

“E1a1, Its Jewish, Genetic, and Paternal Ties”

You can look high and low but I doubt you will find a *more interesting* haplogroup than E1a1. Who would have believed this when we first got our y-dna label? We were African and, presumably, just another differentiation of haplogroup E. Some of the experts were telling us that not only were we all African, but there likely had been a recent history of slavery in our background. Never mind our Jewish connection! Never mind the fact that many of us with this y-dna signature had no known background of African-ness!

E1a1 connects with sub-Saharan Africa, but also with the Mediterranean area, with Middle Eastern countries, and with European and American locales. If we follow the genetic and paternal clues available to us, particularly those revealed in dna studies, cultural and linguistic comparisons, and African archaeology, we may see where its journey began almost 19,000 years ago and learn how one of the smallest of haplogroups became scattered abroad.

A quick look at y-dna test results shows that, today, E1a1 *seems* centered in sub-Saharan West Africa. One reason for this likelihood is that in the Underhill et al. study of 2000, “Y chromosome Sequence Variation and the History of Human Populations,” a test of Malian men revealed 2 out of 44 samples to be E1a1. However, while the Malian test portends that 4.5% of Malians are E1a1, it has to be noted that the sampling was apparently limited to two groups, Tuareg and Bozo, who, at best, represent no more than 2,000,000 people out of a population of more than 15,000,000. Other ethnic groups are Mande (which comprises about half the population, of which the Bozo are one), Fulani (Fulbe), Songhai, Voltaic, Moors, and Dogon.

What can be made of the Tuareg and Bozo samples of E1a1 in the Underhill study? The answer is not clear because we do not know precisely where the E1a1 was found, whether in one group or both. And we have to be skeptical of the small number sampled from less than 13% of Malians! E1a1 seldom appears, though, and when it is found, it is never in abundance. The apparent exception to this was the Scozzari et al., 1999 study, “Combined Use of Biallelic and Microsatellite Y Chromosome Polymorphisms...,” which indicated a percentage of 53% for the Fulbe of Cameroon. However, the samples were few, only 17. So, although the study got the attention of those of us who are E1a1, the information lay dormant for a time.

Fortunately, dna studies are ongoing and information is constantly trickling in. A breakthrough of sorts occurred recently with the discovery of Cerny et al., 2011. In this study entitled, “Genetic Structure of Pastoral and Farmer Populations in the African Sahel,” 364 Fulani pastoralists and farmers were tested and the E1a clade figured prominently, as I discovered in Buckova et al., 2013. E1a yielded more than 17%. At that point, I could only wonder if there were any E1a1 samples present. There were. More about this later!

In trying to find the location of E1a1, it is important, I think, to look first at those from whom E1a1 could have sprung. This means considering an E1a group such as the Dogon. In Wood et al., 2005, 45.5% of 55 Dogon samples were found to be E1a. With this much E1a present, you would expect to find a contingent of E1a1, would you not? But, it didn't happen! Upon

examination of more than 1,000 widespread samples of Dogon, Dr. Beverly Strassmann, a long-time devotee of Dogon research at the University of Michigan, did not find one sample of E1a1. E1a was there in abundance, but no E1a1.

To associate E1a1 with E1a groups, though reasonable to assume, may be a mistake, as can also be seen in the Rosa et al., 2007 study, “Y Chromosomal Diversity in the Population of Guinea-Bissau: A Multiethnic Perspective.” Among 44 samples of E1a, not one known E1a1 haplotype was found. Over millennia, groups often thrived and then disappeared. Those that started out together did not necessarily remain together.

Even though E1a1 is not found among the Dogon, they may very well be the paternal tribal group for E1a1, given the number of E1a present among them today. And if not them, surely another E1a group, either one existing today or one back in the distant past. Although non-carriers of E1a1 today, the Dogon do carry E1a2, which could very well be another indicator for their paternalism. According to Dr. Tatitana Karafet of the Genomic Analysis and Technology Core at the University of Arizona, many of the M33 carriers she has tested were positive for P110, the mutation for E1a2.

The Dogon, then, are a necessary focus of any research about E1a1. But, so are the Fulani with their significant E1a presence! Let’s consider both and start with the Dogon first.

Who are the Dogon? Where do they live? And what do we know about them?

