African Identity and the African Diaspora: The Genetic Impact of the Transatlantic Slave Trade

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Abstract

Africans enslaved during the transatlantic slave trade not only lost their families, their friends, their homes, they also lost their identity. Forced onto ships in tight quarters, these men and women of Africa were stripped of their clothes, their belongings, and their existence as Africans and taken to a foreign land and sold as slaves. They were forced to create a new identity in a new world, shaping their new lives through a collective memory of all that they lost. This article looks at the way DNA is helping the descendants of enslaved Africans reconnect to a lost past and contribute to the African Diaspora.

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Teresa Bowman. A name. A first and last name that connotes a sense of belonging. A name with ancestry tracing back over hundreds of years. Names contribute to an identity built from a cultural heritage composed of languages, customs, traditions, and values. Many Americans, perhaps most, are unaware of their family's origin. There is presently a trend across the world to trace one's ancestry. People want to know more about the past and about those who have gone before us. The transatlantic slave trade extinguished the past for millions of African Americans some 300 years ago. It is as if the roots of their family trees end on the shores of the Atlantic Ocean. The middle passage stripped the identities of over 400,000 survivors of the transatlantic slave trade that came to the United States. "They ceased to be Mende or Igbo or Kpelle and became Negro slaves, thrown together with people of other ethnicities without any consideration." Perhaps there is a bridge built to provide some answers, a possibility of connecting to the African past to restore a lost identity. Analyzing DNA through genetic testing provides an opportunity for African Americans to reclaim their African identity, bringing understanding to a forgotten heritage, while providing new insights into the transatlantic slave trade and the African Diaspora in the United States. Understanding one's DNA can perhaps give a voice to those silenced by the middle passage.

What follows is a discussion of current DNA trends and genetic research centered around the transatlantic slave trade. What can it tell us about the Africans captured during the transatlantic slave trade? Genetic testing fuels a desire to understand human mobility throughout history. This research can be a powerful tool to learn more about the impact of the transatlantic slave trade on the African Diaspora in the United States. What has research uncovered so far, and is there more to glean? Understanding DNA trends and genetic origins across the Americas can reconnect African Americans to their African roots, enriching their sense of identity. Presented below is a case study of one man's quest to connect to his deep familial roots using AncestryDNA and the Transatlantic Slave Trade Database. Also considered are concerns around this emerging trend in genetic testing and the transatlantic slave trade.

Twelve and a half million Africans were forcibly removed from their homes between the sixteenth and nineteenth centuries, sent to the Americas, and enslaved.² Far from their origins, these people attempted to hang on to their African roots and identity in a completely alien world. Africans tried to hold on to their customs and culture despite pressure by slave owners to conform to American life. Forced to assimilate to new names, many shed their African monikers. Cudjo Lewis, a survivor of the slave ship Clotilda, highlights this disconnect. When Zora Neale Hurston visited him one afternoon:

¹ Henry Louis Gates, Jr., *In Search of Our Roots: How 19 Extraordinary African Americans Reclaimed Their Past* (New York: Random House, Inc., 2009), Prefatory Notes on the African Slave Trade, Kindle.

² David Eltis and David Richardson, *Atlas of the Transatlantic Slave Trade*, (London: Yale University Press, 2015), xvii. See also Alexander Falconbridge, *An Account of the Slave Trade on the Coast of Africa*, (London: J. Phillips, 1788), 12-18., for a first-hand account of the slave trade.

Oh Lor', I know it you call my name. Nobody don't callee me my name from cross de water but you. You always callee me Kossula, jus' lak I in de Affica soil!... My name is not Cudjo Lewis. It Kossula. When I gittee in Americky soil, Mr. Jim Meaher he try callee my name, but it too long, you unnerstand me, so I say, 'Well, I yo' property?' He say, 'Yeah.' Den I say, 'You callee me Cudjo. Dat do.' But in Afficky soil my mama she name me Kossula.³

We can only blame slavery and the transatlantic slave trade for this loss of identity. We see customs, cultures, and values passing from one generation to the next since the end of the slave trade two centuries ago. Handed down are shards and shreds of ephemera and narratives to the next family historian that become worn and weathered over time. Holes in the fabric of familial history emerge as ancestral lines die out. African Americans suffer an added level of disconnectedness. Henry Louis Gates, Jr. verbalizes this so well:

