

Article

A New Research Agenda for the Study of Genetic Ancestry Tests and the Formation of Racial and Ethnic Identities and Ancestries

Katharine Tyler

Department of Sociology, Philosophy and Anthropology, College of Social Sciences and International Studies, University of Exeter, Exeter EX4, UK; k.tyler@exeter.ac.uk

Received: 18 September 2017; Accepted: 19 December 2017; Published: 22 December 2017

Abstract: This paper sets out a new research agenda for the study of family historians' (referred to as 'genealogists') use of genetic ancestry tests in the course of their family history research in postcolonial Britain. My focus is upon the ways in which the use of these tests shapes the formation of genealogists' ethnic, racial, national, class and gender identities and their ancestries. I argue that, while there is some significant and important work on the ways in which African Americans and white Americans deploy these tests to trace their family histories, there is little comparable work in the context of postcolonial Britain. Drawing on sociological, anthropological and geographical research on identity, genetic ancestry testing and family history research, I set out some of the theoretical issues that research in this area in Britain should address, and outline possible methodologies and methods that will serve to bridge this gap in the current literature on race, ethnicity, identity and genealogy.

Keywords: genetic ancestry testing; genealogists; Britain; race; ethnicity; nation; class; coloniality

1. Introduction

Population geneticists have argued that innovations in genetic science mean that the DNA contained in a swab of someone's saliva provides information on the genetic identities of their ancestors. Genetic ancestry tests are thought to enhance traditional forms of family history research by tracing the identities of ancestors that cannot be accessed in archival research. The promise of such technology has led to genetic tests becoming a commodity marketed to family genealogists—that is, members of the public interested in tracing their family histories. There has been a rapid growth in commercial organisations that market the sale of genetic ancestry tests to the public, making it a global business enterprise. Contentiously, the commercialisation of these tests focuses on the tracing of individuals' ancestries that supposedly map onto collective ethnic, racial and national identities. Thus, for example, there are companies that claim to map African American ancestries to geographical areas in regions of Africa, Native American ancestries to particular tribes and homelands in parts of the US, and Jewish identities across the globe. In this way, the marketing of the tests parades genetic analysis as evidence of the user's origins, identity and ethnic and racial belonging. The majority of these companies are based in the USA but offer their services via the internet to people across the world. In recent years there has been growing public interest in this technology in the UK, which reflects British people's enduring concern with their origins, heritage, family history and ancestry (see for example, the television series *Who Do You Think You Are?* (BBC1 2004); *Story of England* (BBC4 2010); *Meet the Izzards* (BBC1 2013); *100% English* (Channel 4 2006)).

In the wake of growing popular interest in this scientific development and the practice of family history research in the UK, my aim in this paper is to set out a possible research agenda to explore how an ethnically diverse sample of Britons, who are actively tracing their family trees, engage with genetic ancestry testing technology. I am also interested in how this engagement has affected family historians'

everyday conceptions of racial, ethnic, national, class, gender and postcolonial identities. I make the case for a research agenda that will deploy the technology of genetic ancestry testing as a lens through which to examine how British people from diverse ethnic, racial and class locations, and across gender categories, conceive and imagine the genealogical constitution of individual and collective identities. I contend that central to such a research agenda is an exploration of the ways in which images and histories of colonial and slave pasts are configured within genealogical imaginations of Britons who are differently located in relation to histories of Britishness, slavery and empire.

In what follows, I shall set out how current work on the science and technology of genetic ancestry testing from within sociology, anthropology and human geography has informed my suggestions for future avenues of inquiry in this area. I shall also highlight some of the unanswered questions, empirical absences and theoretical gaps in the current literature. I shall then reflect on possible research methodologies, fieldwork practices and activities that would address these questions and gaps.

But first, a note on terminology: throughout this paper I shall refer to the people who do family history research as a hobby in their spare time as 'genealogists'. This is a term that amateurs who do family history research themselves sometimes deploy for self-identification, and it is also a term that is widely used in the scholarly literature on family history research. I shall refer to the scientists that work in the area of genetic ancestry as 'geneticists'.

2. An Analytical Review of the Use of Genetic Ancestry Tests

In thinking about some of the issues surrounding the everyday use of the science and technology of genetic ancestry testing, I find the TV documentary *Motherland: A Genetic Journey* (BBC2 2003) a useful starting point. This documentary foregrounds some of the sociological, anthropological and geographical issues raised by the commercialisation of genetic ancestry tests both in general terms, and in the UK context more specifically (see Tyler 2007). This programme was inspired by an experiment conducted by geneticists at the Universities of Cambridge and Leicester that used genetic ancestry tests to analyse the DNA of 228 black British men and women of African Caribbean descent. The project participants were selected according to the criterion of having had two generations of paternal and maternal grandparents that were of black African Caribbean descent. Twenty-six per cent of the male participants were told that their Y chromosome, inherited through the male line, traced them to a white European ancestor. The tests also showed that the mitochondria DNA that is inherited through the maternal line affiliated many of the participants with ancestors from various African tribal groups. The DNA results of some of the project participants confirmed the historical evidence concerning the gendered dynamics of interracial sex—that white European men had frequently produced children with black slave women, predominantly through rape.

The programme followed three participants who used their acquired 'genetic kinship' (Nash 2004) to interrogate either their black/African or their white/European ancestry. The viewer is left with the impression that an individual's DNA can be objectively coded, separated and divided into its racially and ethnically distinct component parts. Thus it could be argued, as some sociological commentators have, that genetic science used in this way provides the means for fixing and hardening the geneticisation of racial and ethnic identities (Duster 2003; Fortier 2012; Nelkin and Lindee 1995; Steinberg 2000). However, the programme followed research participants' journeys to African and Caribbean colonial ancestral home-places, where they unexpectedly discovered their entanglement in white and black colonial and slave ancestries and origins. In this way, the programme illustrates how, in some circumstances, knowledge of genetic ancestry can become combined with diasporic relationships and migration histories across time and place, including colonial and slave ancestries. And this can be seen to undermine the idea of racially and ethnically pure lines of genetic descent and heritage (for a similar line of argument with reference to genetic science see (Brodwin 2004; Gilroy 2000; Nash 2002; Skinner 2006; Wade 2002)). The documentary also points to the ways in which classed identifications can become entwined with ethnic and racial identifications. For example, one of the research participants, Jacqueline Harriot, travelled to visit her elderly family in Jamaica, where she was

keen to explore her white British ancestry. The latter signified for Jacqueline and the older members of her Jamaican family a feeling of higher class status and social respectability identified with the British Empire.

