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The Cohen Modal Haplotype

The whole field of genetic genealogy was launched, practically speaking, in 1997, when a Canadian physician noticed at temple that a fellow congregant who was a Sephardic Cohen looked nothing like an Ashkenazi Cohen. Theoretically, they should have the same pedigree and show a family resemblance.

He consulted with geneticists and wrote a letter to the journal *Nature* claiming that the most common set of Y chromosome microsatellite scores shared by men named Cohen (Hebrew for "priest") represented the genetic signature of Aaron, the patriarch who founded the Jewish priesthood: The inference was that all Jewish men with the surname Cohen were descended from Aaron, the brother of Moses.⁶ A study published the next year proposed that Aaron's descendants had been found among carriers of the so-called Cohen Modal Haplotype, defined as DYS19=14, DYS388=16, DYS390=23, DYS391=10, DYS392=11 and DYS393=12.⁷ A follow-up investigation of a South African tribe, the Lemba, who claim to be Jewish, showed that indeed they bore the Cohen Modal Haplotype, which they could only have received from Jewish

⁶ Karl Skorecki *et al.*, "Y chromosomes of Jewish priests." *Nature* 385 (1997) 12.

⁷ Thomas, M.G. *et al.*, "Origins of Old Testament priests." *Nature* 394 (1998) 138-40.

male founders, presumably far-traveling merchants from the Middle East.⁸

Over the following years, however, this theory began to unravel. The CMH was found in J1, as well as J2 and even J*. How could a single haplotype belong to different subclades of J? Was it a matter of "convergence," a hypothetical event by which the same set of scores, in time, could be produced from multiple unrelated parent haplotypes that just happen to coincide?

Such efforts to detect a genetic signature's survival in the Y chromosome unchanged over 3,500 years (approximately the amount of time since the time of the patriarchs) are misplaced. It should come as no surprise that the original "discovery" has never been proved. Here's where countless genetic genealogy enthusiasts miss the mark. The average mutation rate for Y-STRs, the "alleles" that create differences in haplotype scores, is 2.1×10^{-1} , or once every 476 generations, i.e., once every 9,520 years.⁹ But this estimate is computed on the basis of *one* allele changing—either increasing by 1 or diminishing by 1; for instance, the number of repeated tags on the marker DYS14 might randomly mutate from a count of 14 to 15. Since the number on any given microsatellite can mutate in either direction, no matter how it changes over the centuries, the alleles tend to balance out and hover around a central score. In other words, the count does not keep going in either direction, up or down. Theoretically, then, a score of DYS19=14 could be produced by a mutation from either DYS19=13 or DYS19=15, in which case two different parent haplotypes might look the same and be indistinguishable.

Where most people make a mistake, however, is to forget that these

⁸ Thomas, M.B. *et al.*, "Y Chromosomes Traveling South: The Cohen Modal Haplotype and the Origins of the Lemba the "Black Jews of Southern Africa." *American Journal of Human Genetics* 66 (2000) 674ff.

⁹ See "Y-STR Haplotype Reference Database," created by Sascha Willuweit and Lutz Roewer, Institute of Legal Medicine, Humboldt-Universität Berlin, Germany, in cooperation with Michael Krawczak (Kiel), Manfred Kayser (Leipzig) and Peter de Knijff (Leiden), based on the continuous submission of Y-STR haplotypes by the International Forensic Y-User Group." Release 18 from January 31, 2006. Available online at <http://www.yhrd.org>. Also E. Heyer *et al.*, "Estimating Y chromosome specific microsatellite mutation frequencies using deep rooting pedigrees." *Human Molecular Genetics*. 6(1997): 799-803.

statistics apply to *one* microsatellite. Hence, when two haplotypes match (no matter how many markers are tested in common on them, whether it is 4, 8 or 12) it is conventionally reported that the "most remote common ancestor", the male ancestor they share, lived about 10,000 years ago. For multiple matching sites, however, one must *multiply* the probabilities, and if we do this, for nine markers (the searchable standard in the YHRD), we obtain a *combined* mutation rate of once every 952 years, i.e. a time depth of 500-1,500 years, about a millennium ago. In other words, matches on nine sites go back to about the year 1000.