For us, for those of us descended from the 455,000 Africans who arrived in this country directly from Africa and indirectly from the Caribbean as slaves...it was this "trace-ability," as it were, that the evil genius of slavery sought to take away from us on both sides of the Atlantic, making us fragmented and not whole, isolated, discrete parts, not pieces of fabric stitched together in a grand pattern, like some living, breathing, mocha-colored quilt.⁴

This disconnectedness can contribute to a loss of ancestral identity for descendants of enslaved people. The survivors of the transatlantic slave trade account for as many as 48 distinct ethnolinguistic groups across Atlantic Africa.⁵ The language, customs, and culture across these 48 distinct groups could be vastly different. Knowing one's specific genetic home can contribute to a more authentic identity. African identity throughout the Americas contributes to regional cultures and to a new African American identity and the African Diaspora. Slaves brought to America through the slave trade had to create their own Africa on American soil. On the outskirts of Mobile, Alabama, Africa Town is one place dedicated to rebuilding an African identity.

Once free again, they regrouped and put their energy into finding a way to go back to their families in Africa... When their plan failed, they decided to do the next best thing: recreate Africa where they were... Within this African enclave, they raised their children, teaching them the languages and values they had learned from their families and brought from the homelands they cherished.⁶

³ Hurston, Zora Neale, *Barracoon: The Story of the Last "Black Cargo"*, (New York: HarperCollins Publishers, 2018), 17-19. Kindle.

⁴ Henry Louis Gates, Jr., *In Search of Our Roots*, Introduction: Family Matters.

⁵ Steven J. Micheletti et. al., "Genetic Consequences of the Transatlantic Slave Trade in the Americas," *The American Journal of Human Genetics* 107, (August 2020): 265, https://doi.org/10.1016/j.ajhg.2020.06.012.

⁶ Sylviane A. Diouf, *Dreams of Africa in Alabama: The Slave Ship Clotilda and the Story of the Last Africans Brought to America* (New York: Oxford University Press, Inc., 2007), 2-3. Kindle.

Today, genetic research can bring African Americans one step closer to reconnecting with their lost heritage.

Genetic research and DNA analysis for ancestral research is a global trend, with the first tests for ancestry research administered by Family Tree DNA in 2000.⁷ Utilizing DNA research for understanding the identities and origins of the individuals displaced by slavery and the middle passage came about during a conference in Copenhagen in 2003. The conference attended by historians, anthropologists, archaeologists, and geneticists hotly debated the topic:

On the one side, a group of "genetic skeptics" highlighted concerns about how molecular data might be used to create deterministic classifications of human groups, and questioned the validity of applying biological data to questions of social identity. On the other side, a group of "genetic advocates" drew attention to the rigor and precision of molecular studies, suggesting that genetic analyses were capable of providing insights of a heretofore unparalleled resolution into the history of slavery.⁸

The actual usage of DNA to "investigate the origins of human individuals displaced by the transatlantic trade in enslaved Africans" began in 1990 through the New York African Burial Ground project. This project analyzed the DNA of 419 skeletons interred in a Blacks-only cemetery in downtown New York. The results compare 45 skeletal remains of inhabitants of West and West Central Africa to those of the New York remains. The results returned 1,800 mtDNA sequences with 849 connected to people currently living in African cities, including Benin, Burkina Faso, Cameroon, Central African Republic, Guinea, Mali, Morocco, Niger, Nigeria, Senegal, and Sierra Leone. Not included were other cities that were key to the transatlantic slave trade. That number would be much higher if it included Ghana, Gabon, Angola, Congo, or Liberia. Since the study in 1990, similar studies continue to emerge throughout the Americas and the Caribbean. As the science behind genetic testing develops, the results become more precise and enlightening. In 2003 the company African Ancestry, Inc. was formed to offer DNA testing, resources, and products to the African American public. The company was not without its critics, who developed their own testing databases and rival companies. The results of these emerging technologies, research, testing, and database

⁷ "Moneymakers: Bennett Greenspan: DNA Testing Crosses Paths with Genealogy," Chron.com, last modified July 30, 2011, https://www.chron.com/business/article/Moneymakers-Bennett-Greenspan-1657195.php.

