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“Jewish” DNA: The Influence of New Technology Reflecting Race Ideology

The classifications of humans has expanded past the perception of outer appearances. DNA testing, or more officially known as Deoxyribonucleic acid, has totally changed the way we perceive ourselves, others, and our relation to the people around us. With the development of the human genome tests, individuals are able to understand their genetic makeup faster and easier than ever before. However, what is truly outstanding about this development in technology is that individuals are able to test their genetics in their very own homes. With the introduction of self-conducted DNA tests, such as those provided by AncestryDNA, 23andMe, and FamilyTreeDNA, people are able to test themselves for their ethnic background. But what remains unclear is how these tests split up people into groups of similar genetic makeup and call this an “ethnicity?” Where do the lines of likeness end? This is exactly the case for the Jewish people who, according to the AncestryDNA tests, are being classified as an “European Jewish” ethnicity. So this makes one ponder, how has the development of self-conducted DNA tests influenced the classification of “Jewish” DNA? To what extent are the interpretations and reactions of this concept in the American Jewish community and in the wider American setting? With the increasing presence of DNA tests, specifically AncestryDNA, the concept of “European Jewish” as an ethnicity is becoming more widely agreed upon as a true DNA makeup. With results such as “European Jewish” emerging, it is making Judaism appear as a race and not just a religion—further influencing the perception of the “Jewish people.”

Since its introduction in 2007, AncestryDNA has swept the nation by providing the cheapest option for identifying your own genetic makeup. But how do they, or any of the other human genome tests, determine an individual's ethnicity? Companies like AncestryDNA are able to look at specific aspects of your DNA which indicate your lineage to identify your ethnicity. There are two different ways to find your ancestry in the components of your molecular chromo-

somes, which is made up of DNA and proteins. First, there is the DNA found in the Y chromosome, which is a sex chromosome and out of our 23 chromosomes located in the nucleus of each cell, it is the most stable. Y chromosomes are the most stable because other, "...chromosomes swap DNA regularly, but the Y chromosome is passed almost entirely intact from father to son..." (Skloot 81). Instead of a Y chromosome, women have two copies of the X chromosome; because of this, men are the only ones who are able to trace back *parental* lineages, while both men and women are able to trace back their *maternal* lineage through the second location of DNA, in the mitochondria. Like the Y chromosome, mitochondrial DNA keeps the DNA essentially intact, enabling the maternal lineage to be traced back for generation upon generation (Devine 48).

This ability to suddenly know a person's DNA, which indicates the visual appearance and overall ethnicity of an individual, could be detected from something as small as a sample of blood, saliva, or even a strand of hair (Zimmerman 152). Through these small pieces of human extracts, similar characteristics in DNA are discovered connecting people from different backgrounds. This connection of like-DNA leads to "DNA profiling" or "DNA matching." Exactly like the phrase indicates, DNA matching is taking these complementary DNA samples and matching them with similar DNA samples, drawing comparisons between these individuals' DNA makeups in order to find "genetic cousins," (Skloot 82). As DNA testing started to become more utilized throughout the late eighties and early nineties, a platform was created to track all of these DNA samples, called a "DNA database." For AncestryDNA, they specifically pride themselves on having a database of "1.5 million people," a hefty amount indeed, but nothing in comparison to the seven or so billion people who walk this earth. So since AncestryDNA does not have a large database to pool from, it therefore changes the results of the DNA test from one year

to next. This is due to the fact that their data is a continuous collection of people and as they get more DNA samples the percentage for ethnicities becomes clear and more easily defined.

