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[Translated]

ANCESTOR FROM AFRICA TO AFRICA
Dr Rentia Landman Reid

With a paper trail of the Reid family showing our origins in the Scottish Grampians along the North Sea, I worried that my ancestor was a Pict, one of the ancient natives of Scotland, charging at the Romans naked and shouting with sticks in hand. With the information from my brother's Y chromosome, it appears that our ancestors came to Scotland from Scandinavia. Then I had a second concern, namely that my ancestor may have been a looting and raping Viking. Ancestor John Reid was baptised at Gamrie on the shores of the North Sea (\approx 26.01.1720 Gamrie) where skulls of Viking leaders were bricked into the walls of the church to commemorate a victory.

My brother's Y chromosome belongs to Haplogroup I-M170 that originated in the Caucasus¹ 43 000 years ago. The fact that 20% of current European men are from this haplogroup does not make it easy to follow a trail that stretches over 22 000 years. I decided to start at the beginning where *Homo sapiens* originated in Africa. It would show the cycle of my paterfamilia from Africa and back to Africa.

The good life

Homo sapiens (humans who are smart) originated between 140 000 and 300 000 years ago in the vicinity of Ethiopia and Sudan. They probably lived well, because the Sahara² and sub-Saharan at that time had high rainfall with strong-flowing rivers, green savannah with large herds of elephants, buffalo and hippos.

The good life lasted only a few thousand years, because 120 000 years ago the last ice age arrived, which would last 100 000 years. Cold weather causes less evaporation, less rain and less water flowing into the sea. This has resulted in desertification, increasing freezing of the ground surface and a drastic drop in sea level.³

The population numbers of prehistoric humans decreased to an estimated 10 000 individuals due to the drought. For survival, some groups migrated south behind herds of game and veld food. Others moved eastward along the coast of Somalia where they lived off marine sources until they could cross through the Red Sea at the Strait of Bab-el-Mandeb in present-day Eritrea to Yemen in Asia. At this point, Africa and Eurasia were

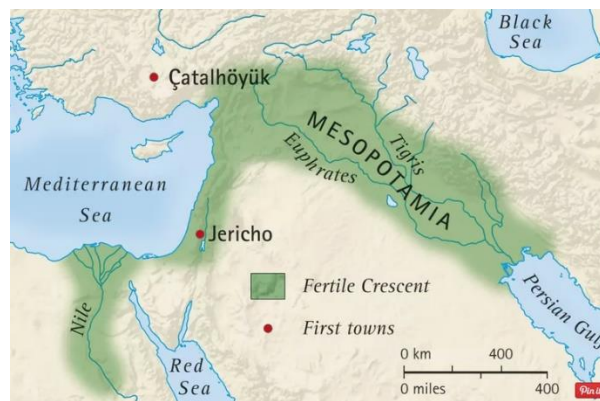
¹ Azerbaijan, Armenia, Georgia and the northeastern parts of Turkey.

² A gradual tilting of the earth's axis is responsible for the monsoon rains that once drenched North Africa to having drifted south to middle Africa.

³ https://en.wikipedia.org/wiki/Last_Glacial_Maximum#cite_note-cLevel-8

only four kilometers apart and the sea level was low enough to walk through with dry feet. In Asia, they migrated all the way along the Arabian coastline to latter-day India.

Other groups, including the ancestor of our family's male line, Haplogroep IJK,⁴ migrated about 50 000 years ago along the Nile River in the direction of the Mediterranean to where they could cross overland at the place where the Suez Canal was to be built, to the Middle East. This migration also took its toll, as the people in Eurasia have a smaller genetic base than African peoples.⁵



Fertile Crescent (in green)

Paradise

When my early forefather arrived in the Levant (Middle East / Southwest Asia) where present-day Israel, Palestine, Lebanon, Jordan, Syria, Iran and Iraq are located, hunter-gatherers found themselves in a paradise of fertile valleys, strong-flowing rivers such as the Tigris and Euphrates, and an abundance of edible plants, including especially the nutritious wild barley (groats). This area is also called the Fertile Crescent.

In time, as the population increased, the hunter-gatherers migrated to the Caucasus Mountains, where mountain goats and other small game could be hunted. By this time they were making stone tools that were an improvement on the mere splintering of stone as used by the Neanderthal and also other Homo species. In search of food, some of the hunter-gatherers migrated to central Asia where Haplogroups IJ and K split from IJK on the Iranian plateau.⁶ One of the bearers of Haplogroep IJ would later become the founding father of Haplogroep I-M170.

Birth of our founding ancestor

The watershed of the Caucasus Mountains is considered the separation between Europe and Asia, and it was on the European side of the Caucasus Mountains where a boy was born about 43 000 years ago with a chromosome variation that could belong Haplogroup I-M170.⁷

⁴ IJK would become the ancestor of 80% of modern Eurasian people.