The Dogon are an ethnic group who live in a large escarpment of desert filled with caves in the country of Mali. The nearest city of any size is Bandiagara. The group is isolated and spill over into Burkina Faso, which adjoins Mali. As James Swagger of offplanetradio.com says, the Dogon are “real living history.” For decades, inquirers have wanted to learn about them. They have wanted to know how it is that they, an isolated and mysterious tribe, have developed the culture they presently have. How did they, for example, develop their knowledge of astronomy?

In the interest of learning the mysteries of the Dogon, two French anthropologists, Marcel Griaule and Germaine Dieterlen, lived among the Dogon in the 1930s and 1940s. Although some of what Griaule and his student say they learned has a tinge of controversy, their work was innovative. It opened up the Dogon to the outside world and spurred further investigation. One of the leading investigators today is the writer, Laird Scranton, who has authored a couple of books on the Dogon, one of which is entitled The Science of the Dogon: African Mystery Tradition.

According to Scranton, the Dogon have rituals similar to Judaism. They wear skullcaps, have prayer shawls and square tefillin boxes, and practice circumcision. Additionally, just like Jews, they celebrate the concept of Jubilee. And they appear to have words and symbols that are connected to the hieroglyphs of the Egyptians. In his books Scranton goes into detail in his comparison of the Dogon mythology and that of other cultures, seeking to prove a similarity between the Dogon and the ancient world, especially the Egyptians, suggesting that the ancients were not the ignorant people we moderns have often thought them to be.

Anthropologists have long wondered how the Dogon received the bountiful knowledge of astronomy they seem to have. A few have suggested they have been taught by recent visitors and others have ventured to guess at extraterrestrial assistance, but Scranton believes the Dogon once lived in East Africa, maybe near Napta Playa, which is located about 800 kilometers south of Cairo, the site of a small, much older, Stonehenge, used for astronomical observations thousands of years ago. A prehistoric calendar from the site now resides in the Aswan Nubia Museum.

The devotion of the Dogon, or any ancient group of people, to astronomical knowledge should not come as a great surprise. In prehistoric times the stars were often the only road maps across a vast, changing desert. Tribal leaders had to read the overhead map in order to lead their dependent tribesmen to food and water.

Could Scranton be right? Could the Dogon have come from Napta Playa? Possibly! The Dogon say their cultural memory is that they came from a very large lake far to the east. The dried-up basin of Napta Playa might just fit the bill. But, who can say? There are probably several other great lakes that might qualify.

Every 50-60 years the Dogon make masks related to Sirius, the brightest star in the sky. They save these masks and use them to recall their history, which is dated at 50-60 year intervals in relation to the orbit cycle. According to Griaule and Dieterlen, who, over a half century ago, were puzzled over what they call "the Sudanese star system" of the Dogon, "The problem of knowing how, with no instruments at their disposal, men could know the movements and certain characteristics of virtually invisible stars has not been settled, nor even posed." (See M.Griaule, G.Dieterlen, "A Sudanese Sirius System," p.59, 1948)

Today, we may not only be posing the question about the Dogon's astronomical knowledge, but we may be on the threshold of some answers. Laird Scranton believes the Dogon probably left east Africa sometime around the period of 3500 B. C. He chose this time for two reasons: (1) Judaism was developing about this time and was contemporaneous with ancient Egypt; and (2) because it was a common occurrence during this period for little priestly groups to be sent out away from the main group to preserve their valued traditions. The choosing of an isolated location, an inhospitable environment such as a desert area, could make the preservation of that knowledge even more secure.

While history, religion, and culture tell us about the Dogon, so do genes and language. We see this in the Tishkoff et al, 2009 study of African tribes and African-Americans, which involved 121 African tribes, 4 African-American populations, and 60 non-African populations. In all, a total of 2432 Africans from 113 geographically diverse populations, 98 African-Americans, and 21 Yemenites were considered. Unfortunately, this group only contained 9 Dogon, some of whose markers did not amplify well. However, when the test results were in, it was the Dogon who showed the least genetic diversity of all Africans, suggesting the isolated state in which the Dogon have lived for centuries.

Like other West Africans, the Dogon speak a Niger-Kordofanian language. But, when the tribes are divided into 14 ancestral geographic genetic population clusters, the Dogon fall into the Saharan cluster among those who speak an Afroasiatic language. Others in the cluster are Beja-Hadanawa, Beja-Banuamir, and Mozabites. The Dogon and Mozabites show ancestry from the European-Middle Eastern cluster.

