

When Genetics Challenges a Racist's Identity: Genetic Ancestry Testing among White Nationalists

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Abstract

This paper considers the emergence of new forms of race-making using a qualitative analysis of online discussions of individuals' genetic ancestry test (GAT) results on the white nationalist website Stormfront. Seeking genetic confirmation of personal identities, white nationalists often confront information they consider evidence of non-white or non-European ancestry. Despite their essentialist views of race, much less than using the information to police individuals' membership, posters expend considerable energy to repair identities by rejecting or reinterpreting GAT results. Simultaneously, however, Stormfront posters use the particular relationships made visible by GATs to re-imagine the collective boundaries and constitution of white nationalism. Bricoleurs with genetic knowledge, white nationalists use a "racial realist" interpretive framework that departs from canons of genetic science but cannot be dismissed simply as ignorant.

Introduction

Genetic ancestry tests (GATs) are marketed as a tool for better self-knowledge.

Purporting to reveal aspects of identity and relatedness often unavailable in traditional genealogical records, materials promoting GATs advertise the capacity to reveal one's genetic ties to ethnic groups, ancient populations and historical migrations, and even famous historical figures. But this opportunity to "know thyself" can come with significant risks.

Craig Cobb had gained public notoriety and cult status among white supremacists for his efforts to buy up property in Leith, ND, take over the local government, and establish a white supremacist enclave. In 2013, Cobb was invited on The Trisha Show, a daytime talk show, to debate these efforts. Another guest on the show yelled at Cobb, "You have the blood of negroes in your body right now! You are not 100% white!" And Cobb accepted a challenge to take a GAT. Several months later Cobb returned to the show only to be laughed off the stage as producers revealed him to have 86% European and 14% African ancestry.

Even as Cobb's efforts to take over Leith were failing, and he was facing terrorism charges for pointing a gun at townspeople, he was aiming to recuperate his public white identity. Cobb had his DNA retested, gained lay expertise to debate the science, and wrote a lengthy essay in March 2015 criticizing the methods of The Trisha Show's GAT, asserting the superiority of an Ancestry.com test which declared his ancestry to be overwhelmingly European. He denounced the initial company DNA Solutions as part of a Jewish conspiracy to spread "junk science" whose "intent is to defame, confuse and deracinate young whites on a mass level—especially males" (Cobb, 2015). White nationalist responses to Cobb were varied: Some mocked and trolled him, but others accepted his exoneration and offered congratulations (Cobb, 2015).

Cobb's perhaps accidental engagement with GAT is not an isolated occasion. Journalists have noted that white nationalists and members of the emergent Alt-Right have eagerly discussed GAT and advocated their use in online forums (Reeve 2016, Zhang 2016). Reeve (2016) has noted a spirit of ironic provocation among Alt-Right users as they, for example, challenge each other to use a GAT to prove they aren't secret members of the "Jewish Internet Defense Force" or seek to explain European civilization as linked to traces of Neanderthal genes which GATs can reveal.

The Cobb example puts on parade many of the key issues and misconceptions of the relationship between white nationalism and GATs. First, the initial challenge demonstrated a common assumption that GAT and true genetic science about race will put white nationalists in their place. After all, hasn't genetics (together with anthropology, sociology, and history) has demonstrated the biological incoherence of race? Hasn't it demonstrated that all humans trace their origins to a common African ancestor? And hasn't it

demonstrated that “pure” populations don’t exist? This episode also seems to dramatize the unique vulnerability of white nationalists to this technology given their ideological commitments to the purity and superiority of the white race. And at least the initial part of the story suggests that white nationalists are ignorant, anti-science, and can thus be ridiculed and dismissed. But Cobb’s second chapter begins to trouble this account as he re-engages GATs and finds data and interpretations of the science (and the testing companies) that confirm his ideas of whiteness. Cobb thus demonstrates his willingness to take genetic science seriously and to make it confirm at least some ideas about white nationalist identity.

The purpose of this paper is to engage the use of GATs by white nationalists more systematically. We use a unique dataset from the white nationalist online bulletin board Stormfront comprised of discussion threads where users post and discuss the results of genetic ancestry tests. We ask two main questions 1) How do racists/white nationalists understand GAT and interpret them viz-a-viz their identity? 2) How are white nationalists’ ideas affected by GAT? Or, more precisely, how do GATs encourage them to debate the boundaries and constitution of their group and practices of members?

The next section motivates these questions by identifying GAT use among white nationalists as a crucial site for race-making agency, which we call the ontological choreography of race. Then we explain how GATs work, review recent work about them viz. identities, and describe our data. The empirical part of our paper is organized by a “decision tree” that illustrates the range of white nationalists’ responses to “good” and “bad news” posts about GAT revelations. The bulk of the paper describes white nationalists’ repair strategies for bad news, but also how some seek to reimagine white nationalism in

terms relationships GAT make visible. We conclude by considering the connection of technology with racial cognition and implications for the politics and ethics of population science.

Background

Significance of the study

Genetic ancestry tests are a locus of what we might call, following Thompson (2005), the ontological choreography of race. For Thompson, the assisted reproductive technology clinic was a site where formerly separate matters of law, property, rights, sexuality, finance, kinship, emotion, and technology became entangled and transformed into a new ontological choreography of parenthood. Though certainly less concentrated and imbricated than the ART clinic, matters of genetics, technology, marketing, population, identity, social participation, and political movement are being put into new relationships with GAT.

One part of this new choreography concerns what Duster (2006) called the “molecular reinscription of race.” Scholars have shown that a combination of new technologies and political ideologies of multicultural inclusion (rather than an earlier generation’s white supremacy) have led to the stabilization of race and ethnicity as molecular and genetic (as opposed to constructed and historical) concepts, promoted efforts to map diversity among groups, and facilitated genetic comparisons of health and other traits (Benjamin 2013, Epstein 2007, Fujimura and Rajagopalan 2011, Fullwiley 2008, Panofsky and Bliss 2017).

What happens beyond the context of labs and biomedical institutions when molecularly reinscribed race gets into the public? One line of research emphasizes the hardening racial essentialism and supremacist politics. Researchers have shown that public

opinion is shifting toward increasingly genetic essentialist views of race, genetic explanations for racial differences, and lessened support for ameliorative social policy (Phelan, Link and Feldman 2013, Shostak et al. 2009). Experience with GAT seems to exacerbate these views (Phelan et al. 2014). TallBear (2013) has emphasized how GAT that purport to represent individuals' Native American ancestry enable attacks on tribal sovereignty over membership and the sense that non-Natives and scientists have a right to Native Americans' DNA and their history.

A second line of research argues that contemporary genetics has created a state of ambiguity around the status of race. Rose (2007) argues that unlike earlier eras today's genetic science has eschewed assumptions about racial purity and hierarchy in exchange for deep explorations of human diversity, and as a result it has helped replace eugenic or quasi-eugenic white supremacist state policies with a neoliberal politics of diversity. And Hochschild et al. (2012) have argued that population genetics and the wide availability of GAT have helped destabilize the old U.S. racial order. On the one hand it has unmoored both anchors of racial political debate—that race is a pure social construction and that races are genetically distinct. On the other hand, it has made racial classifications and individual assignments difficult thus destabilizing medical, criminological, and other institutional drivers of racial political stability.

Though these two lines of research reach seemingly opposed conclusions, they are unified by the idea that population genetics (and GAT) will influence racial politics either by hardening preexisting prejudices and divisions or by disrupting those prejudices by undermining the categories upon which they're built. But Thompson (2005) showed how the crux of ontological choreography was the creation of *new forms of agency* irreducible to

existing social and political forms. Nelson's (2016) work goes furthest in addressing the ontological choreography of race by showing how GAT and new forms of black political agency have been coproduced. Indeed, the GAT technology was first invented in an effort to establish the African ancestry of bodies uncovered in an unknown potters' field in New York City during construction in 1991. GAT would be instrumental in establishing this site as the African Burial Ground National Monument in 2006. Nelson also tracks how black people have tried to use GAT to reconstruct family histories severed by slavery, to build political and economic affiliations to African countries, and to seek slavery reparations, unsuccessfully to date.

The current article engages GAT in the ontological choreography of race from a different direction. Instead of focusing, as has previous work, on the implications of GAT for people of color we focus on the implications for their antagonists in the white nationalist movement. White nationalists' uses of GAT are the camera obscura to Nelson's case, where white supremacists seek an objective vision of race, while also doubting the process and methods of science. It is an example of bad "biosociality" (Rabinow 1996) that is another crucial site where the ontological choreography of race is being danced. As we will show, many white nationalists imagine GAT as a tool to establish white bona fides, find out that it can produce serious individual and collective identity problems, and have begun to rearticulate white nationalism in its terms.

It is important, as scholars of whiteness remind us, not to reproduce the "invisibility" of whiteness in our scholarship by ignoring it (Zuberi and Bonilla-Silva 2008). And white nationalism is a key site where whiteness becomes especially visible and where people are committed to articulating it, burnishing it, and confronting its problems.

