Response to delegate around recommending use of commercial DNA devices to establish Black geographies and ethnicities

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Reason for Clarification on efficacy on commercial DNA technology

Speaking request

Title: CEO/Founder

Email Address: mutale@aiforthepeopleus.org
Org Name:

Al for the People

Website https://aiforthepeopleus.org/

Classification: NGO Home Country: United States

Suggested reframe on use of commercial DNA technology to identify African ethnicity and geography

Following the recommendation commercial DNA test kids should be used by Africans displaced from the continent due to human trafficking during the Trans-Atlantic Slave trade to establish both their identity and geography

While commercial DNA testing kits are marketed as being able to identify human ethnicity and geography this is not the case. There are two main reasons for this:

- I. There is no complete dataset of human DNA and ethnicity therefore scientists measure DNA samples against the existing dataset and then make inferences rather than drawing hard conclusions. For example, you may be told your DNA is most like the Igbo people of Nigeria in the dataset but that does not mean you are Igbo because there are so many variations in the human genome. Read more here. Inference is used a lot by algorithmic systems that perform the matching function for commercial DNA brands. However, these findings are always presented as facts to the consumer to maintain public perception and confidence in the idea that data is in fact impartial when this is not true. Instead, the findings of commercial algorithmic systems are purely subjective or as Data Scientist Cathy O'Neil states, are opinions written in code, learn more here. However, that is the brand promise is scientific products produce hard data, and when combined with the desire of displaced Africans to understand their roots the faith put into the results given is almost always whole.
- II. Ethnicity and Geography are not intractably linked. The assumption made by people who market these tests is there was no trade or movement in times past. However, that is not true, African peoples then and now were extremely mobile This is evidenced by scientific discoveries that have found the nuclear DNA from 938 people from 51 parts of the world. Read more here. This, combined with the fact that Africa has the most diverse gene pool in the world (read here) makes it impossible to say that you may not belong to a particular nation just because your DNA has been linked to a particular people, through analysis within a limited dataset.

Hidden Dangers of Commercial DNA Testing

Therefore, I would suggest that use of commercial DNA technology should not be recommended to the body. This is because not only is it inaccurate but once used it can be sold to actor's hostile to Black people and weaponized against us. For example, FamilytreeDNA, a company based in the United States allowed the FBI to view its dataset upon the agencies request. Given the large margin of error in the results given because of the limitations of the dataset this could lead to the wrongful incrimination of people of African descent and therefore it is not advisable for Black people anywhere to use these tests. Even when they are owned by Blacks because as we have seen from the Musk Twitter acquisition once these companies change hands their governance structures reflect the values of the new owners and it maybe to share data with security forces which are hostile to Black lives.

Suggested Intervention

This illustrates the adage offered to us by lesbian poet Andre Lorde, we cannot use the masters' tools to fix the master's house. Instead, I recommend that the body combats by thinking about how to reverse the effects of the African brain drain¹ through the creation of DNA testing companies owned and operated by people of African descent and created for the public good. In the same way Tim Berners-Lee, the inventor of the modern internet never directly profited from his invention he donated his talent to humanity, read more here.

That is not to say these companies would have to do this, but they sign up to a code ethics that states the DNA data they hold would never be sold on the secondary and tertiary markets, once the samples were analyzed they would be destroyed, and the margins of error made clear to users. One way this could be done if the companies were country and/or regionally specific and held outside of director governmental control to avoid the potential forced sale by external forces. These companies could be financed by affluent and rich people of African descent with an interest in the technology and a percentage of sales benefit African people on the continent either through governments, NGOs or other public sector actors.

¹ I do think Africans born on the continent and living in the diaspora should have to do some type of national service to help develop their countries, whether it is making deposits into national banks or provide some other type of service to their country of birth.

This is not a perfect solution, but it would allow displaced Africans to get a more accurate idea of where they came from perhaps there is a consortium where consumers in the West pay one price for a series of tests across the continent. Significant research could be done on migration patterns of African peoples at universities on the continent making them into centers of excellence and helping to fund research, academic journals and conferences across disciplines. It would also help all African descended people get a better idea of our deep history.