AncestryDNA uses the information collected from individual DNA samples, compiled in their database, to split people up into 26 ethnic regions. The regions in Africa include the following: Africa North, Africa South-Central Hunter-Gatherers, Africa Southeastern Bantu, Benin or Togo, Cameroon or Congo, Ivory Coast or Ghana, Mali, Nigeria and Senegal. In Asia they include Asia Central, Asia East, Asia South, and in West Asia, this includes Caucasus and Middle East. In America the only ethnic region is Native American, and in the Pacific Islands they include Melanesia, Polynesia. In Europe the ethnic regions as follows: Scandinavia, Italy or Greece, Ireland, Iberian Peninsula, Great Britain, Finland or Northwest Russia, Europe West, Europe East, and finally, European *Jewish*. Does this last category not seem out of place? Is not it odd that all the rest of the ethnicities are purely based and named corresponding with their regions and not a religious people? For many people, the “European Jewish” answer from AncestryDNA test is providing a swift divide between what is seen as an ethnicity and what is not. The Jewish people are individuals who have always had a sense of “other” about them—so is this DNA result reaffirming the preconceived notion of Jews as an entirely separate race?

There is no gene that Jews singularly have. Jews are distinct in nature but there is nothing genetically different about this group of people. But this still does not make the scientific world question the idea of Jews as differing racially. Medically speaking, Jewish individuals carry specific genes that cause unique medical conditions, such as Tay Sachs. In many cases, Jews are considered a “founder population,” a people who have preserved the genetic makeup of their ancestors through few cases of intermarriage based on their continuous religious and cultural beliefs. As University of Arizona geneticist, Michael Hammer, states, “...the rate of non-Jews who

entered the European Jewish gene pool over the past centuries was less than 0.5 percent per generation, at least until recent decades,” (Entine 45). Many scientists, in the pursuit of testing Jewish individual’s DNA, have also used this to try and find an “origin” to the Jewish people. This so-called “origin” has a variety of hypotheses but can be a murky subject due to the fact that it is trying to indicate that the Jewish people are “one people” and it does not take into account that the idea of being “Jewish” is a religion and not a regional ethnicity.

Despite this profuse amount of research to distinguish Jews racially, there is no gene that separates the Jewish people from any other group of people—there is no true *Jewish* DNA. There is DNA that corresponds with individuals from Eastern Europe, but it is not something that can be defined as a subcategory of a larger region. Jews from Eastern Europe are also merely Eastern European, and are not something that is different than the whole. Likewise, Jews from the Middle East are not “European Jewish” but instead “Middle Eastern.” So with results emerging from AncestryDNA stating that, “European Jewish” is a separate category, this can lead to a plethora of confusion especially when AncestryDNA goes to such length to define what they mean by this distinction. In each ethnic region, once you are given your results, AncestryDNA has a short bio and history of this region and its people. In the European Jewish ethnic region they state that this region is not geographically defined as the other regions, but instead follows the “...historic dispersal of the Jewish population from its origin in the Levant on the east coast of the Mediterranean...” which produced “...insular communities scattered throughout Europe, North Africa, Central Asia and the Middle East.” This reiterates the fact that Jews are not one people whom can be classified as “European Jewish” since their geographic region is so expansive which an ethnic group would never be able to encompass.

What AncestryDNA does mention in their description is that the Jews are a people who've traditionally been, "...segregated from mainstream society by law, custom and prejudice..." which is accurate, but doesn't sustain the fact that Jews have a separate DNA makeup. In the beginning of the AncestryDNA description of the European Jewish DNA, they also state that this type of DNA is primarily located in Poland, Belarus, Ukraine, Russia, Hungary, and Israel, but can also be found in Germany, France, Lithuania, Latvia, Slovakia, Czech Republic, Romania, Bosnia, Serbia, and Estonia. This is a huge amount of people that AncestryDNA is clumping together—they are essentially saying that anyone from Western Europe all the way to the Middle East are the exact same people. This is a colossal, overgeneralized statement—grouping a large segment of the population together is never truly an “answer” to DNA tests, especially when it comes up with a DNA result that doesn't inherently exist.

AncestryDNA comes up with European Jewish ethnicity the same way it comes up with all the other ethnicities, by analyzing their DNA database and comparing this new DNA to past DNA samples. So people who have similar DNA, which they classify as “European Jewish” will then further influence more people who have this same DNA to be boxed into the term “European Jewish.” So how is this inaccurate DNA result making a difference in the community of people who have had the AncestryDNA test conducted? Does this make them feel more or less “Jewish?” Does this give them the incentive to believe that they come from a “Jewish background,” corresponding with a racial connotation?