When an analysis of ancestral connections is done, the Dogon relate to the following groups in descending order of closeness:

1. Mozabite .51 Algerian (Berber)
2. Cape Mixed Ancestry .26 South Africa
3. Beja-Hadanawa .213 Sudanese
4. Beja-Banuamir .185 Sudanese
5. Beta Israel .17 Ethiopian Jews
6. Gabra .037 Northern Kenya and Southern Ethiopia
7. Fulani Mbororo .034 Niger, Cameroon, C. A. R., and Nigeria
8. Rendille .033 Kenyan
9. Fulani Nigeria .029 Nigerian
10. Baggara .029 Sudanese
11. Koma .025 Nigeria and West and Central Africa
12. Borana .024 Southern Ethiopian and Northern Kenya
13. Fulani Cameroon .022 Cameroon

The Mozabite connection is certainly significant and indicates that the Dogon were likely once in North Africa. This, as it turns out, is “consistent with (the Dogon’s) oral history,” which also claims the tribe has only been in Mali since the 14th and 15th centuries. But there is even more than oral history to suggest a North African location for the Dogon. During the period when Rome controlled North Africa and recruited warriors for their legions and auxiliaries from the region, some of whom wound up in British cemeteries during Rome’s occupation, some of these recruits were Dogon. We know this from Stephanie Leach’s 2009 study, “Migration and Diversity in Roman Britain....,” in which the author stated, incidentally, that Rome recruited from North Africa, not the sub-Saharan.

Beta Israel is also revealing, since it is comprised of Ethiopian Jews, the group who claim to possess the Jewish Ark of the Covenant. Ties between this group and Israel have long been observed. In fact, not long ago, Israel elected a black woman with ancestry in Ethiopia as their Miss Israel. But also important is the Dogon connection to the tribes of Beja-Hadanawa, Beja-Banuamir, Gabra, Rendille, Baggara, and Borana, all of whom are found in Sudan, Kenya, and Ethiopia. Surely, there was a closer relationship to these at one time.

Although the Cape Mixed Ancestry is second on the list of those sharing genes with the Dogon, it is important to understand that it represents the very diverse South African area. Among those present there are Bushmen tribes who are believed to be some of the cousins of the Dogon.

A good question to ask after viewing these “gene-sharers” of the Dogon is this: Could it be we are basically seeing the “back in time” movement of the Dogon? Not very long ago, maybe

1,000-2,000 years in the past, they may have been closely associated with the Berbers and lived in northwest Africa. Before that, it seems that they may have lived in the northeast which is now called Egypt, Sudan, Kenya, and Ethiopia.

Now let's consider the Fulani who, because of their widespread migration over thousands of years, have many subgroups who now claim a connection. The Fulani comprise maybe the largest population in Africa, with the Fulani pastoralists, alone, numbering in the millions. Clearly, if we are to believe the results of the Tishkoff study, they and the Dogon have had a long association. The question is: How close an association has this been?

The two studies that might help to answer this question are Cerny et al., 2011 and Buckova et al., 2013 in which the y-dna of 364 Fulani pastoralists and farmers in the Lake Chad area were analyzed. The chart of Buckova et al., 2013 provides the basics, where she used all but 4 of the Fulani pastoralists and all but 18 of the farmers from Cerny's study. Using Buckova's chart and not counting smaller haplogroups, the Fulani pastoralists' leading haplogroups by name and percentage are as follows:

| | |
|------------|-------|
| E1b1a | 54.4% |
| E1b1b1 | 18.8% |
| E1a | 12.3% |
| R1b (M343) | 7.4% |

The farmers' haplogroups are also of importance, but not so much for what they are, but for what they are not. As Buckova et al., 2013 points out, there is very little overlapping of haplotypes between the two groups. I will explain.

When Cerny et al., 2011 studied the 364 *Fulani pastoralists* and the neighboring *sedentary farmers* of the Lake Chad Basin and points west, the researchers examined the y-dna of pastoralists who all identified as Fulani, such as Peul, Fulbe, M'bororo, Fula, Wodabe, etc., and were speaking one of the Fulfulde dialects belonging to the West Atlantic branch of the Niger-Congo linguistic family (Cerny et al, 2011). With the inclusion of the y-dna from the farmers of the same region, more than 17% of the total samples were placed under M33, the mutation for E1a, with no further delineation.

The important distinction, though, is not the groups' totals, but the groups' differences. While the overall percentage for E1a was high, among the Fulani pastoralists it was half of what it was among the farmers. But most striking is that when I used known E1a1 haplotypes and examined E1a, 21 of the 25 Fulani pastoralist samples appear to be E1a1, or more than 10% of the total of 206! Among the farmers there was no E1a1 or R1b, only E1b1a, E1a (other than E1a1), and E1b1b1a in descending order of numbers, plus 3 minor representations.

