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JEWISH RACIALIZATION, THE “JEWISH GENE,” AND THE PERPETUATION OF
ASHKENORMATIVITY IN DIRECT-TO-CONSUMER GENETIC ANCESTRY TESTING
IN THE UNITED STATES

by

SABINA ALI

Under the Direction of Kathryn McClymond, PhD

ABSTRACT

Jewish identity has been defined and redefined, negotiated and renegotiated, among Jews and non-Jews in various parts of the world. The tensions around the ongoing question of “Who is a Jew?” arise from the fact that Jewish identity encompasses numerous combinations of religion, commitment, nation, kinship, peoplehood, culture, ethnicity, and memory. This thesis will examine the way Jewishness has been and continues to be racialized in the United States by Jews and non-Jews. Specifically, I look at how direct-to-consumer genetic ancestry testing companies, such as 23andMe and AncestryDNA, present a racialized view of Jewish identity to consumers and perpetuate the social construction of a Jewish race by claiming detectable “Jewish genes” in their ancestry reports. Additionally, since these companies often provide reports on European, or Ashkenazi, Jewish ancestry, excluding non-Ashkenazi Jewish ancestries, they contribute to an Ashkenormative narrative of Jewish history, heritage, and identity.

INDEX WORDS: Genetic ancestry testing, Jewish identity, Ashkenormativity, religion and race, Jewish racialization, Ashkenazi Jewish, Jews of color

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Arts
in the College of Arts and Sciences
Georgia State University

2020

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DEDICATION

I would like to dedicate my thesis to my maternal grandparents, Sara and Asif, who, by their example, have taught me to question every norm, boundary, and category.

ACKNOWLEDGEMENTS

I would like to thank my Thesis Director, Dr. Kathryn McClymond, for working with me every single week for the past year on my thesis. Her insight, questions, and feedback have pushed me to dig deeper, think more critically, and overcome challenges and roadblocks. More so, Dr. McClymond's unwavering kindness, patience, and steadfastness has given me the space to thrive and be excited about my work. I also thank Dr. Molly Bassett for always giving the best advice and guidance and encouraging a spirit of innovation in my work and in our field. She has been incredibly gracious with her time and her constant willingness to think through daunting questions and possibilities as well as to trust me to do the work. I also wish to thank Dr. Monique Moultrie for always challenging me to be a better writer, find my voice as a scholar of religion, and explore topics that are often seen as subversive. She has taught me not to shy away from how the personal informs and illuminates research and scholarship. I also thank Dr. Liana Artinian for taking the time to read through the science portions of my thesis, ensuring that it is sound, and giving me additional recourses to bolster my credibility in a field I am not trained in. Moreover, I thank Dr. Artinian for her hospitality and reminder of how meaningful affinity spaces can be for scholars of a shared cultural background. Last, but not least, I would like to thank my spouse and life partner, Clint, who has always encouraged and supported me in everything, read every paper I have ever written, and made our family a safe space.

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INTRODUCTION

Jewish identity has been defined and redefined, negotiated and renegotiated, among Jews and non-Jews in various parts of the world. The tensions around the ongoing question of “Who is a Jew?” arise from the fact that Jewish identity encompasses numerous combinations of religion, commitment, nation, kinship, peoplehood, culture, ethnicity, and memory. This thesis will examine the way Jewishness has been and continues to be racialized in the United States by Jews and non-Jews. Specifically, I look at how direct-to-consumer genetic ancestry testing companies, such as 23andMe and AncestryDNA, present a racialized view of Jewish identity to consumers and perpetuate the social construction of a Jewish race by claiming detectable “Jewish genes” in their ancestry reports. Additionally, since these companies often provide reports on European, or Ashkenazi, Jewish ancestry, excluding non-Ashkenazi Jewish ancestries, they contribute to an Ashkenormative narrative of Jewish history, heritage, and identity. Ashkenormativity is the dominance of Ashkenazi Jewish culture, heritage, and experiences in representing *all* Jewish culture, heritage, and experiences and marginalizing other forms of Jewishness, especially other Jewish heritages and components of Jewish identity.¹

In my work, I bring together several conversation partners from different disciplines to better understand how this religious community has become racialized and how religion is created and constructed through various streams of influence. I begin my thesis with a brief overview of Jewish history in the United States in order to explain the dominance of Ashkenazi

¹ Ashkenormativity is the naming of a phenomenon that exists in culture and has been observed by or represents the experience of (mostly) non-Ashkenazi Jews in the United States. This definition is a compilation of the way this term specifically or this phenomenon generally is being used by everyday people. Additionally, in *The Colors of Jews: Radical Politics and Radical Diasporism*, Melanie Kaye/Kantrowitz uses the term “Ashkenazism” to describe the same idea (Kaye/Kantrowitz, 89-99).

Jewish identity, culture, and population. I then engage contemporary research on the construction of racial identity in the United States, the history of Jewish racialization, and the role of racial science and anthropological genetics in reinforcing existing racial categories. Finally, I examine my primary source materials: direct-to-consumer genetic ancestry testing companies. I focus on the two most (currently) popular companies with the largest databases, 23andMe and AncestryDNA. After providing a brief explanation of how direct-to-consumer genetic ancestry testing works, including how ancestry categories are determined and communicated to the consumer, I examine how 23andMe and AncestryDNA categorize and define Jewishness and how Jewish identity is presented to consumers. My thesis exposes how dominant or folk categories and narratives of Jewishness — specifically those of Ashkenazi Jewishness in the United States — are reproduced and reinforced in the mainstream consciousness by direct-to-consumer genetic ancestry tests.

This work could continue in various directions beyond the scope of my thesis. For example, while I examine the way direct-to-consumer genetic ancestry tests present Jewish identity, this work could lead to a study on the way Jewish and non-Jewish consumers react to and interact with their genetic ancestry test results and how these test results impact identity constructions. Additionally, while I focus on the history of race and Jewish identity in the United States, another study could broaden the scope and investigate how these tests operate to inform or reinforce Jewish identities outside of the United States. While these opportunities and possible studies are beyond the scope of my thesis, my work will contribute to these conversations in my analysis below.

JEWISH HISTORY IN THE UNITED STATES

Since the colonial period, Jews have continuously negotiated the boundaries of Jewish identity, questions of authority and leadership in Jewish communities and in individual lives, responses to an ever-changing American culture, and endeavors for unity among Jews of various movements and wings of Judaism.² Moreover, many American Jews have navigated their often monolithic image in the eyes of the Protestant majority, feeling the need to prove their assimilability and Americanness. Although it is beyond the scope of this paper to outline the entire history of Jews in the United States, I will briefly highlight moments in the dominant meta-narrative of American Jewish history to provide background for the demographic and cultural dominance of Ashkenazi Jews in the United States. This historical background is important to my argument because it will provide the context of American Judaism in which popular genetic ancestry testing companies are operating.³

Jews came to the United States in different moments and waves and for different reasons and motivations. Since the colonial period when the first Jews arrived on the shores of the Americas to the present day, Jews represented a wide spectrum of religiosity and devotion to Judaism and its various points of identity. In each time period, Judaism has changed and adapted, assimilating and resisting, while remaining internally diverse, multifaceted, and deeply contextual. In the colonial period, the majority of the first Jewish settlers were of Sephardic background who were escaping persecution in the Iberian Peninsula.⁴ Similar to many early

² Throughout this paper, I will be using the term “American” to mean the United States rather than the Americas.

³ This does not necessarily speak to whether or not genetic ancestry testing companies are aware of or engage with the historical and cultural contexts and conversations around Jewish identity when they define Jewishness.

⁴ Lauren B. Strauss, “Judaism: Jewish Culture,” in *Encyclopedia of Religion in America*, vol. 2, eds. Charles H. Lippy and Peter W. Williams, 1120-1125 (Washington, DC: CQ Press, 2010),

settlers, Jews of the colonial period prioritized economic and civil rights over religion, maintaining an identity around peoplehood, heritage, and tradition over religious observance.⁵ With the formal establishment of a new nation, Jews were as influenced as the Protestant majority by values of “religious freedom,” “church-state separation,” “denominationalism,” “voluntaryism,” and “patriotism.”⁶ Jewish communities and individuals navigated assimilation and the incorporation of American values into the spectrum of Jewish identities. However, what was evident is that a distinct American Judaism was emerging, “diverse and pluralistic,” shaped by American religious values of choice and autonomy.⁷

Between 1820 and 1840, around 250,000 Jews immigrated to the United States from Central Europe, changing the religious landscape of American Judaism.⁸ Jews from Germany, Austria, and Poland were motivated to immigrate because of anti-Semitic persecution and America’s reputation for freedom and prosperity.⁹ These Central European Jews began to establish networks and mechanisms, such as the Jewish press and the Jewish Publication Society, “to reinforce [their] cultural identity while providing a conduit to American society... a model that has lasted into the present day.”¹⁰ Over time, these organic American Jewish structures turned into institutions and became a means for large numbers of Jews to express their identities to themselves and to a non-Jewish American society and, consequently, have those identities

1121, *Gale Virtual Reference Library*, accessed December 3, 2018, <http://link.galegroup.com.ezproxy.gsu.edu/apps/doc/CX1725800175/GVRL?u=atla29738&sid=GVRL&xid=d8b51241>.

⁵ Jonathan D. Sarna, *American Judaism: A History* (New Haven and London: Yale University Press, 2004), 3, 5, 25, 29.

⁶ Sarna, 41.

⁷ Sarna, 59-60.