⁸ Sarah Abel and Marcela Sandoval-Velasco, "Crossing Disciplinary Lines: Reconciling Social and Genomic Perspectives on the Histories and Legacies of the Transatlantic Trade in Enslaved Africans," *New Genetics and Society* 35, no. 2 (2016): 149-150, https://doi.org/10.1080/14636778.2016.1197109.

⁹ Ibid. 153.

 $^{^{10}}$ mtDNA analyzes genetics sequence through the maternal line. See note 20 for a more detailed explanation on the types of DNA testing.

¹¹ Abel and Sandoval-Velasco, "Crossing Disciplinary Lines," 153-165 and passim.

developments give African Americans a chance to connect to their origins despite their displacement due to the transatlantic slave trade.

Andre Johnson¹² provides an example of how DNA can help trace one's ancestry to the transatlantic slave trade. This case study uses AncestryDNA and the Transatlantic Slave Trade Database to narrow down the African origin of Andre Johnson. Andre grew up identifying as biracial. His mother is of French ancestry, and his father an African American. He had never questioned his heritage until, as a young man, Andre lost both of his parents. Before his mother passed, Andre discovered his original birth certificate and found that he is an adoptee. Andre became curious to understand his familial roots. Who was he, and what was his ancestry? Through Ancestry.com, Andre took a DNA test and awaited his results. He was matched to a close cousin on his birth mother's side and learned that he is primarily Scots Irish which stems from his maternal line. He has located his birth mother and is beginning to piece together one half of his heritage. His birth father's side remains a mystery, but perhaps DNA can begin to gather the pieces of what seems an impossible puzzle.

On Andre's paternal side, AncestryDNA estimates that he is 13% Nigerian and 11% from Cameroon, Congo & Western Bantu Peoples. ¹³ In terms of the transatlantic slave trade, we can conclude that Andre's ancestors likely came from ports along the Bight of Benin, Bight of Biafra, and West Central Africa, three of the largest coastal regions in the slave trade (See Figure 1 in Appendix). According to the *Atlas of the Transatlantic Slave Trade*, the likeliest destinations of Africans from the Nigerian and West Central African ports would be the islands of the Caribbean and the ports of southern United States ¹⁴ (See Figure 2 in Appendix). Utilizing the Transatlantic Slave Trade Database, a search for voyages that include the Bight of Benin, Bight of Biafra, and West Central Africa returns 17,458 possible voyages. ¹⁵ This result narrows down about half of the entirety of the voyages included in the database from 36,000.

We can then compare Andre's DNA to his closest paternal match through AncestryDNA's estimated matches. Andre Johnson and Evan Richardson¹⁶ share 255 centimorgans (cM).¹⁷ Using the Share cM Project Chart, we can assess their connection as a first

¹² The name Andre Johnson is an amalgamation of this person's current legal name and name assigned at birth.

¹³ Andre's DNA also includes a small percent from Mali and Senegal at 2% and 1% respectively, but for this case study we will concentrate on the two larger percentage regions.

¹⁴ David Eltis and David Richardson, *Atlas of the Transatlantic Slave Trade*, 18-19.

¹⁵ Calculated from David Eltis, Stephen Behrendt, David Richardson, and Manolo Florentino, "The Trans-Atlantic Slave Trade Database," SlaveVoyages, http://www.slavevoyages.com, [hereafter TSTD2] link to results, https://www.slavevoyages.org/voyages/L5NDiRHd.

¹⁶ The name Evan Richardson is an alias.

