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Cover Page Footnote

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DNA Evidence of a Croatian and Sephardic Jewish Settlement on the North Carolina Coast Dating from the Mid to Late 1500s

For the Sephardic Jews of Spain, the year 1492 saw one door close while another door opened half a world away.¹ It was the year the Spanish Inquisition reached its apex of brutality, while concurrently Cristobal Colon—remembered in American history as Christopher Columbus and purportedly of Sephardic descent—set sail for the New World.² The names of his crew suggest that several of them were also Sephards.³

By the mid-1500s, Spain had expelled between 100,000 to 200,000 Jews after first seizing their money and possessions.⁴ The Spanish Jews fled in all directions: eastward to Italy and the Ottoman Empire,⁵ westward to Portugal, northward over the Pyrenees to France, and southward across the narrow Strait of Gibraltar to North Africa.⁶ Another 10,000 to 20,000 remained behind, to later be killed by the Inquisitorial Court,⁷ while an additional 30,000 converted (often superficially) to Catholicism.⁸ If their insincerity was suspected, they too were added to the bonfires of the auto-da-fé.⁹

**Table One: List of Crew Aboard the Nina, Pinta, and Santa Maria
(Starred names are Sephardic)**

Alonso Chocero	Juan de Jerez*
Alonso Clavijo	Juan de la Cosa, owner and master
Alonso de Morales, carpenter*	Juan de la Placa
Alonso de Palos*	Juan de Medina*
Alvaro Perez*	Juan de Moguer
Andres de Huelva	Juan Martines* de Acoque
Andres de Yruenes	Juan Nino,* owner and master
Anton Calabres*	Juan Quadrado
Antonia de Cuellar,* carpenter	Juan Quintero
Bartolome Biues	Juan Reynal
Bartolome de Torres*	Juan Rodriquez Bermejo*
Bartolome Garcia,* boatswain	Juan Romero*
	Juan Ruiz de la Pena*
Bartolome Roldan, apprentice pilot	Juan Sanchez,* physician
Bernal,* servant	Juan Vecano

Chachu, boatswain	Juan Verde de Triana*
Cristobal Caro*, goldsmith	Juan, servant
Cristobal Garcia Xalmiento*, pilot	Lope, joiner
Cristobal Quintero, ship's owner	Luis de Torres, interpreter
Diego Bermudez	Maestre Alonso*, physician
Diego de Arana*, master-at-arms	Maestre Juan
Diego de Salcedo*, servant of Columbus	Maestro Diego*, surgeon
Diego Lorenzo*	Marin de Urtubia
Diego Martin Pinzon	Martin Alonso Pinzon, captain
Diego Perez,* painter	Miguel de Soria, servant
Domingo de Lequeitio	Pedro de Arcos*
Domingo Vizcaino, cooper	Pedro de Gutierrez*, royal steward
Fernando de Triana*	Pedro de Lepe
Fernando Mendes*	Pedro de Soria*
Francisco Garcia Vallejo*	Pedro de Terreros, cabin boy
Francisco Martin Pinzon, master	Pedro Tegero
Francisco Mendes*	Pedro Yzquierdo
Francisco Nino*	Pero Arraes
Garcia Alonso*	Pero Nino* pilot
Garcia Hernandex,* steward	Pero Sanches*
Gil Perez*	Rodrigo de Escobedo, secretary of the fleet
Gomez Rascon	Rodrigo de Jerez
Gonzalo Franco*	Rodrigo Monge
Jacomel Rico*	Rodrigo Sanchez*, comptroller
Juan Arias, *cabin boy	Sancho de Rama*
Juan Arraes	Sancho Ruiz,* pilot
Juan Bermudez	Vincente Yanez Pinzon, captain

Source: www.christopher-columbus.eu/ships-crew

Following Colon's arrival in the New World, Spain established multiple settlements in North America, stretching from the Gulf of Mexico and along the Atlantic coast as far north as Parris Island, South Carolina (the Santa Elena colony 1566 – 1587).¹⁰ Hernando de Soto and Juan Pardo led multiple expeditions during the 1540s and 1560s to the interior of what is now the southeastern United States.¹¹ Concurrently, the French crown financed expeditions and military settlements at Charles Fort on the Virginia coast.¹²

Belatedly, the English queen, Elizabeth, decided to enter the race to establish colonial ventures in this new land.¹³ Her favored courtier, Walter Raleigh of Devon and Cornwall, organized a corporation to

bring settlers to the Chesapeake Bay area.¹⁴ Initial scouting expeditions for a location suitable for a trading colony were undertaken by Raleigh and his “Portuguese” pilot, Simon Fernandez, who was very likely of Sephardic descent.¹⁵ They chose the North Carolina Outer Banks area, where Fernandez claimed to have extensive sailing experience from prior voyages “with the Spanish.”¹⁶ Merchants and tradespeople from London staffed the initial colony in 1585-1586.¹⁷ They were hardly the sturdy frontiersmen needed for such a venture into the wilderness, but, this paper proposes, they had an urgent reason to seek employment opportunities outside of England.

Table Two: First Roanoke Colonists

Acton	John Gostigo
Anthony Russe	John Tuyt
Christopher Marshall	John Vaughan
Daniel	Kendall
Darby Glante	Marmaduke Constable
Edward Ketchemen	Marvyn
Edward Nugent	Michael Polyson
Edward Stafford	Prideaux
Erasmus Clefs	Smolkin
Gardynier	Snelling
Haunce Walters	Thomas Bucker
Joachim Ganz (Jewish metallurgist)	Thomas Harvey, (cape merchant)
John Broche (shoemaker)	Thomas Skevelabs
John Fever (basketmaker)	

Source: firstcolonyfoundation.org/history/the-roanoke-colonies

This article proposes that the reason for their desire to exit England was the threat of Spanish invasion in one or two years’ time and their ethnic status as Sephardic Jews. In other words, if one were a *converso* merchant/tradesman in London, it was a good time to move west. Already many Portuguese and Bristol (England) fishing vessels were visiting the Atlantic Coast regularly for cod fishing, while English privateers such as Drake, Gilbert, and Grenville were preying on Spanish silver galleons in the south Atlantic.¹⁸ Many of the crew members aboard these ships were, in fact, *conversos*, as the manifests indicate.¹⁹

Concurrently, these same English voyagers were venturing to the Eastern Mediterranean, including trading in the Adriatic Sea off the coast of Italy and Croatia, and even venturing to Morocco, where both Jews and Muslim Moors had fled from Spain.²⁰ Thus, an anti-Spanish/ pro-Sephardic-Moor maritime network existed stretching from southeastern Europe to North America.²¹ This would have made the shores of North America, especially those above Spanish Florida, a very desirable locale for maritime merchants and traders, and also for refugee families.²²

Other key players in the Roanoke ventures were Phillip Amadas (“beloved” in Spanish) and Arthur Barlowe (“son of Lowe” in Hebrew) who, like Raleigh, were from the Cornwall region near Bristol and who also had extensive trading ties to the Eastern Mediterranean.²³ Additional participants included Arthur and John Faci, whose surnames indicate they were Sephardic Jews from Fez, Morocco (Faci = Fassi, one from Fez/s; www.sephardim.co includes multiple spellings of this surname). Of the original 1585-1586 settlement at Roanoke, fifteen men were left on shore under the administration of a Master Kofar and a man named Chapman, while Raleigh returned to England to obtain additional colonists.²⁴ The surname “Chapman” means a trader/merchant and is common among the Lumbee tribe whom this paper investigates. These men seem to have gone missing by 1587, when the next set of Roanoke colonists arrived.²⁵

By 1587, “London was teeming with foreigners” according to Quinn;²⁶ many of them were in fear for their lives, running from the Spanish who had just invaded the Netherlands where many Sephards and Moors were living in exile from Spain.²⁷ The Armada was now rumored to be sailing for England within the year.²⁸ From among these desperate persons, Raleigh collected his next group of settlers; they included goldsmiths (though no gold had been found along the Virginia Coast), accountants, some attorneys (despite no court system yet existing), a university lecturer, a tile maker, and, happily for the colony's survival, a farmer.²⁹ They also included White's daughter, and son-in-law, Ananais Dare, whose first name is Hebrew for “Compassion of God.”

This unlikely group of 115 men, women, and children were deposited at Roanoke on July 22,

1587. They soon made friends with a young Native American man, Manteo, from the nearby Croatoan tribe.³⁰ The colonists also made arrangements with John White, the colony's leader, to carve the word CROATOAN on their fort palisade, if they decided to move to the village of these “friendly savages,” while White returned to England for supplies. A cross was to be carved, as well, if the colonists met with an emergency during his absence.³¹ As is well-known, the Spanish Armada’s attack on England in 1589 delayed White's return voyage until 1590.³² When he did return, the Roanoke colonists were gone, the fort was in disrepair, and the word CROATOAN was carved neatly on one of the palisades.³³ There was no cross. White was joyful at this; he presumed that the settlers, which included his daughter, son-in-law, and their child, were in safe hands. However, White was unable to locate them, due to severe storms along the coast, and had to return to England alone.³⁴

It is at this point in the narrative that historians differ. Some propose that the colonists were slain either by Chief Powhatan or other native tribes on the coast.³⁵ Another possibility is that they were somehow located by the Spanish and killed.³⁶ A third, more hopeful proposition, is that the colonists merged with the Croatoan (now Lumbee) tribe and their descendants are still with us.³⁷ As Horn states, “Information gathered from local Indian peoples on both sides of the James River between 1607 and 1609 clearly indicated that survivors still lived in the interior of North Carolina.”³⁸

David Quinn, Karen Kupperman, and James Horn³⁹ propose that the colonists may have split into two groups. One group continued up the coast toward the Chesapeake Bay, where most were later killed by hostile Native Americans under Powhatan.⁴⁰ However, the second group is believed by these same researchers to have remained with the Croatoans. As Quinn states, “We are forced to accept as a fact that they became Indian themselves, and their children and grandchildren wholly so, as the century went on.”⁴¹ Similarly, Horn states, “As the months turned into years, most of the settlers had probably resigned themselves to living with the Indians for the rest of their lives.⁴² They blended into Indian communities, making their homes and raising families with peoples they had found when the English thought them lost.”⁴³

The Colony is Founded, 'Lost,' and Now Dwelling in Robeson County, NC

The focus of this study is on the group of Roanoke settlers who may have moved approximately fifty miles inland to live with the Croatoan people, the tribe of friendly Manteo.⁴⁴ Usually, the historical narrative at this point focuses on whether the Roanoke colonists staying with the Croatoan tribe survived. However, this article is going to take a sharp departure, while still answering the question, and instead examine the identity of the Croatoan tribe with whom they went to live. While some sources have proposed that the name Croatoan may be Algonquin for “the talking place” and not an actual tribal name, perhaps the truth is much more obvious. In fact, it was literally spelled out on the palisade by the departing colonists: CROATOAN.

