

2: Deoxyribonucleic acid: DNA to you and me

Having undertaken some basic research in the registers I found a big hole I could not fill surrounding my grandfather's birth and I had to put the research project aside for many years and then I saw on a television programme that it was possible to get DNA analysed to establish one's ethnic origins. In January 2018 I sent off a sample of my DNA to a laboratory in Houston, Texas, and two months later I had the results that enabled me to dig deeper into my past.

Before I reveal those results I should say that I do not understand DNA inheritance but here are three basic principles that help to interpret the results:

1. Because human mobility has only increased rapidly in the last 200 years or so local populations were once much more insular and so developed unique characteristics and those characteristics can be used to identify a person's ethnic origins
2. You inherit half of your DNA from you mother and half from your father but the DNA you inherit from each is totally random and so if you have a 25% level of a certain ethnic content it does not mean that the parent you inherited that from has 50% of their DNA from that ethnicity
3. Because DNA inheritance is random it means no two people have the same DNA structure. Even if I had a twin brother we would have different DNA

So what did my DNA analysis reveal?

82%	English
15%	Spanish
2%	Scandinavian
1%	Nigerian

That is surely proof of what my father and aunt told me, my great grandfather was Spanish UNLESS there is Spanish DNA from another branch of my family and this needs to be disproven before any specific conclusion can be drawn. The 1% Nigerian might seem strange and insignificant but I believe it is important, and possibly a key element, in trying to establish my true identity.

The suggestion was that my great grandfather was Spanish and the DNA analysis certainly shows a high content of DNA derived from a Spanish source but was that my great grandfather?

I inherited half of my DNA from my mother. I know that my mother was from Ashton-under-Lyne in what is now Greater Manchester. I know, too, that her parents and grandparents were Lancastrians where they worked in the cotton mills and in mining related industries around Bolton, Bury and Oldham. Like many thousands of people they moved from surrounding rural areas into Manchester during the Industrial Revolution to find work. I am sure there is no Spanish connection here.

It is, therefore, certain that the Spanish DNA was inherited from my father but where did he inherit it from? His mother, Beatrice Orman, was from Exbury, near Beaulieu, and research has shown that all of her family and ancestors from 1817 onwards were from this area and so my father must have inherited it from his father not his mother.

So where did my father's father get the Spanish DNA? His mother, Hannah Musselwhite, was from the Fawley area on the west side of Southampton water and her ancestry has been traced back to around 1790 and all of her family came from that area so there is no Spanish connection there either.

Without doubt the Spanish DNA came from his father and so his father must have been of Spanish origin or, at the very least, of part Spanish origin.

Given I inherited 15% Spanish DNA and I was four generations down from this unknown Spaniard my grandfather must have inherited a significant proportion of Spanish DNA to pass on to his children.

The records show that my grandfather's mother, Hannah Musselwhite, married a Henry Orchard in 1890, about 2 years after my grandfather's birth and research shows Henry Orchard's roots are in Devon for at least three generations and so there are no Spanish traces there either.

Without doubt, the Henry Orchard from whom we take our name was NOT the father of my grandfather and so who was? A good question and Henry Orchard may hold a clue to that which I will demonstrate later.