¹⁷ A unit of genetic testing measuring genetic distance between humans. See figure 4 in the Appendix. Chart can be found at DNA Painter, "The Shared cM Project 4.0 tool v4," accessed May 6, 2021, https://dnapainter.com/tools/sharedcmv4.

cousin once or twice removed or second cousins (See Figure 3 in Appendix). Their shared ancestor would be Andre's paternal great-grandparents. In comparing their shared ethnicity, Evan's African ancestry mirrors Andre's, Nigeria and the West African Coast being the two largest regions within his DNA (See Figure 4 in Appendix). We can then utilize AncestryDNA's estimated "United States Shared Communities" to get an idea of where Andre and Evan's ancestors settled once they arrived in North America (See Figure 5 in Appendix). Ancestry strongly suggests that the primary area in which their ancestors settled is the central eastern coast of the country, from Maryland to South Carolina and more specifically Virginia (See Figure 6 in Appendix). Once again, we return to the Transatlantic Slave Trade Database to try and narrow down voyages between Nigeria and the West Coast of Africa that disembarked in the central eastern coast of the United States. Selecting the Bights of Benin and Biafra and West Central Africa as embarkation ports and selecting Virginia as the disembarkation port, the database returns 162 vessels that sailed these routes. 18 Further information from the Transatlantic Slave Database can tell us that Andre and Evan's ancestors were part of 43,563 Africans who embarked among these 162 vessels and one of 35,091 Africans who survived the middle passage (See Figure 7 in Appendix).

While this simple case study does not narrow down the exact ship(s) Andre's ancestors arrived on in the U.S., we can certainly get a good idea of what those voyages looked like. The results narrow from 36,000 possible voyages to just 162 with a quick comparison. If we were to continue to compare Andre's DNA results with those of other matches, carefully reviewing several together, we could likely shrink the number of voyages down even further. The Transatlantic Slave Trade Database allows the researcher to glean important clues into the lives of one's ancestors and their experience along the middle passage. We know that of these 162 voyages, six embarked at the Bight of Benin, 122 from the Bight of Biafra, and 34 from the West African Coast (See Figure 8 in Appendix). Since the most significant percentage comes from the Bight of Biafra, we can estimate that Andre's ancestors were part of the Hausa/Fulani, Yoruba, or Igbo ethnic groups. We also have to assume that Andre had multiple African ancestors, and they were one of approximately 35,091 survivors of the middle passage. This scaled-down test case represents information gleaned using genetic testing and the Transatlantic Slave Trade Database to connect an African American to their disconnected past in Africa. Henry Louis Gates, Jr. is a champion for using DNA analysis and primary resources around the transatlantic slave trade to estimate African heritage. His research leads to many cases with much more specific results.¹⁹

While Andre Johnson's case study is small and simplistic, one should consider caveats that shed light on the controversy in using DNA to connect African Americans, and indeed all

¹⁸ David Eltis, Stephen Behrendt, David Richardson, and Manolo Florentino, TSTD2, https://www.slavevoyages.org/voyages/xUFdGvA4.

¹⁹ Henry Louis Gates, Jr., *In Search of Our Roots*, Introduction: Family Matters and passim.

Africans, worldwide. The most significant caveat is the size of genetic databases. Although DNA testing is becoming more and more popular, many countries with remote locations will have little to no representation in source databases. There are efforts to test DNA among Africans specifically for research connected to slavery and the slave trade, but the sampling is still small. As more testing occurs, the databases and results will grow and expand. Companies like Ancestry, Family Tree DNA, and 23 and Me will continue to update individual DNA results for tested clients who will see more specific results as the databases expand. Changes in the mobility of African Americans due to events like the Great Migration can skew migratory paths of the descendants of slaves and create a regional discordance. Disruption in these paths can complicate patterns of shared communities that could help narrow down disembarkation points. Besides the concern of regional discordance, a 23 and Me Research Team points out in their article on "Genetic Consequences of the Transatlantic Slave Trade in the Americas" concerning ancestral sex bias whereby unequal sex contributions to the gene pool skews results.²⁰ One should consider utilizing multiple DNA tests that review samples of mtDNA, Y-DNA, and autosomal chromosomal markers and sequences to review results from maternal and paternal lines.²¹ These are just a few of the concerns and caveats brought to light through genetic research to connect Africans with their displaced descendants.

What we do see here through somewhat limited testing so far is the emergence of an African identity. For some, the impact of connecting to African origins through DNA can be prophetic. On December 12, 2017, Questlove, drummer of the band The Roots, was featured on the popular genealogy documentary show "Finding Your Roots" hosted by historian Dr. Henry Louis Gates, Jr. During the show, Questlove, whose full name is Ahmir Thompson, learned that he was a direct decedent of a survivor of the slave ship Clotilda, connecting the drummer to a specific slave port in Africa. It had a profound effect on him: "how weird the even i'm connected to #Alabama. this moment changed my life. LITERALLY. literally here....on a WAGER. watch!!!!"

