fully explain this phenomenon, I have shown that invoking the lexical fields of ancestry and genetics often trigger the public to assume that ancestral ties are in some way able to explain individual motivation. The rhetorical constitution of the *black criminal* in the text also serves a similar function. The relational *nots* that comprise the composite image are also attitudinal *nots*. By the logic exemplified in the FYR case study, descent is not limited to phenotype. FYR guests were anxious to assimilate their ancestor's successes and strengths into their constructs of self, they were unduly concerned with the role sin might play in their bloodlines. The joining of *black* phenotype and criminality in the text also works to associate others with similar phenotypical presentations with

⁴²² Mark Simcoe et al., "Genome-Wide Association Study in Almost 195,000 Individuals Identifies 50 Previously Unidentified Genetic Loci for Eye Color," *Science Advances* 7, no. 11 (March 12, 2021): 2, <https://doi.org/10.1126/sciadv.abd1239>; I have chosen to focus on the skin color scale in the text. However, it is worth noting how eye color is used. Given the vast range of human eye color presentations it is impossible to know what the text even means by the categories offered. Moreover, the largest genome wide association study on eye color was based on a sample limited to "157,485 individuals of European ancestry in the discovery stage and an additional 35,501 ancestral European individuals in the replication stage, as well as 1636 Asians (of Han Chinese and Indian ancestry) additionally used for replication purposes, in total 194,622 individuals of different ancestries." Again, the study of phenotypical expression of the genome is deeply flawed by population bias, especially with respect of the prediction of African ancestry.

similar behavior. Rhetorics of heritability in the discourse support the idea that criminal tendencies are innate. By adding genetic evidence to the racial palimpsest, Parabon's promise to "reverse-engineer" DNA to phenotype is also a promise to extrapolate from the individual to the group.

The racial calculus that I refer to in all the case studies is also evident in this text. Together, the numbers presented add up to 97.84%. Even in the logical framework, there is a 2.16% presence of not-African DNA that is not mentioned, its absence is unexplained and, apparently, the effect of these percentages on this individuals' overall appearance is negligible. The exclusion of this data leads to a completely African ancestry profile and amplifies the image depiction of a *black* man. By Henry Louis Gates' account of heredity, however, the subject should have some *other* in him. Like Courtney though, the percentages fix the subject squarely in the realm of *blackness*. It is the *NatGeo* case study, however, that is the most relevant to the discussion of the text since the operation of visuality is the same. The magazine's uses a gallery of participants with a shared *genetic profile* to argue for the visual nature of ancestry. *Snapshot* goes a step further by *proving* that race can be seen. Even though it is a more nuanced example, given that *NatGeo*'s constructed group remains unnamed, the criteria for the formation of a genetically based group that presents similarly is replicated. The Edmonton Police Department's suspect is one of larger group that can be identified by their DNA and their faces. While he may not be pictured alongside the rest, I suspect that the public will believe that they all look alike.

Limitations

This project faced a number of linguistic and rhetorical limitations. As I suggested in the *conceptual clarification* section of my introduction the aim of this project is to contribute to the discussion of race. However, since I treat the already rhetorically burdened language *race* as problematic, it was increasingly difficult to make my argument without reinforcing a discursive

hegemony. As such, this project would have been significantly simplified had more accurate terms for the palimpsest been available.

Another difficulty was the rate at which genomic research and the production of genomic data has proceeded in recent years. As an example, since taking my own ancestry test in November 2021, my genetic readout has been altered significantly. The conclusions I drew then and those that I would draw with the new results are very different. Due to the fact that the population against which tests are compared is increasing exponentially, keeping abreast of new data ultimately results in perspective shifts. This is also true of genomic research at large, the permutations of which far exceed efforts to examine it critically. This is perhaps one of the most urgent calls for further work since understanding the role of genomics in racial formation will require critically oriented multidisciplinary interventions.

This project was also limited because it does not include the work of the third tier of Burke's terms for order. Even as I conceded that white supremacist terms influence my case studies, the role of the ultimate term was not examined as fully as it could have been in a larger project. I hope to explore the interaction of the positive and dialectic through the lens of the ultimate term in future studies. The shift in focus to the ultimate term would yield research that considers the role of institutional factors in the development of the palimpsest. It would also help to better define strategies for its disruption.

Conclusion

The available rhetorical and linguistic resources are insufficient to meet the challenges presented by the genetic ancestry and biotechnology industries. The dialectic terms that define the race concept are already bucking under the pressure of scientific advancement. The dearth of language to discuss diversity, ultimately ensures that the baggage of biological race, and its offspring

racism, is dragged along with new efforts to understand what makes individual human beings different. Already the fiction of racial purity has contaminated the genomic heuristic. Defaulting to visual cues for biological inherency has ensured that genomic research is always, already, and potentially evermore, relegated to performing an evidentiary function in the racial discourse instead of offering a counter argument. The challenges of the genomic era emanate from data's subservience to the words that describe it, and in this respect the future is grim. Without definitive modifications to the framework we use to interpret diversity, we will inevitably see the relegitimization of eugenics and other forms of biological segregation. The charge then, must be to harness rhetoric's unique ability to change our collective point of view from complacency to vigilance. The palimpsests genomic layer has been cast, but it is not yet set. I believe there is time before it will be impossible to disrupt.

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