In sum, then, the *Motherland* documentary shows the potential for genetic ancestry test results both to be mobilised in creative ways by individual users, and deployed to support geneticised ideas of racial descent and distinction. This experiment therefore illustrates how genetic ancestry tests offer individuals the opportunity either to celebrate their multiracial identity (be that European and African descent), or to claim a particular exclusive ancestral line of descent (just African or just European) (Abu El-Haj 2012, p. 175). The logic here is that 'I can either celebrate that mixture or I can discover—I can still know and document—a specific heritage' (Abu El-Haj 2012, p. 175). It is precisely in this space between the so-called 'facts of biology' produced by these genetic ancestry tests and the ability of individuals to interpret the meaning and significance of these 'facts' that it becomes imperative to explore in detail how genealogists engage with the technology. Indeed, some of the further complexities of the interpretive situation are touched upon by Tallbear (2008, p. 246) in her suggestion that the biological knowledge produced by genetic ancestry tests does not account for the diverse forms of kinship practiced by Native Americans which combines sociality with biological relatedness. On this matter, Tallbear (2008, p. 246) writes: 'The tests cannot directly address what are actually philosophical and political disagreements within tribes about who should be counted as Dakota or Pequot or Cree'.

My point here is that these tests raise profound sociological issues concerning the configuration of kinship, coloniality, social class, diaspora, place, gender, nationhood and belonging in the formation of ethnic, racial and national identities. In short, innovations in genetic ancestry testing offer a theoretical and ethnographic window through which to explore and analyse how ideas of ethnic, racial and national identification become configured within the genealogical imagination and the constitution of persons. However, in spite of the important sociological issues and concerns raised by these tests, to date only a few scholars have published detailed ethnographic studies that examine how genetic ancestry tests have been used and their results interpreted by genealogists (Palmie 2012; Wagner and Weiss (2012) also make this point). That is to say, most commentators on genetic ancestry tests, including social scientists, geneticists and policy makers, concentrate on the reliability of these tests, the ethics of their commercialisation and their impact on ideas about the biological constitution of race (see Bolnick et al. 2007; Shriver and Kittles 2008; Lee et al. 2009; Sense about Science 2013). Those sociological and anthropological studies that do examine individual user experiences are mainly based in the USA, with a focus mostly on the use of these tests by minority groups, and it is to the details of some of these studies to which I now turn my attention.

2.1. Reflections on the Use of Genetic Ancestry Tests in the USA

Nelson (2008a, 2008b), Schramm (2012) and Fehler (2011) have examined the use of these tests by middle-class, middle-aged African Americans, who are reported to be among the tests' main user groups in the USA (Palmie 2012). Read collectively, these studies usefully illustrate some of the creative ways in which users, including genealogists, mobilise their experiences of kinship and diasporic connections to people and places in the interpretation of their test results in ways that undermine simplistic notions of biological inheritance.

For illustration of the above point let us consider Nelson's (2008a, 2008b) study which explores how African Americans engage with a test marketed by 'African Ancestry', a commercial company that is owned and directed by the respected African American population geneticist Rick Kittles, who also appears in the *Motherland* documentary. Nelson (2008a, p. 258) describes and analyses how Kittles draws on his professional work as a scientist, his African American identity, and his personal interest in his family's ancestry to establish 'authentic expertise' in the field of genetic genealogy. While not disagreeing with Kittle's analysis, Nelson found that African Americans who used this test tend to 'align genetic DNA analysis with other evidence of their ancestry as well as their genealogical

aspirations, prior experience, or extant relationships' (Nelson 2008a, p. 259). That is to say, her research participants reflexively interpreted their test results in the light of their existing sense of relatedness and kinship with members of the African diaspora. Nelson (2008a, p. 259) calls this process 'affiliative self-fashioning' which she describes in the following terms: 'Affiliative self-fashioning accounts for how identities culled from genetic genealogy are shaped not only by "received-facts" but also by desire for diasporic connection'. Thus, for example, one woman's mitochondrial DNA test showed that she had two possible origins: 'Kru of Liberia plus/or Mende-Temne of Sierra Leone' (Nelson 2008a, p. 259). In deciding which of the 'two ethnicities' was most relevant this woman replied: 'My sister was married to a man from Sierra Leone . . . intimating she would likely travel to the natal home of her deceased brother-in-law' (Nelson 2008a, p. 259). In short, Nelson (2008a, p. 265) argues that 'root-seekers' become 'root-makers' through their selective engagement with, investment in, and interpretation of genetic ancestry testing technology.

Developing Nelson's exploration of diaspora, ancestry and kinship, Schramm (2012) followed African American 'roots seekers' on their ancestral journeys to Ghana. She examines how genetic genealogy has contributed to the flourishing field of 'heritage tourism' in Ghana. This tourism is centred on the commemoration of the slave trade as part of 'homecoming' tours for presumably well-off black tourists from the USA to Ghana. Echoing Nelson's analysis of the fluid constitution of diasporic kinship, Schramm found that while the language of genetic connection to African ancestral homelands is 'heavily saturated with references to roots, land and territory, suggesting the boundedness of identity' (Schramm 2012, p. 182), in practice this did not lead to the formation of an essentialist conception of genetic inheritance. Rather, test users made connections to a mythical homeland based on ideas of diasporic relatedness that illustrates the fluidity of transnational identities entwined with the intimacies of kinship (Schramm 2012, p. 182). In other words, users bring their own ideas and assumptions to their use of tests and draw on these in interpreting results. These themes of identity, diaspora, home, attachment to place and belonging are also examined by Fehler (2011) in her interviews with African American DNA test users from Baltimore and New York, who were also motivated by their test results to travel to Ghana.

There is also some important work based in the USA with white American users of these tests, although less attention has been paid to them than to African Americans. For example, Abu El-Haj (2012) has explored how these tests shape and influence the sense of identity of white Americans researching their Jewish ancestries. Her study shows how web fora for public discussion of family history research serve to highlight some of the ways in which ancestry tests enable white Americans to claim a minority ancestry that might be Jewish, Native American and so on.