Furthermore, white nationalism has become increasingly important at this political moment. Never as marginal as champions of liberal, tolerant society would like to imagine, white nationalism has played an increasingly prominent role in American political and social life with the vocal association they've had with Donald Trump's presidency and the contribution they are said to have made to his election. White nationalism is thus theoretically important in understanding GAT in the ontological choreography of race and this is multiplied by its growing demographic and political importance as well.

GAT functions and shortcomings

It is worth turning for a moment to how GAT work and what some of the critical commentary has been. There are two basic technologies in play. The first, using autosomal DNA, compares variation across an individual's genome to variation within a set of pre-defined reference populations. Through a statistical process parts of the individual's genome are inferred to derive from the populations to which they are most similar. The company then informs the individual that her or his ancestry is X% population 1, Y% population 2, Z% population 3, etc. The populations are determined by the company's reference samples and might be defined racially/continentally, ethnically, in terms of modern nation states, etc.

The second technology uses Mitochondrial DNA (MtDNA) which is passed directly from mothers to children, and Y-Chromosome DNA which is passed directly from fathers to sons. DNA collects mutations at a slow, clocklike rate, but because Y and MtDNA don't recombine when inherited, these mutations can be understood as branching points in trees of human ancestry. By assessing the distribution of sets of these mutations (called haplotypes) in current human populations, genetic anthropologists have been able to trace historical relationships and migration patterns among them, and also to show the ultimate

common ancestry within the last 100-200 thousand years of all modern humans to individuals in east Africa. In GATs, companies can identify the haplogroup in a woman's MtDNA to identify her maternal lineage or in a man's Y or MtDNA to identify his paternal and maternal lineages. An individual's lineages can then be described in terms of current populations that share them, and inferences can be made about the historical origins of anyone's maternal line or a man's paternal line.

Observers of GATs have offered several lines of critique (Bolnick et al. 2007, Lee et al. 2009). The GATs sold directly to consumers take as their starting point genetic assays, prior findings, datasets, and statistical strategies common to human population genetics and genetic anthropology. But the dozens of private companies that market these tests each use their own panels of DNA markers, reference groups, databases, statistical algorithms, and information communication strategies, most of which are regarded as trade secrets (Royal et al. 2010). Thus they trade on the authority of science but do not adhere to scientific standards of openness and accountability, nor are there industry standards (Lee et al. 2009). There has been anecdotal evidence, at least, that an individual may obtain different results from different companies and that companies may tune their results to emphasize what they believe customers want to hear (Duster 2011).

GATs embody a particular understanding of kinship that makes some kinds of relationships and histories visible and others obscure (Gannett 2014, Nash 2015, TallBear 2013). For example, the maternal and paternal lineages (made visible with MtDNA and Y-chromosome haplogroups) are but two of the thousands of lineages comprising one's background, and individuals with the same haplogroups can widely vary in the rest of their ancestry (Emery et al. 2015). Also, GATs assume that present day populations can be used

to infer ancient patterns and relationships. They often portray populations more coherent and distinctive from others than history and even genetic data might warrant. And there is no objective way to define a population or to decide which individuals should be picked to be their genetic representatives (Bolnick et al. 2007, Royal et al. 2010). Thus how individuals *should* interpret GATs and what *can legitimately* be inferred from them is far from clear (and might vary from test to test), but research suggests that in practice GATs *are interpreted* to essentialize identity and race biologically (Nordgren and Juengst 2009, Phelan et al. 2014, Wagner and Weiss 2011).

GAT and identities

These findings might suggest that GAT would have an overwhelming influence on individuals' identities, but research indicates the impacts are limited. Nelson's (2008) study of African Americans' quests to fill in gaps in personal genealogy are characterized by "affiliative self-fashioning." That is, GAT results tend not to undermine prior identities, but tend to be incorporated or rejected depending on how they fit into prior self-conceptions or aspirations for identity. Roth and Ivemark (2017), in a study involving before and after interviews of a racially diverse set of GAT users, found that only white users who had a pre-existing desire to burnish their identity with some racial or ethnic ties were likely to change self-conception after the test. Other research found that a sample of Latinas and African American women to be largely unmoved by genetic ancestry information collected as part of a broader genetic health study considering their ancestry to be "all mixed up anyway" (XXX).

But possible risks to personal identity should not be limited to the disclosure of personal information. TallBear (2013) highlights how the idea that GAT might be dispositive of Native American ancestry has been used to challenge the sovereignty of

tribes to set their own membership rules. And Davis (2004) argues that the controversy surrounding the use of genetic tests to determine whether Thomas Jefferson had fathered children with his slave Sally Hemmings was animated by the fact that it risked the narratives and status of a “founding father” of the nation and thus, in principle, all Americans’ identities.

GAT and white identity

Research on GAT and identity has largely focused on non-whites, but what about the implications for white identity? Scholars of whiteness have emphasized its contradictory and complex character—whiteness is in “crisis” even as it maintains political and cultural hegemony (Hughey 2012, Winant 1997). On the one hand whiteness is conceived as neutral, empty, the absence of race. Along these lines, building on Waters (1990), Roth and Ivermark (2017) explain that GAT may offer white people additional ethnic options in their quest to cultivate costless, “colorblind” forms of identity. For whites viewing ethnic identity as costless and optional (Waters 1990), and understanding whiteness as a kind of identity deficit (Hughey 2012), GAT may offer new kinds of identity options (see also Waters, 2014).

But on the other hand, as Harris (1993) has argued, whiteness has been inscribed in American culture and institutions as a form of property. Predicated on racial purity and always at risk of being “devalued,” whiteness is animated by processes of exclusion. And this active and valuable but endangered form of whiteness is what white nationalists actively promote and defend (Willoughby-Herard, 2015).

GAT may thus present a set of dilemmas for white nationalists. On the one hand, GAT may be a valuable tool for them to make race visible, clearly disclose its heritable and biological components, and draw boundaries around whiteness. Common on Stormfront,

the white nationalist online message board upon which we focus, are discussions of who counts as white and what kinds of people are permissible sexual partners; maybe GAT could resolve some of these questions. White nationalism is also closely associated with anti-Semitism, and thus GATs, which often call out Jewish ethnicities (e.g., Ashkenazi), may allow them to identify hidden Jewish or (other) non-White identity.¹

On the other hand, GATs are used by many whites in the hopes of finding hidden non-white ancestry to burnish their identities (Roth and Ivemark 2017), which is antithetical to white nationalists' notions of white pride. However, whites seeking out racialized identities reveal how GATs reproduce different colonizing logics, where the power to selectively self-identify through genotype is not as stigmatized as phenotypical markers of race. More crucially, GATs are designed to reveal human variation and genetic heterogeneity (Royal et al. 2010), and MtDNA was the decisive evidence in establishing that all human races share common ancestry (Cann, Stoneking and Wilson 1987). GAT may thus blur boundaries of whiteness and unsettle individuals' claims to membership. Furthermore, GAT, which may be used to identify distinctions within races—e.g., peoples within Europe, may energize a simmering debate within white nationalism between those who emphasize common whiteness and those focused on the hierarchy of nations within Europe (Simpson and Druxes 2015).

These literatures provide us with some general questions as we analyze how white nationalists use GAT. Are there special ways that different groups engage GAT? Do white nationalists engage GAT in ways analogous to non-whites? For example, do they exhibit the affiliative self-fashioning that Nelson (2008) describes as characteristic of African

¹ On Jews' late and problematic admission into whiteness, see Brodtkin (1998).

American responses? Furthermore, if whiteness is in a state of permanent crisis, and if white nationalism is predicated on an essentialist understanding of race and racial difference, does GAT exacerbate the sense of crisis or help resolve it? If many Native Americans experience GAT as an assault on their identity and membership sovereignty, do white nationalists experience something similar?

Data and Methods

To study the interpretation of GATs by white nationalists, we examined posts from Stormfront.org, a prominent online discussion forum for whites only (Daniels 2009). We chose Stormfront as our object of analysis because of its long history as a publicly available resource for white nationalists and its overt messaging as a white power movement. As we will show, Stormfront is not only a free space for discussion of white nationalism, but also advocates for white identity politics as a frame for mobilizing what they call “the white minority.” In this section, we provide a history of Stormfront as a social movement online community and highlight the role Stormfront plays in framing white identity politics. We conclude by describing our sampling strategy and present the descriptive analytics of our dataset.

Stormfront as a Social Movement Online Community

On March 27, 1995, Don Black, a former Grand Wizard of the Ku Klux Klan, launched Stormfront (Abel, 1998). Black was educated in computer programming while in prison for attempting an armed invasion of Dominica in 1981. Upon leaving prison, he worked as a web designer, specializing in databases and discussion boards for clients around the country. Black saw potential in emerging technologies such as black board systems and website discussion boards for reinvigorating interest in the white nationalist movement. In his estimation, Stormfront would provide whites a place for free and open discussions of

race, politics, and culture. Because Stormfront was one of the first websites dedicated to racial hate and discrimination, the message board serves as an archival and historical resource of white nationalist thought and discussion, with nearly one million archived threads and over twelve million posts by 325,000 or more members.²

What made Stormfront different from other white supremacists' sites was its adoption of web 2.0 technology, which allowed for member participation on forums and blogs. In 2002, Black added a new feature on the site, where he and his mentor David Duke, a former KKK leader and congressman, co-hosted a weekly web radio show (Daniels, 2009: 104). The inclusion of these features led to debates as to whether Stormfront should be considered a movement unto itself or an online community among other white nationalist groups (Hara and Estrada 2003; Daniels 2009; Caren et al. 2012). Hara and Estrada (2003) compare the features of Stormfront to MoveOn.org, a leftist political organization who focuses on political campaigns through donation drives and online petitions. They argue that Stormfront is an ineffectual political organization within the white nationalist movement because they do not actively engage in political campaigns. Daniels (2009: 49; 106) states that Stormfront should be defined as a "virtual community" rather than a social movement because it is united by a particular racialized worldview, where there are few opportunities for coordination of offline activities.