Obviously, a test for M44 is always preferable when looking for E1a1, and I inquired as to whether the known haplotypes might be tested. However, the study leader, Viktor Cerny, indicated that it could not be done at this time. As a result, I did not venture away from those with the tell-tale $DYS391=9$ and $DYS392=12$. (See Haplotypes of Fulani Pastoralists) With

such analysis, simple as it may be, I think I found the group that has the highest percentage of E1a1 discovered to date.

Now someone will say that the E1a1 haplotypes I used could be E1b1b1 haplotypes. However, in examining the Strs of E1b1b1 men I only saw 1 from more than 1,000 samples that matched a known E1a1 haplotype, and it could actually be an E1a1. To assume that there are no mistakes made where hundreds of samples are listed is unrealistic. But even if there is some overlapping of haplotypes between E1a1 and E1b1b1, there's probably not much. Scozzari et al, 1999 has already shown that E1a1 has a significant presence among the Fulani.

It seems, then, that what Scozzari et al., 1999 told us about the Fulani of northern Cameroon in 1999 was ground-breaking, but we didn't know it at the time. We dismissed the results from 17 samples taken because we did not want to be premature in our assessment.

Not only have we rediscovered and confirmed the Fulani and their E1a1, but, for the first time ever, we may be seeing how E1a1 has been spreading in Africa. A nomadic population has, perhaps, picked up a small, rare subclade of E1a in northeast Africa, or maybe even farther north, and dispersed it all along their route, moving from northeast to northwest Africa, and then down into the sub-Saharan region.

Actually, the previous supposition has support from the Buckova study on page 18 of their report which states: "For pastoralists the results favor a model in which an initial core formed by E1b1b1-M35 was later enriched with E1b1b1a-M78, E1a-M33 and only recently by E1b1a-M2 and R1b-M343." Consider, if you will, that among Jews the core group, E1b1b1-M35, and its subclade, E1b1b1a-M78, are second only to haplogroup J and its subclades, which is at least suggestive of a Jewish group being included in the makeup of the Fulani pastoralists. (https://en.wikipedia.org/wiki/Genetic_studies_of_Jewish_origins) Then, if you add E1a-M33, which from the Buckova study of the Fulani is mostly E1a1, you have the cradle of a relationship that continues to this day, not only among the Fulani, but among E1a1 men everywhere.

As the Buckova study found, R1b-M343 (R-V88) and E1b1a-M2 were only added to the Fulani pastoralist core *recently*. This, of course, is plausible considering that the Fulani pastoralists are now in the hotbed of these two haplogroups. R1b-M343 holds sway among the nearby Oeldeme at the rate of 95% and E1b1a-M2 is very sub-Saharan. The big question is: What does Buckova mean by "recently"? Fortunately, the study authors tell us on pages 18 and 19 when they estimate the entry date of R1b-M343 at 2900 years ago and E1b1a-M2 at 2200 years ago. So then, the entrance of E1a1 into the Fulani pastoralists' gene pool occurred before the last two were added, during the time the pastoralists still had an E1b1b1 core.

Called by many variations of the name, Fulani, this pastoralist group of nomads, millions strong, has traveled widely over Africa for at least 2,000 years looking for pasture for their cattle, sheep, goats, horses, and camels. Like the Saharan cluster to which the Dogon belong (Tishkoff et al., 2009), they, too, have some tell-tale y-dna from North Africa, the Middle East, and Europe. In addition to carrying those haplogroups we have just discussed, they carry an A subclade

(Scozzari et al., 1999) and haplogroup T1 (Cruciani et al., 2002), which is numerous in Somalia and Ethiopia and is believed to have originated in West Asia. And there is even their lactase persistence phenotype which they share with Europeans. (Buckova et al., 2013)

The Fulani rank quite high among African populations having an element of mystery. More has probably been written about them than just about any other group. Along with a host of other tribal descendants in Jamaica, they were studied for 5 years by Father Joseph J. Williams, who then spent another 11 years looking at the groups on the African continent. His findings have been recorded in the very heavily footnoted Hebrewisms of West Africa, written in 1930.