These themes are currently being taken up and explored further by Roth and Ivemark (2017) who have studied ways in which American test users across ethnic and racial identities engage with this technology. One aspect of this work includes qualitative telephone interviews with 115 individuals who purchased genetic ancestry tests, many of whom were genealogists interested in family history research, and who identified before taking the tests as 'white', 'black', 'Asian', 'Hispanic', or 'Native American'. Roth and Ivemark argue that the value that individuals place on their own racial identity affects how they interpret their test results. In this regard, they found that white American interviewees perceived their 'white' racial identities as 'bland' and 'boring'. The appropriation of a mixed-race ancestral identity enabled these white American test users to claim a sense of cultural prestige and esteem associated with being more than 'just' white—which is interesting in relation to 'one drop rule' conceptions according to which non-white components wouldn't be 'more' but an adulteration, hence less. In contrast to racialised minorities, white test users felt at liberty to pick and choose when disclosing their newly discovered 'ethnic' and 'racial' identities to others. Thus, they had no sense of the systemic racial inequalities and racism that structures the lives of ethnic minority Americans. In short, for white Americans the identification with a racialised minority identity was mediated through their white racial privilege. Like white Americans, African American and Hispanic American test users also received mixed-race test results. However, they were not surprised by such results

because they already had the feeling that as a racialised minority they were of mixed-race ancestry and descent. In stark contrast to white American test-takers, African American interviewees had a strong affiliation to their pre-existing socially and historically constructed racial identity which meant that the tests did not change their identifications as African American.

A second strand of Roth's research involves a large randomised trial of white Americans born in the USA, half of whom were provided by Roth and her team with genetic ancestry tests (Roth et al. 2017). The aim of this study is to examine the impact of test results on essentialist views concerning the biological constitution of race. The sociological study showed that in general genetic ancestry tests are not used to support essentialist geneticised views of the inheritance of racial identities. This study usefully highlights how research on the use of genetic ancestry tests provides an important avenue via which to explore the ways in which everyday engagements with these tests gives insight into 'people's understandings of what race is, how races differ, and where race comes from' (Roth et al. 2017, p. 1).

Significantly, Roth and Ivemark (2017) note that unlike the views of test users themselves there is a reification of ideas of racial difference within the media dissemination of this science and technology in the USA. This observation points us in the direction of a further strand of work by sociologists and anthropologists that examines representations of whiteness and genetic ancestry testing in the American media as well as the US-based Genographic Project. The latter is a world-wide research project that deploys genetic ancestry testing to map humanity's shared origins (see for example, (Reardon 2012; Reardon and Tallbear 2012)). This sociological and anthropological work highlights the limits of anti-racism and liberal democratic discourses and practices superficially embedded within the science that claims to challenge biological conceptions of race and thereby to challenge racism. For example, in her work on US media representations of genetic tests, Reardon (2012) points to some of the ways in which these tests are seen to 'individualise' (and perhaps indeed making it something one selects from the identities supermarket) race within American society and thus unintentionally enable white people to mobilise mixed-race ancestries to potentially get resources that are otherwise reserved for ethnic minorities who experience systematic racial discrimination within American society.

To summarise briefly, then, from the point of view of these US-based studies, a picture emerges whereby the commercialisation of genetic ancestry testing supports, on the one hand, the formation of diasporic identifications whereby African American test users mobilise ideas of social and biological relatedness to assert a politicised sense of individual and collective identifications. On the other hand, these tests have also enabled white Americans to claim mixed-race genealogical identities that take meaning and hold within the context of their white racial privileges within American society. Significantly this work demonstrates that these tests do not support in any straightforward way essentialist or geneticised ideas of racial and ethnic inheritance. Rather, they open up a potentially fruitful avenue through which to explore the ways in which ideas of race and racial difference are conceptualised in everyday life. These US-based studies also illustrate how nationally specific colonial and slave histories, and local regionally-based ideologies of race, nation, citizenship and multiculturalism, shape users' interpretations of the results of genetic ancestry tests. Taking on board the specific histories of empire, slavery, race, nation, racism, nationalism and multiculturalism that have formed and continue to shape the UK and its ethnically diverse citizenry, the study of genetic ancestry testing in the UK offers specific ethnographic insight into the ways in which these tests are mobilised and their results interpreted in the context of postcolonial Britain.

2.2. Reflections on Genetic Ancestry Testing in the UK

By 1820 Britain ruled twenty-six per cent of the world's total population, including Islands in the Caribbean, India and parts of Africa (Hall and Rose 2006). Historians have very effectively shown how the social, cultural, economic and political formation and structure of contemporary senses of Englishness and Britishness rests upon the nation's colonial exploits, including its involvement in the slave trade (e.g., Colls 2002; Hall and Rose 2006; Kumar 2003; MacPhee and Poddar 2010). Cultural

studies scholars, sociologists and anthropologists have illustrated how the histories of empire and slavery are interwoven into the landscape, language, political organisation and social fabric of British society (e.g., Gilroy 1997, 2005; Hall 1992, 2003; Hesse and Sayyid 2006; Wemyss 2008, 2009; Tyler 2012). As the *Motherland* documentary indicates, one consequence of these histories is that the ancestries of postcolonial Britons, including individuals who self-identify as ‘just’ white, ‘just’ Asian and ‘just’ black, are revealed to be racially and ethnically mixed. Thus black and South Asian people who migrated to England and other parts of Britain from the former colonies, and their descendants, have intimate complex histories, relationships and genealogical connections to Englishness, Britishness and whiteness that go very deep.

This raises the question of how UK individuals who self-identify as ‘white’, ‘black’, ‘Asian’ and ‘mixed-race’ mobilise accounts of ancestries and histories, including colonial and slave pasts, when they reflect on the diversity of components in the genealogical constitution of their identities. Sociologists and human geographers have examined how population geneticists concerned with mapping British ancestry tend to portray an image of British ethnic and racial identity via associations with ancient ‘Viking’, ‘Anglo-Saxon’, ‘Jute’ and ‘Celtic’ genetic ancestries (Cross 2001; Nash 2004; Tutton 2004; Fortier 2012; Sommer 2012). While British so-called ‘indigeneity’ is often portrayed as ethnically heterogeneous in scientific projects that set out to identify the origins of Britishness, British descent is depicted in the scientific projects as racially white and Nordic European in terms of its geographical origins (Nash 2013). Sociologists and human geographers have convincingly argued that one consequence of this research on British ancestry is that the ethnically and racially diverse histories of Britishness that derive from slavery and imperialism are displaced in favour of histories that portray the ‘original’ and ‘indigenous’ Britons as racially white (see, for example (Cross 2001; Fortier 2012)). Black, Asian and mixed-race postcolonial settlers from the former British colonies and their descendants are thereby positioned outside of national genealogies and geneticised ancestries.