The community of Stormfront is maintained through the technological features of the website itself, where there is a consistent moderation of posts, restriction of spamming and trolling, and topical forums ensure order for lengthy discussions. Caren et al. (2012)

² Statistics were gathered from the Stormfront webpage's self-reporting and does not include information on lurkers (i.e. those that visit but do not sign into an account): <https://www.stormfront.org/forum/> (accessed, May 30, 2017).

describe Stormfront as a “social movement online community,” where collective identity is emphasized over collective action. Caren et al. (2012) assert that SMOCs are unlike typical social movement communities because they are geographically dispersed, can scale membership rapidly as needed, and allow for anonymity. Additionally, Buris et al. (2000: 232) write with reference to skinheads, “the Internet holds a special attraction for those in search of a “virtual” community to compensate for the lack of a critical mass in their own town or country.”

In assessing the size of Stormfront, Caren et al. (2012) estimated that in 2010 there were between four and five million page views per month. With the focus on the American presidential election from October through December 2016, Stormfront logged over 17 million page views. This increase in consumption over the election cycle indicates not only a growing curiosity about white nationalism, but also more interest overall in discussions about white identity and its political ramifications. Since Daniels (2009) and Caren et al.’s (2012) publications, much has changed about online coordination of social movements, where the strategic leveraging of social media coupled with backchannel communication allows movements to reach new audiences for recruitment and mobilization (Donovan 2016). Therefore, we define Stormfront as social movement online community linked with a much broader white nationalist social movement, where Stormfront serves as an integral forum for discussions of white nationalism and meaning-making about white identity. We now turn to describing how Stormfront frames white identity politics.

White Identity on Stormfront

While Stormfront has not overhauled its technical interface greatly, it has changed the description, shifting from a militant political position to one where they emphasize the need for the “white minority” to get organized. Throughout the end of the 1990s,

Stormfront's description read: "Stormfront is a resource for those courageous men and women fighting to preserve their White Western culture, ideals, and freedom of speech and association -- a forum for planning strategies and forming political and social groups to ensure victory." Guided by Don Black's militant vision, Stormfront was intended to be an organizing space for a white nationalist social movement, with tendencies towards white supremacy. Over time Stormfront revised this combative introduction and now describes themselves similar to other identity-based movements, they write, "We are a community of racial realists and idealists. We are White Nationalists who support true diversity and a homeland for all peoples. Thousands of organizations promote the interests, values and heritage of non-White minorities. We promote ours. We are the voice of the new, embattled White minority!"

This shift in language reveals how leftist movements that created political and cultural changes through mobilizing a collective identity (such as feminist, LGBTQ, and Black power movements) have greatly influenced the ways in which the US white nationalist movement conceptualizes white identity. Moreover, by adopting an identity-based approach, white nationalists differentiate themselves from white supremacists, who seek to advance an extremist plan for worldwide domination. In this way, white identity movements rely on a "racial realist" perspective, which claims race is biologically determined (rather than socially constructed), a state of affairs that justifies the separation of races and nations as a matter of heritage, and biological and cultural preservation. Because white nationalists are concerned with issues of race, biology, and nationhood, examining Stormfront members' discussions of GAT explains how white nationalists use

these tests as markers of white identity, especially those in search of European, non-Jewish, roots.

As a result of its Web 2.0 interface, its longevity online, and respected status within the white nationalist movement, Stormfront is an exemplary place to study to how white nationalists use GAT tests in the formation of white identity politics. While there are now many places where individuals can discuss GAT tests online, such as message boards like Reddit or in Facebook groups, our study specifically addresses how white nationalists are using genetics to think about racial categories and how white nationalists make claims about white identities using scientific evidence. Therefore, Stormfront is unlike other websites or social media because there is no ambiguity in its presentation or messaging as a white nationalist online community invested in white identity politics above all else.

Overview of Data Analysis

Much of the discussion on Stormfront related to genetics takes place in the “Science and Technology” forum. Caren et al. (2012) found that few forums hold on to new members for long periods of time, but 27% of users who first post in Science and Technology were still posting over a year later. For our study, we compiled a database of seventy threads, which were chosen based on the thread containing at least one instance of a member posting their GAT results. Within these seventy threads, we examined 3,070 posts that included both GAT results and the ensuing discussions (See Appendix). Among the 70 threads, in 639 posts users described their genealogy, where 153 posts were results from identifiable direct-to-consumer testing companies. Of these posts where GAT consumers revealed their results and their personal reactions, we coded them according to the type of test and reaction by the consumer.

[Table 1 about here]

[Table 2 about here]

The remaining 2,341 posts in our sample were made in the discussions that emerged within threads. Responses to test results ranged from shame and exclusion to sympathy and understanding. Moreover, responses to surprising results prompted discussions of scientific legitimacy, multicultural conspiracies, and racial purity. From these responses, we created a flowchart or decision tree (See Figure 1) that maps the range of rationalizations used by white nationalists to interpret GAT results. Below is the range of community member reactions to another member revealing their GAT test results and the number of code applications. Some posts involved multiple reactions, so there is a degree of overlap between these categories. We present this information here as a general overview of the range of members' reactions and to highlight the preponderance of responses where members engaged the community using educational and scientific explanations.

[Table 3 about here]

Because our study assesses how white nationalists use the theories, methods and tools of science to support their racist beliefs, we examined closely members attempts to educate each other. Among the 1,260 posts that were coded with "provides an educational or a scientific explanation," we developed a series of sub-codes to draw out what kinds of knowledge and explanations community members were relying on to understand science and genetics. Of these 1,260 posts, many involve an attempt to educate the community about genetics, explain what it means to be white, and recommend specific texts for further education.

[Table 4 about here]

What is perhaps most noteworthy among the codes reported in Tables 3 and 4, is that despite the racial essentialist starting point of most Stormfront posters, responses aiming at shaming or discrediting individuals as “not white” upon the revelation of “bad news” are surprisingly infrequent relative to the wide range of other types of responses. It is toward this wide variation that we now turn.

Findings

Here we analyze different ways that Stormfront users post their GAT results, react to the posts of others, and also generally debate the meaning of GAT. We inductively generated a classification scheme of the different responses, which we have portrayed as a “decision tree” (Figure 1).

[Figure 1 about here]

In the analysis below, we will progress through the different possible responses which are represented by the different squares on the figure. We start by considering the GAT results that posters consider “good news” regarding their identities (red squares). Then we turn to the more interesting cases where posters reveal results that they consider “bad news” in that some proportion of non-white or questionable ancestry is revealed (yellow squares and subsequent branches). First we consider cases where Stormfront responders work to repair the poster’s “spoiled identity” (Goffman 1963), either by rejecting GAT as a basis of knowledge about identity (purple squares) or engaging in a scientific reinterpretation of the results to minimize the damaging results (green squares). These cases all involve ways of discrediting or minimizing the impact of GAT, but we turn next to examples where Stormfront members engage these “bad news” posts by accepting

GAT results (gray squares). One set of these includes boundary work to expel posters with spoiled identities, but the second set contains examples of ways that Stormfront posters are using GAT to rethink the boundaries of whiteness and the project of white nationalism.

“Good news” from GAT

Of the 153 posts where specific GAT results were revealed, 53 of them were Stormfront members posting some kind of good news about their GATs—that is results that they interpreted as confirming or enhancing their white identity bona fides. Many of these were seen as strictly confirmatory:

I used 23andme. It came up 100% European. Mostly Irish and British with some Scandinavian. Pretty much what I expected but it was good to get it confirmed.
(AltRightyThen, 09-28-2016)

I did my Y-67 and Autosomal tests through Family Tree DNA. All it did was confirm my ancestors were western European; primarily England, Wales and Scotland. I already had a paperwork trail before the DNA tests so the test was accurate for me. (jbgramps 07-10-2016)

These posters are pleased but not surprised by results that confirm what they already believed to be true about their ancestral origins.

But for other posters, the good news went further as they identified unknown components of their ancestry that confirmed their white identities in new ways. For example, one poster was thrilled with the “*pretty damn pure blood :D*” (Sloth 07-11-2010) that testing revealed. Sloth was surprised that “*even though im born in Finland I dont have much roots in here. The biggest % was from Iceland, then Ireland, then Scotland, Then Norway, Sweden and FI[nland] last but not least.*” Intrigued by the “Celtic” result, Sloth mused “*How can I have some Celtic roots if I have BLONDE hair, not red.*” But this result was considered interesting, not discrediting, and Sloth planned to get a Thor’s hammer tattoo and visit Iceland due to this new knowledge.