And what about convergence—the creation of a single, ambiguous configuration from two different parent configurations? The probability of this randomly occurring could be computed, and the chances of such a fluke happening are more and more remote the greater the number of markers considered, but the possibility of it occurring and surviving is remote. The reason is a combination of genetic drift, founder effects, bottlenecks and what may be called political, or cultural (instead of natural) selection. Over time, a self-contained population has a tendency to emphasize certain genetic types while others die out or become insignificant.

It is unlikely that in the same relatively narrow time frame two distinct haplotypes formed by the rare process of convergence would become dominant, favored by political circumstances or the momentum of history. In Y chromosomal haplogroups, founder types like Genghis Khan (or what is more likely, his Mongol kinsmen as a whole) had many sons and were favored by military victories and wise governance, so that their genetic signature is evidently present in millions of Asian men.¹⁰ But both Khan and the Viking Somerled (the progenitor of a sizable part of the Irish and Scottish population, according to Oxford Ancestors)¹¹ lived about 1,000 years ago, not 3,500 like Aaron. Even if Aaron's progeny did prosper and survive, it would have split into dozens of different genealogies (though these still could not cross subclade boundaries, since J1 and J2 went their different ways over 10,000 years ago, long before Aaron). The search for the ancient roots of the Jewish

¹⁰ *Science News*, Feb. 8, 2003.

¹¹ *The Scotsman*, "DNA Shows Celtic Hero Somerled's Viking Roots," by Ian Johnston (April 26, 2005), available at www.scotsman.com.

priesthood is as misguided as the attempt to prove an unbroken genetic or cultural link between the inhabitants of the state of Israel and Biblical Israelites. If Skorecki, Thomas, Hammer and company found any modal Jewish haplotype at all, it is probably the genes of a prolific medieval rabbi who lived about 1,000 years ago and had numerous sons and grandsons. Whether his family was Old Palestinian or not is debatable. Certainly, six markers are not enough to judge.

We have included this tangent because among the Sephardic Jews there are several haplotypes which differ greatly from the Ashkenazi CMH but which are thought nonetheless to be Kohanim, including a Scottish J type associated with the name Gordon (claimed to be a corruption of Cohen), Iberian J2 type (often borne by males with the name Sanchez, a late Roman and Visigothic surname meaning "priest, or holy man") and even some R1bs (Cowan) and E3bs. Such diverse types prove, again, that medieval Jewish communities were formed as often from local convert populations as from a core of supposedly Old Palestinian males.¹²

"There are already many fine books on the history of the Jews in the Middle Ages," writes Theodore L. Steinberg, an English professor at State University of New York, in the preface to his *Jews and Judaism in the Middle Ages* (Wesport: Praeger, 2008). So why another one?

"All of those other studies, as excellent as they are, presume a certain degree of knowledge on the part of the reader—knowledge of Jewish customs and traditions and beliefs, as well as a general knowledge about the Middle Ages," he continues.

If you have never been to a synagogue service, don't know many observant Jews and, perhaps, just discovered an interest in Judaism after finding Jewish ancestry in your family tree, this is the book for you. Beginning with the first chapter, "Jews and Judaism, What Are They?" and continuing with "Talmud and Midrash," Steinberg skillfully guides

¹² Oddly, we did not find any Cohens, Katzes or related surnames among the Js in the Y-Haplogroup J Base at www.m410.net/yjdb/ and only one man specifically named Cohen claiming to be of the ancient priestly lineage in Family Tree DNA's Ysearch at www.ysearch.org. On the other hand, there were Stewart, Alexander, Forbes and Adair Js (all Scottish clan names), as well as numerous Cohens classified as R1b and E3b.

the reader through a crash course on Jewish history since the advent of Christianity. He introduces us to the rabbinical traditions of Judaism, Mishna, Gemara and all the flowering branches of halakah or Jewish law. We learn why Jews were blamed, and tolerated, by the Church. We learn about everyday life in cities where Jews, Christians and Muslims mixed, Jewish occupations, their literature, philosophy and the Cabala, all major areas of intersection with Christian society.

Appendix I has a good chronology of important events, from the life of Rabbi Akiva, which overlapped with that of Saul/Paul to the infamous date of 1492.

Joseph Jacobs

Another masterwork on Judaism intended primarily for non-Jewish readers is Joseph Jacobs' *Jewish Contributions to Civilization. An Estimate* (Philadelphia: Jewish Publication Society of America, 1919). This began life as the Australian Judaic scholar's *Studies in Jewish Statistics*, published in an anthropology journal in 1891, at the height of his fame. It was to be the first volume in a trilogy, the second book devoted to individual, rather than collective, contributions to European culture, the third a philosophical answer to anti-Semites about the value of Jews in the modern secular state. Alas, Jacobs died in 1916, leaving only notes for the second book and nothing at all of the third.