This was the term used in the 1500s for Croats, or Croatians.⁴⁵ Using DNA evidence, this article suggests that the “tribe of friendly savages” the colonists went to dwell with was composed, at least in part, of Croatian men who had likely shipwrecked off the North Carolina coast some decade(s) before and were likely known to be there by Raleigh, John White, and Simon Fernandez.

Croatia in the 1500s

Most Americans today likely think of Croatia as a small, inconsequential country, relatively poor, unsophisticated and powerless, located somewhere in southeastern Europe. However, during the 1500s, Croatia, also known as Ragusa, was a formidable sea-power, trading throughout the Mediterranean, as well as with England, Scotland, and Ireland, and with several European-founded colonies in South, Central, and North America.⁴⁶ In the waters of the Atlantic off the coast of the Southeast and in the Caribbean, Croatian sailors preyed upon Spanish “treasure ships,” often collaborating with English privateers engaged in the same activity.⁴⁷ The principal Croatian port of Dubrovnik was the center of much of this activity.⁴⁸

By the mid-1500s, Sephardic Jews exiled from Spain had reached the section of the Ottoman Empire nearest Croatia, as well as the Italian city of Venice, just across the Adriatic Sea.⁴⁹ It should be recalled that Cristobal Colon was Italian and possibly of Jewish ancestry.⁵⁰ Thus, Italian Jews wishing

to come to the New World or to assist their co-religionists from Spain to do so, would have been well aware of the opportunity for colonization in North America, which was, by the late 1500s, a safer destination than Mexico, Cuba, or South America. Notably, there were also multiple Croatian businessmen in London during the 1500s, working as part of the city's expanding international clientele of trading partners.⁵¹

Map One: The Mediterranean Region, Circa 1550



Map modified from Medieval.UCDavis.edu

Thus, it is probably from one or more these sources that Raleigh and White learned of the existence of the Croatoan colony prior to sending their own colonists to Roanoke. Croatian government archives mention a ship sailing toward North America around 1540 carrying Sephardic Jews who had passed through the Ottoman Empire.⁵² Another document makes the same claim and gives the date as 1558.⁵³ In 1570 yet another Croatian vessel is said to have sailed toward the North Atlantic coast carrying primarily Croatian sailors, which apparently wrecked near the Outer Banks.⁵⁴

Given this scenario, it would make great sense for the Roanoke colonists to “make friends” with the descendants of these earlier emigres, one to three generations later, in 1585-1587. It also would be anticipated that Manteo would befriend the new arrivals from England, who, as this article proposes,

were also of Sephardic affiliation. If this thesis is correct, one would expect the combined descendants of these persons to have Sephardic Jewish and possibly Croatian ancestry, especially if one or more of the Croatian ships had wrecked, making a return voyage impossible. This possibility is examined using DNA ancestry testing on a contemporary population of persons who claim descent from the early Roanoke colonists—the Lumbee Native American tribe of North Carolina.

The Significance of Modern DNA Testing for Historians and Social Scientists

Conjecture about the whereabouts of “lost” colonists—however romantic and appealing—remain at the level of wishful thinking unless there is concrete evidence to back it. For decades, such speculations about the Roanoke colony were dismissed, because there were no supporting documents. However, unquestioned “document supremacy” is on the cusp of being eclipsed by human genetic science. An entirely new form of historical “inscription” is now available that can reveal the past without the concern of forgery or incompleteness that plague artifacts and texts.

Human DNA testing for ancestry identification was revolutionized in 2001 with provision to the general public of personal DNA tests, which could be used to link individuals to distant relatives and ancestors.⁵⁵ Concurrently, population geneticists began collecting DNA samples from nationality and ethnic groups to trace patterns of migration from ancient to modern times.⁵⁶ It became possible to track human ancestry not only out of Africa, but around the world, both on a personal and group level.⁵⁷ In 2006, the National Geographic Society completed the first global mapping of human haplotypes, compiling a database of over 850,000 individual samples from across the globe.⁵⁸ At present, academic and commercial enterprises have greatly expanded the mapping of human origins, to the extent that virtually every ethnic group, religious group, nationality, and indigenous tribe has been tested and the results uploaded onto publicly-accessible websites.⁵⁹ The present study utilizes a database containing both female (MtDNA) and male (Y chromosome) DNA samples. These two types of DNA ancestry testing are described below.

Mitochondrial DNA (MtDNA) Testing

Mitochondrial DNA is transmitted from mother to child, so that a direct maternal ancestor can be traced using mtDNA. A perfect match found to another person's mtDNA test results indicates shared ancestry of possibly between one and fifty generations ago. More distant matching to a specific haplogroup or subclade may be linked to a common geographic origin.⁶⁰ The present study traces female ancestry to the regional and national level, e.g., the Carpathian Mountains, Poland.

MtDNA is divided into three regions. They are the coding region (00577-16023) and two Hyper-variable Regions (HVR1 [16024-16569], and HVR2 [00001-00576]). The most common mtDNA tests are a sequence of HVR1 and HVR2 and a full sequence of the mitochondria. This type of testing was used in the present study.⁶¹

Y Chromosome (Y-DNA) Testing

The Y-Chromosome is one of the twenty three pairs of human chromosomes. Only males have a Y-chromosome, as women have two X chromosomes in their twenty-third pair. A man's paternal ancestry can be traced, as the Y-chromosome is transmitted from father to son nearly unchanged.⁶² A man's test results are compared to another man's results to determine the timeframe in which the two individuals shared a most recent common ancestor in their direct paternal line. A woman who desires to know her paternal ancestry can ask her father, brother, paternal uncle, paternal grandfather, or a paternal uncle's son (her cousin) to take a test for her.⁶³ There are two types of male DNA testing: STRs and SNPs.

The most common type of male ancestry testing is conducted using STR's or Short Tandem Repeats. These are pairings of genetic coding material which are passed from father to son. The more STR markers tested, the more accurate the results will be in determining paternal lineage. In the present study, comparisons with as many as thirty-seven STR markers are used, which provides a high degree of accuracy. The results of two individuals are compared to see how closely they match.⁶⁴

All contemporary human men descend in the paternal line from a man (or group of related men), who lived approximately 135,000 years ago. Different branches of this paternal tree are termed *haplogroups*.⁶⁵ Most haplogroups can be further subdivided into sub-clades. The present study documents the presence of some subclades among the Lumbee tribal sample important for our thesis. Maps of the global distribution of the female and male ancestries relevant to our study are given in the Appendix.

The Lumbee Tribe DNA Study

For historians and social scientists, the use of DNA testing makes possible a paradigm shift in the Kuhnian sense of the term. The genetic origins of monarchs, conquerors, explorers, peoples and populations of both the present and past can now be ascertained, if viable DNA samples are available.⁶⁶ In the case of the Roanoke Colonists and the Croatoan people, this study proposes there is such a sample. The Lumbee Native American Tribe of Robeson County, North Carolina traces its ancestry to the Croatoan Indians of Hatteras.⁶⁷ Furthermore, the Lumbee claim to have absorbed a portion of the Roanoke Colonists in 1588;⁶⁸ current tribal members carry thirty-four of the original surnames of the colonists (as is shown in Table 3).⁶⁹ In addition, the Lumbee carry names of Sephardic Jewish origin, (see Table 4), as well as surnames of Croatian origin (demonstrated in Table 5).⁷⁰

Table Three: Roanoke Colonist Surnames Found Among the Lumbee Indians

Allen	Dial	Patterson
Bennett	Graham	Powell
Berry	Harris	Revells
Bridger	Harvie/ey	Sampson
Brown	Howe	Scott
Brooks	Johnson	Vicars/Viccars/Vickers
Butler	Jones	White
Chapman	Lasie	Willis
Cole	Lucas	Williamson
Cooper	Martin	Wood
Dare	Paine	Wright

www.revolvy.com/page/List-of-colonists-at-Roanoke

Table Four: Lumbee Names of Sephardic Jewish Origin

Adams	Hammon/d	Ortiz
Brashear/Brassier	Hernandez	Pace
Brassel	Hyatt	Peary
Cannaday	Isachs	Perez
Carsey	Israel	Perry Petty
Casper	Jacobs	Pevia/Peavey
Castro	Leviner/Laviner	Pharoah
Chavis/vers	Loved/tt	Prevatte
Cortopassi	Lowery	Quinto
Deas/Dias	Lucas	Raines
DeMory	Manetas	Reeves/Rivas
Rodrigues/Driggers	Marcks	Rosier
Elzey	Marret	Sampson
Emanual	Massie	Sanders(son)
Flores/Flowers	Moore	Santee
Gandy	Norris	Sherif
Gill	Odom	Simeon
Haber	Orosso	Valentine

www.sephardim.co

Table Five: Lumbee Names of Croatian Origin

Cannon	Kober
Craddock	Kamper
Fiveash	Kemerer
Goolsby	Koss
Gregerson	Scoggins
Groms	Shumate
Haga	Suchochos
Hagan/in	Tolar
Ickler	Warriax

www.croatian-genealogy.com/croatian-names/croatian-family-names-surnames

Central to this paper’s thesis is that DNA testing of the 2,724 Lumbee tribal members will indicate the presence of 1) Sephardic Jewish male haplotypes, 2) Sephardic Jewish female haplotypes, and 3) male Croatian haplotypes. The Lumbee began their program of DNA testing in 2004 and it has continued to the present. Their website is publicly available online at FamilyTreeDNA/LumbeeProject. All DNA test results given in the Project are for registered tribal members.⁷¹

Table 6 displays the haplogroups found among the men of the Lumbee tribe. As can be seen, only eight men carry Native American haplotypes. Thus, as suspected, the Lumbee were likely hybridized early on by European arrivals, to the extent that the tribe now has only a very small element of male Native American ancestry. The Lumbee men also exhibit seventy-four Sub-Saharan haplotypes, which likely represent incoming slaves and freedmen from the Colonial era onward.

The G-m201 haplogroup carried by two Lumbee men is most common in Georgia and the Caucasus; while G-L91 haplogroups carried by fourteen male Lumbee are most common in Central Asia. This could be considered partial support for the presence of Croatian men among the Lumbee, although it is also possible that the men with this haplotype are of Sephardic Jewish ancestry. Among the Lumbee males, eighty-three carry I haplotypes; these reach their highest concentration in Croatia and surrounding areas. The presence of G and I haplotypes at this level among the Lumbee supports the hypothesis that a portion of the tribe does descend from Croatian sailors, most likely arriving during the mid to late 1500s. This would imply that Croatia succeeded in creating a settlement in the New World prior to the arrival of the English in Massachusetts and Virginia.