The good news can also allay fears about one's identity. For example, Shatzie (08-23-2013) had pursued testing out of a concern that "*their might be american indian or jew in the mix because I tan really easily*" but was relieved by the results:

67% British isles
18% Balkan
15% Scandinavian...
100% white! HURRAY!

Good news posts generally fail to draw responses, perhaps because they rarely pose a question. Occasionally good news might draw congratulations from a poster's virtual friends and sometimes a scoffing response from someone critical of the decision to send one's DNA to companies that some Stormfront posters believe are parts of a Jewish conspiracy, a point we return to in a moment. Overall, GATs seem to be worth little discussion so long as they deliver good news. But bad news posts are another story.

Rejecting "bad news" from GAT

A substantial, perhaps surprising, number of posts relate some kind of bad news revealed by GAT. It is perhaps somewhat surprising that posters would reveal bad news—even with the quasi-anonymity of the online handle, but such reveals often solicit advice about how to interpret or cope with the information. Such posts often elicit long series of responses some of which are supportive and others of which can be dismissive or cruel—about these more below. We have identified two basic ways that Stormfront posters seek to contain identity-damaging GAT results.

Rejecting GAT

The first of these is to reject GAT as a basis of knowledge about an individual's ancestry or racial identity. One version of this rejection is to champion traditional genealogical methods instead. For example, in response to a result that contradicted the poster's family history, one posting was:

My advice is to trust your own family tree genealogy research and what your grandparents have told you, before trusting a DNA test. These companies are quite liberal about ensuring every white person gets a little sprinkling of non-white DNA (we know who owns and runs these companies). Rather, these tests can be used to affirm what you know about your own European ancestral groupings, deep origins, etc.

It's also very unlikely for whites to be mixed if their genealogy shows all European ancestors 5 or more generations back. Rampant race mixing wasn't going on back then the way it is today. (Bellatrix 06-21-2015)

Genealogical research is a popular pursuit among Stormfront posters and they frequently describe it as the best way to learn about one's identity. Genealogy is more specific about identity—linking one to people from particular groups and places rather than vague populations from some unclear historical past—but also it is under the identity seeker's control.

A second justification for rejecting GAT results is that race or ethnicity is directly visible. In response to a poster's distress that GAT identified Jewish ancestry, Gladiatrix responds, "I wouldn't worry about it. When you look in the mirror, do you see a jew? If not, you're good" (05-26-2014). CatchTheInnocence mocked the form of the GAT by posting his own "test results": "And the mirror test results: golden/reddish beard, bright blue/green eyes with a beautiful yellow circle and a White mans nose" (07-07-2015). The idea behind the "mirror test"—a play on the GAT data reveal (Nelson and Huang 2011)—seems to be that a part of a true white nationalist consciousness is the ability to discern race directly; or, more precisely, that non-white or Jewish ancestry will leave visible traces that the race-conscious will be able to see. From this perspective, if someone does not "look white" or if their appearance leaves room for doubt, then that person is not white. GAT thus adds nothing.

A third way to reject problematic results is to reject GAT themselves as produced by companies whose leaders have an anti-white bias. In the response above, Bellatrix accuses companies that offer GAT of having a pro-multiculturalism bias in which they try to confuse whites about their identity by attributing to them some non-white ancestry. Others link this bias to a specifically Jewish conspiracy advanced by GAT companies, in particular 23andMe, which they believe are owned by Jews.³ For some, the conspiracy goes deeper:

I would be interested in taking a DNA test to explore my ancestry, but one thing prevents me. That is the fact that 23 and Me is Jewish controlled and it would not be surprising if all the others are too... it IS possible to develop synthetic diseases that will kill only whites with a 100 percent death rate.... I think 23 and Me might be a covert operation to get DNA the Jews could then use to create bio-weapons for use against us. (ErikTheWhite 10-15-2016 quoting Volodyamyr)

For many Stormfront posters, one can discount GAT results because the putatively Jewish company ownership is invested in sowing racial doubt and confusion among whites. But furthermore, one should not participate in testing because it also empowers Jews and governments to surveil and ultimately to attack whites.⁴ Though cast in implausible anti-Semitic and conspiracy theory terms, the critique here mirrors those of GAT critics who have noted the technology is between science and the market and lacking an objective standard companies may tell people what they believe they want to hear (Bolnick et al. 2007).

³ For a full articulation of this point on a white nationalist blog see, <http://www.renegadetribune.com/the-jews-behind-23andme-and-family-tree-dna/> (accessed, April 25 2017).

⁴ Not all Stormfront posters accept the extreme conspiracy theories about GAT: "I am sorry if you think it is an evil conspiracy. There is zero evidence to support that. Every White person I know who has taken any of these autosomal tests came back as White in some form or the other. They were never told that they are mixed" (SaxonCelticPride 09-17-2013).

The Stormfront posters who reject the legitimacy of GAT do so based on the conviction that paper and pencil genealogy and perception grounded in racial-consciousness are superior forms of knowledge. Furthermore, many believe GAT companies to be biased, seeking to confuse whites. The common thread here (beyond the conspiracy mindset) is a distrust of elites and Jews and a valorization of tools of knowledge that can be controlled by oneself. Indeed some posters bemoan the lack of a “racialist” run GAT company, and others advocate downloading one’s genetic data (which some companies allow), and taking it to sites like GED Match (<https://www.gedmatch.com/>) which they believe offer a more detailed and neutral depiction of ancestry.

Reinterpreting GAT

A second general strategy for dealing with “bad news” GAT results is to reinterpret the results within frameworks of genetic, statistical, or historical knowledge in order to undermine the most damaging interpretations. Here GATs are understood as legitimate in principal, but particular results are believed to be erroneous. Such discussions are usually in response to an original poster’s worried description of an anomaly—a person who “looks” white and believes his or her ancestry is white, but receives a GAT result with some ancestry from a non-white or Jewish ancestry. And the responses that aim at repair tend to be educational and reasoning through different ways of making the anomaly make sense.

The most common strategy is to chalk low levels of anomalous ancestry to “statistical error.” Posters often respond that ancestry percentages in the low single digits are not significant and can be discounted: “Every single White person I have spoken to who has taken this test ends up with less than 1 percent of some obscure region in their DNA. It's not worth stressing over” (SaxonCelticPride quoted in greengoddess 09-15-2013).

Others put the threshold of non-concern at about 5%, sometimes citing the interpretative guidelines promulgated by GAT companies themselves.

But there is a lot of obsessing and questioning about these small portions of “bad news” ancestry, so they are clearly considered dangerous. One individual writes, “Mine says 98% Europe and I will not be revealing the others that make everything add up to 100%. I view the rest as noise DNA that's probably there from many hundreds of years ago during conquests between Europe and other places” (greengoddess 09-14-2013). It is “noise” so the poster feels justified in not revealing it (perhaps to avoid drawing negative attention), but then she gives the noise an explanation in historical processes. Despite assurances of their insignificance, low percentages can be hard to ignore. As one posted:

They had me at 5% [non-European] and the rest European decent, whether it's legit or not I did the smart thing and went on the forum where they racially profile people by traits and race features all the time, they classified me and said I looked of Germanic, Celt stock and Borreby, Alpine like was the trait. (Ghostofwar1119 07/31/2015)

Concerned about the genetic results, this poster went to a crowdsourcing site where a person can submit his or her picture to be rated by peers for its whiteness and was gratified that the suspicious DNA was at least not visible.

Finally, tiny percentages of non-white data can be seen again as part of the multicultural conspiracy of 23andMe and other GAT companies trying to sow confusion among whites:

EVERY single American's results that I have seen ALWAYS have this 0.1% non-white garbage....[results from 23andme are 'rigged'] for the very reason and cause of trying to spread multiculturalism and make whites think that they are racially mixed ... 23andme has been called out for it's new method of determining ancestry, this whole 0.1% or 0.2% african or native american (or whatever non white it may be) garbage is 100% falsified and inaccurate. (Herja 02-21-2014)

This poster disputes the scientific basis of disclosing very small portions of ancestry and thus attributes GAT companies' disclosure of the information as having anti-white motives.⁵

A more sophisticated strategy for reinterpreting problematic GAT results to be less damaging is to point out some version of correlation does not equal causation in the results. For example:

the main flaw is that they base your results on common dna segments. For instance if a significant number of Turks had a certain segment resulting from the Greeks who used to live there, a Greek taking the test might come up as part Turk, not because he has Turkish ancestry but because some Turks have Greek ancestry.

Bingo. This may even account for face-value White Americans who come up with a smidgen of Amerindian. It's not that the White folks necessarily have an Injun in their woodpile.... it's that the base population of Injuns from whom they analyzed the markers had some White in theirs. (Skyrocket 06-01-2014)

The poster points out that GAT companies estimate an individual's ancestry by comparing it to a reference group. But that reference group is defined by fiat since geneticists must generally sample from contemporary populations rather than historical populations believed to be their origins. This poster's critique, though without the racist overtones, echoes those of academic critics of GAT (Bolnick et al. 2007) and is one of the basic problems that population geneticists deal with in their work.