⁸ Strauss, 1121.

⁹ Sarna, 63; Strauss, 1121.

¹⁰ Strauss, 1121.

reflected back to them and to ongoing generations. Additionally, similar to many other minority groups, many American Jews in this time period exhibited great concern over the future of Jewish identity in a country where they could more easily intermarry, move to a different coast, and choose to be “unaffiliated” with a synagogue community.¹¹ Despite internal diversity and ongoing tension to establish public markers or pipelines for Jewish identity, American Judaism began to “develop a series of powerful unifying symbols and markers” to link Jews together and distinguish themselves from the Protestant majority.¹²

The largest wave of Jewish immigration to the United States occurred between 1881 and 1914.¹³ Around two million Eastern European Jews from Russia and the Austro-Hungarian Empire, “approximately 20 percent of the world’s Jewish population in 1900,” sought an escape from political and economic hardship and were attracted by “tales of wondrous opportunity in America and offers of cut-rate tickets from steamship companies plying the Atlantic.”¹⁴ Dominating the Jewish demographic landscape in the United States, European Jews created an “identity and cultural legacy” of the Ashkenazi Jewish experience.¹⁵ Jewishness was characterized by “common denominators” that all Jews, despite diversity since the colonial period, supposedly shared, including the Yiddish language, life cycle rituals, important holidays and “rhythms of the Jewish calendar,” and memories of persecution.¹⁶ Slowly, old European-based differences began to fade away as American Jews united “into a more cohesive religious community.”¹⁷

¹¹ Strauss, 1121; Sarna, 73-74.

¹² Sarna, 105-108.

¹³ Sarna, 152; Strauss, 1121.

¹⁴ Sarna, 152; Strauss, 1121.

¹⁵ Strauss, 1121.

¹⁶ Sarna, 166-174.

¹⁷ Sarna, 177.

In addition to the fact that about eighty-five percent of American Jews were now of Eastern European, or Ashkenazi, ancestry, clearly dominating the American Jewish landscape by population size, Ashkenazi Jews were highly influential in American culture in the twentieth and early twenty-first centuries by significantly contributing to the creative industry and popular culture.¹⁸ Their “involvement in and influence on American society has been evidenced through such creative outlets as Tin Pan Alley and vaudeville, the birth and development of the American film industry, the fine arts and comics industries, television, Broadway musicals, photography, the folk revival and other popular music, and comedy.”¹⁹ Additionally, many nonreligious aspects of Ashkenazi Jewish culture, such as “Yiddish words, outsider humor, and images of food and overweening parents,” have also become incorporated into American life.²⁰ However, the Ashkenazi dominant majority did not represent the entirety of American Jews. In various moments of the twentieth century, thousands of Jews from the Arabian Peninsula, “North Africa, Greece, the Ottoman Empire, and areas of the Balkans” immigrated to the United States.²¹ For example, this “Sephardi-designated population” of Jewish immigrants from regions other than western Europe were estimated to be around ten thousand by 1913 and seventy-five thousand by 1934.²² Additionally, Jews from Egypt, Lebanon, Syria, Iran, and other Muslim-majority nations immigrated to the United States largely as a response to the creation of the state of Israel and the hostilities that followed.²³ These Jews of West Asian, Central Asian, and North African origins

¹⁸ Strauss, 1125.

¹⁹ Sarna, 207; Strauss, 1124.

²⁰ Strauss, 1124.

²¹ Strauss, 1122.

²² Jane Gerber, “Sephardic and Syrian Immigration to America: Acculturation and Communal Preservation,” in *Contemporary Sephardic Identity in the Americas: An Interdisciplinary Approach*, eds. Margalit Bejarano and Edna Aizenberg, *Modern Jewish History* (Syracuse, NY: Syracuse University Press, 2012), 42, accessed September 20, 2019, ProQuest Ebook Central.

²³ Strauss, 1122.

have their own histories of acclimation to American life and are often quite distinct from “the majority Ashkenazi culture of American Jewry.”²⁴

RACIALIZATION OF JEWISHNESS IN THE UNITED STATES

Nevertheless, Ashkenazi Jewishness has dominated the narrative of what it means to be a Jew in America. This uniquely American Jewishness has often been characterized by whiteness and assimilability on the one hand and otherness and a distinct group identity on the other. Significantly, racialization and other forms of group distinction happens differently across the world. It is imperative, then, to understand the role of Jewish racialization, the whiteness and otherness of American Jews, within the context of the history of ideas about race in the United States as well as the role of racial science and anthropological genetics in reinforcing prevailing racial categories.

For the purpose of this conversation and building on the work of other scholars and critical race theorists, I define race in its contemporary American context as the categorical grouping of humans based on socially constructed ideas about inherited, phenotypic traits that change and evolve to “respond to the interests of elite whites.”²⁵ This conception of race emerged from the age of European colonialism and imperialism and the Atlantic slave trade.²⁶ Certainly, humans have always found ways to distinguish themselves from one another and highlight their own group’s superiority over others. In that sense, ideas around human differences, especially in terms of religions, customs, and cultures, have always been imbedded

²⁴ Strauss, 1123.

²⁵ Monique Moultrie, “Critical Race Theory,” in *Religion: Embodied Religion*, ed. Kent L. Brintnall, vii-ix, Macmillan Interdisciplinary Handbooks (Farmington Hills, MI: Gale, 2016), 344, *Gale eBooks*, accessed January 19, 2020, <https://link.gale.com/apps/doc/CX3645400032/GVRL?u=atla29738&sid=GVRL&xid=6bb9c166>

²⁶ Dorothy Roberts, *Fatal Invention: How Science, Politics, and Big Business Re-create Race in the Twenty-First Century* (New York and London: The New Press, 2011), 6-7.

in human history. However, as much as human groups have called each other savages, barbarians, infidels, heathens, and the like, differences among people were not understood as something inherently and innately subhuman. Early classification schemes did not link phenotypic difference with permanent, inferior qualities that would later develop out of European colonialism and the Atlantic slave trade beginning in the fifteenth and sixteenth centuries.²⁷ For example, “the imposition of permanent slavery on [captured Africans] was not the result of a single, abrupt decision” in the English colonies, but a gradual institutionalization of laws and regulations that “reduced the [enslaved person], in the eyes of society and law, from a human being to a piece of chattel property.”²⁸ What gave rise to ideas about race as we know it today emerged from a combination of existing folk ideas about human differences, political and economic contexts of the Americas, and the emergence of science and its perception as a strictly empirical and objective epistemology.²⁹

By the time the English began to colonize North America, they had already developed extreme ethnocentric ideas of their superiority over other European and non-European people, deeming them as uncivilized and unchristian savages, which justified their brutal conquest and enslavement of non-English peoples.³⁰ In the specific context of the developing English colonies, it became increasingly urgent to supply the growing plantation system with skilled labor. Captured Africans soon became the preferred enslaved people primarily due to their vulnerability on a new continent, immunity to Old World diseases, visibility in terms of skin color, and

²⁷ Roberts, 6-7; Audrey Smedley and Brian D. Smedley, *Race in North America: Origin and Evolution of a Worldview* (Boulder, CO: Routledge, 2011), 102-105.

²⁸ Smedley and Smedley, 101-102.

²⁹ Smedley and Smedley, 214.

³⁰ Smedley and Smedley, 206.

immense knowledge and experience with agriculture.³¹ Initially, the leading justifications for the enslavement of Africans “rested on the same issues of religion and ‘savagery’ that [the English colonists] had applied to the Irish and the Indians.”³² However, before notions of race were fully articulated, the English began to associate darker skin with “savagery and heathenism and all the other negative characteristics” that were deemed “intrinsic and terminal.”³³ The need for cheap labor and permanent and inherited servitude demanded that physical differences reflected something deeper. By the end of the seventeenth century, social meanings were imposed on phenotypic differences, dividing the laboring classes and inflicting a subhuman status on Africans to justify chattel slavery.³⁴

From its inception and throughout the history of the United States, race has been deeply rooted in the politics and economics of colonialism and slavery and has been “manufactured by law” and “codified into the legal framework” of American society to differentiate enslaver and enslaved, those with power and privilege and those without.³⁵ As ideas about race emerged around the social meanings of phenotypic differences, diverse distinctions among ethnic groups of the African and European continents, “*who had never before perceived that they had anything in common,*” were erased to uphold a politically charged system of categories that has relied on “invented biological demarcations.”³⁶ Although this invention and homogenization of whiteness and blackness, buttressed by laws and, later, race science, has shifted and changed in meaning throughout American history, it has nonetheless persisted as the dominant social and political

³¹ Smedley and Smedley, 106-112.

³² Smedley and Smedley, 113.

³³ Smedley and Smedley, 114.

³⁴ Smedley and Smedley, 115.

³⁵ Roberts, 9; Smedley and Smedley, 97.