In the digital age, there has been a wave of people reading and analyzing their AncestryDNA results on Youtube. This is not a mere scattering of videos—there were *many* videos of people describing their ethnicity findings. For the individuals that had results reading “European Jewish,” the videos all had an underlying commonality, which was that the individuals were sur-

prised by the fact that their DNA came back as Jewish but not surprised at the fact that Judaism was being classified as a specific DNA. In the video title, “Ancestry.com DNA results,” the user, Natalie Russell, explains starting at 4:53 that she is “2% European Jewish.” Russell is not at all shocked by this, and then goes on to explain that she has “heard this before” but it is still nice to “confirm it.” Obviously Russell interpreted this element of her DNA makeup as an accurate DNA indication, due to the fact that she has heard that she was “Jewish,” as if she heard that she was any other ethnicity. Russell then reiterates that she views Judaism as a race by stating that she is surprised but still finds it “cool” that she is the same percentage Jewish as she does African.

The Youtube user, C Kaiser, in his video, “My Ancestry DNA with shocking results!” states at 4:33 that he is “4% European Jewish,” which he finds “awesome” because he likes “bagels with some schmear.” This combination of cultural attributes being linked to a supposed DNA, is a prime example of how AncestryDNA is misrepresenting the Jewish people. Kaiser believes that since he now knows he is European Jewish he is “representing” with his love for bagels— a cultural appropriation for a non-existent ethnicity.

In many of these videos, it is not always what the individuals say that indicates their surprise, but instead the long pauses and facial expressions they exhibit. In “Ancestry DNA Test Results!!! You Won’t believe!” Miranda Pierce reads she is 2% European Jewish and then gasps, shaking her head, and exclaims, “What? I had no idea about that,” (4:47-4:50). This element of surprise then leads Pierce to explain that she thought she would be more Irish, since her skin is “so light” and her hair has a “reddish tint.” This statement almost seems like a non-sequitur, but when it is combined with the fact that Pierce was previously talking about being European Jewish, it seems to indicate she is surprised she is “Jewish” because she does not have olive skin,

dark hair, or dark eyes—all stereotypical characteristics of Jewish people. This continuation of facial shock is also evident in the video, “DNA Ancestry Results Shocker,” in which Angela Benedict at 5:38 reads she is “3% European Jewish.” For a few seconds after this statement Benedict stays silent, scrunching her eyebrows together and staring at the camera. This initial reaction tells that Benedict is, like the title indicates, is shocked at her DNA results. One can assume that this "shock" is not positive.

The only individual who made a video about their DNA results who was slightly critical about the “European Jewish” result, was Danielle White in her video, “Ancestry DNA results/23 and me review.” At 3:42, White said that the next results she was going to read were all small so she does not take them seriously, but that the result European Jewish really “shocked” her. Immediately after reading this, White’s eyebrows scrunch in as she exclaims, “...how could they even get that [European Jewish], unless they like have an Ashkenazi gene...” (3:49-3:54). This is the only person in the videos who indicates any sort of knowledge of the Jewish people in Europe, White is the only one who questions the results but she does not quite question them fully. Starting at 4:02, she states that it is, “...pretty cool that Ancestry is able to track that gene...” therefore declaring that she does not deny that this European Jewish DNA does exist.

From all the videos, no one ever truly denies that there is a European Jewish gene. But why would they when an established source such as AncestryDNA is telling them that their DNA results are true? These were Americans who were not practicing Jews, who are then given the information that they have a Jewish background, would they really question this? No, most likely not because this society is built around the perception that Jews were already different, therefore why wouldn’t they have a separate DNA makeup? But would the American Jewish

community question these results? Indeed these people truly understand firsthand the “otherness” of being Jewish, but would they define this as different DNA?