Long before dna was discovered, creating scientific pathways to the past, another author, E. D. Morel, devoted whole chapters to the Fulani in his 1902 book, Affairs of West Africa, first looking at “The Fulani in Nigeria,” then “The Fulani in West African History, and lastly, considering the “Origin of the Fulani.” He stated that the features of the Fulani suggested an Asiatic origin and even went so far as to call them “the lineal descendants of the Hyksos,” the shepherd kings of the east who had invaded Lower Egypt.

Morel was quick to say, though, that his theory about the Fulani was not original. And it wasn't. He was following in the footsteps of his contemporaries, some of whom had read the words of Manetho, the Egyptian historian, who believed that the Hyksos invaders of Lower Egypt who were called the shepherd kings because of their pastoralism, had come from the east; and the words of Josephus Flavius, the Jewish historian, who, having read Manetho's Aegyptiaca, believed that they were the Hebrews who, after a period of 511 years of rule in Egypt, crossed the desert into Syria and then into Judea, there establishing the city of Jerusalem.

Unsurprisingly, the Fulani, with their lighter-skins among darker-skinned African populations, have often provoked questions and inspired theories. A century ago, Roland B. Dixon, who authored The Racial History of Man, believed that it was possible to measure a human skull and determine its geographical origin. As a result of that controversial school of thought, Dixon believed the Fulani originated near the Caspian Sea. To him, that was the best explanation for their Caucasian features.

As a present-day African population, the Fulani do not appear to have much in common with the leading E1a group, the Dogon, who might very well be the progenitors of E1a1. Nevertheless, they clearly share the Dogon involvement with Judaism. Such was proposed by Hugh Thomas in his book, The Slave Trade, which stated that Jews established colonies in the Saharan oases back in the 1300s and intermarried with Berbers and blacks, such as the Senegambian Fulani (Fulbe). But, whether the Jews of the middle ages, whose modern-day descendants are E1a1-carrying Ashkenazi and Sephardim, carried E1a1 and their religion to the Fulani or merely reunited with part of their ancestral population is an open question. We can only say that Jews, dark-skinned Africans, and lighter-skinned Fulani merged a long time ago, and that the Fulani were in many ways as Jewish as those with the name.

As late as the end of the 19th century when European writers like Maurice Abadie, Edmund Morel, and others began to write about the Fulani, their involvement with Judaism was taken for

granted! Though Abadie, for example, did not know the Fulani past with any more preciseness than his peers, he did conjecture concerning their origin. He sought to explain their Jewishness in the only way he knew how, as he wrote the following:

“One knows in rough outline the history of the Israelitic migration into Egypt, at the time of Joseph, and the return to Sinai with Moses, movements which were undoubtedly connected with the invasion and exodus of the Hyksos. It is probable that many of the Jews who remained in Egypt were driven towards Ethiopia and especially towards Cyrenaica where they intermingled more or less with the Berbers. These Jews of Cyrenaica were rejoined about 330 B. C. by the Jews deported from Palestine after the seizure of Jerusalem by Ptolemy Soter. Thus they would form in Cyrenaica a Judaeo-Syrian population, mixed with Egyptian and a little Berber, and this would be the origin of the Peuls (Fulbe or Fulani). (Did this population take the name of Foudh or Fouth in remembrance of its flight?)”

To this picture we can add tradition and the personal experience of Dr. William F. S. Miles, an Ashkenazi Jew who served in Guinea through the Peace Corps some thirty years ago. In an email to the author he spoke of a conversation he had had with his French language instructor who “soon insisted that we were indeed cousins—for he, as a Fulani (Fulbe) from Guinea, was also a descendant of a tribe of Israel but one that, instead of returning east to Canaan with Moses, headed west into, and across, Africa.” As Miles discovered in going to Guinea, his environment was not devoid of Judaica, but filled with it.

According to Hebrewisms of West Africa, the influence of Judaism on West Africa can be traced in part to the Empire of Ghana, which Maurice Delafosse, the French Savant who was the French governor of West Africa, believed was inherently Jewish. The Chronicle of the Soudan is sited as a source, mentioning that Ghana was ruled by forty-four white kings. He goes on to say that in the 9th century a descendant of the Jewish tribe of Dan named Eldad claimed that there had been in the interior of Africa a language that appeared to be Phoenician, a religion that was Jewish, and a Jewish emperor. The existence of Eldad of the tribe of Dan is supported by History of the Jewish People by Margolis and Marx who relate that Eldad claimed that his tribe and others departed Palestine and moved to Havilah in Africa in the times of Sennacherib.