³⁶ Smedley and Smedley, 115; Roberts, 4.

system with determinable “consequences for people’s health, wealth, social status, reputation, and opportunities in life.”³⁷

American Jewishness, characterized by whiteness and assimilability, emerged in this dichotomously racialized context of whiteness and blackness. In *How Jews Became White Folks and What That Says About Race in America*, Karen Brodtkin, a sociocultural anthropologist who studies social movements and race in contemporary North American cultures, argues that prior to the great waves of immigration from southern and eastern Europe in the early nineteenth century, whiteness was generally not contested among European groups, including Jews.³⁸ Since Jews were a small minority until the 1890s that “acculturated quickly” and weren’t seen as a threat “to the established racial order,” particularly the metanarrative of whiteness and blackness, they were “overwhelmingly seen as white” by the non-Jewish American society.³⁹ Brodtkin argues that by the 1880s, however, intrawhite racialization and the concept of “real” Americanness as “more familiar northwestern European culture” as opposed to a “‘less familiar’ southern and eastern European set of cultures” emerged as the dominant response of native-born whites to the great influx of immigrants.⁴⁰ “Real” Americanness—real whiteness—was perceived as rooted in Nordic or Anglo-Saxon ancestry, superior to other European groups in addition to non-European ones.⁴¹

³⁷ Roberts, 5.

³⁸ Karen Brodtkin, *How Jews Became White Folks and What That Says About Race in America* (New Brunswick: Rutgers University Press, 1998), 53-54.

³⁹ Eric L. Goldstein, *The Price of Whiteness: Jews, Race, and American Identity* (Princeton: Princeton University Press, 2006), 17, 18, 51.

⁴⁰ Brodtkin, 54.

⁴¹ Brodtkin, 25, 27.

Furthermore, Brodtkin demonstrates that intrawhite racialization was also largely determined by “the performance of work.”⁴² Intrawhite segregation characterized the American workforce before World War II as “dirty jobs,” despite being vital to the economy of the country, were largely performed by non-western Europeans.⁴³ These distinctions were reflected in the composition of the upper and lower classes, upheld by institutionalized exclusion techniques that prevented non-western European whites, especially non-Protestants and Jews, from certain skilled professions, educational opportunities, government aid programs, and, consequently, upward mobility.⁴⁴

However, this changed after World War II with “the decline of systematic, public, anti-Euro racism and anti-Semitism.”⁴⁵ As intrawhite racism fell “out of fashion” and the notion of whiteness expanded to include southern and eastern Europeans, including European Jews, the economic climate of prosperity in the years after the war provided “ethnic” Europeans with class mobility that was unavailable to them before.⁴⁶ In fact, it was this economic opportunity for upward mobility into the middle class, particularly with the assistance of the government, that, according to Brodtkin, made the “whitening process” truly possible.⁴⁷ As governmental aid programs, such as the GI Bill, disproportionately helped white males and as government-sanctioned practices, such as systemic redlining, segregation, and urban renewal, reinforced racial inequality, the economic gains of newly sanctioned whites reinforced prevailing ideas about race.⁴⁸

⁴² Brodtkin, 55.

⁴³ Brodtkin, 56-58.

⁴⁴ Brodtkin, 27, 28, 55.

⁴⁵ Brodtkin, 34-35.

⁴⁶ Brodtkin, 36, 50.

⁴⁷ Brodtkin, 37.

⁴⁸ Brodtkin, 34-35, 38, 51.

At the same time, American Jews were not passive in this whitening process. In *The Price of Whiteness: Jews, Race, and American Identity*, Eric L. Goldstein, a historian of American and modern Jewish history and culture, argues that the whitening of American Jews was a contentious process for both Jews and non-Jews. On the one hand, the whiteness of Jews allowed them “to become one of the most successful American ethnic groups” and served the needs of native-born whites “bent on preserving a stable and optimistic vision of their national culture” within a dichotomous racial paradigm.⁴⁹ On the other hand, becoming part of the white majority “made it exceedingly difficult for Jews to assert a minority consciousness in American society” and conflicted with “central aspects of Jewish identity,” particularly their self-definition of “apartness” that was often communicated in racial terms.⁵⁰ Many American Jews used racial language over the course of American history in an attempt to clarify boundaries and, significantly, to allow “those who had given up affiliation with the Jewish community to retain a sense of identity as Jews.”⁵¹ Therefore, American Jews had to negotiate the consequences of either becoming white and forfeiting a certain visibility and distinction or remaining separate and becoming linked with “America’s more stable ‘other,’ the African American.”⁵²

RACE SCIENCE AND ANTHROPOLOGICAL GENETICS

Despite the instability and fragility of whiteness, which “was constantly informed and reshaped by other competing identities,” economics, politics, and laws upheld prevailing ideas about human differences.⁵³ Soon, race science began to play an integral role in reinforcing common or folk ideas about race. With the rise of science in the eighteenth century, taxonomic

⁴⁹ Goldstein, 5.

⁵⁰ Goldstein, 1, 3, 6.

⁵¹ Goldstein, 1, 3, 6.

⁵² Goldstein, 22.

⁵³ Goldstein, 4.

and categorical methods for classifying the world extended to human beings and reflected ethnocentric and subjective folk ideas about non-European peoples.⁵⁴ Eighteenth century classification had a long-lasting impact on the development of racial science, including ideas about the “permanence and rigidity” of human differences, subjective hierarchies of “inferior qualities ascribed to non-Europeans,” and, most significantly, the aura of “scientific sanction and scholarly credibility for prevailing popular images and stereotypes of non-Europeans.”⁵⁵ Ideas about biological human differences continued to evolve as nineteenth century science became saturated with attempts to provide material proof that human differences reflected an innate inferiority of non-European races.⁵⁶ These scientific assertions about racial hierarchies not only buttressed folk ideas about human differences, but also informed the logic behind discriminatory public policies, laws, and practices.⁵⁷

Racial science in the late nineteenth and early twentieth centuries relied heavily on intelligence testing and early genetics, giving rise to the eugenics movement.⁵⁸ This biological and hereditary understanding of differences in human behavior reinforced racial ideology and white supremacy already present in the aforementioned political and economic contexts.⁵⁹ By the mid-twentieth century, “a new genetic conception of race” began to develop with the identification of “the structure of genetic material (DNA) in the cell nucleus” and scientific ideas about racial differences evident “in the relative frequencies of hereditary traits found in all populations.”⁶⁰ However, research in population genetics yielded results that undermined ideas

⁵⁴ Smedley and Smedley, 217-218, 221.

⁵⁵ Smedley and Smedley, 220, 222-224.

⁵⁶ Smedley and Smedley, 230, 247-248.

⁵⁷ Smedley and Smedley, 247.

⁵⁸ Smedley and Smedley, 264, 274, 280-281.

⁵⁹ Smedley and Smedley, 282.

⁶⁰ Smedley and Smedley, 297.

of static and fixed racial categories and revealed, over and over, that population groups were “episodes in the evolutionary process” and are “dynamic and changeable.”⁶¹ Moreover, scientists had to grapple with the questions of what constitutes a population group and “which traits are taxonomically relevant.”⁶² In other words, they had to consider how much endogamy must be maintained within a population group for it to be considered distinct as well as how people should be grouped on the basis of complex traits that are “determined by more than a single gene” and vary greatly within presumed population groups.⁶³

As racial science, growing in authority, and the emerging field of genetics reinforced existing racial paradigms and compounded economic and social tensions around the “Jewish race,” anti-Semitism in Europe and the United States surged in the late nineteenth and early twentieth centuries.⁶⁴ One of the responses from Jewish communities in Europe to anti-Semitism was the work of Jewish scientists (that is, scientists who were Jewish) to study “themselves” in biological terms.⁶⁵ However, instead of challenging the eugenic paradigm and the idea “that Jews were a degenerate and a degenerating race,” some Jews utilized it as a political tool to argue for Zionism.⁶⁶ Many Jewish scientists of the era argued that “Jewish degeneracy” was a non-permanent product “of Jewish displacement from their homeland and of the social and economic conditions in which they lived.”⁶⁷ Therefore, returning to Palestine “would produce Jewish regeneration.”⁶⁸ However, not all European Jews in that time period agreed with the racial and

⁶¹ Smedley and Smedley, 298; Roberts, 53.

⁶² Smedley and Smedley, 298; Roberts, 51.

⁶³ Smedley and Smedley, 298; Roberts, 51.

⁶⁴ Goldstein, 167-168.

⁶⁵ Nadia Abu El-Haj, *The Genealogical Science: The Search for Jewish Origins and the Politics of Epistemology* (Chicago and London: The University of Chicago Press, 2012), 68.

⁶⁶ El-Haj, 66, 68.

⁶⁷ El-Haj, 78.

⁶⁸ El-Haj, 80.

Zionist language of Jewish identity. Some argued that “Jews are not a race” and that the “only thing [Jews] have in common is their religion.”⁶⁹ People opposed to biological research of Jewish origins advocated for local assimilation and, particularly in the United States, “the Jewish community distanced themselves from that prior embrace of Jewish racial difference *in order to protect their standing as white*.”⁷⁰ Many American Jews in this period continued to navigate their status as white, which granted certain rights and privileges, as well as their “cherished ‘racial affinities’” and “claim of ‘Semitic’ origin.”⁷¹

Still, many Jewish scientists continued to work in the biological and early genetic sciences to maintain some level of control of an emerging bio-racial narrative and persisted in their search for evidence of a shared Jewish origin and descent. Working from the a priori assumption that “Jews are the biological descendants of an ancient people” from Palestine, Jewish scientists believed that “evidence of that origin and shared descent, of that peoplehood, will be revealed by the biological sciences.”⁷² Early Y-chromosome research of Jewish men who claimed the Kohen priestly lineage was conducted based on the assumptions made by anthropological geneticists that “it should be possible to find evidence consistent with the biblical account through genetic analysis” of the Kohen lineage.⁷³ The logic was that an enduring genetic marker that has persisted despite “recombination, selection, and admixture” in Jewish communities would prove that contemporary Jews are indeed “*descendants of a Hebrew*

⁶⁹ El-Haj, 69, 72.