Turning to Haplogroups J1 and J2 (n=16), as well as E-L117 (n=4), one finds there is a distinct presence of Middle Eastern and North African DNA among the Lumbee males. In fact, there are more Middle Eastern male lines among the Lumbee than there are Native American male lines. Moreover, there are twenty-one lines among the Lumbee men which carry the R-m512/R1a1a haplotype. This haplotype is found in approximately 50 percent of male Ashkenazi Levites, a hereditary caste within Judaism.⁷² In addition, the majority of the male Lumbee sample carries the R-v88 subclade of the R-m269 haplogroup. This subclade is most common in Southeastern Europe and found among both Ashkenazi and Sephardic Jews.⁷³ The R-v88 DNA haplotypes provide additional support for ancestry from the Croatian area, as well as support for the presence of Sephardic Jews among the Roanoke colonists, as hypothesized. Thus, the hypotheses is supported for the male portion of the Lumbee database.

Table 6: Lumbee Male Haplogroups

Haplogroup	N
A,B,C Native American	8
E-L117 MiddleEast/North Africa	4
E-M2 Sub-Saharan Africa	74
G-L91 Central Asia	2
G-m201 Georgia, Caucasus	14
I-m253/p37/m223 Balkans/Croatia	83
J1,2 Middle East	16
R-m269 R-v88 Europe/Central Asia	413
Rm512/R1ala Ashkenazi Levites/Sephardic Jews	21

Female Lumbee Results

Table 7 (below) provides the haplogroups for the female Lumbee lines. There are twenty female Native American lines among the Lumbee, indicating that the maternal ancestry of the tribe is only slightly Native American. There were 121 Sub-Saharan female samples in the Lumbee Project DNA database, indicating that women who were likely slaves or freed have joined the tribe during its existence.

Table Seven: Lumbee Maternal Haplogroups

Haplogroup	N	Haplogroup	N
A,B,C,D,F Native American	20	K2 Syria/Druze/Bulgaria	1
H European/ Middle East	66	L Sub-Saharan Africa	121
H1 Basques/Maghreb	68	M Somalia, Libya	5
H2 European	12	N Saudi Arabia, Turkey	3
H3 Eu/Spanish	21	O Oceania/Melanesia/Native American	11
H4 Eu/Spanish	8	R Saudi Arabia	2
H5 Eu/Spanish	12	T Eastern Baltic	5
H6 Eu/Spanish	6	T1 Central Asia, Iran	24
H7 Eu/Spanish	9	T2 Saudi Arabia (Seph. Sig.)	43
H8 Eu/Spanish	5	U India	5
HV Eu/Spanish	9	U2 India	8
I1 Carpathian Mtns.	5	U3 North Africa	5
I3 Carpathian Mtns.	3	U4 Chuvash/Bashkirs/Carpathian	15
I4 Carpathian Mtns.	3	U5 Sami,Berbers,Carpathian Mtns.	56
J Middle East	32	U6 North Africa	2
J1 Middle East	24	U7 Caspian Sea	2
J2 Middle East	4	U8 Basques	1
		V Cantabria/Iberia	23

K Syria/Druze/Kurdistan	27	W North Pakistan	5
K1 Syria/Druze/Bulgaria	20	X Native American/Eur.	9
		N=705	

The other haplogroups found among the Lumbee women are diverse and come from many parts of the globe. Around 216 female lines are in the H haplogroup and its subclades. This indicates a European origin, but as can be seen, several of the subclades are most highly represented in Spain, which could indicate Sephardic Jewish ancestry. Consistent with this interpretation, there are sixty women who have J/J1/J2 haplotypes, which are Middle Eastern/Jewish in origin.⁷⁴ Indicating possible Muslim ancestry are the forty-eight women with K haplotypes, which is common among Syrian Druze and in Bulgaria.

Remarkably, there are also women whose haplotypes suggest they may have originated in Pakistan (U4, W) and India (U, U2); these may have arrived with Sephardic-Portuguese sailors who traded with South Asia during the 1500s.⁷⁵ Additional support for possible Muslim/Jewish ancestry among the Lumbee comes from forty-three women who have T2 haplotypes, typically found in Saudi Arabia, and another twenty-four who have T1 haplotypes, which are most common in Central Asia/Iran. Finally, there are fifty-six Lumbee women who carry haplotype U5, which is most prevalent among the Berbers and Sami.⁷⁶

Hence there is strong support for the thesis that not only Jewish, but likely also Muslim women became members of the Lumbee tribe. Obviously, this suggests that Muslims—females at least—may have made trips to the shores of North America prior to the arrival of the English.

There are also twenty-two women who have haplotypes belonging to the I haplogroup and its subclades, which are found most commonly in the Carpathian Mountains⁷⁷. Their presence among the Lumbee prods us to consider if the Croatians who ventured to North America in the 1500s may have included some families, as well as male sailors. This would suggest that the Croatians were intending to form a permanent settlement, and not just a trading colony.

The interpretations above for both men and women are reinforced by specific haplotype matches

conducted using Y-Search⁷⁸ and Mito-Search.⁷⁹ These on-line services permit researchers to examine the global matches for specific haplotypes—in other words, specific individuals in our data set. The results for the men are given in Appendix A. Of the four Lumbee men whose haplotypes were investigated in Y-Search, all had matches to men now living in the areas indicated by our earlier Y-haplogroup analysis. Haber, for example, matched several Jewish surname individuals living in Poland, Lithuania, Israel, and Russia. He also carried the Ashkenazi G2c Modal Haplotype, as well as matching a Sephardic surname in Italy. Reeves matched several French and Italian Jewish surnames, indicating likely Sephardic ancestry, which would be consistent with the derivation of the Reeves surname from the Spanish surname Rivas. Cannon showed matches to persons now living in Armenia, Turkey, Qatar, and the United Arab Emirates, as well as to several Gordon/Jordan/Jardine/Gardenov surnames, which are often Ashkenazi and Sephardic Jewish. Thus, this individual's ancestors could have been either Muslim or Jewish. Hyatt actually means “life” in Hebrew and matches for this Lumbee man in Y-Search showed Sephardic surnames in Spain and Portugal, as well as matches to likely Ashkenazi Jews in Eastern Europe.

Similar results were found for the six women we investigated on Mito-Search. Their haplotypes were close to those of women from Poland, Germany, and the Czech Republic, which could indicate Ashkenazic Jewish or Croatian ancestry. They also displayed close matches to women from Turkey, Argentina, and Italy, which would likely indicate Muslim and Sephardic Jewish ancestry.

Discussion

One of the distinct advantages of DNA testing, as compared to documents, for historical research is that DNA consists of biological material which, when competently analyzed in a laboratory, does not lie. Documents can be lost, forged, altered and misplaced, as has happened in several well-known cases.⁸⁰ DNA—as a set of chemical molecules—is apolitical, nonreligious, disinterested in disputes over national boundaries, and impartial to claims of sovereignty. Although British language and culture came to dominate North America, it is important for us to recognize that the English were beaten to the

Americas' shores by the Spanish, French and, as the present paper argues, even Croatians, during the 1400s and 1500s.

After the American Revolution, the majority of North American colonists continued their British traditions; while those persons who were Native American, Spanish, French, or Croatian were relegated to remote locales on the continent, such as, Oklahoma, Southern Texas, Mexico, Acadian Canada, New Orleans, and Robeson County, NC. Little Croatoan Island, its ethnically mixed inhabitants having migrated fifty miles inland and taking their secrets with them, was renamed Hatteras and its true history over-written with the celebration of British Jamestown. But the true ancestry of these early arrivals has lived on, rediscovered through the advance of human genetics.

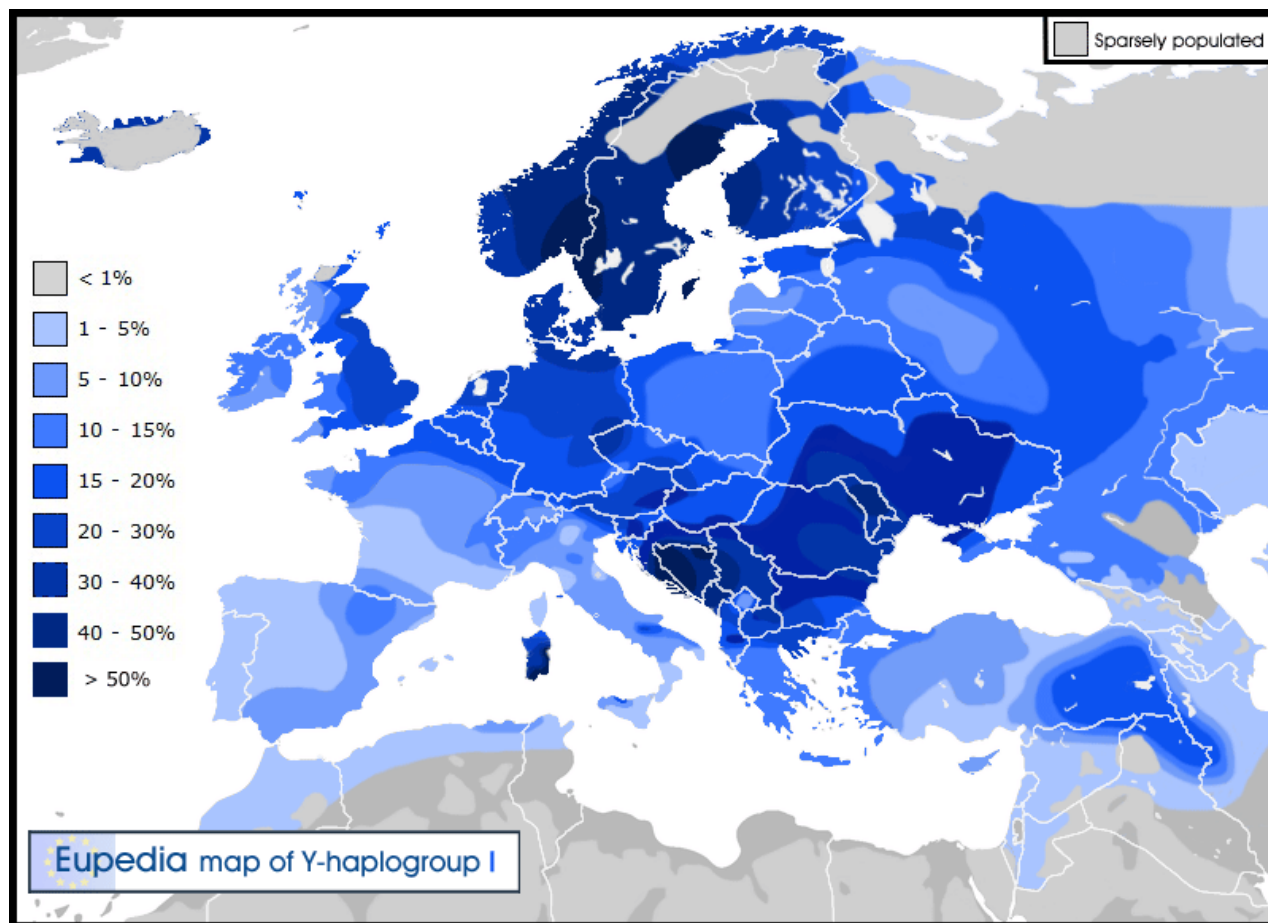
In New Mexico and Southern Texas, the residents of counties and towns recently have learned that not only were their ancestors Spanish, they were also Sephardic Jews.⁸¹ The present research has shown that a similar community likely existed on the Outer Banks of North Carolina. Furthermore, this community contained a variety of nationalities and ethnicities. The DNA of the Croatoan/ Lumbee tribe not only retains its Native American origins, as well as the genes of Africans brought to the New World as slaves, it also carries the genetic record of male and female Sephardic Jews. This same tribe also served as the lonely New World outpost for a group of male and female Balkan, and likely also Muslim settlers, who arrived on the shores of North Carolina prior to the first British efforts at colonization.