To illustrate this process and its gendered dynamics further consider the work of Nash (2004), which has scrutinised the writings of the population geneticist Bryan Sykes. The latter is professor of genetics at the Institute of Molecular Medicine at Oxford University, and is the founder of the most prominent and commercially successful British-based genetic ancestry testing company called ‘*Oxford Ancestors*’. In her critiques of aspects of Sykes’ work, Nash (2004) analyses and deconstructs the gendered and racialised logic underpinning his ‘Y-Chromosome project’. This project drew upon genetic ancestry tests and archival research to trace specific lines of descent of supposedly ‘native English men’ bearing the same surname. Nash (2004, pp. 9–11) contends that the assumption underlying this genealogical quest is that the biogenetic connection between father and son is a straightforward and unproblematic relationship that conveys the inheritance of surnames, property and biogenetic substance. Sykes thus constructs a ‘monogenetic’ theory of procreation that positions women as ‘earthy nurturing vessels for the father’s seed’ (Nash 2004, p. 11). Significantly for the place of race and ethnicity in this picture, surname studies are conducted amongst ‘native English males’ who can claim paternal ancestors *living* in Britain in 1881 (Nash 2004, p. 15). Thus men and women whose ancestries are located outside the UK, but whose genealogical identities are intimately entwined with the histories of Britishness through empire and slavery were excluded from participation in this project and thus the history of ‘native English men’. In short, to qualify as a legitimate subject for participation in, and benefit from, this project one must be white and male. It is precisely these aspects of Sykes’ work that has rendered it attractive to the extremist right wing far-right British National Party (see also Sommer 2012).

Clearly, then, critical studies on the science of genetic ancestry testing in the UK raise important issues and concerns about the connections that contemporary genetic scientists make between ideas of indigeneity, white racial purity, gendered identities, genetic ancestry and Britishness in their research. In spite of this important sociological critique, there is very little sociological research that explores the actual use of genetic ancestry tests in British contexts compared to the volume of work published on the use of the tests in the USA. Those UK-based studies that have examined everyday experiences

of genetic tests have explored the impact and outcomes of public encounters with this technology at media and staged research events whereby individuals are invited by scientists and other researchers to take the tests (see [Scully et al. 2013](#); [Tutton 2004](#)). A pertinent example here is [Nelson \(2008b\)](#) reflections on her meetings with the producers of, and research participants that feature in, the *Motherland* documentary described above.

[Nelson \(2008b\)](#) attended a meeting of 'the Motherland Group' that included members of the production team and individuals who participated in the experiment. At this event a geneticist questioned the accuracy of the science underpinning the experiment and the ability of genetic ancestry tests to pinpoint individual genetic ancestries (highlighting the ways in which this science is a matter of dispute amongst the scientists themselves). [Nelson \(2008b\)](#) became interested in what the individuals who featured in the film made of the geneticist's critique, and discussed this with the participant Beula, who in the film traced her genetic ancestry to Equatorial Guinea. In her discussions with Beula it became clear to Nelson that Beula's 'genetic genealogy result amassed through social ties formed through her relationships with individuals and organisations in and from Equatorial Guinea' ([Nelson 2008b](#), p. 775). Thus, the scientist's critique of the accuracy of the genetic test results did not change Beula's mind on how to interpret her results, which was based on a blurring of biological and social kinship with people from Equatorial Guinea.

In the face of these insights into the constitution of British ancestries, my contention is that there is scope to examine in much greater detail the extent to which these tests are used by British genealogists within the context of their own family history research, and how the language of genetic science is becoming configured within their practices. This is especially the case given the marketing of these tests by commercial companies directed at genealogists. Indeed, little is known about how British genealogists across ethnic and racial identities engage, or do not engage, with technological innovations in genetic ancestry testing. How do differing ethnic-racial, national, class, gender and religious identifications, migration histories, belonging to local and diasporic places, ancient ancestries and histories of empire and slavery interact with genealogists' interpretations of test results? How does the language of genetic science enter into various ideas of racial, ethnic and national relatedness, expressions of racism, xenophobia and nationalism? To address these questions, I shall offer in the next section of this article some suggestions on how to explore ethnographically some of the ways in which an ethnically diverse population of British-based genealogists engage with genetic science in the course of their ancestral research. But before doing this it is important to reflect on the central themes that inform highly relevant work that explores the practices of British based genealogists or those who trace their origins to the UK (e.g., [Basu 2007](#); [Cannell 2011](#); [Edwards 2012, 2017](#); [Kramer 2011a, 2011b](#); [Nash 2002](#)).

The anthropologist [Basu \(2007\)](#) studied ethnographically the ways in which Canadians, Australians and New Zealanders trace their ancestries either virtually or physically to the Scottish Highlands in the UK. His focus is on how genealogists create and construct self-narratives and a sense of homecoming to the Scottish Highlands, a home-place that they deem to be more authentic than their nominal national homelands. In a similar vein, [Nash \(2002\)](#) examines the articulation of ideas of nation, ancestry and diaspora of white Canadians, Americans and New Zealanders who trace their ancestries to The Republic of Ireland (The UK's geographical neighbour) and Northern Ireland in the UK. [Nash \(2002, 2008\)](#) eloquently illustrates how what might be interpreted as 'a politically regressive' turn to ideas of 'roots', 'soil', 'home', 'place', 'ethnic purity' and 'racial distinction' can also serve to 'unsettle' and complicate exclusivist notions of belonging.

More recently, [Cannell \(2011\)](#) and [Edwards \(2012, 2017\)](#) have conducted ethnographic research with regional family history societies based in differing parts of England. [Cannell \(2011\)](#) draws on ethnographic fieldwork with a family history society based in East Anglia to complicate Basu's analytical attention to the formation of the self in family history research. [Cannell \(2011\)](#) analyses how genealogists form relations and feelings of 'care' for the dead, whereby the living and dead are 'mutually constituted as relatives' and thus become family. For Cannell the formation of kin ties

between the living and dead exemplifies the religious, spiritual and mystical quality of family history research. In part inspired by Cannell's study, Edwards (2017) shows, in her ethnography of a family history society in the north of England, how forming affective kin relations with the dead can facilitate new and unexpected relationships with the living that also serve to 'root' people in unexpected ways in local places and communities. Significantly, Edwards raises the issue of social class that I would like to pursue here. That is to say, Edwards (2012, p. 78) discusses how the practice of 'family-treeing' gives working class people who feel 'marginalized' and 'patronized' by 'contemporary political elites' the medium through which to 'author themselves' via 'detailed and evocative histories' of social class that provides a sense of 'dignity' and self-worth.