Other versions of this critique are made less on logical grounds, but in terms of elaborate historical theories that account for the mixture of white or European genes with non-white or non-European populations. For instance, one poster understood his/her ancestry to be Italian, "However, the DNA tests show that on both sides, I belong to

⁵ Logically, though, if GAT companies were seeking to lie and confuse they would do so by skewing the results to appear significant rather than negligible.

haplogroup U5a1a, which means all my ancestors come from Northwestern Europe!”⁶ A responder explained the result in terms of the heterogeneous mix of peoples constituting Italy:

It's not really all that surprising, Italy is a fairly new country and before that there were quite distinct regions to it, it used to be Celts and Etruscans in the North, Greeks in the south Italics in the middle etc and later on the South became the Kingdom of Sicily, also Byzantine Greek occupation happened in large portions of it, in the Central and North and the South it passed into the hands of Lombards, Franks, Goths, etc, so it's not really all that surprising that your ancestry is from Northwestern Europe. (MaxVictory 01-04-2008)

In another example, a poster noted alarm at a GAT identifying “11% PersianTurkishCaucasus” ancestry. FadingLight responded, “these are OLD strains of White genetic material that turn up in odd places. Remember that Persia was a WHITE civilization to start with, and all of that surrounding area was White, too, until the Semites came” (10/09/2012). And in response to a person who posted a small portion of “Senegal” ancestry, FadingLight raged:

See, THIS is why I don't recommend these tests to people. Did they bother to tell you that there were Whites in what is now Senegal all that time ago? No? So they led you to believe that you're mixed even though in all probability, you are simply related to some White fool who left some of his DNA with the locals in what is now Senegal. (07-01-2015)

Thus, anomalous results of current Stormfront posters are sometimes explained in terms of deep histories of whiteness including its ‘heroic’ conquests, ‘tragic’ incursions of non-white populations, and ‘foolish’ mistakes of whites.

What we have shown here is a strategy of coping with “bad news” that accepts the reality and relevance of GAT results but attempts to offer alternative explanations than

⁶ Uncommented on by interlocutors is the odd reporting of the result: The haplogroup is only for the maternal line (and couldn’t describe “both sides” let alone “all my ancestors”) and many contemporary populations around Europe exhibit it in various frequencies.

those seemingly on offer from the testing companies. In this framework, the repair strategy is not to reject scientific or historical knowledge but to educate oneself to understand the construction of GAT results and to explain those results in alternate terms. This perspective is often supplemented with counter-historical knowledge that emphasize race as the driving force in history.

Accepting GAT results that deliver “bad news”

The sections above considered ways of repairing identities endangered by GAT “bad news” that worked by rejecting, displacing, or re-interpreting GAT results so as to minimize their impact. Now we turn to responses that accept the bad news—first on the individual level and then how some have begin to think through the implications of the results for the boundaries of white nationalism and theories of race.

On occasion someone will post GAT results that have bad news that far exceeds the threshold of a few percent of non-European ancestry. Witness this exchange:

Orion22 11-13-2014

Hello,

Has anyone received their DNA result from saliva DNA test?

I received my results today, and I am 58% European, 29% Native American and 13% Middle Eastern.

I am pretty sure Middle Eastern is Caucasian too, as well as European, so it means I am 71% Caucasian?

...

Gargoyle 11-14-2014

Looks like you won't be a member here anytime soon.

Orion22 11-15-2014

I am pretty sure you are NOT 100% pure either. Good luck with your DNA test, if you are North American, you will be surprised how much Native American DNA you have.

TommyGunOrange 12-01-2014

you are seriously retarded and ignorant about genetic studies

...

no, you're just jealous because you want to be white but you cant and you hate the fact most white americans really are 100% white

...

its not our fault your ancestors were stupid fcking race mixers and race traitors

don't get mad at us just because you're stupid dirty dog

and for your info, the vast majority of genetic studies and results show that yes, the typical white American is 99%-100% white/European

...
go troll somewhere else, There must be a La Raza website out there somewhere. you'd feel more welcome among your half breed cousins.

...
TommyGunOrange's extraordinarily harsh response (edited down by about two thirds) was triggered first by the admission of Native American ancestry and then the defensive claim that lots of North Americans would share this background. The initial poster is perceived as a troll—why else would someone cop to this background among Stormfronters—and is screamed at with a racist screed.

Not all such bad news acceptances are quite like this. Another example, *Hello, got my DNA results and I learned today I am 61% European. I am very proud of my white race and my european roots. I know many of you are "whitter" than me, I don't care, our goal is the same. I would like to do anything possible to protect our white race, our european roots and our white families.* (RogerOne 12-31-15)

The response from FadingLight (01-01-16) was quick and harsh:

I've prepared you a drink. It's 61% pure water. The rest is potassium cyanide. I assume you have no objections to drinking it. (You might need to stir it first since anyone can see at a glance that it isn't pure water.) Cyanide isn't water, and YOU are not White.

FadingLight tells RogerOne to kill himself, invoking the common idea that 39% non-European ancestry would be clearly visible and also that non-European ancestry is like a poison. Beorma246 (01-01-16) responded a bit more mildly: "If you do care about the White race, don't breed with any White women. Therefore not polluting our gene pool." Apart from the racist screaming denunciation, we see the two common responses for accepting bad news: kill yourself or at least don't breed.

Interestingly, these kinds of response to bad news are fairly uncommon. As Table 3 shows, shaming or denunciation of someone with problematic results is far less common

than repair through personal support or various GAT reinterpretations. Though more research will be necessary to see if it can be determined when individuals are enjoined to accept vs. repair bad news, the former seems to be reserved mostly for posters perceived to be trolling or provoking Stormfront members. Indeed, perhaps RogerOne is “only” counseled to consider suicide or celibacy rather than being denounced as a “stupid dirty dog” in a thousand word screed like Orion22 because he claimed a commitment to the cause and thus muddled his intentions. But more generally, we believe, but still need to confirm, that bad news posters who have a record posting on other topics are likely to receive repair advice, whereas those who are newer to the board are more likely to be attacked—because they will be interpreted as people who have decided to post only to stir up reactions.

Rethinking the boundaries of whiteness and the project of white nationalism

Discussions of GAT among Stormfront posters go beyond the interpretation of results for an individual’s own identity and go on to consider redefining group definitions of whiteness and white nationalism. First of all there is considerable discussion of what are the genetic markers of legitimate whiteness or European-ness. In particular, posters discuss the haplogroups that differentiate among Y chromosome and Mt DNA lineages and debate whether particular ones are white and European. For example, jvpski3 (09/25/2015) asked about the European bona fides of the Y chromosome J2 haplogroup; posters debated its supposed Mesopotamian Semitic origins, relation to other haplotypes, and distribution into Europe by Neolithic peoples.⁷

⁷ See <https://www.stormfront.org/forum/printthread.php?t=1122696&pp=100> (accessed May 1, 2017).

In a different thread, “Which is the pure white haplogroup?,” a poster referred to a Y haplogroup map of Europe: “I see that R1a, R1b and I are the prominent European haplogroups” (HaplogroupQuestions11, 06/21/08). Semitic-Arab responded that those are the Indo-European/Aryan haplogroups (06/23/08). And SabreWolf, picking up the thread after several dormant years, explained “I, J, R, L and their subclades are the major Caucasoid haplogroups” (04/04/2014). SabreWolf went on to note a problem however, “There are African-Americans with R1b, but that does not make them White. ... Haplogroup is only useful for tracing the migration path, not to confirm race of individuals. ... Thus only full autosomal PCA testing is useful to confirm race.” In these discussions, the question is what are the legitimate markers of whiteness or European-ness and what technologies can deliver them. At stake is the implicit question of whether white nationalists could use GAT to derive genetic criteria for membership.

The risk that genetic ancestry poses to the coherence of white nationalism and its membership rules can be seen directly in an exchange that followed auswhite posting his results that revealed a tiny portion of non-European ancestry:

demines (08/28/2013)

As per Stormfront's rules, you have to be of wholly European descent to be white. <https://www.stormfront.org/forum/t579650/>

auswhite (08/28/2013)

I am of wholly European descent. Both my lines trace back to Europe, the last names are European the religion practiced on both sides were European, my Italian grandfather went to school with catholic nuns for crying out loud. Just because I took a test and it came back with 0.25% nonEuropean does not mean I am not white The thought of even considering myself nonwhite has never crossed my mind. I am white in body soul and spirit through and through.

bioprof (08/28/2013)

That rule will have to be updated in the face of genetic testing. A new standard will have to be set based on modern technology. The OPs genome showing some tiny degree of admixture is going to show up in a massive

number of individuals of European descent. Strict adherence will result in very few individuals qualifying for Stormfront.

demines challenges auswhite's claim to be white based on the GAT result (though normally this kind of result would produce repair responses). auswhite replies defensively to establish his ancestral and personal white bona fides. And then bioprof recognizes the broader problem, which is that on a strict genetic rule, white nationalism would run out of legitimate members.