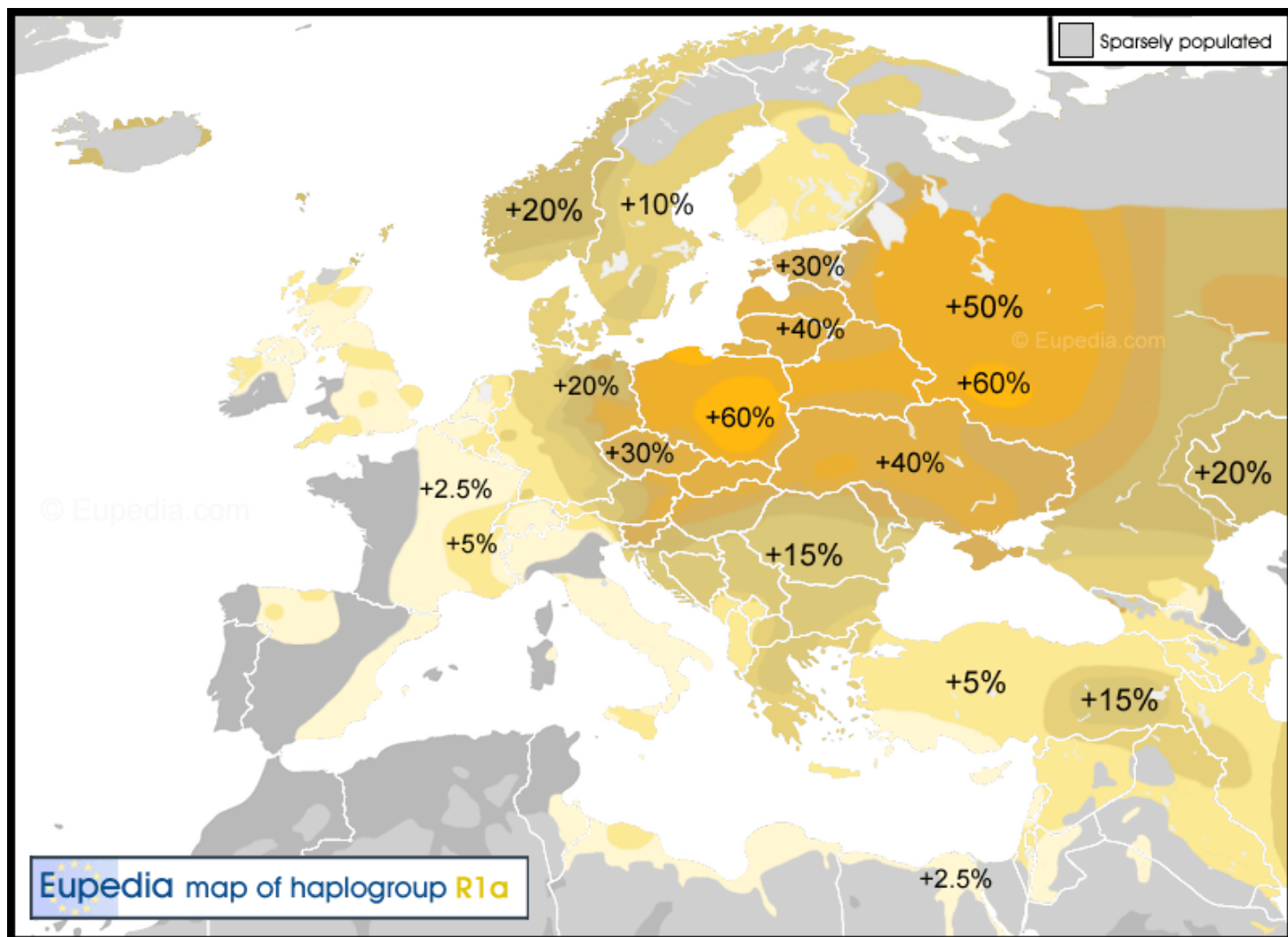
Why was this not recognized sooner? There are several possible explanations. First, just as with the *converso* inhabitants of New Spain, any secret Jews in Britain who sought passage to the New World would not have wanted their religious identities known outside their group. To do so would invite discrimination and possibly even attacks by agents of the Spanish Inquisition, which, at the time, were actively operating along the North American coast. As a result, many Anglicized their names and disguised their religious practices. This was not uncommon during the 1500s—for example, Juan Caboto became John Cabot, Dias became Day, Fernandes claimed to be Portuguese, not Spanish, and Ferdinand vos Olmos became Dulmos.⁸²

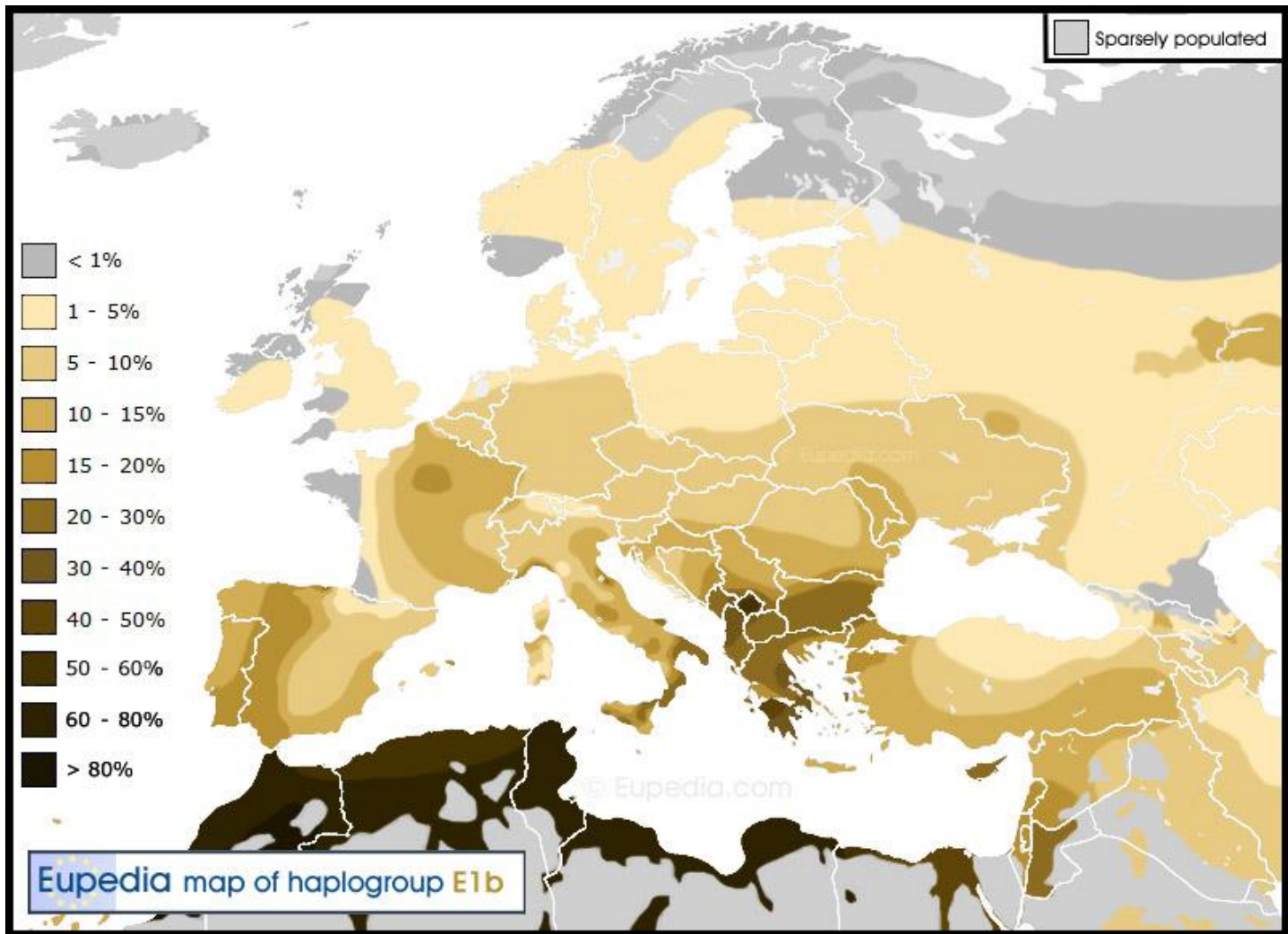
Second, entrepreneurs such as Raleigh, Drake, Hawkins, and Grenville understood the political importance of maintaining a British/Protestant cloak over their settlements and ventures.⁸³ It was a matter of national pride for the less-powerful, late-arriving England to be seen as sending competent colonists and administrators to their New World settlements. Who wants to admit to using desperate refugees as one's representatives on the world stage?