⁷⁰ El-Haj, 69, 71.

⁷¹ Goldstein, 108.

⁷² El-Haj, 66; Susan M. Kahn, “Are Genes Jewish? Conceptual Ambiguities in the New Genetic Age,” in *Boundaries of Jewish Identity*, eds. Susan A. Glenn and Naomi B. Sokoloff (Seattle, WA: University of Washington Press, 2010), 16.

⁷³ El-Haj, 34-35; The Kohen lineage is traditionally believed to be a patrilineal descent of priests that go back to the biblical figure of Aaron, the brother of Moses.

population that originated in ancient Palestine and founded the religion.”⁷⁴ However, despite the persistent “evidence of diversity” among Jews in various populations, (and the findings that “the Kohen modal haplotype, while widespread among Jews who profess Kohen status, is not unique to Jews”), a priori assumptions about Jewish lineage persisted to the extent that any contrary evidence to the presumed historical narrative was reinterpreted to fit the “‘known’ historical information” or dismissed as incomplete or imprecise.⁷⁵

More recent mitochondrial DNA studies, which started around the 1990s, used the same logic as Y-chromosome studies in the past. Genetic scientists hypothesized: “*If* the system of matrilineal inheritance of Jewish identity has been strictly followed, *we could expect* it to be reflected in systematic differences in the patterns of mtDNA and Y-chromosome genetic variation within and among Jewish populations.”⁷⁶ However, mtDNA studies revealed that the women of the Jewish communities studied did not seem to originate in ancient Palestine but were rather converts to Judaism.⁷⁷ The ancestral mothers of these communities, after converting to Judaism, “became and remained endogamous.”⁷⁸ In other words, they “*chose* Judaism in places other than Palestine.”⁷⁹ Nevertheless, despite the fact that mtDNA data contradicted preconceived Jewish history of a diaspora population rooted in ancient Palestine, it was largely reinterpreted as “a commitment to and a celebration... of the fact that Jews are who they are because of the choices that their ancestors made over and over again.”⁸⁰

⁷⁴ El-Haj, 41, 44, 51.

⁷⁵ El-Haj, 102-103; Kahn, 15.

⁷⁶ El-Haj, 114.

⁷⁷ El-Haj, 115-116; Kahn, 14.

⁷⁸ El-Haj, 116.

⁷⁹ El-Haj, 117.

⁸⁰ El-Haj, 111.

Much like population genetics revealed that racial categories are social and cultural constructions that are not rooted in biology, DNA studies of Jewish communities yielded results that undermined traditional narratives of Jewish origins in Palestine. And, despite the fact that findings that contradicted existing paradigms and narratives were often reinterpreted or deemed incomplete or imprecise, human diversity on the genetic level exposed monolithic ideas about human groups and presumed populations. Moreover, these findings complicated the normative or traditionally accepted ideas about Jewish ancestry and peoplehood, pointing to a much more diverse and complicated genetic story that included choice and agency.

DIRECT-TO-CONSUMER GENETIC ANCESTRY TESTING⁸¹

Just as Jewish scientists work from a priori assumptions about Jewish descent, so anthropological geneticists, Jewish and non-Jewish, hold an underlying assumption that “there were *ethnically pure—‘original’—populations* sometime in the past that can be identified in our DNA.”⁸² In other words, there is an assumption that if we go far enough into the past, we can identify original ethnic groups before they mixed with other populations.⁸³ These original ethnic groups can then be identified in our DNA and tell us “where and who we descend from.”⁸⁴ In order to reconstruct historical narratives of human migration and origin, genetic scientists create databases based on predetermined accounts of human migration by drawing DNA samples from populations that are already socially meaningful — that is, socially constructed. Particularly,

⁸¹ Special thank you to Dr. Liana Artinian, Department of Biology, Georgia State University, for reviewing this section on February 26, 2020.

⁸² El-Haj, 170.

⁸³ El-Haj, 170.

⁸⁴ El-Haj, 170.

they draw samples “from groups assumed to be geographically separate and isolated.”⁸⁵ While the Human Genome Project “found that 99.9% of human genetic sequences are identical and only 3%-10% of the variation is associated with geographic ancestry,” the focus of the results has largely been on the 0.1% of unshared variation as a means to distinguish population differences.⁸⁶ The unshared variations are found in single nucleotide polymorphisms, or SNPs, of our DNA, instances where “the genomes of different individuals vary by a single DNA base pair.”⁸⁷ These variations can sometimes reflect phenotypic differences between people but are otherwise considered “the residue of not just random but of biologically and selectively irrelevant evolutionary events.”⁸⁸ In other words, SNP variations are random mutations that do not carry any known “significant biological function” and “have no influence one way or the other on survival or success in breeding.”⁸⁹ However, since SNPs are hereditary and “tend to be shared in people with a common geographical origin,” geneticists have used them to understand geographic ancestry.⁹⁰ Therefore, this “junk DNA” data becomes meaningful when geneticists use it to reconstruct historical narratives of human migration and origin.⁹¹

⁸⁵ Roberts, 60, 65, 66; Wendy D. Roth and Biorn Ivemark, “Genetic Options: The Impact of Genetic Ancestry Testing on Consumers’ Racial and Ethnic Identities,” *American Journal of Sociology* 124, no. 1 (July 2018): 159, accessed November 1, 2019, <https://www-journals-uchicago-edu.eu1.proxy.openathens.net/doi/pdfplus/10.1086/697487>.

⁸⁶ Roth and Ivemark, 158; Sibille Merz, “‘Health and Ancestry Start Here’: Race and Prosumption in Direct-to-Consumer Genetic Testing Services,” *Ephemera: Theory & Politics in Organization* 16, no. 3 (August 2016): 127-128.

⁸⁷ Brian Resnick, “The limits of ancestry DNA tests, explained,” *Vox*, last updated May 23, 2019, <https://www.vox.com/science-and-health/2019/1/28/18194560/ancestry-dna-23-myheritage-science-explainer>; Roberts, 58.

⁸⁸ Brian Resnick, “How scientists are learning to predict your future with your genes,” *Vox*, last updated August 25, 2019, <https://www.vox.com/science-and-health/2018/8/23/17527708/genetics-genome-sequencing-gwas-polygenic-risk-score>; Roberts, 59; El-Haj, 47.

⁸⁹ El-Haj, 11, 43, 48.

⁹⁰ Resnick, “How scientists are learning to predict your future with your genes.”

⁹¹ El-Haj, 47; Merz, 128.

The operating assumptions are not only that there were genetically “pure” ancestral groups in the past, but also that there are modern populations that have somehow retained that genetic “purity” and can be sampled to represent the ancestral populations.⁹² Relying on statistical frequencies of genetic clusters which geneticists have determined to be meaningful in the sampled groups, (groups which they have also determined to be meaningful), geneticists use highly advanced computer software to compare individuals’ DNA with their databases to estimate geographic ancestry.⁹³ Additionally, these databases vary based on the decisions of the geneticists, who differentiate “ancestry informative markers,” or AIMs, that they determine to be representative of an original ethnic group to establish base populations, and the ever growing DNA data contributions of direct-to-consumer genetic ancestry testing consumers.⁹⁴

In *The Genealogical Science: The Search for Jewish Origins and the Politics of Epistemology*, Nadia Abu El-Haj criticizes genetic ancestry testing services for conflating population diversity by relying on “modern cultural and political notions” of ethnic, racial, and national categories.⁹⁵ In addition to challenging the construction of base populations, she challenges the method used by geneticists of identifying genetic markers that are “most common in one population” and “assum[ing those common markers] to be diagnostic of that population,” particularly in light of the fact that there is tremendous diversity within and among even presumed populations and that common genetic markers are not “diagnostic of membership in a

⁹² Jonathan Marks, “Genetic Testing: When Is Information Too Much?” *Anthropology Today* 34, no. 2 (April 2018): 2, doi:10.1111/1467-8322.12416; Charmaine D. Royal, John Novembre, Stephanie M. Fullerton, David B. Goldstein, Jeffrey C. Long, Michael J. Bamshad, and Andrew G. Clark, “Inferring Genetic Ancestry: Opportunities, Challenges, and Implications,” *American Journal Of Human Genetics* 86, no. 5 (May 14, 2010): 661, doi:10.1016/j.ajhg.2010.03.011.

⁹³ Roberts, 60; Roth and Ivemark, 159.

⁹⁴ Roth and Ivemark, 159-160.

⁹⁵ El-Haj, 173.

specific population.”⁹⁶ In other words, not everyone within a presumed population has AIMs that geneticists have chosen to represent that population, and people from other presumed populations can have AIMs associated with a different population.⁹⁷ Others have made similar criticisms, pointing out that geneticists choose AIMs that offer “the greatest genetic differentiation between predetermined clusters” based on “preconceived ideas” about human population groups.⁹⁸ Therefore, despite any attempt to distance their work from the legacy of racial science and shift the language from race to geographic ancestry, genetic scientists have “merely repackage[d] race as a genetic category.”⁹⁹ Unsurprisingly, genetic scientists are not immune to existing narratives and ideas about racial categories and have, consciously or unconsciously, reflected those ideas into their work. Consequently, while racial language is not used explicitly, essentialist ideas about human differences are reinforced in scientific and, therefore, authoritative language.