This problem of how to think about white nationalism in the era of GAT is actively debated on Stormfront. For example, WNquestion123 asked other members who hadn't taken GAT what the implications would be; would discovery of less than 100% whiteness be disqualifying? One response was to search the "fifty previous answers" to this question. Thomas Stuart invoked a cultural and political definition: "Most WN's do not hold to a "one-drop" rule. If you look White, live White, identify White, if your grand-parents and great-grand-parents looked White/lived White/identified White--that is often sufficient....Not to mention that many WN's distrust the DNA services" (01-09-2014). This response, of course, denies the many disgusted posts about non-white pollution of white lineages. But another response by sparrow was:

I don't think there is going to be one giant super-nation, I expect there to be multiple smaller nations, possibly confederated in some way. I predict that each nation will have its own unique definition of "White", each nation having its own standard of what constitutes appropriate genetic compatibility. So in one nation having Ghengis Khan as your ancestor won't disqualify you, while in others it might. Hypothetically, I might take a DNA test and find that I don't qualify for every Nation and every Nation's Standards, though I'm sure that at least one of those nations (and probably many of them) will have standards that would include me, because I'm pretty sure that whatever Genetic mix I have is probably shared by a certain % of the White Population where that particular mix is actually the baseline normal. I don't have to be granted "Status" everywhere, I 'm pretty sure I will be granted "Status" somewhere. That of course is speculative future that we're not really at yet. (01-09-2014)

This response imagines a future of multiple genetically defined white nations that will set different levels of strictness according to purity, and affinity and individual whites will find membership in one or more of them. But we can see in this discussion two basic approaches. The first is to emphasize a white nationalism that uses culture, family background, and political commitment to define membership, and the other is one that takes more seriously how a system might put genetics at the core without collapsing under overly rigid definitions of purity.

Finally, some Stormfront posters have begun to theorize race in ways that are specifically informed by the lineage logic of GATs. In particular in order to distinguish between better and worse forms of non-white inheritance, they use the difference between GATs based on the non-recombining Y and Mt DNA, which identify individual's patrilineal and matrilineal ancestry, and those based on recombining autosomal DNA, which give percent similarity to particular populations. AngryGoy explains the idea:

HOWEVER, When it comes to direct maternal and paternal lines, I'm a strict ONE DROP fanatic! In particular the direct maternal line for females and the direct paternal line for males. The reason why I'm more liberal with autosomal DNA is that non-White autosomal DNA can be cut in half every generation from 25, 12.5, 6, 3, 1.5, .75 and so on to the point where the non-White admixture is irrelevant. On the other hand, I am more strict with Y and mtDNA haplogroups because these haplogroups are passed from father to son, mother to daughter, and remain virtually unchanged indefinitely for 10 to 20 to 30 generations!...
I will be somewhat relieved if I find out the bi-racial female has a White Mother or the bi-racial male has a White father. I don't applaud or condone any bi-racial person with a White partner, BUT, the bi-racial female with a White Mother or the bi-racial male with a White father are the lesser of two evils when it comes to potential assimilation.
(11-23-2012)

This is an updating of a one-drop rule that measures the long term "danger" of non-white ancestry in terms of the chance that it can be "diluted" in subsequent generations of white-only interbreeding. A non-white father of boys or a non-white mother of girls is a problem

will allow the non-white essence to be transmitted unchanged down lineages. While non-white fathers of girls or non-white mothers of boys are less dangerous because non-white Y and MtDNA will not be passed on to children.

But bioprof posted a rejoinder to this idea:

What?! I don't get this. mtDNA and Y-DNA have little influence on genetic expression when compared to autosomes. I do see your "washing out" of autosomes reasoning, but I also see long-term admixture of those genes more problematic. Once that admixture begins in a population it just builds and builds until you have Brazil. (11-23-2012)

The response is that the idea of differential genetic dilution might make sense in the abstract, but that the non-recombining parts of DNA are not responsible for racial phenotypes. Furthermore, once non-white DNA is admitted into the gene pool it cannot be controlled and the practical outcome will be a racially heterogeneous population. What we can see in this debate is a tension between bioprof's phenotypic and pragmatic understanding of the genetics of race and AngryGoy's logical and essentialist conceptualization, both of which have genetic connections but different practical implications.

Discussion

GATs have been among the most publicly visible and available products of the recent genetics revolution. Companies have pitched them as an opportunity for individuals to know themselves better, and GAT advocates have celebrated their potential to foster connections and understanding in a racially and ethnically fragmented world.⁸ Though research is accumulating on the identity implications of GAT for various groups, ours is the

⁸ Indeed the travel booking site momondo.com has marketed their services with a series of melodramatic web films giving people GATs, taping their reactions, and encouraging travel to explore background and experience otherness. See https://www.youtube.com/channel/UCxpbnnGX6raZfTJcdt5_7Ag (accessed, May 26, 2017).

first to consider the implications for white nationalists who believe racial purity and ethnic separation are the formula for a better future.

Using a kind of “decision tree”, our study maps the range of responses to individuals revealing their GAT results on the white nationalist bulletin board, Stormfront. Some posters reported “good news” that confirmed expected or hoped for white or European backgrounds. More interesting, though were responses to “bad news” revealing some fraction of the poster’s ancestry was non-white or non-European. One set of responses was to reject the legitimacy of GAT due to their supposed tainting by a Jewish conspiracy or their inferiority to traditional genealogy and white racial consciousness. A second set of responses accepted GAT, but using statistical, logical, or historical critiques of genetic research reinterpreted the damaging results in less dangerous ways. A third set of responses, used somewhat rarely and especially against perceived “trolls,” accepted bad news and attacked those who bore the tainted backgrounds. Finally, we considered ways that white nationalists have accepted that GATs have implications for the larger movement and have sought to use them to reimagine its boundaries.

We began by wondering whether white nationalists would use GAT identified bad news to double down on genetic boundaries of identity or would seek to explain it away. Clearly both responses happen. But though our sample does not allow us to model the frequency of different responses, white nationalists seem to expend much more effort explaining away bad news than drawing boundaries with it.

Alondra Nelson (2006) describes African Americans’ approaches to GAT as characterized by “affiliative self-fashioning.” That is, African Americans tend to accept and incorporate seemingly “objective” GAT results mainly insofar as they fit prior aspirations

for community attachment. Nelson links this cautious and pragmatic interpretative strategy to African American's collective experience with historically racist and exclusionary scientific and medical institutions.

In a perhaps ironic twist, our study shows that white nationalists too engage in a version of affiliative self-fashioning. The white nationalist version of affiliative self-fashioning seems more collectively organized than the culturally conditioned, but somewhat individualized practices Nelson describes. White nationalists on Stormfront are able to reinterpret GAT using a set of refined, widely available scripts including the assertion of elite, Jewish conspiracies, the valorization of knowledge and consciousness derived from white nationalism, and the alternate accounts of science and history based on presumptions about white superiority in history.

Are white nationalists particularly vulnerable to GAT's potential for "genealogical dislocation" (Nelson 2016)? Scholars describe whiteness as subject to a permanent crisis (Hughey 2012, Winant 1997). And white nationalists' fetishization of genetic distinctiveness, purity, and hierarchy seems to make them particularly vulnerable to small "anomalies"—especially in contrast to many people of color who believe themselves to be "all mixed up anyway." But if they are vulnerable, working together on Stormfront, white nationalists have also armed themselves with a set of ideological imaginaries, scripts, and concepts to cope with the problem.

Race is the commanding variable in the white nationalist worldview. And though it is important because of its ties to culture, civilization, tradition, power, and place, race is conceived as fundamentally biological. The core reason for many, perhaps most, invocations of genetics on Stormfront is to deride the idea that race is "socially

constructed” or in any way ephemeral or mutable. White nationalists generally interpret GAT along the lines of racial essentialism as Phelan et al. (2014) would have predicted.

However, as we have shown, GAT also troubles the boundaries and membership of white nationalism. But what is more interesting, GAT has specified and focused how white nationalists understand and might cope with these problems. The technical affordances of GAT—the kinds of belonging and difference it makes visible—shape how white nationalists think about the boundaries and contours of legitimate whiteness. First, GAT has not provided them with a “test” of whiteness, but rather than debating whether such a thing is possible in the abstract, they have begun to think of particular MtDNA and Y chromosome haplotypes as typically European (and many others as disqualifying).

Second, GAT has helped effect a transition in the debates about membership criteria from, “Non-Jewish people of wholly European descent. No exceptions” to, “What is the specific threshold?” now that quantitative genetic estimates are available. GAT has sharpened the divide between an absolute definition of belonging and one that has to contend with quantitative gradations and different compositions of whiteness. This debate has immediate political stakes: Is white nationalism an elite club for pure whites or a movement that will have to make compromises to be numerically effective?

Third, GAT has helped open up a contest between the idea that all race mixture pollutes whiteness and that some might be “diluted away” so long as it does not affect the non-recombining paternal or maternal lineages. Furthermore, it has helped open up a debate about what exactly is despoiling about racial mixture: is it specifically racial traits that might be carried on particular genes, invisible essences carried with haplogroups that

don't manifest racially, or the uncontrollability of genetic mixture in general? All these positions can be seen in the final exchange above about more and less dangerous mixing.