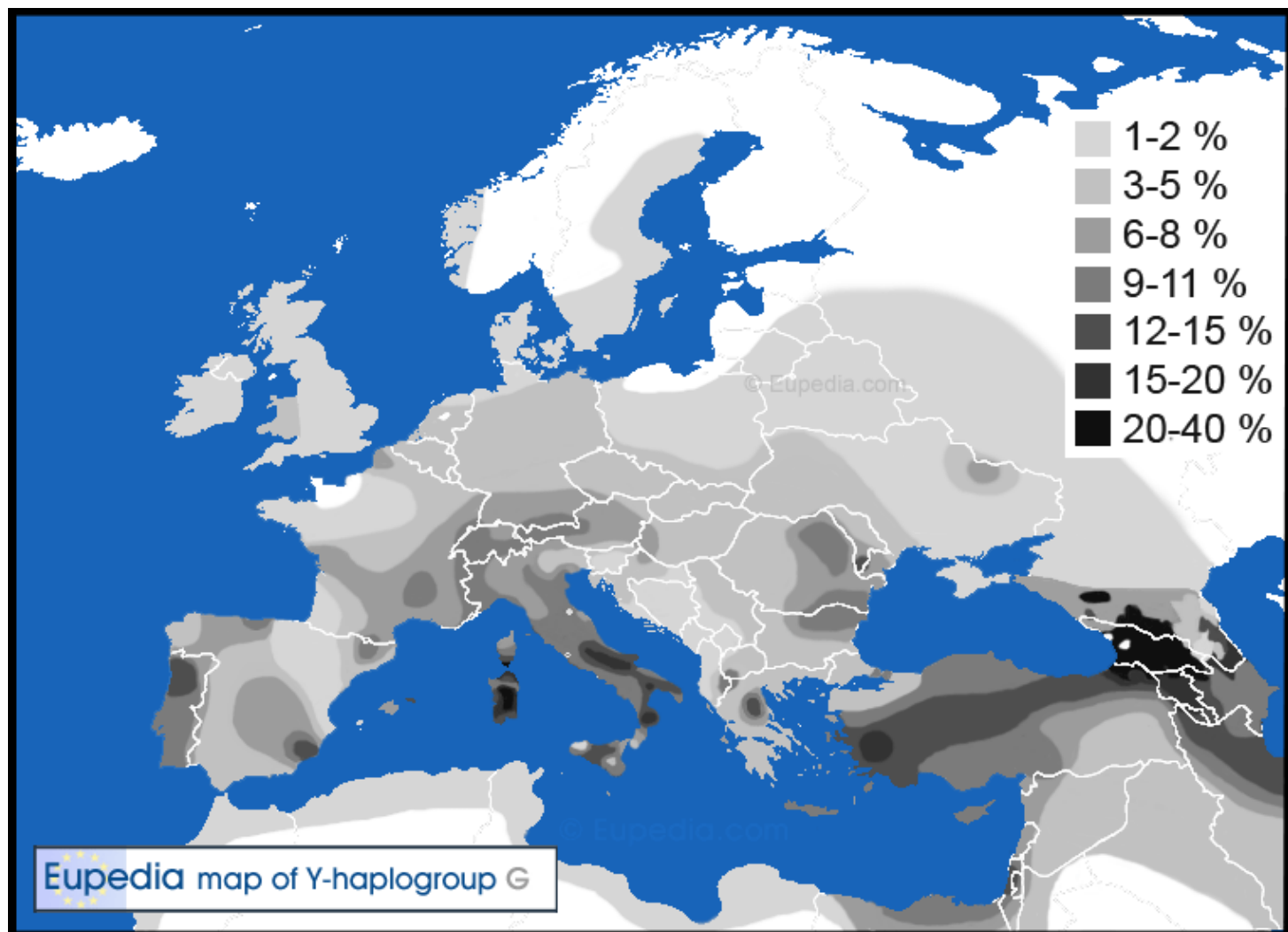
Of course, it is also very likely that the Spanish Court well knew there were superficially-Catholic adherents among those they sent to their New World settlements, but as long as they were discreet, it was largely overlooked.⁸⁴ Besides, why risk high-ranking, pure-blooded Spanish aristocrats on such hazardous ventures? Hence, questionable Catholics such as Juan Pardo and Hernando de Soto led the way to Spain's discoveries in North America. Spanish-settled Cuba is now widely known to have harbored a colonial population largely composed of *converso*-Catholics, as does Puerto Rico.⁸⁵ Why not *converso*-Protestants in North Carolina?

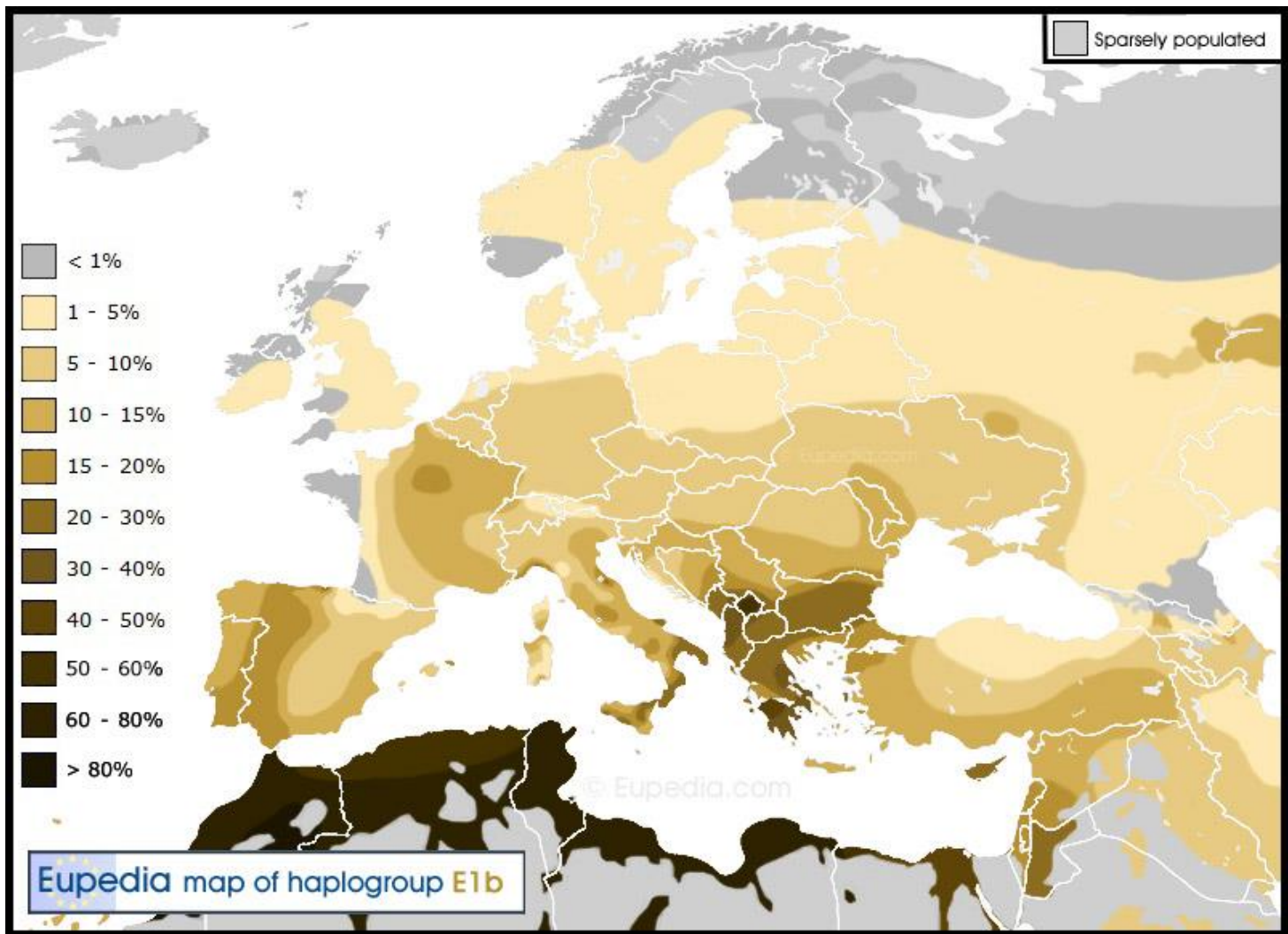
Appendix A: MAPS OF THE GLOBAL DISTRIBUTION OF MALE AND FEMALE ANCESTRIES