Direct-to-consumer ancestry testing companies similarly employ ideas around founding populations to compare individual customers’ DNA to their databases. The two (currently) leading direct-to-consumer ancestry testing companies, 23andMe and AncestryDNA, now have a customer base of over 25 million people combined.¹⁰⁰ Both companies provide ancestry testing by conducting autosomal DNA tests to “look at DNA inherited from both sides of [the

⁹⁶ El-Haj, 151.

⁹⁷ Royal et al, 666.

⁹⁸ Roth and Ivemark, 160.

⁹⁹ Roberts, 57; Merz, 128; Janet K. Shim, Sonia Rab Alam, and Bradley E. Aouizerat, “Knowing Something versus Feeling Different: The Effects and Non-Effects of Genetic Ancestry on Racial Identity,” *New Genetics & Society* 37, no. 1 (March 2018): 46, doi:10.1080/14636778.2018.1430560.

¹⁰⁰ “About Us,” *23andMe*, accessed February 6, 2020, <https://mediacenter.23andme.com/company/about-us/>; “Ancestry Surpasses 15 Million DNA Customers,” *AncestryDNA*, accessed February 6, 2020, <https://blogs.ancestry.com/ancestry/2019/05/31/ancestry-surpasses-15-million-dna-customers/>.

customer’s] family and compare it to other samples to determine [their] ethnicity.”¹⁰¹ 23andMe additionally conducts mtDNA and yDNA tests to “reveal the lineage, known as a haplogroup,” from which the customer purportedly descends.¹⁰² Therefore, while both companies claim to reveal “recent family relations up to seven generations” and ethnicity estimates, 23andMe also includes information about a consumer’s “ancestors [from] tens of thousands of years ago and their migration patterns.”¹⁰³

Although direct-to-consumer genetic ancestry companies attempt to shift their language from race to geographic ancestry, the ancestral categories they present mirror artificial continental divisions — Africa, Europe, Asia, Oceania, America (or some variation of this) — that are rooted in political, economic, and cultural histories as well as ideas about race and racial science.¹⁰⁴ For example, 23andMe currently divides its ancestral populations into the following categories: European, Central and South Asian, East Asian and Native American, Sub-Saharan African, Western Asian and North African, Melanesian, and Unassigned.¹⁰⁵ Similarly, AncestryDNA tests for the following regions: Africa, America, Asia, Europe, Pacific Islander, and West Asia.¹⁰⁶ In *Fatal Invention: How Science, Politics, and Big Business Re-create Race in the Twenty-First Century*, Dorothy Roberts points out that while geographical ancestry categories are represented as “natural groupings” and follow the conception of “populations as

¹⁰¹ Dieter Holger, “23andMe vs. AncestryDNA: What’s the Difference?” *PCWorld* 37, no. 1 (January 2019): 92.

¹⁰² Holger, 92.

¹⁰³ Holger, 92.

¹⁰⁴ Roberts, 59-60; Royal et al, 661.

¹⁰⁵ “23andMe Reference Populations & Regions,” *23andMe*, accessed January 24, 2020, <https://customercare.23andme.com/hc/en-us/articles/212169298-23andMe-Reference-Populations-Regions>.

¹⁰⁶ “List of AncestryDNA® Regions,” *AncestryDNA*, accessed January 24, 2020, <https://support.ancestry.com/s/article/List-of-AncestryDNA-Regions>.

natural, isolated, and static,” they are in fact informed by “political, cultural, and even arbitrary borders that [do not] delimit populations and consider how mutable, porous, and continually changing these boundaries are.”¹⁰⁷ This is also evident in the various ways direct-to-consumer genetic ancestry companies present ancestries within each continental group (such as Europe) by distinguishing subgroups that are inconsistent in terms of continental, subcontinental, national, and ethnic identities.¹⁰⁸ For example, subgrouping can include national identities (such as German and French), subcontinental or peninsular regions (such as Scandinavian), and ethnic and even religio-ethnic identities (such as Ashkenazi or European Jewish).¹⁰⁹

23andMe currently calculates ancestry composition of a consumer by comparing their “genome to those of over 14,000 people with *known ancestry* [emphasis added],” that is, their reference database, as well as information gained from participating consumers.¹¹⁰ They explain that their “reference datasets include genotypes from 14,437 people who were *chosen to reflect populations that existed before transcontinental travel and migration were common* [emphasis added].”¹¹¹ Acknowledging that people’s ancestries can be quite diverse, 23andMe bases their estimates of ancestry on ideas around “admixture — the genetic mixing of *previously separate populations* [emphasis added].”¹¹² Additionally, as consumers participate in 23andMe’s ancestry testing and self-report “that they have four grandparents all born in the same country — and the country isn’t a colonial nation like the US, Canada, or Australia — that person becomes a

¹⁰⁷ Roberts, 75-76.

¹⁰⁸ Roth and Ivemark, 153.

¹⁰⁹ “23andMe Reference Populations & Regions,” *23andMe*; “List of AncestryDNA® Regions,” *AncestryDNA*.

¹¹⁰ “Ancestry Composition,” *23andMe*, accessed February 8, 2020, <https://www.23andme.com/ancestry-composition-guide/>.

¹¹¹ “Ancestry Composition,” *23andMe*.

¹¹² “Ancestry Composition,” *23andMe*.

candidate for inclusion in the reference data.”¹¹³ If the customer’s self-reported ancestry does not match 23andMe’s dataset of that ancestry, the customer’s dataset is removed as an outlier.¹¹⁴ In other words, even if a customer self-reports that their four grandparents came from the same country and share an ethnicity, the DNA sample must match the predetermined ancestry informative markers (AIMs) of that group (which, as discussed above, are based on the decisions of geneticists and their preconceived ideas about human population groups) in the reference database in order to be considered “pure” enough to be included in the database.

AncestryDNA works quite similarly by calculating ethnicity estimates based on their “reference panel,” or “huge database of DNA samples, collected from people with deep ancestral roots in certain geographic regions,” as well as DNA data from other customers.¹¹⁵ Unlike 23andMe, AncestryDNA focuses largely on recent ancestry, creating their databases by gathering DNA data from “people whose families have lived in one area [or region] for generations — Ireland, for example.”¹¹⁶ Additionally, AncestryDNA communicates ancestry as an estimate by providing “a range of possible percentages” of a customer’s ethnicity.¹¹⁷ Overall, it is quite evident that both direct-to-consumer genetic ancestry testing companies “incorporate[] into [their] very infrastructure” assumptions about populations based on socially and politically constituted ideas of human groups and boundaries.¹¹⁸ Therefore, rather than distancing themselves from constructions of human differences based on a priori ideas around race and

¹¹³ “Ancestry Composition,” *23andMe*.

¹¹⁴ “Ancestry Composition,” *23andMe*.

¹¹⁵ “How does AncestryDNA® work?” *AncestryDNA*, accessed February 8, 2020, <https://www.ancestry.com/dna/lp/how-does-ancestrydna-work>.

¹¹⁶ “More Than a Pie Chart and a Number: Reading Your Ethnicity Estimate,” *AncestryDNA*, accessed February 8, 2020, <https://www.ancestry.com/lp/ethnicity-estimate/reading-your-ethnicity-estimate>.

¹¹⁷ “More Than a Pie Chart and a Number: Reading Your Ethnicity Estimate,” *AncestryDNA*.

¹¹⁸ Shim, Alam, and Aouizerat, 46.

“undermin[ing] notions of the biological basis of race,” direct-to-consumer genetic ancestry testing companies have contributed to “the molecular reinscription of race” and racial categories, replacing “race” with “geographic ancestry.”¹¹⁹ In other words, by reading race into DNA data, genetic ancestry testing reinforces existing racial ideas and categories as well as socially, culturally, and politically constructed borders and boundaries.

As discussed above, European race scientists in the late nineteenth and early twentieth centuries engaged in anti-Semitic racial classifications of European Jews.¹²⁰ In response, European Jewish scientists “generated their own discourse” to combat anti-Semitism in various ways, including reconfiguring racial ideas about Jewish degeneracy or rejecting the idea that Jews were a race altogether.¹²¹ Since the modern science of genetics, European, or Ashkenazi, Jews have also been “of interest to [both Jewish and non-Jewish] genetic researchers” because of their “history of endogamy,” of marrying within the local community over many generations, and the genetic resemblance that such endogamy can generate.¹²² While endogamy is not unique to Ashkenazi Jews, it was particularly prevalent among the Ashkenazi Jewish communities of Europe because of a history of repression and discrimination against their communities as well as their religious and cultural values and marriage practices.¹²³ To say that European Jews have had a complicated relationship with genetic testing would be an understatement. On the one hand,

¹¹⁹ Shim, Alam, and Aouizerat, 46.

¹²⁰ El-Haj, 68.

¹²¹ El-Haj, 68-69.

¹²² Sarah Imhoff and Hillary Kaell, “Lineage Matters: DNA, Race, and Gene Talk in Judaism and Messianic Judaism,” *Religion & American Culture* 27, no. 1 (2017): 103, doi:10.1525/rac.2017.27.1.95.