⁵ <https://www.genetics.org/content/161/1/269>

⁶ https://en.wikipedia.org/wiki/Haplogroup_IJK

⁷ https://en.wikipedia.org/wiki/Haplogroup_I-M170

Little would this boy, our founding ancestor, know that he would become the father of the only large Y chromosome group that originated and continued to exist on the European continent. He would have had a dark complexion and brown eyes – because the genetic mutation that causes blue eyes only spread to agriculturists who migrated from the Middle East to Europe 10 000 years ago – and light skin 7 000 years ago when R1b horsemen⁸ migrated from the Asian Steppes.

From small game hunter to big game hunter

The carriers of Haplogroup I-M170 followed the migratory routes of deer, elk, mammoth and other large game from the Caucasus to the western part of the Great Steppes in the



Ukraine and north of the Black Sea.⁹ They made rough knobkieries and spears of stone and bone with which large game could be hunted. Some of the finer tools were flat-shaped ivory arrowheads and also tools of bone and quartz to sharpen arrowheads, cut and scrape skins. Characteristic are small knives with sharp blades and flat blade tops made of quartz and also the Venus figures of clay, ivory or limestone that represented fertility. Their personal decorations were of bone and ivory on which intricate geometric patterns were carved.¹⁰ The women and children knotted nets that were used to capture small game.¹¹ This way of life is known as the Gravettian culture and is exclusively associated with Haplogroup I-M170.¹² A migratory trace can be deduced from the tools excavated at hunting camps.

The men of the Gravettian culture were particularly tall with a length of 178-188 cm.¹³ It is argued that this feature could be attributed to a rich meat diet that consisted mainly of mammoth meat, but geneticists believe it is rather the result of genetic heredity. With a genetic advantage of length and size, it would be obvious that they would become big game hunters. Their particular length offers a further migratory trace in the sense that the tallest people in the world are still found in areas such as Bosnia, Montenegro, Croatia and in Friesland where it correlates with a high concentration of I-H170.¹⁴

Escape from the cold

The ice age that began 120 000 years ago has increased in intensity. In Europe and Asia, forests withered from drought, tundra (drought-resistant plants) began to grow in their place, and ice sheets moved south.

Deer, elk (moose), mammoth, rhino and bison thrived on the tundra and the large, strong I-M170 big game hunters, despite the cold, followed the game and dwelt with their families in skin shelters where they burned mammoth bones.

⁸ [https://www.eupedia.com/forum/threads/29435-Light-skin-allele-of-SLC24A5-gene-was-spread-by-the-Indo-Europeans-\(R1a-R1b\)](https://www.eupedia.com/forum/threads/29435-Light-skin-allele-of-SLC24A5-gene-was-spread-by-the-Indo-Europeans-(R1a-R1b))

⁹ https://en.wikipedia.org/wiki/Haplogroup_I-M170

¹⁰ www.iabrno.cz/agalerie/gravetta.htm

¹¹ <https://www.iflscience.com/health-and-medicine/many-tall-men-can-be-traced-back-to-paleolithic-mammoth-hunters/page-2/>

¹² This type of tool has been found at La Gravette in the Dordogne region of France.

¹³ <https://www.seeker.com/health/the-tallest-men-in-the-world-trace-back-to-prehistoric-mammoth-hunters>

¹⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5414258/>



*Mammoth*¹⁵

The ice later covered such a large part of Europe that humans and animals had to migrate to the south for survival.¹⁶

The Gravettian hunters of the Ukraine migrated to the present-day Balkans¹⁷ and those of central Europe to present-day Italy, France and Spain. They lived in caves or skin shelters with a view on the valleys below to monitor the movement of game and also because there was more sunshine than in the valleys. Big game hunting declined and brought an end to Gravettian culture. The hardships during the peak of the last ice age about 26000 years ago caused the population to decrease drastically, which again caused a genetic bottleneck. In addition, the survivors remained in isolation in the shelters for so long that chromosome mutations arose. From Haplogroup I-M170, a split occurred that created I-M438 (also known as I2) in the Balkans and I-M253 (I1) that would become the main branch of I-M170 in the Pyrenees.¹⁸

Migrating back to the hunting grounds of earlier times



After the peak of the Last Ice Age, temperatures rose, ice sheets moved away, the tundra began to grow, and about 14,000 years ago hunters could migrate after the big game in a northerly direction.

Haplo group I-M170 and both its variants I-M438 and I-M253 played a central role in the repopulation of Europe:¹⁹ such that Haplo group I was the largest Haplo group in Europe until this position was ceded to Haplo group G of Late Stone Age agriculturists in the Middle East (J2-M172 and G2a-P15) and then to Haplogroup R who migrated from Asia to Europe with their herds of horses.