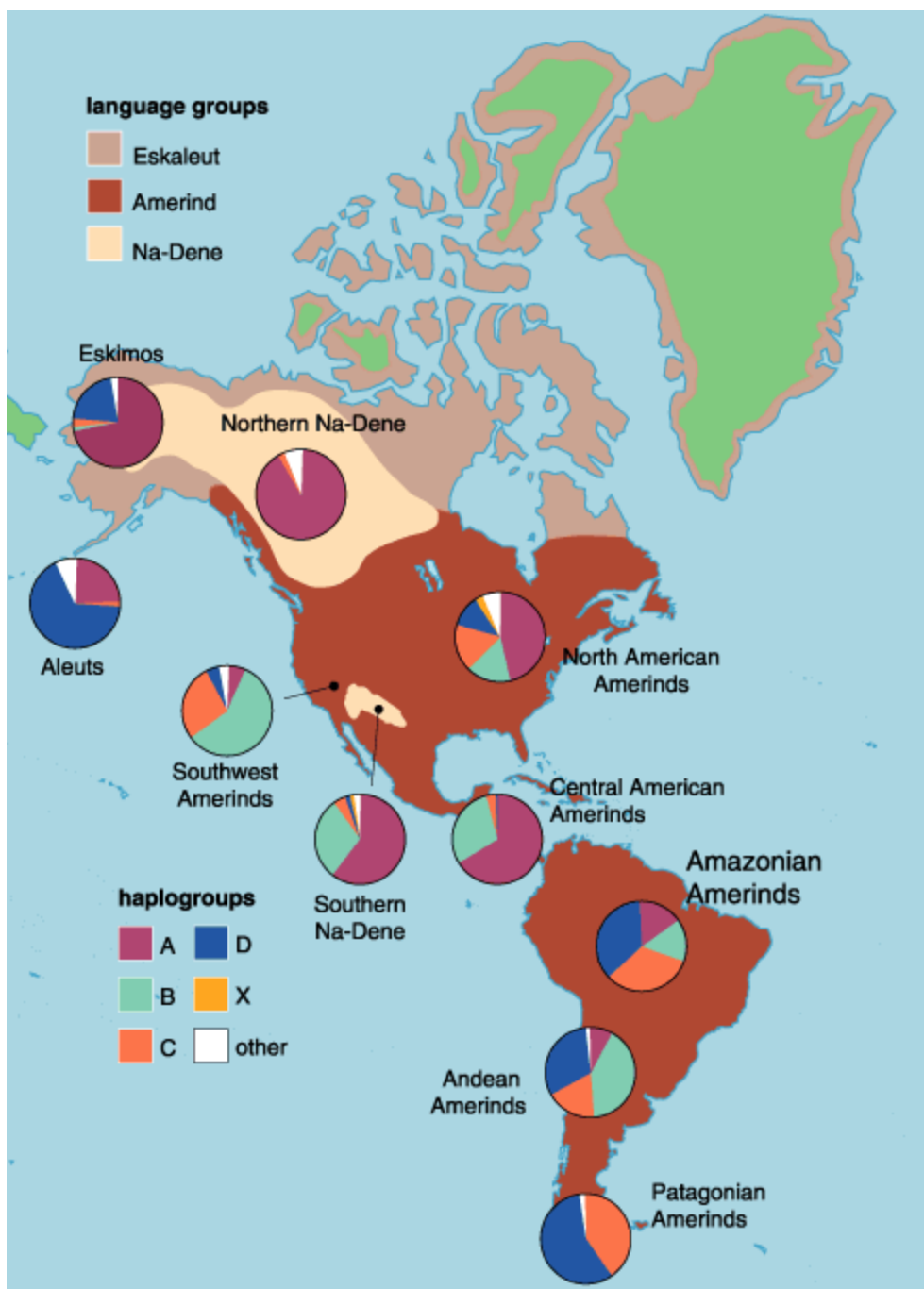


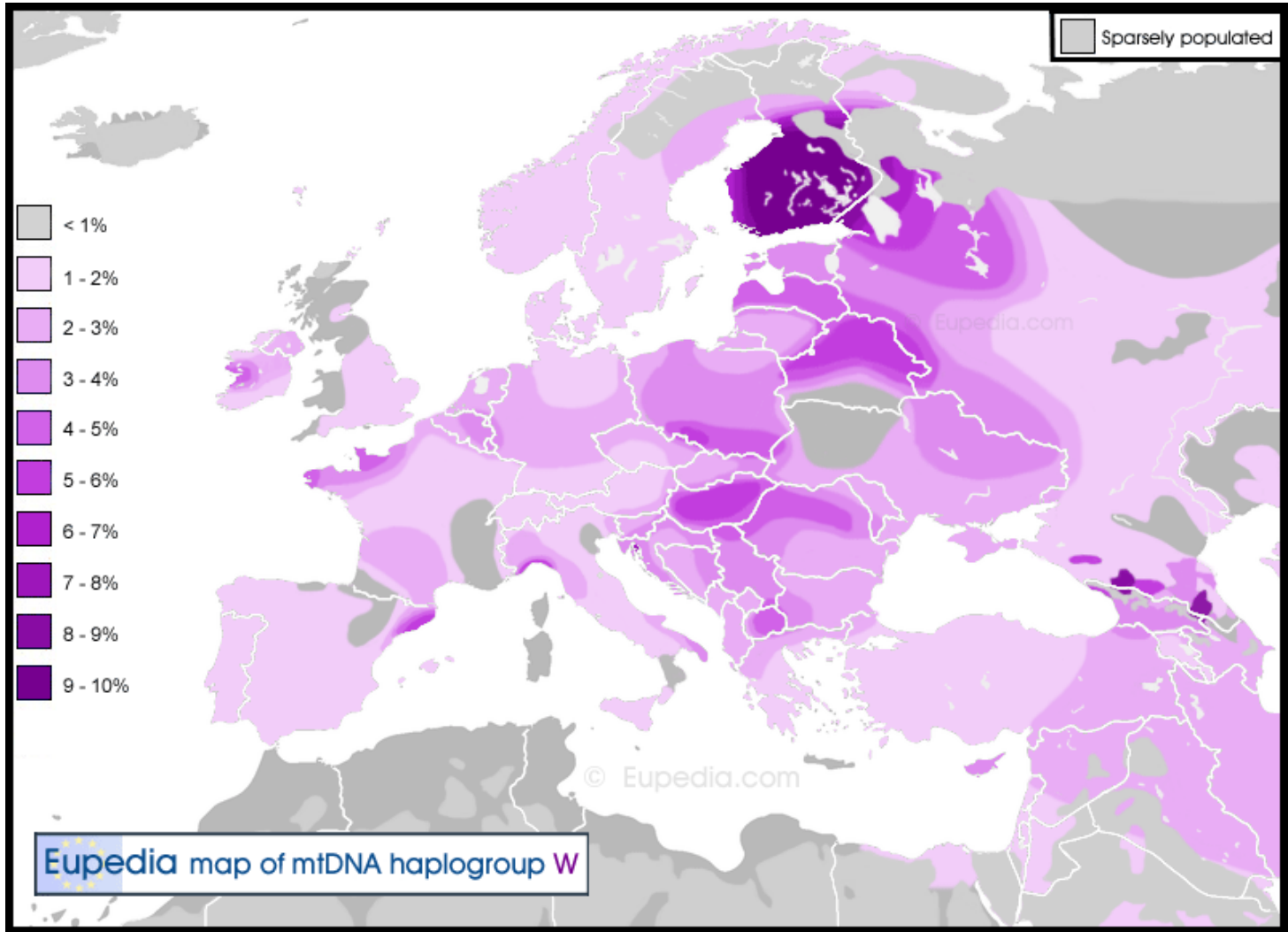


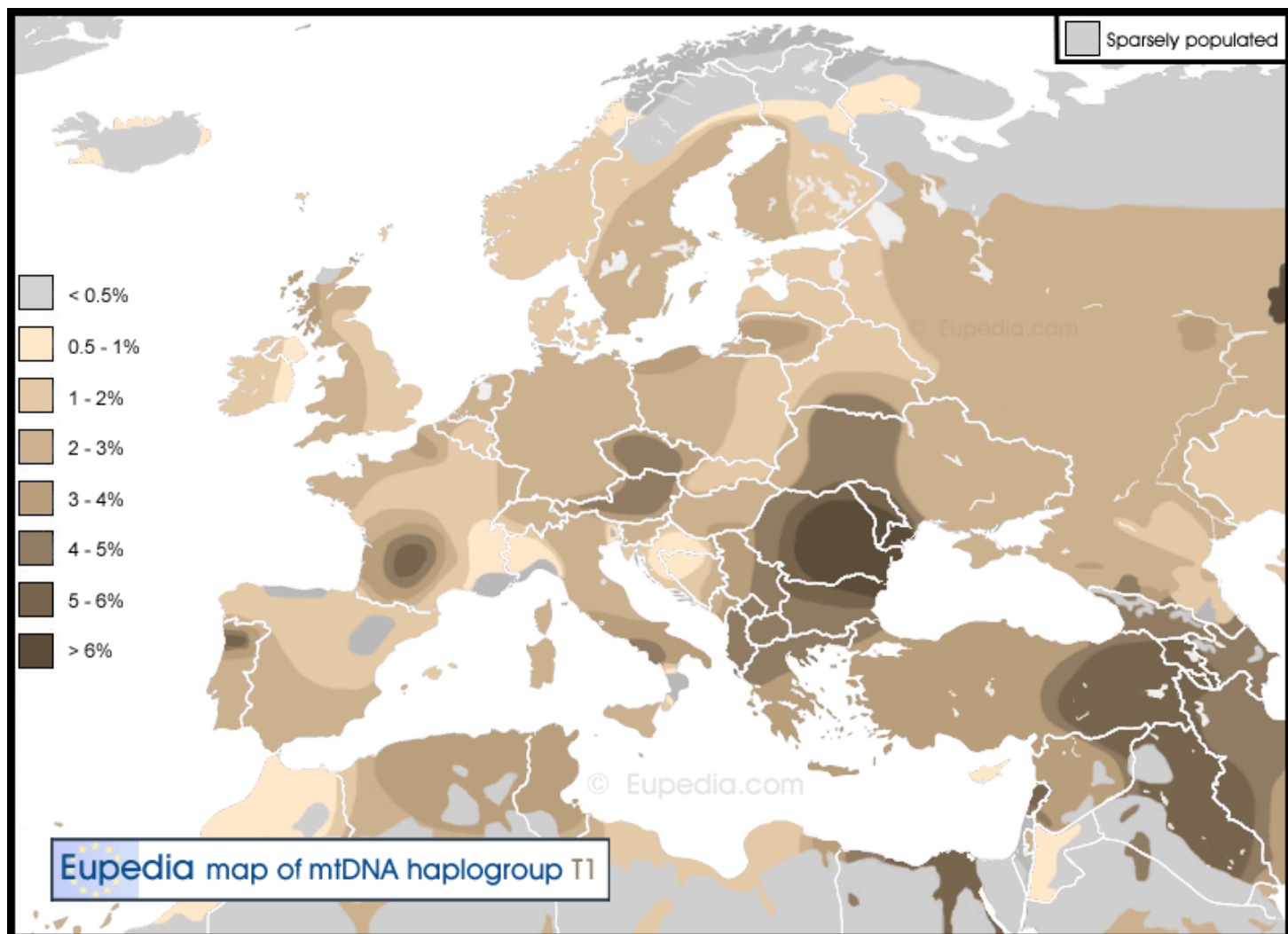


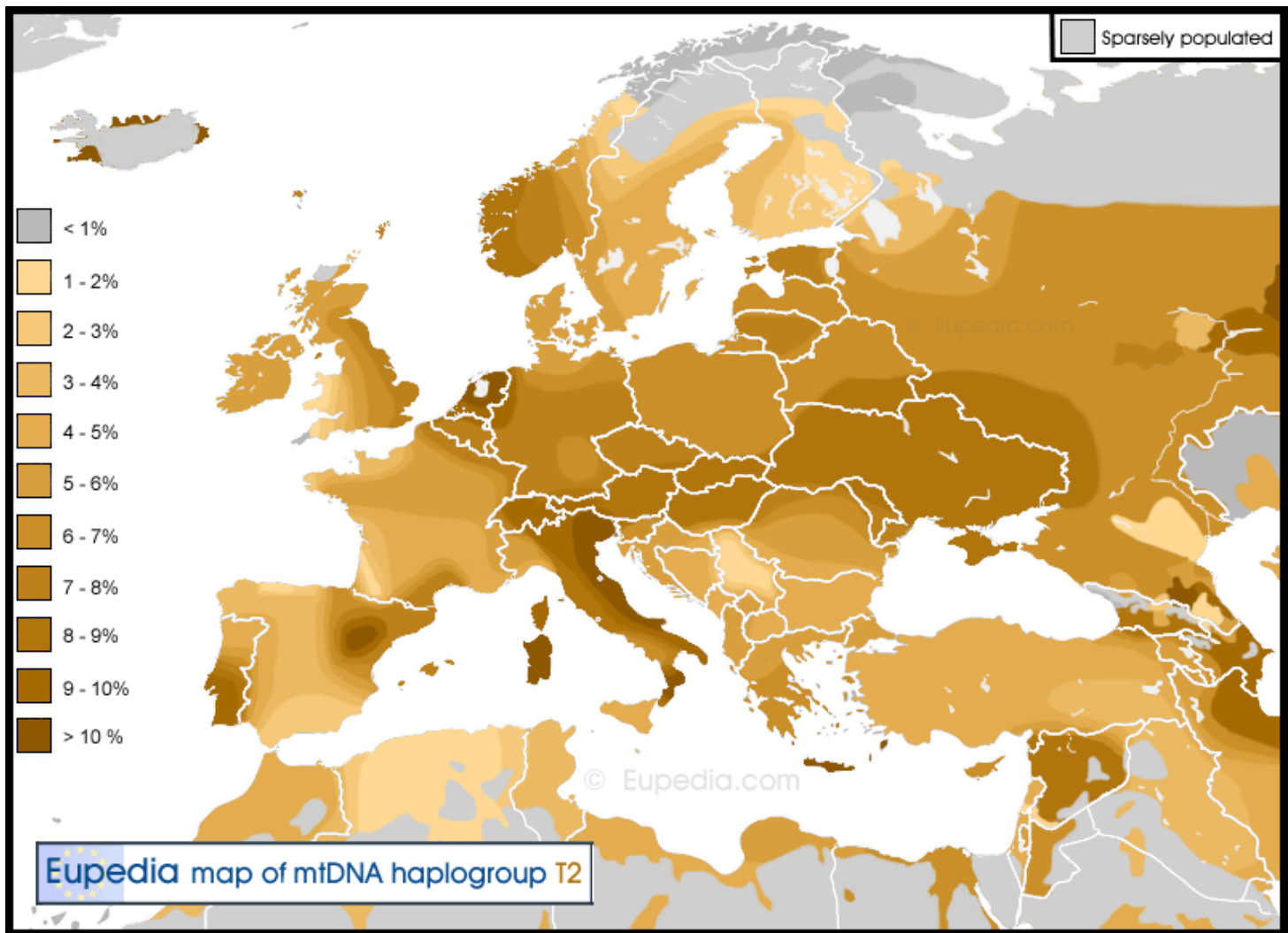


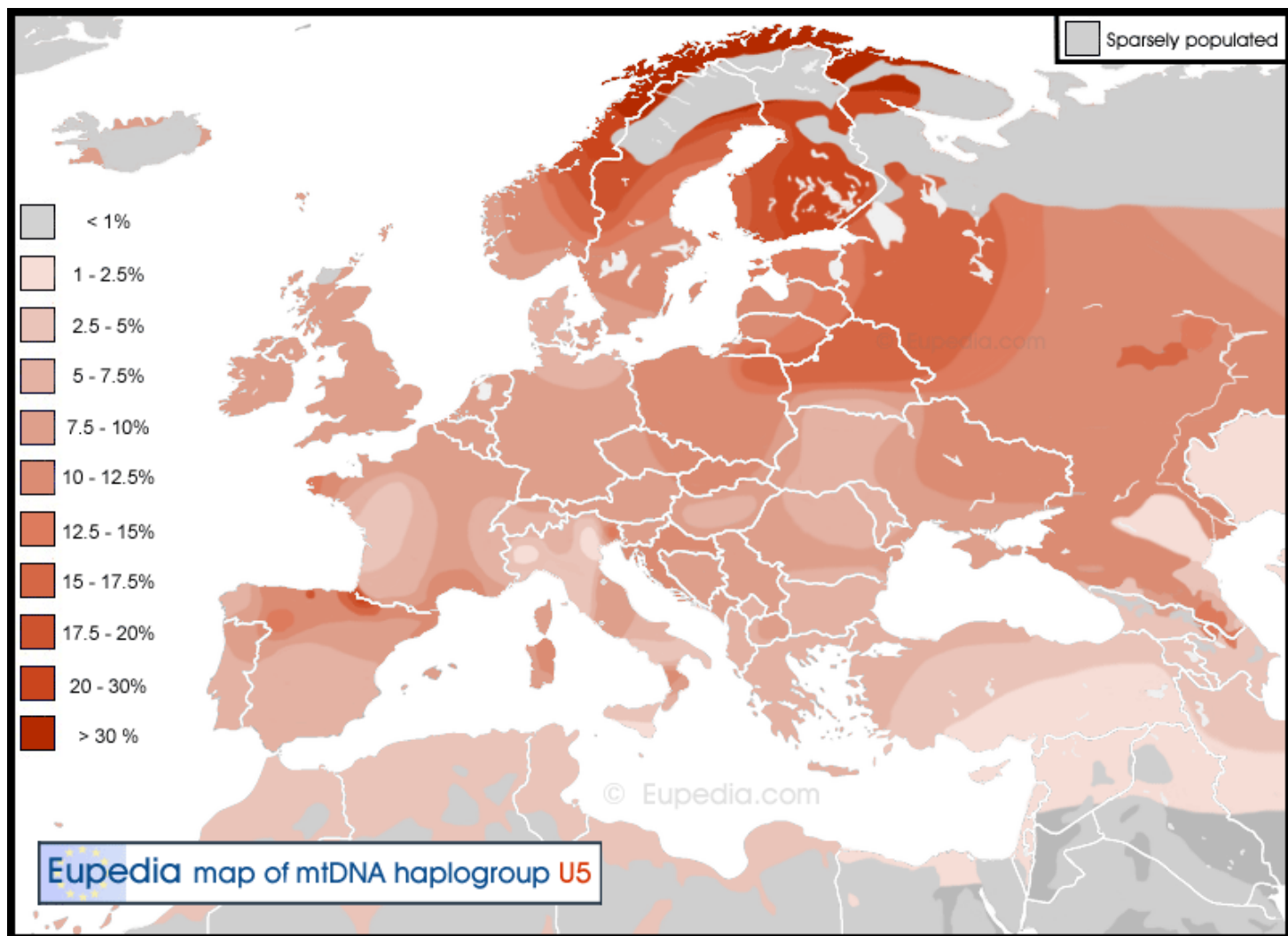


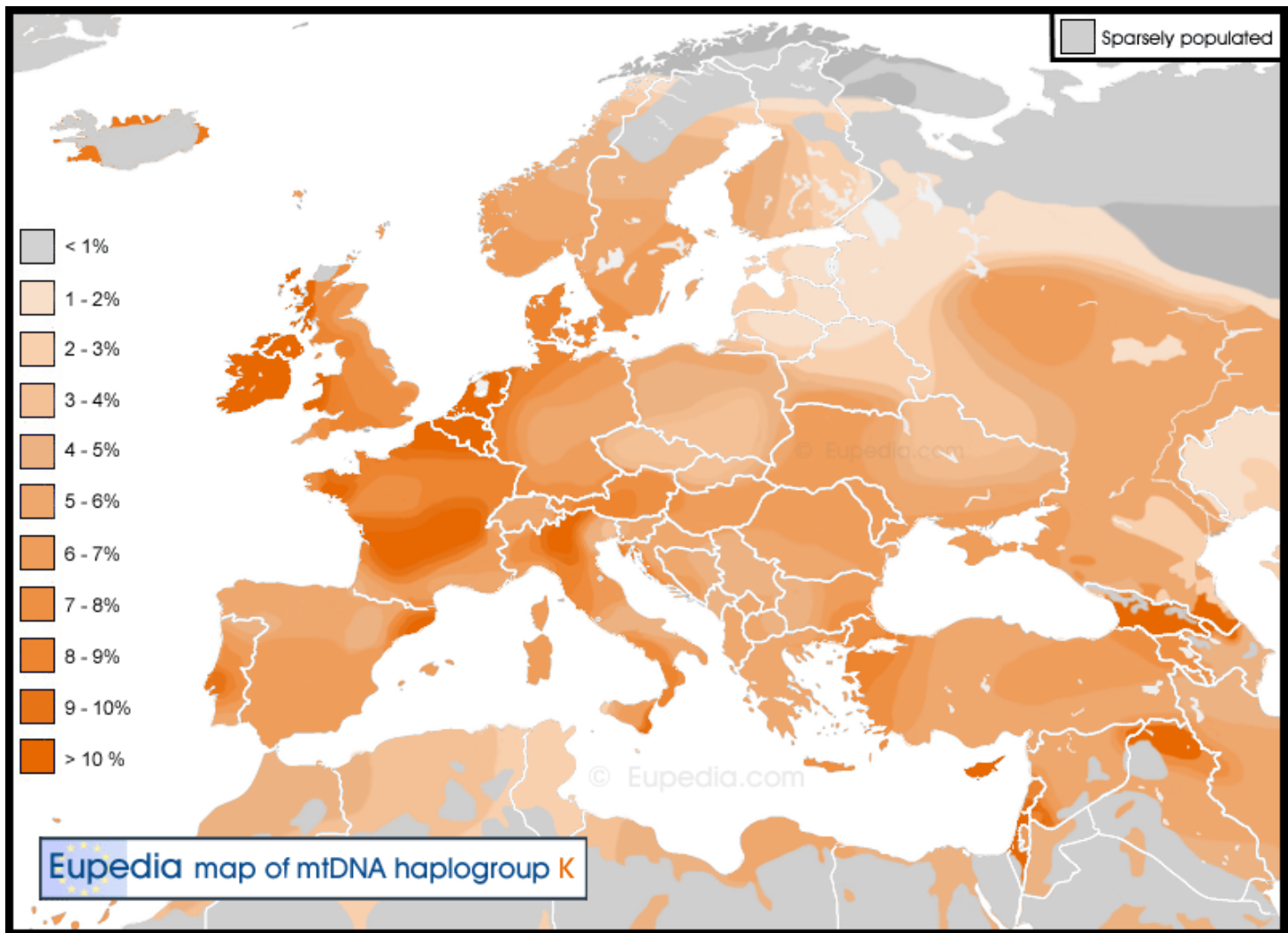


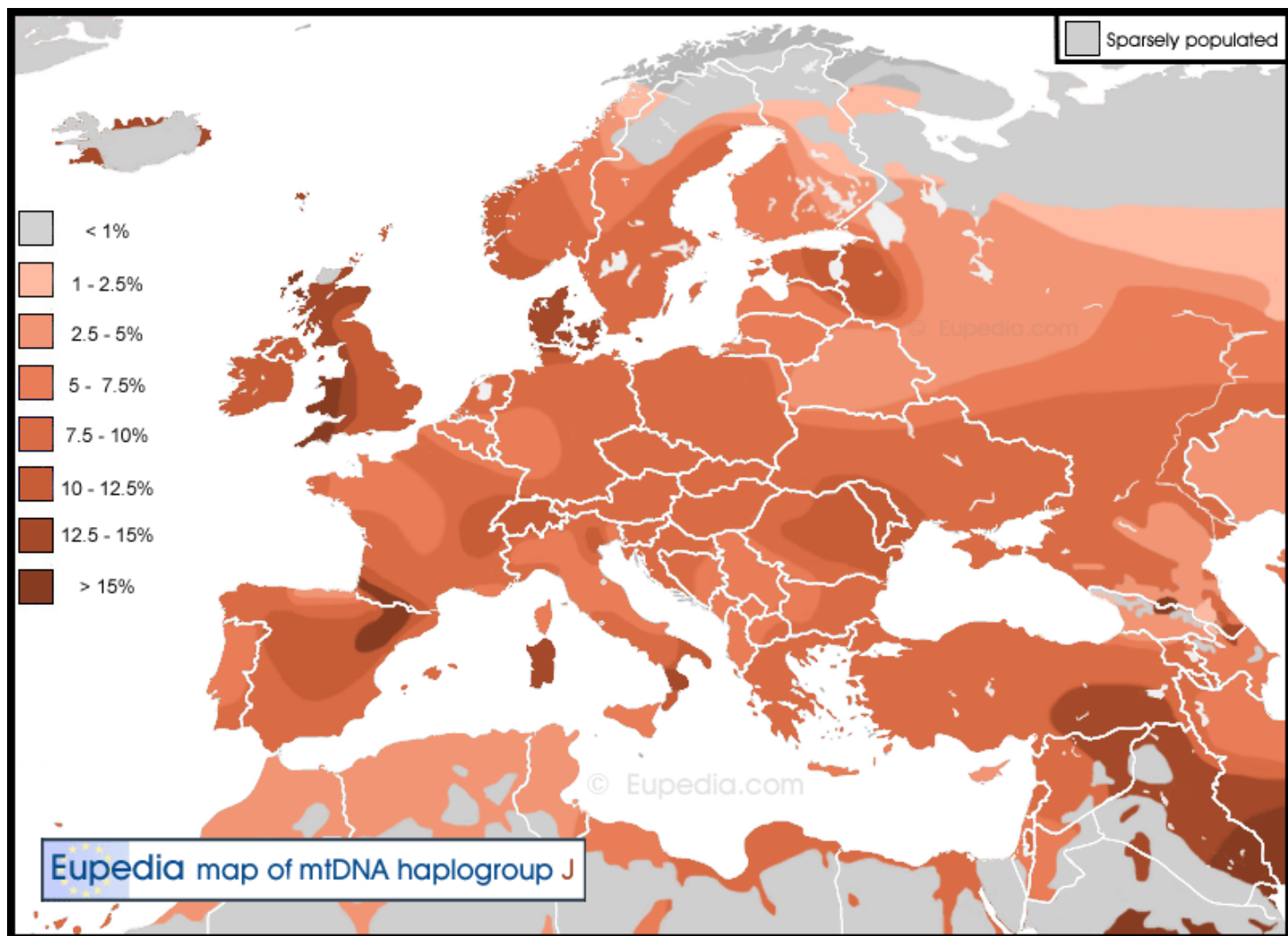


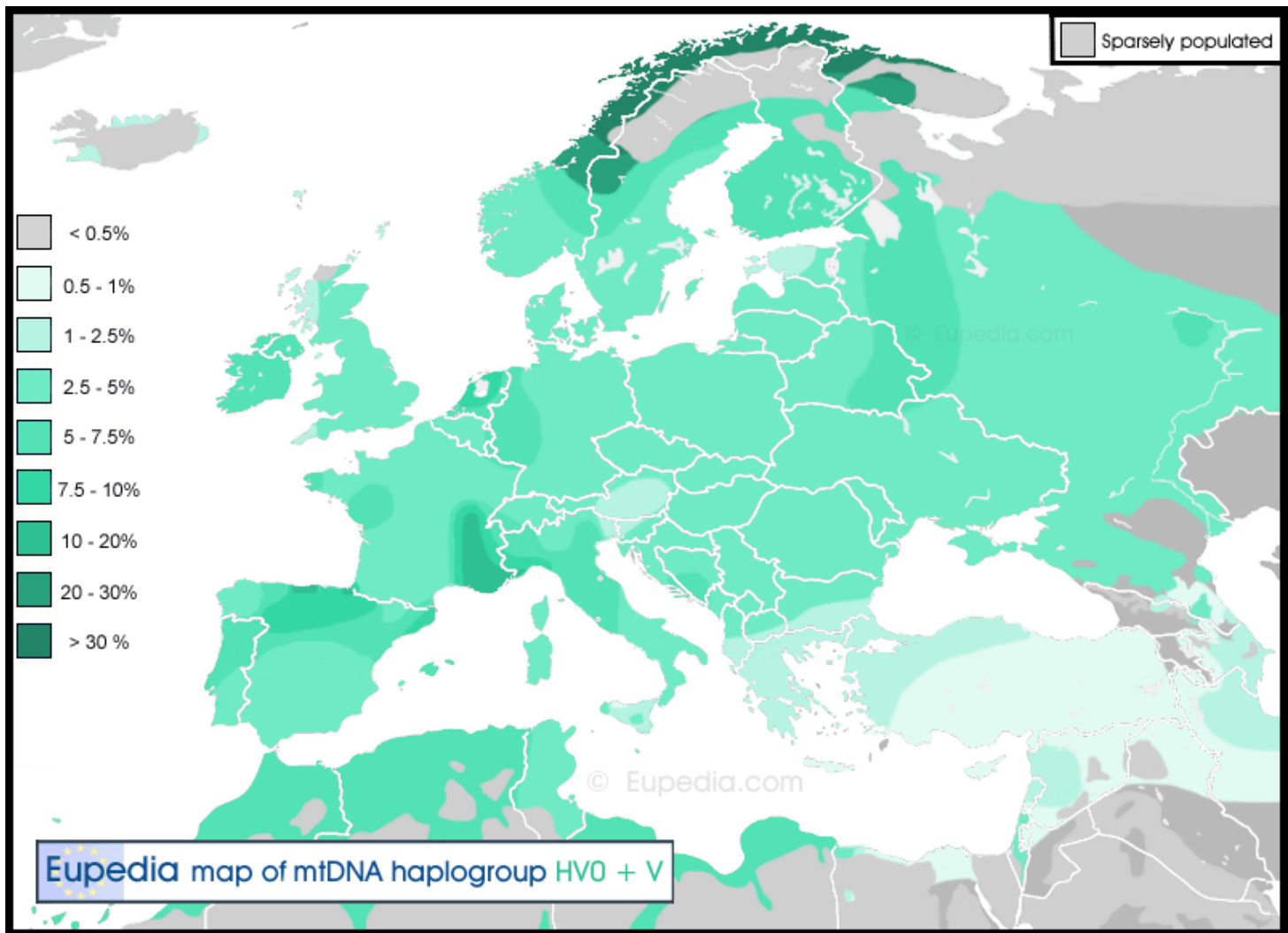












Appendix B:
SPECIFIC MALE SURNAME DNA MATCHES

Cannon - Haplotype J1C3d

Abdul Kareem United Arab Emirates	19/5
Alzeyara Qatar	25/6
Balian Armenia	25/4
Bedenian Turkey	25/5
Cannon	25/0
Gardanov	25/6
Gobler Ukraine	25/5
Gordon Belarus	22/6
Graham modal haplotype	25/5
Hyklawy Ukraine	25/4
Irvine	25/0
Jacobi Poland	25/5
Jardine	25/0
Jordan	25/0
Levy	25/6
Saaf United Arab Emirates	25/6
Villalobos Spain	25/5

Haber - Haplotype G2a3b1

Alpern Lithuania	25/0
Appelbaum Poland	25/0
Ashkenazi Modal Haplotype	25/1