Understanding one's ethnic origins are not wholly an African problem. In the twenty-first century, the world has become a giant melting pot. Immigration and emigration between countries contribute to mixed regional culture and multiracial peoples. Today, when we consider identity, we think more in terms of the intersectional view of ourselves. Understanding DNA and genetics can contribute to a new idea of ethnic identity and diversity, and it also contributes to

²⁰ Micheletti et. al., "Genetic Consequence," 269-270.

²¹ "Y-DNA, mtDNA, and Autosomal DNA Tests," Ancestry.com, accessed May 6, 2021, https://support.ancestry.com/s/article/Y-DNA-mtDNA-and-Autosomal-DNA-Tests, provides an explanation of the different types of DNA tests.

²² "PBS Show Reveals Questlove Descended From Last Known Slave Ship, Which Landed In Alabama," AL.com, accessed May 6, 2021, https://www.al.com/news/mobile/2017/12/pbs_special_reveals_questlove.html. Quote from Questlove @questlove, 2017, "how weird," Twitter, December 12, 2017, https://bit.ly/3h223mf.

pride in one's family, ancestors, and origins. Whether it is an Irish American whose ancestor came to the United States due to the potato famine, a Jewish American whose family fled the Holocaust in 1940, or an African American whose ancestor was forcibly removed from their home country to endure the tragedy of slavery, one's origin is unique to their identity. "Regardless, however, of how they were enslaved in Africa, still they spoke their languages and knew their names. But here, on this side of the Atlantic, they soon lost those names."²³

As I sit here putting the final words to this project, I am in the inevitable position of facing the end of my family identity. My sister, who is my only sibling, having just passed and my parents before her leave me as the final leaf on our family tree. Unable to have my own biological children, I face what many others face throughout time, the end of familial identity. The explosion of genetic testing used to fill in familial gaps by people of all backgrounds indicates that there is a global personal need to understand one's heritage. Filling in these gaps allows a person to add new facets and understanding of self-identity and pride in one's deep familial roots. I cannot fathom what hundreds of thousands of Africans endured being torn from their homes, away from their families and heritage. Slave traders stripped them of their clothes, belongings, ancestry, names, and identities. Those that survived the middle passage had to create a new sense of self and secretly hold dear their African heritage in an unforgiving country. They had to make a new Africa in the Americas built on their remembered past. The legacy that was the transatlantic slave trade did not, could not, wholly extinguish an African identity for the over 400,000 people who survived the middle passage. It merely diminished for a time to boldly reignite as the African Diaspora.

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²³ Henry Louis Gates, Jr., *In Search of Our Roots*, Prefactory Notes.

Appendix

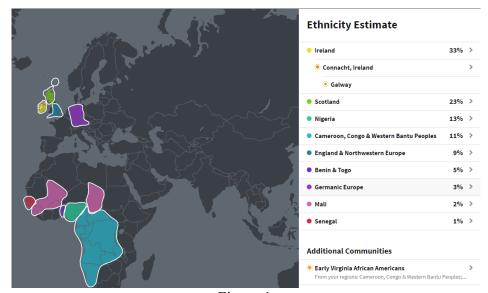


Figure 1

Ethnicity Estimate for Andre Johnson From Author's Personal Ancestry Account. Data courtesy of Ancestry.com

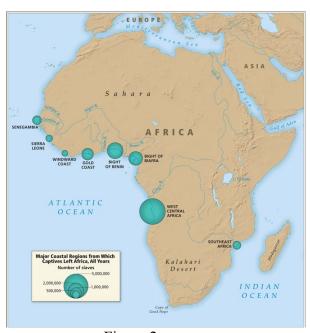


Figure 2

Map 7: Major coastal regions from which captives left Africa, all years. JPEG. SlaveVoyages. https://slavevoyages.org/voyage/maps (accessed September 29, 2021). Source: David Eltis and David Richardson, Atlas of the Transatlantic Slave Trade (New Haven: Yale University Press, 2010), reproduced with the permission of Yale University Press. © 2021 Yale University Press. All Rights Reserved.