¹²³ Rebecca Alpert, “What Is a Jew? The Meaning of Genetic Disease for Jewish Identity,” in *Jews and Genes: The Genetic Future in Contemporary Jewish Thought*, eds. Elliot N. Dorff and Laurie Zoloth (Philadelphia: The Jewish Publication Society, 2015), 110, doi:10.2307/j.ctt1d98cbm.

genetic science emerged in the context of racist ideas and systems that have contributed to discrimination, oppression, and genocide of Jews in Europe. On the other hand, Jewish scientists participated in studying “themselves” to not only combat anti-Semitism but to also better understand genetic diseases, such as Tay-Sachs, which were “found to be prevalent among [though not unique to] Jews of Ashkenazi descent” and could be detected through “premarital and prenatal screening.”¹²⁴

In light of the fact that European Jews have been the subject of as well as heavily involved in genetic science since its emergence (as discussed above), it is not surprising that contemporary direct-to-consumer genetic ancestry testing companies include this religio-ethnic group as a category under the European regional umbrella.¹²⁵ For instance, the only Jewish ancestry that 23andMe presents to consumers is Ashkenazi Jewish ancestry.¹²⁶ Their reasoning is that, “Although not a country or region, they have their own reference population in Ancestry Composition because Ashkenazi Jews are so genetically distinct.”¹²⁷ In addition to providing a percentage of a customer’s Ashkenazi Jewish ancestry, 23andMe’s ancestry reports explain that “Ashkenazi Jewish people settled in Central and Eastern Europe in the late Middle Ages, but their modern descendants remain genetically more similar to other Jewish populations than to their European neighbors, reflecting shared western Asian origins.”¹²⁸ Essentially, the claim is that since Ashkenazi Jews share more genetic markers with each other than with other Europeans, then they must share an ancestral origin in Palestine in accordance with the religio-ethnic history of the Jewish people in Diaspora. The company points to studies that work from a

¹²⁴ Alpert, 109, 138-139.

¹²⁵ Alpert, 109.

¹²⁶ “23andMe Reference Populations & Regions,” *23andMe*.

¹²⁷ “23andMe Reference Populations & Regions,” *23andMe*.

¹²⁸ “23andMe Reference Populations & Regions,” *23andMe*.

priori narratives of Jewish history, assuming that “Jews originated as a national and religious group in the Middle East during the second millennium BCE *and have maintained continuous genetic, cultural, and religious traditions since that time, despite a series of Diasporas* [emphasis added].”¹²⁹ These studies work from assumptions about Jewish history derived from biblical and traditional narratives and allow these assumptions to inform their method of gathering and interpreting genetic data. Additionally, these outside studies of Ashkenazi Jews engage in methods of acquiring reference databases by collecting DNA samples from “individuals of unmixed ancestry... from a wide variety of European countries,” maintaining politically, socially, and culturally meaningful categories of human groups and boundaries.¹³⁰

AncestryDNA presents Jewish ancestry to consumers under the European region as well, although the company uses “European Jewish” (with several subcategories based on regional and political boundaries of European countries) rather than “Ashkenazi Jewish” as a subcategory.¹³¹ However, the term “Ashkenazi” is used interchangeably with “European” in various parts of the website and is expressed to mean northern and eastern European Jews.¹³² Similar to 23andMe, AncestryDNA explains their choice of including European Jewish as an ethnicity category by employing assumptions about Jewish history. The company states,

The forced dispersal of the Jewish population from the kingdom of Israel in the Eastern Mediterranean resulted in Jewish communities scattering throughout the world, in what’s known as the Jewish diaspora. People in Jewish communities tended to have children with people who shared the same religious culture, and over time, people in Jewish

¹²⁹ Gil Atzmon, Li Hao, Itsik Pe’er, Christopher Velez, Alexander Pearlman, Pier Francesco Palamara, Bernice Morrow, et al, “Abraham’s Children in the Genome Era: Major Jewish Diaspora Populations Comprise Distinct Genetic Clusters with Shared Middle Eastern Ancestry,” *The American Journal of Human Genetics* 86, no. 6 (January 1, 2010): 850, doi:10.1016/j.ajhg.2010.04.015.

¹³⁰ Atzmon et al, 851.

¹³¹ “List of AncestryDNA® Regions,” *AncestryDNA*.

¹³² “European Jewish Ethnicity,” *AncestryDNA*, accessed February 21, 2020, <https://www.ancestry.com/dna/ethnicity/european-jewish>.

communities began to share more DNA with one another. This is why there's a European Jewish region in our ethnicity estimate—because *people who were originally from the kingdom of Israel* [emphasis added] developed enough shared DNA over time to appear as a group.¹³³

In presenting Jewish ancestry and ethnicity, both 23andMe and AncestryDNA engage in existing narratives of Jewish history and read culturally meaningful identities into biology.¹³⁴ And, while Jewishness is often negotiated in terms of “religious law, ethnicity, affiliation, descent, or some combination of these,” direct-to-consumer genetic ancestry companies reinforce racial and ethnic social constructs of Jewish identity.¹³⁵ As these companies provide consumers with ancestry reports based on “biological and geographical discourse — both essential to the social construction of race,” they perpetuate a racialized idea of Jewishness, disregarding cultural, religious, and other aspects of a continuously negotiated Jewish identity.¹³⁶

CONTEMPORARY JEWISH IDENTITY, “GENE TALK,” AND ASHKENORMATIVITY

As mentioned in the introduction of this thesis, Jewish identity markers have been constructed throughout history, by Jews and non-Jews, to include some variations and combinations of religion, commitment, nation, kinship, peoplehood, culture, ethnicity, memory, and, more recently, DNA science. Moreover, definitions around Jewishness depend on how these (and other) markers are interpreted and who gets to decide which markers make someone Jewish.

¹³³ “European Jewish as an Ethnicity,” *AncestryDNA*, accessed February 8, 2020, <https://support.ancestry.com/s/article/European-Jewish-as-an-Ethnicity>.

¹³⁴ El-Haj, 48.

¹³⁵ Imhoff and Kaell, 100.

¹³⁶ Sarah Imhoff, “Traces of Race: Defining Jewishness in America,” in *Who Is A Jew?: Reflections on History, Religion, and Culture*, ed. Leonard J. Greenspoon (West Lafayette, Indiana: Purdue University Press, 2014), 1-2, <http://ezproxy.gsu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=987171&site=eds-live&scope=site>.

An example of this is evident in one of the largest surveys of American Jews conducted by Pew Research Center in 2013, “A Portrait of Jewish Americans.”¹³⁷ The survey constructed questions and screened participants with a particular understanding of Jewishness in mind. Consequently, what emerged from the responses of the participants and the conclusions made by the survey was an Ashkenormative Jewishness defined through an American Protestant lens. In the following analysis of the Pew Research Center survey of American Jews, I will demonstrate how particular understandings of Jewishness limit, exclude, or render invisible important aspects of Jewish identity and why genetic ancestry testing has become so lucrative in Jewish communities where boundaries of identity are not always so clear.

As “the first [representative sample] survey of American Jews not conducted by a Jewish organization,” Pew Research Center interpreted Jewishness through an American Protestant lens by distinguishing religion as something separate from culture.¹³⁸ For example, the first screening question for determining eligibility to participate in the survey was “What is your present religion, if any?” and a list of possible choices.¹³⁹ If respondents identified themselves as Jewish or partially Jewish, such as “Jewish and Christian (including Protestant, Catholic, Baptist, etc.;

also includes ‘Messianic Jew,’ ‘Jews for Jesus,’ and ‘Completed Jew’)” and “Jewish and

¹³⁷ Rachel B. Gross, “Who Counts As a Jew?” *Religion & Politics*, October 8, 2013, https://www.academia.edu/4756627/Who_Counts_as_a_Jew.

¹³⁸ Gross, “Who Counts As a Jew?”

¹³⁹ “A Portrait of Jewish Americans,” *Pew Research Center* (Washington, D.C., October 1, 2013), 121, <http://www.pewresearch.org/wp-content/uploads/sites/7/2013/10/jewish-american-full-report-for-web.pdf>. Possible choices included “Protestant (Baptist, Methodist, Non-denominational, Lutheran, Presbyterian, Pentecostal, Episcopalian, Reformed, Church of Christ, Jehovah’s Witness, etc.), Roman Catholic (Catholic), Jewish (Judaism), Muslim (Islam), Buddhist, Hindu, Atheist (do not believe in God), Agnostic (not sure if there is a God), Something else (SPECIFY: _____), Or nothing in particular.”

something else,” they were deemed eligible to participate in the survey.¹⁴⁰ The other respondents were asked a second screening question to determine eligibility: “ASIDE from religion, do you consider yourself Jewish or partially Jewish, or not?”¹⁴¹ Again, those who identified as Jewish or partially Jewish, including those who responded as “culturally Jewish” or “half Jewish,” were deemed eligible while the other respondents were asked the final screening question: “And did you have a Jewish parent or were you raised Jewish or partially Jewish – or not?”¹⁴² If the respondents answered in the affirmative, including those who said that they were “partially Jewish/raised Jewish and something else/mother or father was partially Jewish,” they were deemed eligible for the survey.¹⁴³ These three questions determined who is considered Jewish for the Pew Research Center survey and emphasized Jewish religion as something separate from culture, distinguishing between “Jews by religion” and “Jews of no religion,” and Jewishness as something hereditary, passed down from parents to children.¹⁴⁴ As evident in the screening questions to select participants, the Pew Research Center survey imagined Jews first and foremost as defined by religion in the American Protestant sense of the term, that is, religion as rigidly distinct from culture, ethnicity, community, and other possible understandings of Judaism.¹⁴⁵

¹⁴⁰ “A Portrait of Jewish Americans,” *Pew Research Center*, 121; Interestingly, Christian Jews and variations of this movement were deemed eligible for study despite the fact that many American Jews have strong feelings against Christian Jews. (See also Imhoff and Kaell, 95).

¹⁴¹ “A Portrait of Jewish Americans,” *Pew Research Center*, 121.