Belkin Russia	25/1
Bronfman	25/0
Dellafield	25/0
Fox Israel	25/1
Gould Australia	25/0
Jewish Western Modal Halotype	25/0
Levin	25/0
Mosely Poland	25/1
Segar	25/0
Severino Italy	25/1
Wolinsky Lithuania	25/0

Hyatt - I-m253

Able	29/5
Acree	32/2
Adams	25/5
Chavez New Mexico	25/6
Chavez Spain	25/6
Cowan	25/5
Dodd	25/6
Dodson	37/6
Fields	37/4
Finder Poland	25/5
Goff	25/5
Hafner Slovenia	31/6
Hayes	37/6
Hoffman	24/6
Hyatt	37/0, 37/2
Lawson	37/4
Lay	28/4
Lczare Spain	27/6
LePoutre Flanders	32/4
Lowe	25/5
Morrow	25/5
Perry	25/6
Pheathean	32/6
Pope	26/4
Rice	27/6
Rose	25/4
Ruddell	37/5
Schreiner Germany	25/3
Sequeria Portugal	25/6
Shtrunov Russia	32/5
Simonsen Denmark	25/4
Van der Vloet	37/6
Vizzaccaro Italy	31/6
Yerkes Netherlands	25/5

Reeves - Haplotype G2a3b1

Brunner Germany	25/3
Deis Switzerland	25/2
Friel Ireland	25/3
Gaudier France	25/3
Hamman Germany	25/4
Leon Venezuela	25/3
Murello Salerno Italy	25/4
Nie Spanish Netherlands	25/3
Paila Italy	25/3
Panto Greece	25/3
Schech Germany	25/3
Terry	25/0
Wiley	25/0

Appendix C: SPECIFIC FEMALE DNA MATCHES

Female Hapotype: J1b1a

Ancestor surname: Martinez, Faust
Ancestor location: Argentina, Germany

Female Haplotype: J2b1a

Ancestor surname: Mancini
Ancestor locations: Italy

Female Haplotype: K1a4a1

Ancestor surname: Krieger, Smellie, Davis, Antone, Guck
Ancestor location: Poland

Female Haplotype: Kl1a2

Ancestor surname: Orzechowska, Meines
Ancestor location: Poland, Netherlands

Female Haplotype: T2

Ancestor surname: Kosinski, Zeydan
Ancestor location: Czech Republic, Turkey

Female Haplotype: U4a1

Ancestor surname: Wentzell, Van loon
Ancestor location: France, Netherlands

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