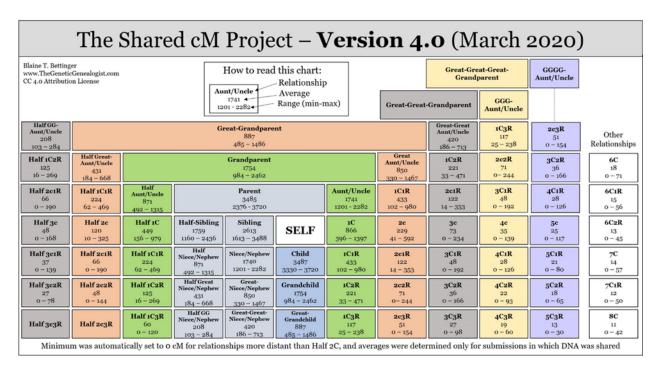
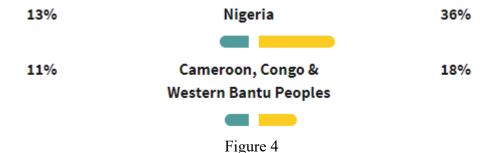


Figure 3

The Shared cM Project Chart – Chart courtesy of DNA Painter. Licensed under the Creative Common License: https://creativecommons.org/licenses/by-nc/3.0/us/



Shared DNA Estimated Ethnicity between Andre Johnson and Evan Richardson From Author's Personal Ancestry Account. Data courtesy of Ancestry.com

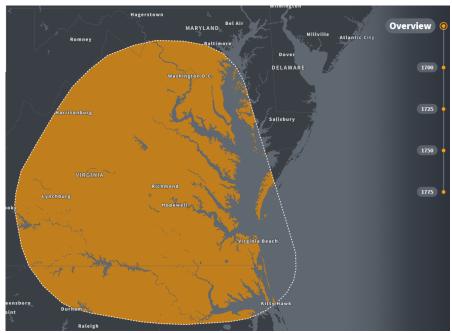


Figure 5

AncestryDNA Estimated Shared U. S. Communities From Author's Personal Ancestry Account. Data courtesy of Ancestry.com

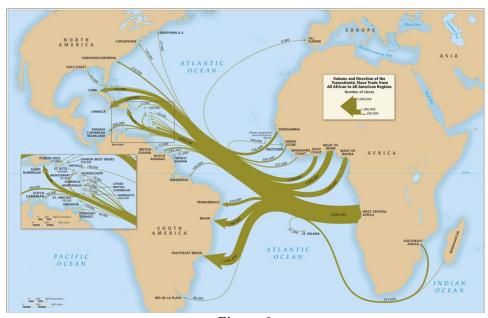


Figure 6

Map 9: Volume and direction of the trans-Atlantic slave trade from all African to all American regions. JPEG. SlaveVoyages. https://slavevoyages.org/voyage/maps (accessed September 29, 2021). Source: David Eltis and David Richardson, Atlas of the Transatlantic Slave Trade (New Haven: Yale University Press, 2010), reproduced with the permission of Yale University Press. © 2021 Yale University Press. All Rights Reserved.



Figure 7

Slaves Embarked and Disembarked. Data courtesy of SlaveVoyages. Licensed under the Creative Common License: https://creativecommons.org/licenses/by-nc/3.0/us/

Year Range		Africa		
	1 1	Bight of Benin ↑↓	Bight of Biafra and Gulf of Guinea islands	West Central Africa and St. Helena
1651-1675		0	1	1
1676-1700		1	6	0
1701-1725		1	44	4
1726-1750		1	51	15
1751-1775		3	20	14
Totals		6	122	34

Figure 8

Number of Vessels from Embarkation Points. Data courtesy of SlaveVoyages. Licensed under the Creative Common License: https://creativecommons.org/licenses/by-nc/3.0/us/

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Maps

David Eltis and David Richardson. "Map 7: Major coastal regions from which captives left Africa, all years. JPEG. SlaveVoyages." *Atlas of the Transatlantic Slave Trade,* (New Haven: Yale University Press, 2010). JPEG. SlaveVoyages.

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