Cristo X - The Politics of Uncovering Our DNA

Cristogianni Borsella (August 18, 2009)

The Genographic Project has the potential to bring about the deconstruction of previous, popularly held racial beliefs. It will enable the breakdown of still extant racial barriers existing not only socially or politically, but also in the deepest corners of our minds, where many of us fear to go.

A little over a month ago, I sent away for two "Genographic Project" kits from National Geographic. One would test my paternal Y-DNA all the way back to "Adam" (via my father, his father, his father's father, etc.), and one testing my maternal mitochondrial DNA (tracing my mother's-mother's-mother's line, etc., etc.) all the way back to the person whom geneticists refer to as "mitochondrial Eve," or Homo sapiens' earliest known female ancestor (living somewhere between 150,000 and 170,000 years ago).

The overall purpose of these tests is to determine which of the unique, alphabetized

haplogroups appear in our genetic makeup. Quite simply: Who were our earliest ancestors; where did they originate; where did they end up; what kinds of activities did they specialize in (e.g. hunting, farming, fishing); who are we? Such testing can uncover a great deal about us. And so, the Genographic Project is rapidly expanding our knowledge of humanity's deepest, most ancient roots.

When I received my kits, I was instructed to swab the inside of each cheek thoroughly for about thirty seconds (per cheek). Each kit provided two cotton swabs and two vials; when finished, I placed the swabs inside the vials and mailed the test kit back anonymously (as instructed). I repeated this procedure for the second kit. As I write this, I am still awaiting my paternal Y-DNA results. However, my maternal results just came in as of last night.

Before I continue, I should say that my ancestry on both sides is deeply, profoundly Southern Italian, Mediterranean. My father's people come from the mountain country of the Campobasso region, and my mother's family are from Napoli and Bari--two ancient metropolises heavily influenced by everyone from Greeks and Romans to Arabs, Jews and Albanians. Prior to receiving my maternal DNA information, I expected my haplogroup to be prevalent in many other peoples from the Mediterranean region, including Turks, Greeks, North Africans, Lebanese, etc. Well, I was right. However, there was also something of an unexpected twist. Let me explain.

First of all, my results confirmed that I belong to Haplogroup X. This group, after participating in the second great migration out of Africa (45,000 to 50,000 years ago), split off from Haplogroup N to form two sub-groups: X1 and X2. They formed approximately 30,000 years ago in the Middle East. Group X1 is found primarily in North and East Africa, yet X2 was much more prolific--this group experienced a tremendous population surge, either around or soon after the last glacial maximum occurring about 21,000 years ago. Group X2 can therefore be found with considerable frequency among peoples of the Near East, Caucasus, Mediterranean Europe, and...among North American Indian peoples! Haplogroup X is virtually non-existent in Northern Europeans and, so far as geneticists can presently discern, is entirely absent in East Asian populations.

Interestingly, white Europeans and American Indians share an equal, if minute, amount of X in their respective populations. Ninety percent of whites are included in one of 6 haplogroups derived from Haplogroup R, but only 2 percent are in Group-X. Likewise, 95 percent of American Indians derive from 6 haplogroups of East Asian origin, but only 3 percent derive from X.

The map tracing the route of my Group-X ancestors, which National Geographic provided me with online, showed a steady line from East Africa, up through the Middle East, across Central Asia and Siberia, and down into the Americas. The map is the first bit of information I saw after reading that I was part of "Haplogroup X," and needless to say, it really caught my attention. None of my ancestors

even appeared to have so much as glanced at Europe, according to the map (though of course they did, yet via the Mediterranean).

Upon reading further, I became aware of the great genetic paradox that scholars are confronted with when studying my maternal haplogroup. And that is: Group X is completely missing from East Asian populations, and is not found with any degree of frequency among Siberian peoples. X does in fact occur in some south Siberian groups, however scientists believe this is the result of much more recent genetic mixing occurring many thousands of years after the first X-carriers migrated across the "Beringia" land bridge. This means that there is a tremendous gap in the genographic record, mystifying scholars as to how exactly these essentially Mediterranean/Near Eastern carriers of X came to be some of the first people to cross into the Western Hemisphere, roughly 15,000 years ago. To be specific about it: Just how did these early migrants fail to leave their genetic mark on East Asia, and especially on Siberia (long considered the "home" of most American Indian peoples), before entering North America?