¹⁴² “A Portrait of Jewish Americans,” *Pew Research Center*, 121-122.

¹⁴³ “A Portrait of Jewish Americans,” *Pew Research Center*, 122.

¹⁴⁴ “A Portrait of Jewish Americans,” *Pew Research Center*, 122.

¹⁴⁵ This American Protestant understanding of religion, however, does not actually reflect American Protestantism, which is very much connected to culture, ethnicity, community, and nationality.

The Pew Research Center survey also characterized religion as something separate from culture in some of the questions they asked participants. For example, one of the questions was whether being Jewish is “mainly a matter of religion,” “mainly a matter of ancestry,” or “mainly a matter of culture.”¹⁴⁶ Participants could also volunteer to select all of these options, two of these (and to specify which two), other/none of these, and don’t know or refuse to answer.¹⁴⁷ According to the responses, 62% of American Jews defined Jewishness as “either ancestry or culture (or a combination of the two),” 23% defined Jewishness as “a matter of religion as well as ancestry and/or culture,” and 15% defined Jewishness as only “a matter of religion.”¹⁴⁸ While it could be interpreted from this data that most American Jews define Jewishness as ancestry and culture rather than just religion, the fact that Pew Research Center separated the categories of religion, ancestry, and culture reinforces the misconception that religion is a rigid category separate from culture, ancestry, ethnicity, nationality, and other markers of identity. It is quite possible, then, that American Jews have different understandings of what it means to be Jewish, particularly in terms of the division between religion and culture constructed by the survey, than their responses suggest.¹⁴⁹

The Pew Research Center survey also often limited religion to beliefs and a set of particular practices, such as Sabbath observance and religious service attendance, further interpreting Jewishness through an American Protestant lens. For example, the survey asked participants, “What is compatible with being Jewish?” and reported that 68% of eligible American Jews responded that “a person can be Jewish even if they do not believe in God,” and

¹⁴⁶ “A Portrait of Jewish Americans,” *Pew Research Center*, 167.

¹⁴⁷ “A Portrait of Jewish Americans,” *Pew Research Center*, 167.

¹⁴⁸ “A Portrait of Jewish Americans,” *Pew Research Center*, 54.

¹⁴⁹ Gross, “Who Counts As a Jew?”

34% said that “a person can be Jewish even if he or she believes Jesus was the messiah.”¹⁵⁰ Additionally, the survey asked “How important is religion in your life – very important, somewhat important, not too important, or not at all important?” and found that “many Jews say religion is not a very important part of their lives.”¹⁵¹ By constructing questions that prioritized beliefs and particular religious practices, which yielded responses that undermined the importance of those beliefs and practices, the survey concluded that American “Jews are less religious than the general [American] public.”¹⁵² In other words, since questions were constructed around limited ideas of Jewish religiosity, such as believing in God, attending religious services, and working on the Sabbath, American Jews who were surveyed appeared less religious overall. Questions like this miss significant markers, practices, identities, and understandings of American Judaism. For example, belief in God may not be as important as feeling “a strong sense of belonging to the Jewish people.”¹⁵³ Additionally, keeping the Sabbath may not be as important or as prevalent of a practice among American Jews as attending a service on Yom Kippur, celebrating Hanukkah, or engaging in activities that would typically not be considered overtly religious, such as eating Jewish foods and visiting Jewish museums and restaurants.¹⁵⁴

Additionally, the study included interviews with people who were “not considered Jewish” according to the main criteria discussed above but who did have a “Jewish background... a Jewish parent or were raised Jewish but who, today, either identify with a religion other than Judaism... or say they do *not* consider themselves Jewish in any way” as well

¹⁵⁰ “A Portrait of Jewish Americans,” *Pew Research Center*, 58, 171.

¹⁵¹ “A Portrait of Jewish Americans,” *Pew Research Center*, 58, 179.

¹⁵² “A Portrait of Jewish Americans,” *Pew Research Center*, 71.

¹⁵³ Gross, “Who Counts As a Jew?”

¹⁵⁴ Gross, “Who Counts As a Jew?”

as those who identified as Jewish-adjacent, “those who are not Jewish by religion... and who neither have a Jewish parent nor were raised Jewish but who nevertheless say they consider themselves Jewish in some way.”¹⁵⁵ Interestingly, some people in the Jewish-adjacent group “have Jewish ancestry (though none have Jewish parents).”¹⁵⁶ The survey did not define ancestry but often conflated ancestry, culture, and ethnicity, as well as background and family. It seems that the point of including these other affiliations with Jewishness is, again, to highlight how complicated Jewish identity can be and how determining who is considered a Jew impacts demographic information.¹⁵⁷ For example, according to Pew Research Center, the “net” Jewish population, that is, “Jews by religion” and “Jews *aside* from religion,” made up about 2.2% of the United States population in 2013, about 5.3 million people.¹⁵⁸ However, looking at a “broader definition of Jewish identity” that “include[s] all Americans who say they consider themselves Jewish for any reason – even if they do not have direct Jewish ancestry,” the number of Jews in the United States would increase to about 3.8%, 9.0 million people, in the same year. Importantly, Pew Research Center surveys of other religious groups, such as their survey of US Muslims in 2017, do not include screening and demographic questions that note religious identity in terms of ancestry and culture or adjacent/affiliated connections.¹⁵⁹ For example, in the 2017 survey of US Muslims, participants were asked, “What is your religious preference? Christian, Jewish, Muslim, Hindu, Buddhist, or something else?”¹⁶⁰ The survey did not probe for

¹⁵⁵ “A Portrait of Jewish Americans,” *Pew Research Center*, 123.

¹⁵⁶ “A Portrait of Jewish Americans,” *Pew Research Center*, 123.

¹⁵⁷ “A Portrait of Jewish Americans,” *Pew Research Center*, 23-24.

¹⁵⁸ “A Portrait of Jewish Americans,” *Pew Research Center*, 23.

¹⁵⁹ “US Muslims Concerned About Their Place in Society, but Continue to Believe in the American Dream,” *Pew Research Center* (Washington, D.C., July 26, 2017), <https://www.pewforum.org/2017/07/26/demographic-portrait-of-muslim-americans/>.

¹⁶⁰ “US Muslims Concerned About Their Place in Society, but Continue to Believe in the American Dream,” *Pew Research Center*, 157.

broader definitions of Muslim religious identities beyond that or ask participants if they identified as Muslim in terms of culture or ancestry.

While the Pew Research Center clearly had some methodological issues, especially in the way they limited religion to a rigid category, the survey was also somewhat reflective about the complexity of Jewish identity and the inadequacy of the questions in truly capturing Jews in America. In addition to dedicating a “Sidebar” section to the complexity of constructing who is considered Jewish, the survey noted that “Jews defy easy categorization” and that the survey’s ideas around religious observance does not seem to capture Jewish religiosity.¹⁶¹ For example, the survey makes the following observation in one of the summaries:

Though many Jews say religion is not a very important part of their lives, participation in Jewish traditions remains quite common. Seven-in-ten Jews say they participated in a Seder last Passover, for instance. And over half of Jews – including about one-in-five Jews of no religion – say they fasted for all or part of Yom Kippur in 2012.¹⁶²

Evidently, the boundaries of Jewish identity and religiosity constructed by Pew Research Center do not adequately describe American Jews and the range of American Jewish practices and identity markers. Jewishness in the United States is complex, contested, and falls outside of recognized boundaries and ideas of what makes someone Jewish.¹⁶³

It is not surprising, then, that “gene talk” has become part of the conversation about Jewish identity for “group members [to] tell socially meaningful stories about their individual and corporate identities.”¹⁶⁴ By providing people with a breakdown of their geographic and ethnic ancestry, direct-to-consumer genetic ancestry companies market the idea that DNA science “can help people understand something fundamental about themselves and their

¹⁶¹ “A Portrait of Jewish Americans,” *Pew Research Center*, 18, 71.

¹⁶² “A Portrait of Jewish Americans,” *Pew Research Center*, 71.

¹⁶³ Gross, “Who Counts As a Jew?”.

¹⁶⁴ Imhoff and Kaell, 96.

relationship to others.”¹⁶⁵ For American Jews, these “new genetic technologies have proved seductive to a community long preoccupied with its origins, boundaries, and self-definition.”¹⁶⁶ Furthermore, “biomedical criteria for Jewishness,” including direct-to-consumer genetic ancestry tests that report Ashkenazi Jewish ancestry, is particularly appealing because it provides “something that looks like objective criteria for ‘who is a Jew’ in those communities where Jewish identity has become the most fluid and contested.”¹⁶⁷ For example, matrilineal descent, a more traditional marker of Jewish identity and often a source of conflict among American Jews in claiming Jewishness, can be contested when Jewish communities and individuals expand the definition of who is considered a Jew to include anyone with any trace of “Jewish genes” in their genetic ancestry reports. Therefore, interpretation of DNA science by individual group members and communities “function[s] as a substitute for religion or even seem[s] to trump religious claims” to Jewish identity.¹⁶⁸ In other words, science, which is often perceived as objective and unbiased, becomes an authoritative source of identity rather than religious community traditions. The authority of DNA science on “proving” Jewish identity has already made a significant impact in Israel where many people have used DNA testing as “supportive evidence,” in addition to documentation, in order to prove their Jewishness in rabbinical courts.¹⁶⁹ Decisions regarding Jewish identity impact significant issues such as immigration and marriage.¹⁷⁰

¹⁶⁵ Imhoff and Kaell, 96.