For Jacobs the watchword is always "judicious." He never exaggerates Jewish influence, emphasizing again and again that the number of Jews at no time, probably, rose above one-half of 0.1 percent in Western Europe, outside of countries where Jews were tolerated such as Moorish Spain and Poland/Lithuania under the Jagellon dynasty.

Did Jewish thinkers transform medieval philosophy from the stale dogmas of the theologians into more modern ideologies? Maybe, but they were only part of the movement.

His considered assessment of the Jewish contribution to medieval fables and folklore, one of his academic specialties, is "about one-tenth" of the material. There are those today, however, who would go so far as to say all of troubadour poetry and half of courtly love romances were inspired by the Judeo-Arabic tradition of Spain and southern France, with deeper roots in Arabia, Egypt and Babylon.

Did the Radanite ("From Persian *rah dan*, knowing the way") merchants plying the Silk Road in the early Middle Ages introduce all the choice import goods and enlightened ideas we associate with the East?

"Europe owes to the Jewish Radanites the introduction of oranges and apricots, sugar and rice, Jargonelle pears, and Gueldre roses, senna and borax, bdellium and asafoetida, sandalwood and aloes, cinnamon and galingale, mace and camphor, candy and julep, cubebs and tamarinds, slippers and tambours, mattress, sofa, and calabash, musk and jujube, jasmine and lilac " (p. 203).

But their influence was limited. Beginning in the 12th century, Venice took away the monopoly on the Levantine trade, just as Lombard merchants replaced Jews as bankers and moneylenders throughout most of Europe. The transition to a moneyed economy, according to Jacobs, was not due to Jews.

On the subject of Jews and capitalism, including stock exchanges and paper money, Jacobs takes a Ciceronian position. He denies that any Jews were involved with the South Sea Bubble, Mississippi Scheme of John Law or other experimental business models of the day. He does not even think that Jews fostered acceptance of bills of exchange or letters of credit. He points out that even with the Dutch East India Company, Jews had only very moderate ownership (although we wonder if, like the silent partner behind the usurious kings of medieval times, the partners named Coen and Hendricks and the like chose rather to have their names out of it), while the Jewish presence was absent at the first exchanges in Antwerp and London, and later minimal.

We think he might be too circumspect here. The Jewish role in the discovery, exploration and development of the American colonies is set forth in detail in Elizabeth C. Hirschman and Donald N. Yates, *Jews and Muslims in British Colonial America* (Jefferson: McFarland).

Jacobs is particularly harsh toward his contemporary Werner Sombart, who wrote an enthusiastic and eulogistic apology for the Jews in economic history (*Die Juden und das Wirtschaftsleben*, Leipzig, 1911, trans. by M. Epstein, 1913, *The Jews and Modern Capitalism*). Jacobs calls the European professor of economics' work a "farrago of fantasies about Jewish life and religion" (p. 259). The dour Victorian explicitly rejects Sombart's equation of the American way of business with Jewish

practice and influence ("what we call Americanism is nothing else than the Jewish spirit distilled"). Again, however, we think Jacobs is bending over backward not to appear partisan. His objections to Sombart's arguments seem academic and petty if Sombart was on the right track, as most people concede today.

Prudent or Prudish?

In the same way, we feel that Jacobs' inability to detect any Jewish influence in the Puritans, or indeed the entire Reformation, is willfully blind.

"It cannot be by chance," he writes, "that the three most prominent voices among the Politiques (advisors to French king Henri IV), who laid down the principles which were to result in the Edict (of Nantes, granting toleration to Protestants, 1598)— Michel de l'Hopital, Jean Bodin and Michel de Montaigne—were all partly of Jewish race" (p. 281). But what he gives with one hand Jacobs takes away with the other, for he goes on to say that the influence of these men stopped with the borders of France, while "freethinkers" in other countries like Baruch Spinoza certainly did not meet with much success.