The larger point here is that GAT—MtDNA and Y chromosome haplotype lineages and autosomal ancestry estimation—have made particular kinds of relationships visible and thus particular boundary and identity problems and solutions imaginable. GAT has not made white nationalists more or less racist, but it has shaped the possibilities of racist imagination and cognition.

Finally, it would be a serious mistake to view white nationalists as ignorant or stupid or as straightforwardly wrong in the way they are interpreting GAT and population genetics. First, we can see in some white nationalists' rejection of GAT due to their mistrust of experts and valorization of community-based consciousness and knowledge; a pattern identified before by STS scholars (Wynne 1992). Furthermore, the white nationalists grappling with how to interpret GAT and how their construction affects their credibility have certainly acquired a form of lay expertise (Epstein 1995).⁹

It is probably the prevailing view among geneticists that while different socially-defined racial groups do have minor aggregate genetic differences, race is not a genetic concept (Bliss 2012, Morning 2011, Reardon 2005). Human Genome Project director Francis Collins famously said, "Those who wish to draw precise racial boundaries around certain groups will not be able to use science as a legitimate justification" (quoted in Bliss 2012, 1). In one sense Collins is right; this paper is all about white nationalists' struggles with the "precision" of their ideological expectations about race. But Collins' expectation

⁹ This dynamic can be seen in a Stormfront discussion thread about GAT that has been continually updated since 2003. Several individuals, such as JohnJoyTree and GreenGoddess, have established themselves as authoritative voices on genetics over time. See <https://www.stormfront.org/forum/t96295/> (accessed 5/28/2017).

was the genetic data would force an abandonment of strong views of race. Rather than compelling a particular understanding of race, genetics and GAT have set into motion a new racial ontological choreography (Thompson 2005), which is to say new forms of agency. White nationalists, like bricoleurs (Levi Strauss 1966) have used genetic materials to reinforce, though also to reconfigure, their racial worldview.

Crucially, the information population geneticists have produced is quite available for racist interpretations. For example, population geneticists prefer to think about the global distribution of Mt-DNA haplogroups in ways that convey variation and blur boundaries between groups such as in this map which uses local pie charts to convey the variation in each geographic population. The story here is that no population (even those selected for homogeneity) is genetically pure, nor do haplogroups follow racial boundaries.

[Figure 2 about here]

But when white nationalists want to know the which MtDNA haplogroups are properly European, they are thinking about maps like these produced by population geneticists (or their GAT companies):

[Figure 3 about here]

Maps like Figure 3 are designed to give a picture of how haplogroups map in space and time to reveal something about migrations and relationships among ancient populations. But they also seem to indicate that particular places have particular genetic types, though these are at best the modal variety. And thus they are easily assimilable to white nationalists' views of the tight relationship between place and race (Zeskind 2009; Daniels 2009; Willoughby-Herard 2015).

Thus, while white nationalists are reaching what population geneticists and other experts in human biological diversity would say are the wrong conclusions. They are doing so based not on wild misinterpretations or anti-scientific conceptualizations, but rather by processing through racist cognition (Brubaker, Loveman and Stamatov 2004) the materials that geneticists and genetic ancestry testing companies churn into the public. Because GAT results are often presented as maps of haplogroups and bioregions, the visualization of results reify white nationalists' beliefs in naturalized physical borders and boundaries between territories and people. Unlike white supremacists who may seek information from geneticists to prove a hierarchy of races (Panofsky 2014), the flattening of genetics onto color coded world maps provides a symbiotic set of meanings, where GAT results conflate contemporary national borders with race and biology (Nash 2015). For US white nationalists, non-Jewish European heritage is a proud marker of not only purity, but also the spirit of empire and colonization by Europeans of The United States of America.

This situation presents an ethical and political problem for scientific experts of human biodiversity. Experts' ideas are highly available for misappropriation. White nationalist misappropriators—much less marginal as a group than even one year ago—are not ignorant, yet they are suspicious of expertise. This conjunction suggests that clear communication, simple forms of education, and collective denunciations of scientific misuses (e.g., Coop, 2014), scientists' preferred forms of anti-racist action, are insufficient for the task. Challenging racists' public understanding of science is not simply a matter of more education or nuance, but may require scientists to rethink their research paradigms and reflexively interrogate their own knowledge production.

Methodological Appendix

Especially on Stormfront, debates about one's own descent are crucial as criteria for remaining a respected community member is based on the one-drop rule. According to John Law, Stormfront Senior Moderator, he explains who is white, "Non-Jewish people of wholly European descent. No exceptions. And if you tell us you're not, we will believe you."¹⁰ While there is much discussion of genealogy and family lineage, we sought out threads related to DNA testing specifically to see how white supremacists coped with these scientific results. To find threads containing ancestry test results, we used Stormfront's search engine and combed threads containing the following words or company names:

1. DNA Test (57 Threads)
2. Haplotype (678 Threads)
3. Haplogroup (1250 Threads)
4. Autosomal (583 Threads)
5. mtDNA (1250 Threads)
6. YDNA (192 threads)
7. 23andMe (276 Threads)
8. Ancestry.com (704 Threads)
9. AncestryByDNA (158 Threads)
10. GEDMatch (30 Threads)
11. National Geographic (1250 Threads)
12. FamilyTreeDNA (144 Threads)
13. DNA Solutions (1 Thread)

Stormfront only provides the top 1250 matches for each search. After searching for these terms individually, we sorted through the 6,753 threads to remove duplicates. Of the remaining threads, we compiled a database of seventy threads containing one or more DNA ancestry test results. Across this corpus of seventy threads, we found 639 posts where members describe their family's lineage, where 153 of those members included their entire DNA testing results, where they identified DNA testing company, such as 23andMe, Ancestry.com DNA Solutions, Family Tree DNA, National Geographic and more.

¹⁰ See <https://www.stormfront.org/forum/t579652/> (accessed June 2, 2017)

If a post contained a DNA ancestry test result, we coded it for the type of test result including mtDNA, Y-DNA, or Autosomal. We then categorized how the original poster reacted to the results using the following codes: confirmed prior knowledge, uncertain, welcome surprise, or unwelcome surprise. From here, we were able to see how other members reacted to the original poster and marked a range of response types based on if the results were accepted or rejected. Responses that aimed to repair the identity of the original poster were coded in the following categories:

1. Emotionally Supportive
2. Suggests that better data analysis is available or to move your data
3. Reject testing company outright
4. Suggest there are technical/statistical error in tests
5. Delegitimize genetic tests
6. Suggest that poster misinterpreted test results
7. Refute the test on scientific grounds
8. Provides an educational or a scientific explanation

In instances where responders attacked the original poster, we applied the following codes:

1. Racist claim or rant not targeted at person or test
2. Shaming or exclusion of original poster
3. Suspicion that the original poster is a troll
4. Calling the original poster “not white”

As discussions developed within threads, we marked posts that provided scientific evidence or education advocating a particular reading of the results or advocated for a specific understanding of genetics. Here is a list of those codes:

1. Citing a text or author (book/article)
2. Explains GAT quantification and/or haplogroups
3. Makes appeal to theories of DNA and Genetics
4. Provides a definition of “who is white” or “whiteness”
5. Discussion of whiteness as culture, not just biology
6. Educational post directly commenting on original posters’ GAT results
7. Explains relationship of nations and races
8. Racist attack against a racialized group using scientific explanation
9. Refutation of GAT on scientific grounds
10. Very general explanation of genetics meant to educate all readers

To ensure intercoder reliability each thread was analyzed by at least two coders. We are unable to make broad quantitative claims from these data for two reasons. One, the search function of Stormfront artificially limited the scope of our keyword queries. Two, posting DNA ancestry test results often provokes a rich discursive discussion that requires qualitative contextualization. That is to say, posts are relational to the debates not only within a single thread, but also across the entire message board, as well as to the white nationalist movement.