¹⁶⁶ Kahn, 13.

¹⁶⁷ Imhoff, 2.

¹⁶⁸ Imhoff, 13.

¹⁶⁹ Aaron Rabinowitz, “Israel’s Rabbinical Courts Begin to Recognize DNA Tests, Potentially Opening Gateway to Proving Jewishness,” *Haaretz*, September 1, 2019, <https://www.haaretz.com/israel-news/.premium-will-dna-testing-become-the-gateway-to-proving-jewishness-1.7772764>.

¹⁷⁰ Rabinowitz, *Haaretz*.

When direct-to-consumer genetic ancestry testing companies provide reports on Ashkenazi Jewish ancestry, they offer something that looks objective and authoritative, particularly by treating “the genome as an empirical and legible record of our authentic, cultural, and historical selves.”¹⁷¹ They present Jewishness as something biological and inherent, or at least something “detectable,” *within us*, as if someone could “become Jewish” by virtue of their DNA results. However, as discussed above, anthropological geneticists make choices about human groups and populations based on existing social, political, and cultural constructions and narratives that shape their data and method. Additionally, in determining particular ancestry informative markers (AIMs) to represent or be diagnostic of a presumed population, such as Ashkenazi Jews, geneticists essentialize that population to its most common genetic markers, reducing the tremendous genetic diversity found within and among even presumed populations. It’s one thing to present to consumers that a socially meaningful population shares particular AIMs in higher frequency than others. It’s a whole other thing to present to consumers that Jewishness is detectable in the genome.

Moreover, while Ashkenazi Jewish ancestry appears to be validated in direct-to-consumer genetic ancestry testing reports and through “gene talk,” non-Ashkenazi Jewish ancestries and other aspects of Jewish identity are often invisible in this genetic construction of Jewish identity. And, although the majority of Jews in the United States are of Ashkenazi background, dominating the Jewish demographic and cultural landscape since the late nineteenth and early twentieth centuries, anywhere from 3% to 15% of American Jews are not Ashkenazi.¹⁷² This minority within a minority is often marked by diversity, as opposed to “normal” American

¹⁷¹ El-Haj, 222.

¹⁷² Melanie Kaye/Kantrowitz, *The Colors of Jews: Racial Politics and Radical Diasporism* (Bloomington: Indiana University Press, 2007), 91.

— that is, Ashkenazi — Jewishness, characterized by whiteness and a certain European heritage and history.¹⁷³ Therefore, consciously or not, direct-to-consumer genetic ancestry testing companies perpetuate an already dominant Ashkenormative understanding of Jewish history, heritage, and identity in the United States.

As mentioned in the introduction, Ashkenormativity is the dominance of Ashkenazi Jewish culture, heritage, and experiences in representing *all* Jewish culture, heritage, and experiences and marginalizing other forms of Jewishness. Ashkenormativity, whether named explicitly or implied, represents the experience of (mostly) non-Ashkenazi Jews in the United States.¹⁷⁴ Ashkenormative culture manifests in various ways, particularly through Eurocentric stereotypes and mainstream or normative narratives of what it means to be Jewish. This can include Eurocentric stories of Jewish migration from biblical times to the present; Ashkenazi religious and/or cultural practices, languages, foods, and customs seen as normative or mainstream; ideas around Jewish mannerisms and what Jews look like that are tied to the Ashkenazi experience; Ashkenazi-centric Jewish Studies scholarship; and narratives of assimilation, upward mobility, and access to whiteness in the United States.¹⁷⁵

One of the many ways American Jewish identity has been negotiated is through the body — through Jewish “looks.” While ideas around Jewish physical differences fueled anti-Semitism, eugenics, and prejudiced practices and policies in Europe and the United States, at the same time, “the idea of ‘Jewish looks’ has been one of many sources of collective self-definition” for American Jews who navigated assimilation while attempting to maintain a group

¹⁷³ Kaye/Kantrowitz, 90.

¹⁷⁴ Kaye/Kantrowitz, 89-90.

¹⁷⁵ Kaye/Kantrowitz, 67-104.

identity.¹⁷⁶ Throughout American history, “real and imagined physical differences both mark[ed] Jews as stereotypically other and serve[d] as symbols in a shared ethnic identity.”¹⁷⁷ However, although many American Jews continued to draw boundaries of their “apartness” through racial language and ideas around physical differences, the expansion of who is considered white after World War II as well as the fact that Ashkenazi Jewishness dominated the narrative of what it means to be a Jew in America shaped stereotypes of what an American Jew *looks like*. In other words, being Jewish in America has become equated with being white, of European descent, and/or Ashkenazi.

Consequently, Jews who do not fit the stereotype or normative perception of what a Jew looks like, including Jews of non-European and/or non-Ashkenazi backgrounds, experience having their Jewishness questioned, and their cultures, heritages, histories, and experiences are either invisible or homogenized in mainstream culture, among both Jews and non-Jews. In *The Colors of Jews: Racial Politics and Radical Diasporism*, Melanie Kaye/Kantrowitz documents the voices of Jews of color, particularly Jews who have background or ancestry in places other than Europe, to challenge common assumptions about Jewishness, whiteness, and the perennial question of who gets to decide who is Jewish. However, while Jewishness continues to be racialized to mean whiteness in the United States, and as American Jews continue to incorporate “gene talk” into the social construction of what it means to be Jewish, direct-to-consumer genetic ancestry tests “reinforce the idea that [Ashkenazi Jews] are the real Jews” and conceal all others, including Jews “with ancestry from the Middle East, North Africa, and the Mediterranean” as

¹⁷⁶ Susan A. Glenn, “‘Funny, You Don’t Look Jewish’ Visual Stereotypes and the Making of Modern Jewish Identity,” in *Boundaries of Jewish Identity*, eds. Susan A. Glenn and Naomi B. Sokoloff (Seattle, WA: University of Washington Press, 2010), 65.

¹⁷⁷ Susan A. Glenn, 83.

well as “adoptees and converts,” from the conversation.¹⁷⁸ After all, a 23andMe or AncestryDNA genetic ancestry report does not provide non-Ashkenazi Jewish ethnicity or ancestry estimates and, therefore, does not seem to validate non-Ashkenazi Jewishness on a genetic level.

Furthermore, since these genetic ancestry testing results do not come with a manual explaining the history of Jews, various components of Jewish identity, and the issues around constructing reference populations and testing individuals, they contribute to Jewish racialization and perpetuate Ashkenormativity by conflating not only the idea that there are “Jewish genes,” but also that Jewish genes are synonymous with Ashkenazi Jewish genes.¹⁷⁹

Coming back to the perennial questions of who is considered a Jew and who gets to decide, it is important to pay attention to which aspects of Jewish identity are being elevated and validated at each moment in history and why. The history of Jews, ideas about race and human differences, and the impact of racial science and anthropological genetics have shaped an Ashkenormative understanding of Jewishness in the United States. Direct-to-consumer genetic ancestry testing companies, knowingly or not, are operating in the context of these histories and conversations by continuing to racialize a religious community and validating a Eurocentric version of Jewishness.

CONCLUSION

The boundaries of Jewish identity have been a topic that Jews and non-Jews have explored for centuries. Academics, religious leaders, and lay people have navigated what it means to be a Jew, who gets to decide, and in what context, to the present day. Answers to the question “who is a Jew?” have had social, religious, political, economic, and cultural

¹⁷⁸ Imhoff and Kaell, 109.

¹⁷⁹ Imhoff and Kaell, 109.

consequences for individuals, communities, and nations. In contemporary scholarship of religion, a growing number of scholars are engaging with the way DNA science and the history of anthropological genetics have contributed to identity formation, particularly identities that intersect with race and religion. This thesis adds to the conversation by critically looking at the way direct-to-consumer genetic testing companies are defining Jewishness in biological terms and, therefore, narrowing an incredibly broad and complex reality of what it means to be a Jew in America.

Moreover, through the work of examining dynamics of race and power in religion, especially to expose instances of invisibility, exclusion, and marginalization, it is evident that mainstream or normative constructions of religious identities are more dynamic than they seem. For example, even Ashkenazi Jewishness itself is more complicated and diverse than its mainstream representation. It includes practices of Jews from various racial and ethnic backgrounds and is “characterized by division and extremes,” just as any other group presumed to be monolithic.¹⁸⁰ Additionally, Ashkenazi Jewish populations have high genetic diversity and, in terms of genetic ancestry, are inadequately represented through most common genetic markers.¹⁸¹ As Melanie Kaye/Kantrowitz notes in her book, “when we situate the excluded experience... we see the formerly dominant experience differently.”¹⁸² For scholars of religion, our work is important because we use our insight and expertise to question criteria and categories and expose assumptions that are taken for granted in normative discourses, mainstream cultures,

¹⁸⁰ Melanie Kaye/Kantrowitz, 88.

¹⁸¹ Steven M. Bray, Jennifer G. Mulle, Anne F. Dodd, Ann E. Pulver, Stephen Wooding, and Stephen T. Warren, “Signatures of Founder Effects, Admixture, and Selection in the Ashkenazi Jewish Population,” *Proceedings of the National Academy of Sciences of the United States of America* 107, no. 37 (2010): 16222.

¹⁸² Melanie Kaye/Kantrowitz, 98.

and even other disciplines, such as the sciences. The importance of the study of religion, then, is to contextualize constructed or manufactured understandings of religious identities and to investigate the dynamics of power that contribute to those constructions.

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