¹⁵ Artist's rendition of a mammoth. Britise Museum 2019.

¹⁶ <https://www.worldatlas.com/webimage/countries/europa/balkans.htm>

¹⁷ The Balkans comprise Romania, Slovenia, Croatia, Bosnia, Serbia, Herzegovina, Montenegro, Macedonia, Bulgaria, Albania and Greece. The European part of Turkey also forms part of the Balkans.

¹⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1181996/>

¹⁹ Haplo group I-M170 is not found in Asia.

Small Ice Age

About 14 500 years ago, large animals such as the mammoth, mastodons, saber-toothed tigers, and giant bears became extinct. Humans could have played a role in this, but the fact that 135 mammal species including three-quarters of the large mammals, two homo groups and Haplo group C-M130 ²⁰ became extinct, suggests a major ecological revolution²¹ called the 'Small Ice Age' played an important role.²²

After the mammoth and other large animals became extinct, hunters followed the deer and elk (moose) that migrated north as the ice melted and the tundra began to grow. Based on tests on bones, the first migrants reached Scandinavia 13 000 years ago and were from Haplo group I-M438 (also known as I2 and earlier as I1b). These are the prehistoric people who migrated from the Balkans through present-day Germany to Denmark.

Haplo group I-M253 that originated in the Pyrenees mostly migrated to present-day Sweden and Iceland. According to FamilyTree DNA, our family appears to have predominantly genetic ties in Denmark and we deduce that our ancestor probably migrated with I-M253, which means that the migration route could be traced back to the Balkans, which was the refugee base of the hunters from the Ukraine.

Agriculture and animal husbandry

Meanwhile, population pressures in the Fertile Crescent inevitably led to agriculture and animal husbandry. Wild sheep, goats, pigs and the auroch (wild cattle) were domesticated for domestic use. When the ice melted, G2a farmers from Anatolia (Turkey) migrated north to central Europe along the Danube River in 6 000 BC, while others migrated west along the Mediterranean route along the coast. These farmers were light-faced with dark eyes and were shorter in stature than I-M170. Pottery also appears now and this makes it possible to store grain and trade in it. Researchers can follow the migration routes with the help of decorated pottery.²³

Over time, Haplo group G replaced the position of I-M170 as the largest Haplo group in Europe. ²⁴ Besides the fact that agriculture and animal husbandry provided a supplementary food source in addition to hunting and veld food, the population growth could also be attributed to the availability of goat milk, cow and sheep milk with which more children could be raised. On the other hand, hunter-gatherers did not have access to milk other than that of the mother, and babies born while the mother was still suckling the previous one were killed.

²⁰ <http://www.genlinginterface.com/wp-content/uploads/2018/04/Hq-I-M170-Update.pdf>

²¹ This was not due to the volcanic eruption at Toba in Indonesia, since that had occurred about 50 000 years earlier.

²² <https://www.britannica.com/science/Little-Ice-Age>

²³ <https://www.britannica.com/place/the-Steppe>

²⁴ <https://www.sciencedaily.com/releases/2019/03/190319121742.htm>

Language

The next major event that affected our family's ancestors was the Yamnaya who came from the Asian Steppes around 2 800 BC where they domesticated wild horses and learned to ride in the Ural Mountains and in Kazakhstan. Their horses provided them with exceptional mobility and also were nutritious food because the horses drank milk. They rapidly and easily moved west in search of pasture for their large herds of horses.²⁵ The Yamnaya men who were from Haplo group G displaced the genetic frequency of the R1a farmers.²⁶ Their language was adopted by the locals with adaptations from their local languages so that Indo-Europeans became the largest language family in the world.²⁷ In this way, our ancestors' language became part of the large Indo-European language family.

Conclusion

How did it come about that an ancestor of mine ended up in Scotland from Denmark? There is no evidence of any Norseman fortifications on the coast south of Moray Frith (the Moray Peninsula) from where my ancestors hailed. The Norsemen did carry out Viking raids in this area in the 9th and 10th centuries, as evidenced by the church of skulls at Gamrie.²⁸ In the Middle Ages there was an active marine trade between Scandinavia and Scotland. Was my ancestor a Viking looter or a Danish fisherman? We will never know. The trail of 1861 from Scotland to South Africa is clear, but that's a story for another day.

²⁵ https://en.wikipedia.org/wiki/Yamnaya_culture#cite_note-29

²⁶ Mutations, R1b is found in Western Europe, R1a in Eastern Europe and also in central and southern Asia.

²⁷ https://en.wikipedia.org/wiki/Proto-Indo-European_language#cite_note-:0-4

²⁸ https://en.wikipedia.org/wiki/Scandinavian_Scotland

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