Reading across all of these studies on family history research a picture emerges of this practice facilitating often serendipitous relations between the living and the dead, the religious and the secular, national histories and personal biographies, personhood and belonging, individuals and communities, biological and social connections. But yet, it is noteworthy that the experiences of black, Asian and mixed-race Britons are mostly ignored and displaced in these studies on family history research (see also (Kramer 2011a) who makes a similar observation). Furthermore, the processes of racialisation and racism including the reproduction of white racial privilege in the practice of family history research is not given the detailed critical attention that it deserves. It seems to me that an exploration of how racial, ethnic, class and national identifications are articulated in the process of family history research in the face of genetic ancestry testing technology holds the potential to fill these absences in the current literature.

At this juncture it is useful to briefly summarise my argument thus far. My contention is that in the face of: (a) sociological work on the use and popularisation of genetic ancestry testing in the US and the UK and; (b) current anthropological and geographical work on family history research in the UK, there is scope to develop a research agenda that explores comparatively the ways in which an ethnically, racially and classed diverse population of British genealogists, including both users and non-users of genetic ancestry tests, engage with this technology. In the following section of this paper I set out broad outlines of such a research agenda.

3. Ways Forward: Research Design

I begin by setting out what might constitute an anthropological approach to a study of family history research in the age of genetic ancestry testing. Edwards (2000, 2002) argues that an anthropological approach to innovations in science and scientific understanding places emphasis on 'the status and place of scientific knowledge in culturally diverse ways of knowing the world' (Edwards 2002, p. 165), and 'tells us something about the appropriation, negotiation and rejection of science and the contexts in which this occurs' (Edwards 2002, p. 167). For Edwards, an anthropological approach to science 'focuses attention on the connections that people make and the things that they are reminded of when they engage with possibilities presented by science' (Edwards 2002, p. 167). In her study of New Reproductive Technologies (e.g., the use of innovations in genetic science to facilitate the reproduction of children via techniques such as ova and sperm donation) with the residents of a town in the north of England, Edwards traces and analyses how townspeople draw on their experience of, and thus expertise in kinship relations to engage with innovations in reproductive technologies.

From this standpoint, then, an anthropological approach to British-based genealogists' engagements with the interpretive possibilities offered by genetic ancestry tests might draw on the following experiences, practices, thoughts, reflections and discourses:

- Personal experiences and relationships with the living and the dead
- Senses of belonging to local places and communities as well as diasporic identifications that stretch across historical times and geographical spaces
- Individual and shared experiences of nationalism, xenophobia and racism
- Multiple and shifting personal and collective knowledges of migration histories

- Senses of identification with ancient 'Celtic', 'Viking' and 'Saxon' histories associated with ideas of white racial purity and Nordic European descent
- Individual and collective identification with colonial pasts and slave ancestries
- Diverse senses of religious and spiritual beliefs, and political views, for example on multiculturalism, immigration, national identity, 'Brexit' and so on
- Classed, gendered and sexual identifications
- Ideas on the inheritance of racial and ethnic identities, including, for example, the perceived inheritance of physical, cultural and personal characteristics and attributes of identity.

Particular attention should also be paid to the ways in which genealogists understand the constitution and meaning of science and scientific practice. In short, an anthropological approach to genetic ancestry testing would set out to trace and examine the diversity of experiences, networks of ideas about racial, ethnic and national identities, ancestry, kinship, coloniality, gendered and classed identifications that people mobilise when they think about the science of genetic ancestry testing.

My contention is that taking such an approach to genealogists' reflections on and experiences of genetic ancestry testing will open up a fruitful and rich research avenue through which to explore the ways in which genealogists' conceptualise ideas of race and class identification and difference (see also [Wade \(2002, 2007\)](#) for an anthropological approach to 'race', 'nature' and 'culture'). Like ethnic and racial identities, classed identities are inscribed upon the body, 'beneath your clothes, under your skin, in your psyche, at the very core of your being' (Kuhn 1995, p. 98, cited in ([Bryne 2006](#), p. 106)). My supposition is that the ethnographic study of family history research through the lens of genetic ancestry testing offers the potential to explore people's understandings of what race, ethnicity and class is, how they understand differences between these concepts, and where the concepts come from. Moreover, such an approach will also facilitate insight into the contradictory ways in which genealogists' ideas and practices support racial, ethnic, national and class relations of inclusion and exclusion. In this vein, analytical attention should be paid both to the racist and anti-racist consequences of genealogists' accounts and practices. This will include critical attention to the potentially contradictory ways in which ideas and practices support expressions of anti-racism that unwittingly reproduce white racial hierarchies, privileges and racism, as well as discourses and practices that are socially and politically progressive (see [Nash 2015](#)). Central to this line of inquiry will be critical reflection on the ways in which ideas of racial and ethnic difference are present in their apparent absence (see also [M'charek et al. 2014](#)).

Furthermore, it seems to me that new work in this area could make a significant contribution to existing analyses of the role of place in the making of genealogical identities. This might be achieved by pursuing and advancing [Basu's \(2007\)](#) innovative methodology of shadowing individuals on their 'genealogical journeys'. My suggestion is that future research could include accompanying individuals to local and diasporic home-places to show how people and places that are often assumed to be racially white and Anglo-Saxon, for example, in terms of heritage, have complex multiracial histories. Additionally, this methodology might also reveal the dynamics by which genealogists produce racially homogeneous images of descent, place and nation that are nationalistic and racist in orientation.

Having set out some of the guiding principles shaping my proposed research agenda, I shall now turn to what I envisage might comprise the details of three projects that offer connected lines of inquiry. In this regard, I shall indicate the types of research that I believe would be valuable to this arena of inquiry.