For Joel Grynheim, a sixty-six year old man from Indianapolis, the results of the AncestryDNA test came back as 90% European Jewish, 7% Middle Eastern, 2% Italy or Greece, and 1% other region. A child of immigrants from Poland, raised in an orthodox Jewish household in Brooklyn, Grynheim understood that his results would come back almost fully Eastern European, or more specifically Polish. But he never would have guessed that the DNA results would read European *Jewish*. “I find the general ‘European’ category not necessarily confusing but so non-specific as to almost being lazy on the part of AncestryDNA,” Grynheim said, “I am surprised they can read Jewish, I would not have been surprised if they just said, ‘Eastern European.’” There was an influence of confusion on Grynheim’s part because he did not know how they could even detect that he was Jewish since for him being Jewish is, “...a way of life, not a race.”

Grynheim’s bafflement on being defined as merely “European Jewish,” was similar to David Dreyfoos, who is in his sixties and was raised in a Jewish household in Cincinnati. Dreyfoos is a 3rd generation American and his results came back as 99% European Jewish and 1% Middle Eastern. But unlike Grynheim, Dreyfoos was not really surprised that he was as, “...pure bred Jewish...” as his results showed him to be. Being classified as “European Jewish” also did not confuse Dreyfoos because, “...Jewish people already define...as a race and that classification preceded DNA testing.”

Similar to Dreyfoos, the blogger, Rachel Krantz, also agrees that Jews are a race after she discovered through AncestryDNA that she was “more Jewish” than her boyfriend. This higher percentage of “Jewishness” led Krantz to become more aware and self-conscious of her outward appearance. Krantz stated that she found herself inwardly accusing her boyfriend of being, “... a

self-hating Jew...” when really it was herself, “...who was feeling suddenly more self-conscious about the nose and unruly hair that were the clearest physical markers of...jewishness.” By stating this, Krantz is indicating that the DNA test made her more conscious of her “Jewishness,” be that physical or emotional, showing that Krantz truly believes that she “...identifies as ethnically Jewish,” which she clearly states at the end of the piece. So if a Jewish individuals identify themselves as racially Jewish, why can't non-Jews define Jews as a race? This notion of Jews being “others” is so cemented in the mindset of the American population that it has filtered over to the scientific study of DNA, influencing the opinion that there is a Jewish race even amongst people practicing Judaism.

Despite the fact that Dreyfoos was not perplexed with the results “European Jewish,” he still thought, “...it would be nice to know a more specific region/country. I already know that I am part Hungarian, part Russian but I don't know where my paternal great grandparents are from and it would be nice to know that. I guess in some way it would be better to have an exact classification.” Grynheim thought along the same lines as Dreyfoos, stating that being told his DNA is “Jewish,” was, “...a funny way to be classified...” wishing instead to be told that he was simply “Eastern European” or stating him as “Polish or German,” similar to the category “Italy or Greece.”

The influence of the “European Jewish” results on non-Jewish populations was also a topic of contention between Dreyfoos and Grynheim. “I think it definitely allows the non-Jewish community to gain support if viewing the Jewish group as a unit,” said Grynheim. Additionally, he stated that the DNA test results also allows non-Jews to look at Jews “...as the ‘others,’” that is not European but Jewish European. Grynheim stated that, “I could have been brought up in a non- Jewish household and had little to no teaching about Judaism and yet according to Ance-

tryDNA I am 90% Jewish.” Dreyfoos, on the other hand, believes that this perception of Jewish DNA does not affect the non-Jewish community’s view on the Jewish people as a race, instead believing that the non-Jewish communities would most likely take their information based on “...more scientific studies.” This unfortunately does not seem to be the case for non-Jewish communities because based on the Youtube videos, non-Jewish individuals take these results as fact and apply them to their own DNA makeup.

Science is changing faster than anyone could have ever predicted. Now the problem is just to have science keep up with the social cues of our time. A result of “European Jewish” in a DNA test is skewing the public's perspective on race. AncestryDNA is redefining the preconceived idea of Judaism as both a race and a religion in modern times—a classification that is neither socially accurate nor scientifically proven. Generalizing a group of people into an overarching, mass category not only takes away from the significance of the Jewish community but also brings forth the “otherness” of these people. The Jewish people divert from the general population—yes this is true—but they do not divert *racially* and that is what must be established.

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