And of course, looking ahead to the eventual playing out of these policies, we cannot attribute either the American Bill of Rights or French Revolution to Jews, can we? Jacobs has a bowdlerized version of Jewish influence. He is willing to take modest credit for the good things Jews introduced, while letting their Christian imitators line up in the limelight and get the glory, but he doesn't want to admit that Jews might have been responsible for or at least complicit in some evils in modern society, such as communism, the militaristic state and free love ("the sexual vagaries of *Enfantin*," p. 308).

June 25, 2011

Plato Geneticist

Mary Settegast is described on the jacket simply as an archeological researcher, the 20-year-old book being *Plato Prehistorian: 10,000 to 5,000 B.C. Myth, Religion, Archaeology* (Hudson: Lindisfarne, 1990).

It's obvious she is not a member of the entrenched academic community of archeologists and prehistorians, for she spends most of the introduction to her fascinating study inveighing against the Old Model and New Archeology and defending the value of myth.

She then retells the Egyptian Priest's tale from Plato's *Timaeus* about how Solon's ancient Greek ancestors defeated an aggressive Atlantic sea-power situated on a now-lost continent beyond the Straits of Gibraltar—the so-called Atlantis myth, which has no other source but the writings of Plato. Her thesis is that Plato is representing what he believed to be historical fact. Among other arguments, Settegast points out that it would have been impious for him to contrive a political fiction and put it in the mouth of Critias, who attributes the story to his grandfather, who received it from Solon himself, given the occasion of the dialogue, a celebration of Athena's festival day. She asks, "Would Socrates have Critias offer to the goddess as 'a just and truthful hymn of praise' (*Timaeus* 21) an intentional misrepresentation of Athena's own past history with the Greeks?"

Once Plato's word and intentions are vindicated, it is possible to study the scattered clues he gives us to prehistory of the Mediterranean world in a new light. Settegast makes a good case that the Magdalenian cave art of 17,000/15,000 to 9000 B.C.E. preserves the fading glory of an Atlantic culture of enormous power and sophistication that came to an abrupt end toward the end of the 10th millennium. She brackets the question of the location of a sunken continent and dwells instead on the blunders of modern prehistorians who fail to grasp the advanced picture of civilization left to us in Paleolithic remains like the Lascaux paintings. For instance, most anthropologists have explained the paintings as vehicles for sympathetic hunting magic without noting that it is the horse that is most commonly depicted while excavations of Magdalenian sites reveal almost exclusively the remains of reindeer as their principal animal food. The religious significance of the animals is lost on most analysts. Plato, as usual, provides the pertinent clue: the Atlantics worshipped Poseidon and regarded his sacred animal the horse with great awe. A revisionist look at the horses in cave paintings clarifies that the lines on horses' heads represent harnesses, not natural contours or anatomical details, proving that the Magdalenians or Atlantic peoples had tamed the horse by 12,000 B.C.E., some 8,000 years before the date

assigned to the domestication of the horse in the conventional model.

I've just started to read the book and will conclude this preview for the blog by mentioning that one obstacle to accepting Plato's story at face value was that he describes the Atlantics as literate. The recent re-evaluation of the "magic signs" in Magdalenian caves as a writing system with heirs in many Old World alphabets seems to bear him out once again ... and make his detractors look stupid and full of hubris. It is the effect many Socratic dialogues were meant to have on their readers.

Addendum: One of the offshoots of Atlantic Culture according to *Plato Prehistorian* was the Çatal Hüyük civilization that flourished in Anatolia from 6200-5300 B.C.E. Only 2 percent to 3 percent of the 32-acre site has been excavated, but what has come to light so far includes amazing cyclopean walls, refined wall paintings and peculiar religious practices such as a vulture-bull rite, leopard shrine and Mistress of the Animals cult reminiscent of Venus figurines. It is conceivable that Atlantic Culture itself was spurred to life originally by admixture of Europeans with Neanderthals, since there are numerous signs of Neanderthal culture in archeological remains. Significantly, the Venus figures once associated with Gravettian Culture now appear to have had their origins with Neanderthals, who occupied Europe for 350,000 years before *H. sapiens sapiens*. Venus figurines were worn about the neck by Neanderthals, as proved in several excavations in Spain and elsewhere. In 1961, archeologists unearthed the skull of a Neanderthal man in the ancient site of Chalcedon on the east side of the Bosphorus in Asia Minor, although the find is seldom mentioned today.

Our Neanderthal Index is based on affinities with archaic populations presumed to carry the highest rate of admixture with Neanderthals. These include many of the Atlantic and Mediterranean populations mentioned in *Plato Prehistorian*, including Greek, Turkish, Syrian, Arabian, Basque, Egyptian and Berber.