The first strand of research might explore how an ethnically diverse sample of genealogists that are differently orientated to histories of slavery, empire and nation mobilise genetic ancestry tests in their own research. This would include identifying and interviewing individuals living across Britain that have used genetic ancestry tests as part of their genealogical research. This research would involve in-depth digitally recorded interviews with at least 30 genealogists. The interviews would need to be positioned within a textual analysis of the websites and relevant literature produced for users by companies selling genetic ancestry tests, as well as analysis of other websites, archives and literature

used by the research participants themselves. Ideally all research participants would be residents in England, Scotland or Wales. It is reasonable to exclude Northern Ireland from the sample due to its recent complex histories with Englishness and Britishness that means this area of the UK deserves its own special attention (see [Nash 2008](#)). The research sample could also endeavour to include an equal balance of people who self-identify as 'white', 'black', 'Asian', 'mixed-race', working and middle class, men and women. Given that genetic ancestry testing traces male and female lines of descent, the gender identity of the sample is very important ([Nash 2004, 2015](#)). Moreover, particular attention should also be paid to the classed constitution of discourses of racial, ethnic and national inclusion and exclusion.

It might be insightful to interview individuals both before and after they have used a genetic ancestry test in their research to tease out the impact of these tests on the formation of identity. However, [Roth and Ivermark \(2017\)](#) found that it was useful to interview people who had taken the tests some months before the interview in order to explore the full impact of the tests on self-identifications. The specific themes that might fruitfully be explored with research participants in the interviews could include the following:

- individuals' biographies including research participants' experiences of doing family history research,
- research participants' motivations for using a genetic ancestry test,
- reflections on their experiences of doing the test, receiving the test results and individuals' thoughts on their family's reactions to the test and its results,
- exploration of how the test has shaped (or not), formed and transformed research participants' feelings of identity, including their ethnic, racial and class identifications, and feelings of belonging (or not) to ideas of Britishness,
- discussion of individuals' reflections on genetic science for the practice of doing family histories
- research participants' views on the wider implications of this science, including, for example, their views on the validity, cost and commercialisation of genetic ancestry tests for public use.

A second strand of research could include a comparative ethnographic study of three family history societies located in different parts of England, Wales and Scotland. By contrast to fieldwork with the users of genetic ancestry tests, the majority of research participants that are members of family history societies probably will not have used genetic ancestry tests in their research. This contrast would provide wider insight into the ways in which genealogists engage with the commercialisation of genetic ancestry tests than a focus solely on users of these tests would allow. Given my focus on how ethnic, racial, national, classed and gendered identities take meaning and endure in the face of post-colonial Britain, ethnographic work with family history societies should include fieldwork with male and female members of family history societies that are differently orientated to Britain's colonial and slave pasts. This aspect of the research design would allow for a comparative study of the motivation, mood, atmosphere and approach to family history research taken by genealogists across ethnic, racial, national, gender and class identities (see [Parham 2008](#)). The societies could include for example:

- (i) a regionally based family history society for people who trace their ancestry to a particular region of England, Scotland or Wales. As [Edwards's \(2017\)](#) and [Cannell's \(2011\)](#) studies show, the members of family history societies in England tend to be mostly white of both working and middle class backgrounds
- (ii) a family history society that is for people who want to trace their Caribbean and black history and heritage
- (iii) more specialist organisations such as the 'Families in British India Society' that assist people who are interested in tracing their ancestries to imperial India. Given the legacies of empire on the formation of contemporary white middle class British identities, it is anticipated that the

members of this sort of society will be mostly white and middle class (Knowles 2007). Fieldwork within and across such organisations would open up a creative vista for examining how the colonial and slave past mediates the formation of British classed ethnicities, racialised ancestries and national identities.

A third strand of research might include an ethnographic study of the largest family history exhibition in the world based in London, *'Who Do You Think You Are? Live'*. The exhibition builds on the fame and great success of a long running BBC television series that traces the family histories of celebrities. Both Cannell (2011) and Kramer (2011b) discuss in some length what this series of programmes illuminates about the process of doing family history research. *Who Do You Think You Are? Live* is composed of hundreds of stands, workshops and exhibits that offer advice and information to the public about researching family history. The hundreds of family history societies based in Britain and across the globe are represented at this event. A study of this exhibition would provide an up-to-date insight into how members of the family history community are engaging with the latest technology in family history research, including genetic ancestry testing. For example, the US based company 'FamilyTreeDNA' hosts a series of workshops that include international speakers in the field of genetic ancestry testing. Participant observation at this event would also offer an opportunity to explore how these societies fit into the wider landscape of family history societies and research in the UK and the rest of the world.

4. Concluding Remarks

In this article, I have attempted to outline a new research agenda that suggests pathways to explore some of the ways in which genetic ancestry testing is mobilised within the practice of family history research in the UK. My focus has been on the articulation and enactment of racial, ethnic, national, gender and class identities and differences within family history research that is conditioned by the commercialisation of genetic ancestry testing. The aim of this research is to enhance theoretical and ethnographic understanding of how innovations in genetic science are shaping everyday discourses and practices of racial, ethnic and national exclusion (e.g., racism, nationalism, xenophobia) and inclusion (e.g., multiracial forms of conviviality).

My contention is that a focus on Britain will serve to address the overwhelming America-centric bias in this area of inquiry by exploring the ways in which Britons across ethnic, racial, class and gender identities are engaging with the commercialisation of genetic ancestry testing. This emphasis on postcolonial Britain holds the potential to contribute to sociological, anthropological and geographical debates about the relationship between science and society, including the ways in which innovations in genetic science informs everyday ideas and practices of difference, identity, diasporic affiliation and kinship that are socially and politically progressive as well as regressive. In short, this research will shed light on the crucial questions of how to live with and across difference. In postcolonial Britain, as in the USA and other parts of Europe, there is evidence of growing support for nationalist politics especially in the face of Britain's exit from the EU where issues of immigration and national sovereignty are high on the agenda, and there is a prevalence of Islamophobic sentiment in the wake of terrorism committed in the name of Islam. In this vein, Nelson (2016) poignantly writes on the blurb of her most recent book: 'DNA is a portal to the past that yields insight for the present and future, shining a light on social traumas and historical injustices that still resonate today'. My contention is that the study of everyday uses of genetic ancestry testing in the UK will offer a critical space to explore what constitutes these social traumas and historical injustices for contemporary Britons and how they inform the postcolonial present.

Acknowledgments: I would like to thank Catherine Nash for her kind invitation to write this article. I also thank Catherine, an anonymous Referee and Nigel Pleasants for their useful comments on a draft of this article. My thanks also to Wendy Roth who kindly sent me her articles that are in progress and under-review for publication.