The pervasiveness of Judaism in Africa has continued into recent times. Williams in Hebrewisms of West Africa relates the story of the Jewish settlement of Alouna near Lake Chad, which the French consul at Akka in Southern Morocco, M. Rene Leblonde, visited quite by accident in 1928. It seems that the consul was flying over the area on a map-making expedition when, because of engine trouble, he had to make an emergency landing. When he came down, he was greeted warmly and welcomed to the settlement where the people spoke a dialect of Arabic, mixed with French and Moroccan words.

When Leblonde was taken to the home of the oldest inhabitant, he was treated in the Hebrew style. His feet were washed and he was provided the best room in the dwelling for his rest. He learned that the people identified themselves as French subjects who had left Morocco centuries earlier when Berbers from southern Morocco invaded the place where they lived in northern

Morocco. (A cursory review of Moroccan history reveals that this period of persecution for North Moroccan Jews apparently took place sometime during the 11th and 12th centuries.)

According to Leblonde, the fathers of the settlers at Alouna had originally intended to cross over to Egypt and into Palestine to visit “the land that flows with milk and honey,” (Old Testament) but because of disease, famine, and warfare they had to remain in the desert. Nevertheless, they had never abandoned their hope to migrate to their homeland some day. He reported that the Jews were dark-skinned and could easily be taken for part of the native population of Africa. But they had held to their Jewish traditions by keeping their ritual service and ancient Hebraic books, and even having Talmudic commentators.

After 3 days Leblonde’s plane engine was repaired and he returned home. His story was reported in the “New York Evening World” for November 15, 1928. The article was signed by Pierre Van Paassen and was dated Paris, November 7.

The question to be asked about the Jewish settlement at Alouna is not whether the community was Jewish. We have the documented story. The question is whether or not Alouna’s inhabitants were descendants of Jews or Fulani! For anyone reading the history of the African continent, it’s hard to tell the difference.

For his part, Joseph J. Williams, the scholarly priest who authored Hebrewisms of West Africa, believed that the Fulani, and some other groups as well, were “exile Jews.” He apparently believed that while some of the Hebrews moved back into the Levant when they left Egypt, others remained in Africa and never left.

In summary, it appears to this researcher that E1a1 was born when the Dogon, a strong E1a group, were in northeast Africa or the Levant. The Fulani, who were present in the same area and closely associated with the Dogon, picked up the haplogroup and became disseminators of it, first, through North Africa, and then all the way down into the sub-Saharan.

The most important question of all may be: Who are the Fulani? Are they descendants of the Hebrews? Certainly, some of them are! And if so, this would suggest that not all of the Hebrews (Hyksos?) left Africa for the land of Canaan, which would not be hard to believe since people are often reluctant to abandon what they consider their homeland. If the pastoralists were indeed “the shepherd kings” and did, indeed, live in Egypt for several centuries, it is reasonable to assume that if a decision was made to leave Africa, some would go while others would remain. But, some things we don’t have to guess about! We know, for example, that Jewish families settled in North Africa and even down into the sub-Saharan region long after Moses took the Israelites into the Levant.

Admittedly, the spread of E1a1 by the Fulani is debatable. Some would argue that E1a1 could have been assimilated into the pastoralists in recent times from some group in the sub-Saharan. But what group would that be? The Dogon have no E1a1 that is measurable and every other non-Fulani group that has any has precious little. Besides, the places in Africa where E1a1 can be found seem to be the places where the Fulani have lived or are presently located.

When I asked Viktor Cerny about the age of the Fulani y-dna, he said he would judge it more likely to represent thousands of years in age, rather than hundreds. So, it's very likely that E1a1 has been carried by the Fulani literally for millennia. No, it is not their dominant haplogroup, not even close! But it is present and it is being spread by these traveling nomads.

Finally, it is E1a1, and not E1a* or its other subclades, that seems to appear among the Ashkenazi men who fall under the heading of E1a, just as E1a1 seems to be the more dominant clade of E1a among the Fulani pastoralists. Why, then, we might ask, are E1a* and the other subclades mostly absent? The obvious answer would seem to be that they don't appear often because it was E1a1 that was spread among Jewish men, not E1a* or one of its other subclades. Perhaps, just maybe, this tells us something about where it originated!

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Emails:

Dr. Viktor Cerny

Dr. Tatiana Karafet

Dr. William F. S. Miles

Dr. Jana Novackova

Dr. Beverly Strassmann

Dr. Elizabeth T. Wood

**Written By Robert E. Hall
Haplogroup E1a1
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