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Figures

Figure 1: White Nationalist GAT Results Decision Tree

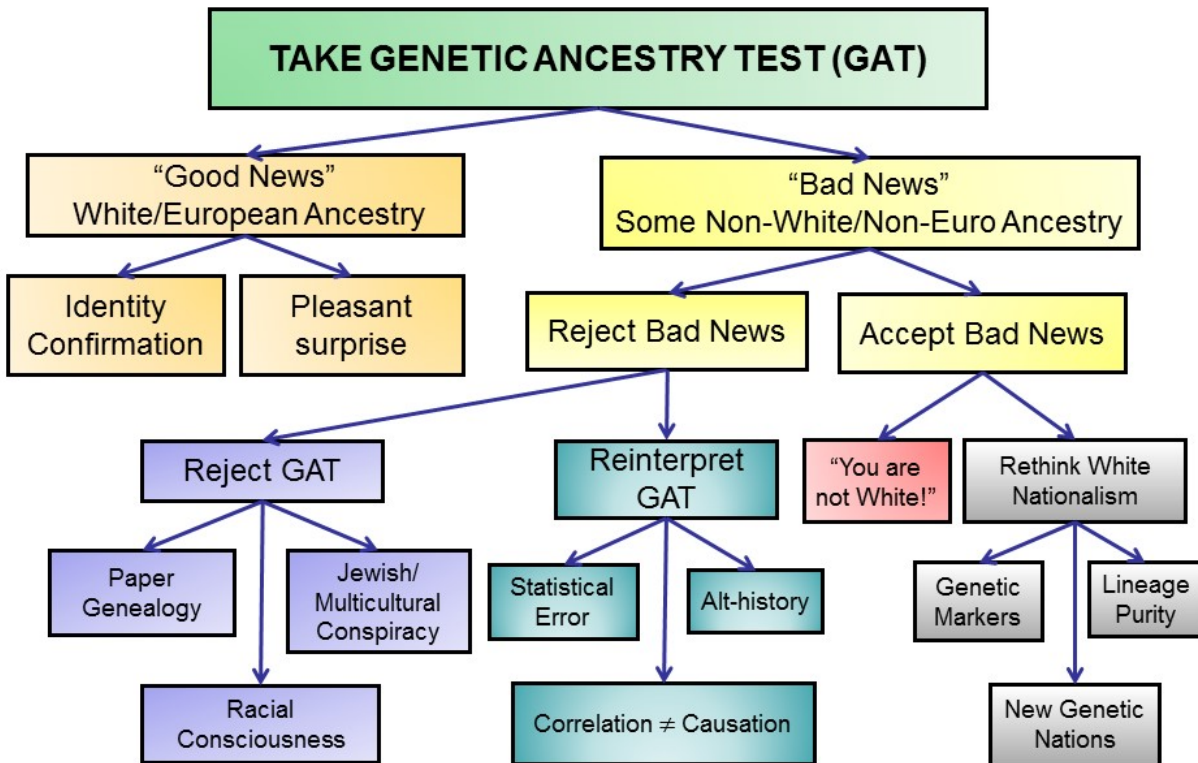
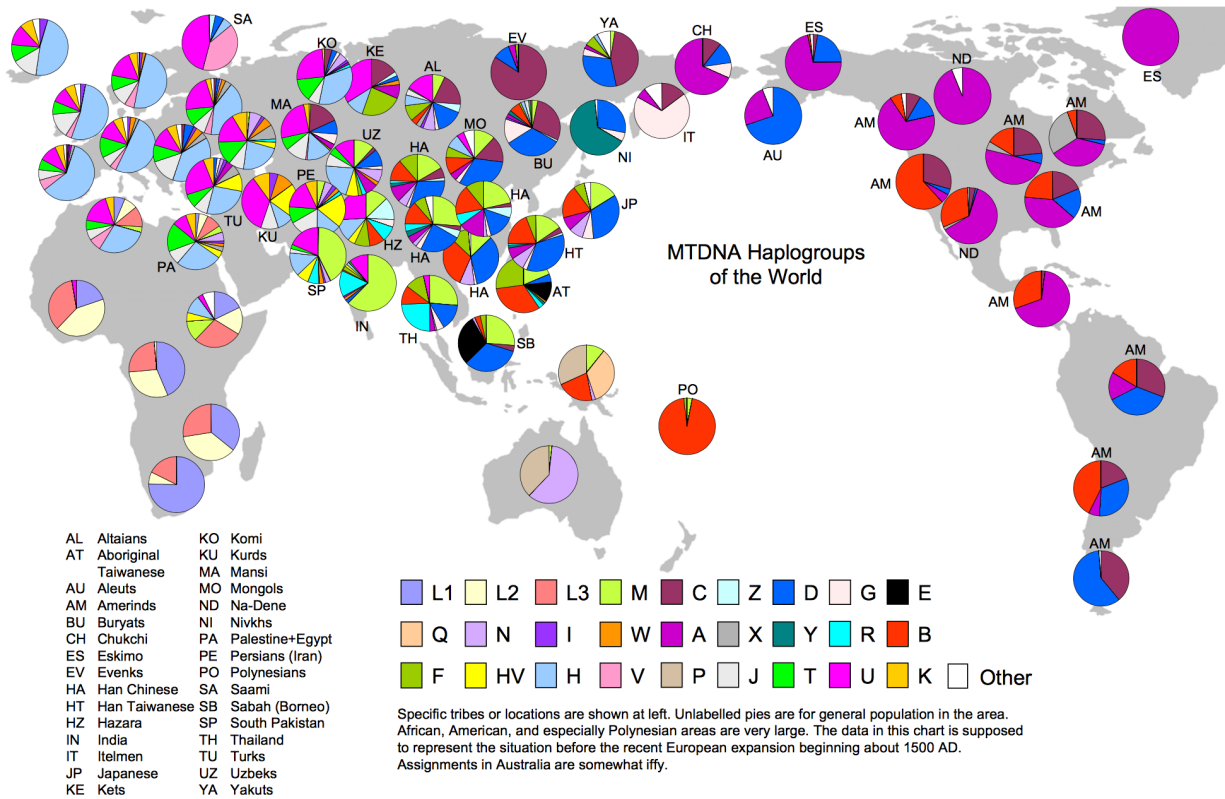
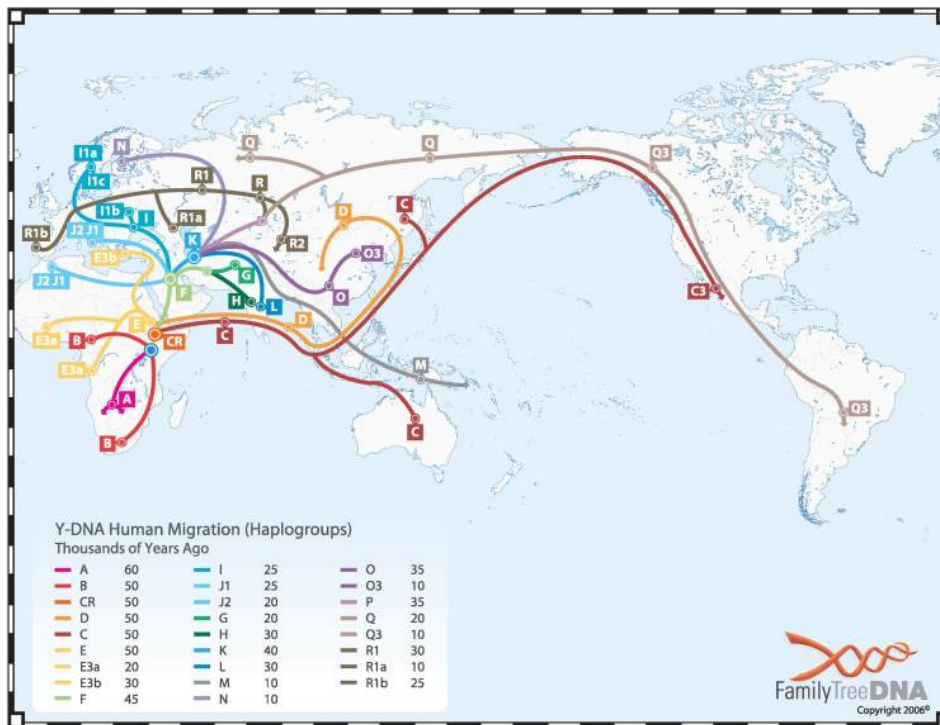


Figure 2—MtDNA Haplogroups of the World (McDonald 2005)



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Figure 3—Y-DNA Human Migration¹¹



¹¹ From the GAT company FamilyTreeDNA. See <https://www.familytreedna.com/groups/china/about/background> (accessed May 26, 2017)

Tables

TABLE 1
GAT consumer results by test type

Autosomal DNA (group percent)	86
YDNA haplogroups	34
MtDNA haplogroups	33
Total number of cases	153

TABLE 2
GAT Consumer Result Reactions

Posted test results with no reaction or explanation	51
Confirmation of prior knowledge	28
Unwelcome surprise	28
Welcome surprise	25
Uncertain of how to interpret results	21
Total number of cases	153

TABLE 3
Range of Stormfront Members' Reactions to Original Posters' GAT Results

Provides an educational or a scientific explanation	1260
Suggests that better data analysis is available or to move your data	224
Delegitimize genetic tests	224
Reject testing company outright	135
Suggest there are technical/statistical error in tests	114
Emotionally supportive	111
Racist claim/rant not targeted at person or test	98
Suspicion that the original poster is a troll	72
Shaming or exclusion of original poster	65
Refute the test results on scientific grounds	45
Suggest that poster misinterpreted test results	44
Calling the original poster "not white"	42

TABLE 4
Types of Educational or Scientific Explanations by Stormfront Members

Provides a definition of “who is white” or “whiteness”	451
Citing a text or author (book/article)	446
Makes appeal to theories of DNA and Genetics	361
Very general explanation of genetics meant to educate all readers	236
Explains relationship of nations and races	202
Explains GAT quantification and/or haplogroups	146
Discussion of whiteness as culture, not just biology	109
Racist attack against a racialized group using scientific explanation	107
Educational post directly commenting on original posters’ GAT results	63
Refutation of GAT on scientific grounds	45