Conflicts of Interest: The author declares no conflict of interest.

References

- Abu El-Haj, Nadia. 2012. *The Genealogical Science: The Search for Jewish Origins and the Politics of Epistemology*. Chicago: University of Chicago Press.
- Basu, Paul. 2007. *Highland Homecomings: Genealogy and Heritage Tourism in the Scottish Diaspora*. London: Routledge.
- BBC1. 2004. *Who Do You Think You Are?* London: BBC1.
- BBC1. 2013. *Meet the Izzards*. London: BBC1, March.
- BBC2. 2003. *Motherland: A Genetic Journey*. London: BBC1, February 14.
- BBC4. 2010. *Story of England*. London: BBC1, September–October.
- Bolnick, Deborah A., Duana Fullwiley, Troy Duster, Richard S. Cooper, Joan H. Fujimura, Jonathan Kahn, Jay S. Kaufman, Jonathan Marks, Ann Morning, Alondra Nelson, and et al. 2007. The Science and Business of Genetic Ancestry Testing. *Science* 318: 399–400. [[CrossRef](#)] [[PubMed](#)]
- Brodwin, Paul. 2004. Genetics, Identity and the Anthropology of Essentialism. In *Mixed Race Studies: A Reader*. Edited by Jayne O. Ifekwunigwe. London: Routledge, pp. 116–22.
- Bryne, Bridget. 2006. *White Live: The Interplay of 'Race', Class and Gender in Everyday Life*. London: Routledge.
- Cannell, Fenella. 2011. English Ancestors: The Moral Possibilities of Popular Genealogy. *Journal of the Royal Anthropological Institute* 17: 462–80. [[CrossRef](#)]
- Channel 4. 2006. *100% English*. London: Channel 4, November.
- Colls, Robert. 2002. *Identity of England*. Oxford: Oxford University Press.
- Cross, Kathleen. 2001. Framing Whiteness: The Human Genome Diversity Project (as seen on TV). *Science as Culture* 10: 411–37. [[CrossRef](#)]
- Duster, Troy. 2003. *Backdoor to Eugenics*, 2nd ed. London: Routledge.
- Edwards, Jeanette. 2000. *Born and Bred: Idioms of Kinship and the New Reproductive Technologies in England*. Oxford: Oxford University Press.
- Edwards, Jeanette. 2002. Bits and Bytes of Information. In *British Subjects: An Anthropology of Britain*. Edited by Nigel Rapport. Oxford: Berg, pp. 163–80.
- Edwards, Jeanette. 2012. Ancestors, Class and Contingency. *Focaal—Journal of Global and Historical Anthropology* 62: 70–80. [[CrossRef](#)]
- Edwards, Jeanette. 2017. A Feel for Genealogy: 'Family Treeing' in the North of England. *Ethnos* 2017: 1–18. [[CrossRef](#)]
- Fehler, Benedicte Ohrt. 2011. (Re)Constructing Roots: Genetics and the "Return" of African Americans to Ghana. *Mobilities* 6: 585–600. [[CrossRef](#)]
- Fortier, Ann-Marie. 2012. Genetic Indigenisation in "The People of the British Isles". *Science as Culture* 21: 153–75. [[CrossRef](#)]
- Gilroy, Paul. 1997. Diaspora and the Detours of Identity. In *Identity and Difference*. Edited by Kathryn Woodward. London: Sage, pp. 299–346.
- Gilroy, Paul. 2000. *Between Camps: Nations, Cultures, and the Allure of Race*. London: Penguin Books.
- Gilroy, Paul. 2005. *Postcolonial Melancholia*. Columbia: Columbia University Press.
- Hall, Stuart. 1992. New Ethnicities. In *Race, Culture and Difference*. Edited by James Donald and Ali Rattensi. London: Routledge, pp. 252–59.
- Hall, Stuart. 2003. Cultural Identity and Diaspora. In *Theorizing Diaspora*. Edited by Jana Evans Braziel and Anita Mannur. Oxford: Blackwell, pp. 233–46.
- Hall, Catherine, and Sonya Rose, eds. 2006. *At Home with Empire: Metropolitan Culture and the Imperial World*. Cambridge: Cambridge University Press.
- Hesse, Barnor, and Salman Sayyid. 2006. Narrating the Postcolonial Political and Immigrant Imaginary. In *A Postcolonial People: South Asians in Britain*. Edited by Nasreen Ali, Virinder S. Kalra and Salman Sayyid. London: Hurst and Company, pp. 13–31.
- Knowles, Caroline. 2007. The Landscape of Post-Imperial Whiteness in Rural Britain. *Ethnic and Racial Studies* 31: 167–84. [[CrossRef](#)]
- Kramer, Anne-Marie. 2011a. Kinship, Affinity and Connectedness: Exploring the Role of Genealogy in Personal Lives. *Sociology* 45: 379–95. [[CrossRef](#)]
- Kramer, Anne-Marie. 2011b. Mediatizing Memory: History, Affect and Identity in "Who Do You Think You Are?". *European Journal of Cultural Studies* 14: 438–45. [[CrossRef](#)]