This has led some scholars to propose an early trans-Atlantic route to North America, occurring tens of thousands of years before Columbus. It is called the "Solutrean Hypothesis," and postulates that the prehistoric, X-bearing Solutrean culture of Spain and south-western France journeyed by boat around the edges of an arctic ice shelf that had connected large areas of the British Isles to Greenland, and finally to the eastern coast of North America. They are said to have accomplished this incredibly ambitious task some 20,000 years ago.

While this hypothesis might sound a tad bit too ambitious for prehistoric humans, we should remember that such a migration, starting in the western Mediterranean, would have been far less of a journey than the traditionally accepted route across the Siberian steppes and across the Bering Strait. Also favoring a Solutrean explanation is the striking similarity between Solutrean arrowheads and those of the prehistoric Clovis culture, found traditionally throughout North America. Some scholars have even referenced archaeological sites in the states of Virginia, Pennsylvania and Florida, which seem to display a transitional style of stone tools, thus linking the Solutrean and Clovis cultures together. The hypothesis sounds good, but personally I'm not sure.

What I am sure about is that the Solutrean Hypothesis is also a very politically charged theory, as some Native American groups have hinted: it would weaken their protected status if it is discovered that "Europeans" were living in the Western Hemisphere thousands of years earlier than expected. Conversely, a number of European-descended people have been all too eager to point to early connections between the continents for their own political gain. (Some of us archaeology geeks will recall the intense political debate surrounding "Kennewick Man": the Patrick Stewart-looking clay bust of a man, forensically reassembled from the 9,000 year old skull of an American Indian.) And so, the rabble-rousing media have projected the debate in very black and white (or, in this case, "red" and "white") terms--that is to say, racial terminology easy for the average, simple American to grasp.

However, it dawned on me: This is not really a "white thing" at all. If we are talking about Anglo-Saxons or Germans or Russians or Frenchmen or even Spaniards, Group-X is barely visible among these populations (from what I am given to understand). Rather, if X was a noticeable contributor to early human expansion in the Western Hemisphere, this would link some American Indian peoples genetically to a number of modern Middle Easterners, North Africans, Caucasians (meaning: Armenians, Georgians, Azeris, etc.), and Mediterraneans. Broadly speaking, anthropologically speaking: Mediterraneans.

Among the Ojibwa Indians of the Great Lakes region, Haplogroup X appears in a full 25 percent of

the population. This corresponds to the high percentage found in the Druze population of the Middle East (located in Israel, Lebanon, Syria and Jordan), where no less than 26 percent are included in X. This fact has led many to refer figuratively to the Druze as the "founders" of Group-X. The following American Indian groups have also displayed high percentages: Sioux - 15 percent; Nuu-Chah-Nulth - over 10 percent; and the Navajo - 7 percent. (These groups all possess X2--the same sub-group as most Mediterraneans and Middle Easterners.)

To conclude, I encourage those reading this article to take the genetic test provided by National Geographic for themselves. It's fun, it's easy, it's anonymous, your results don't take long at all, and it's a personally enriching experience which demonstrates just how connected we all are as humans.

The deconstruction of previous, popularly held racial beliefs will continue to be an ongoing process in the 21st century--where people, regardless of their particular physical features will find they often have more in common genetically with those who look very different from themselves. Hopefully, this will enable the breakdown of still extant racial barriers existing not only socially or politically, but also in the deepest corners of our minds, where many of us fear to go. I, for one, am happy to have contributed my "two cents" to the Genographic Project.

National geographics - The Genographic Project

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This article first appeared in broowaha as "Cristo X - What Uncovering My Maternal DNA Tells Me [2]."

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