- Kumar, Krishan. 2003. *The Making of English Identity*. Cambridge: Cambridge University Press.
- Lee, Sandra S., Deborah A. Bolnick, Troy Duster, Peter Ossorio, and Kim TallBear. 2009. The Illusive Gold Standard in Genetic Ancestry Testing. *Science* 325: 38–39. [[CrossRef](#)] [[PubMed](#)]
- M'charek, Amade, Katharina Schramm, and David Skinner. 2014. Technologies of belonging: The absent presence of race in Europe. *Science, Technology and Human Values* 39: 459–67.
- MacPhee, Graham, and Prem Poddar. 2010. *Empire and After: Englishness in Postcolonial Perspective*. New York: Berghahn Books.
- Nash, Catherine. 2002. Genealogical Identities. *Environment and Planning D: Society and Space* 20: 27–52. [[CrossRef](#)]
- Nash, Catherine. 2004. Genetic kinship. *Cultural Studies* 18: 1–33. [[CrossRef](#)]
- Nash, Catherine. 2008. *Of Irish Descent: Origin Stories, Genealogy & the Politics of Belonging*. Syracuse: Syracuse University Press.
- Nash, Catherine. 2013. Genome Geographies: Mapping National Ancestry and Diversity in Human Population Genetics. *Transactions of the Institute of British Geographers* 38: 193–206. [[CrossRef](#)]
- Nash, Catherine. 2015. *Genetic Geographies: The Trouble with Ancestry*. Minneapolis: University of Minnesota Press.
- Nelkin, Dorothy, and Susan Lindee. 1995. *The DNA Mystique: The Gene as Cultural Icon*. New York: W. H. Freeman.
- Nelson, Alondra. 2008a. The Fact of Diaspora: The Social Sources of Genetic Genealogy. In *Revisiting Race in a Genomic Age*. Edited by Barbara A. Koenig, Sandra Soo-Jin Lee and Sarah S. Richardson. New Brunswick: Rutgers University Press, pp. 253–70.
- Nelson, Alondra. 2008b. Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry. *Social Studies of Science* 38: 759–83. [[CrossRef](#)] [[PubMed](#)]
- Nelson, Alondra. 2016. *The Social Life of DNA: Race, Reparations, and Reconciliation after the Genome*. Boston: Beacon Press Books.
- Palmie, Stephen. 2012. Biotechnological Cults of Affliction? Race, Rationality and Enchantment across the Black Atlantic. In *Identity Politics and the New Genetics*. Edited by Katharina Schramm, David Skinner and Richard Rottenburg. Oxford: Berghahn Books, pp. 193–212.
- Parham, Angel Adams. 2008. Race, Memory and Family History. *Social Identities* 14: 13–32. [[CrossRef](#)]
- Reardon, Jenny. 2012. The Democratic, Anti-Racist Genome? Technoscience at the Limits of Liberalism. *Science as Culture* 21: 25–47. [[CrossRef](#)]
- Reardon, Jenny, and Kim Tallbear. 2012. Your DNA is Our History' Genomics, Anthropology, and the Construction of Whiteness as Property. *Current Anthropology* 53: 233–45. [[CrossRef](#)]
- Roth, Wendy D., and Biorn Ivemark. 2017. Genetic Options: The impact of Genetic Ancestry testing on Ethnic and Racial Identities. Paper presented at Brandeis Events, Waltham, MA, USA, Brandeis University, Sociology Department Seminar Series, March 23, pp. 1–49. Available online: <http://www.brandeis.edu/events/?trumbaEmbed=view%3Devent%26eventid%3D122807404> (accessed on 21 December 2017).
- Roth, Wendy D., Kaitlyn Jaffe, and Lindsey Richardson. 2017. Does Genetic Ancestry Testing Promote an Essentialized View of Race? Findings from a Randomized Controlled Trial. Paper presented at Annual Meeting of the American Sociological Association, Montreal, QC, Canada, August 13; pp. 1–53.
- Schramm, Katharina. 2012. Genomics en Route: Ancestry, Heritage and the Politics of Identity across the Black Atlantic. In *Identity Politics and the New Genetics*. Edited by Katharina Schramm, David Skinner and Richard Rottenburg. Oxford: Berghahn Books, pp. 167–92.
- Scully, Marc, Turi King, and Steven D. Brown. 2013. Remediating Viking Origins: Genetic Code as Archival Memory of the Remote Past. *Sociology* 47: 921–39. [[CrossRef](#)] [[PubMed](#)]
- Sense about Science. 2013. *Sense about Genetic Ancestry Testing*. Report. Available online: www.senseaboutscience.org (accessed on 21 December 2017).
- Shriver, Mark D., and Rick A. Kittles. 2008. Genetic Ancestry and the Search for Personalized Genetic Histories. In *Revisiting Race in a Genomic Age*. Edited by Barbara A. Koenig, Sandra Soo-Jin Lee and Sarah S. Richardson. New Brunswick: Rutgers University Press, pp. 201–14.
- Skinner, David. 2006. Racialized Futures: Biologism and the Changing Politics of Identity. *Social Studies of Science* 36: 459–88. [[CrossRef](#)]
- Sommer, Marianne. 2012. "It's a Living History, Told by the Real Survivors of the Times—DNA": Anthropological Genetics in the Tradition of Biology as Applied History. In *Genetics and the Unsettled Past*. Edited by Keith Wailoo, Alondra Nelson and Catherine Lee. New Brunswick: Rutgers University Press, pp. 225–46.

- Steinberg, Deborah L. 2000. Reading Genes/Writing Nation: Reith, “Race” and the Writings of Geneticist Steve Jones. In *Hybridity and its Discontents: Politics, Science, Culture*. Edited by Avtar Brah and Annie E. Coombes. London: Routledge, pp. 137–53.
- Tallbear, Kim. 2008. Native-American-DNA.com: In Search of Native American Race and Tribe. In *Revisiting Race in a Genomic Age*. Edited by Barbara A. Koenig, Sandra Soo-Jin Lee and Sarah S. Richardson. New Brunswick: Rutgers University Press, pp. 235–52.
- Tutton, Richard. 2004. “They Want to Know Where They Came From”: Population Genetics, Identity, and Family Genealogy. *New Genetics and Society* 23: 105–20. [[CrossRef](#)] [[PubMed](#)]
- Tyler, Katharine. 2007. Race, Genetics and Inheritance: Reflections upon the Birth of “Black” Twins to a “White” IVF Mother. In *Race, Ethnicity and Nation: Perspectives from Kinship and Genetics*. Edited by Peter Wade. Oxford: Berghahn Books, pp. 33–51.
- Tyler, Katharine. 2012. *Whiteness, Class and the Legacies of Empire: On Home Ground*. Basingstoke: Palgrave Macmillan.
- Wade, Peter. 2002. *Race, Nature and Culture: An Anthropological Perspective*. London: Pluto Press.
- Wade, Peter, ed. 2007. *Race, Ethnicity and Nation: Perspectives from Kinship and Genetics*. Oxford: Berghahn Books.
- Wagner, Jennifer K., and Kenneth M. Weiss. 2012. Attitudes on DNA Ancestry Tests. *Human Genetics* 131: 41–56. [[CrossRef](#)] [[PubMed](#)]
- Wemyss, Georgie. 2008. White Memories, White Belonging: Competing Colonial Anniversaries in “Postcolonial” East London. *Sociological Research Online* 13: 8. Available online: <http://www.socresonline.org.uk/13/5/8.html> (accessed on 10 December 2010). [[CrossRef](#)]
- Wemyss, Georgie. 2009. *The Invisible Empire: White Discourse, Tolerance and Belonging*. Aldershot: Ashgate.



© 2017 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).