June 6, 2010

Now Come Jewish DNA Studies

Two major research articles on Jewish DNA appeared in June. As reported by Nicolas Wade in *The New York Times* in an article titled "Studies Show Jews' Genetic Similarity," they settle an old controversy.

One of the surveys of genomic or autosomal DNA was conducted by Gil Atzmon of the Albert Einstein College of Medicine and Harry Ostrer of New York University and appears in the *American Journal of Human Genetics*. The other, led by Doron M. Behar of the Rambam Health Care Campus in Haifa and Richard Villems of the University of Tartu in Estonia, is published in the journal *Nature*.

The two teams reached similar conclusions independently and simultaneously. Their findings refute the long-standing contention that Jews "have no common origin but are a miscellany of people in Europe and Central Asia who converted to Judaism at various times."

One of the articles, published online June 9, and in print July 8, was "The Genome-Wide Structure of the Jewish People," (*Nature* 466, 238-42). The editors' summary for it goes like this:

A comparison of genomic data from 14 Jewish communities across the world with data from 69 non-Jewish populations reveals a close relationship between most of today's Jews and non-Jewish populations from the Levant. This fits in with the idea that most contemporary Jews are descended from ancient Hebrew and Israelite residents of the Levant. By contrast, the Ethiopian and Indian Jewish communities cluster with neighbouring non-Jewish populations in Ethiopia and western India, respectively. This may be partly because a greater degree of genetic, religious and cultural crossover took place when the Jewish communities in these areas became established.

An abstract for the other article mentioned by *The New York Times*, "Abraham's Children in the Genome Era," is given as follows by the publisher, *The American Journal of Human Genetics*:

For more than a century, Jews and non-Jews alike have tried to define the relatedness of contemporary Jewish people. Previous genetic studies of blood group and serum markers suggested that Jewish groups had Middle Eastern origin with greater genetic similarity between paired Jewish populations. However, these and successor studies of monoallelic Y chromosomal and mitochondrial genetic markers did not resolve the issues of within and between-

group Jewish genetic identity. Here, genome-wide analysis of seven Jewish groups (Iranian, Iraqi, Syrian, Italian, Turkish, Greek, and Ashkenazi) and comparison with non-Jewish groups demonstrated distinctive Jewish population clusters, each with shared Middle Eastern ancestry, proximity to contemporary Middle Eastern populations, and variable degrees of European and North African admixture. Two major groups were identified by principal component, phylogenetic, and identity by descent (IBD) analysis: Middle Eastern Jews and European/Syrian Jews. The IBD segment sharing and the proximity of European Jews to each other and to southern European populations suggested similar origins for European Jewry and refuted large-scale genetic contributions of Central and Eastern European and Slavic populations to the formation of Ashkenazi Jewry. Rapid decay of IBD in Ashkenazi Jewish genomes was consistent with a severe bottleneck followed by large expansion, such as occurred with the so-called demographic miracle of population expansion from 50,000 people at the beginning of the 15th century to 5,000,000 people at the beginning of the 19th century. Thus, this study demonstrates that European/Syrian and Middle Eastern Jews represent a series of geographical isolates or clusters woven together by shared IBD genetic threads.

Critics of the new research findings point out that there are still no known markers for Jewish ancestry in genomic DNA. They obviously are not among our customers, however, since those who have purchased the 18 Marker Ethnic Panel available since last year are routinely screened for Jewish I, Jewish II and Jewish III. Their locations on genomic DNA were discovered by the company last August.

A Jewish genetic signature expressed in terms of autosomal DNA was predicted last year in a study titled, "A Genome-Wide Genetic Signature of Jewish Ancestry Perfectly Separates Individuals with and without Full Jewish Ancestry in a Large Random Sample of European Americans," by Ann C. Need et al. (*Genome Biology* 2009, vol. 10). That study spoke of "near perfect genetic inference of Ashkenazi Jewish ancestry." Interestingly, it also foresaw that "the genetic distinction between Jews and non-Jews may be more attributable to a Near-Eastern (i.e. Middle

Eastern) origin for Jewish populations than to population bottlenecks." (American usage favors "Middle East" over the British and outdated "Near East" still retained in academia.)

A final study of Jewish autosomal DNA that deserves mentioning is "Genomic Microsatellites Identify Shared Jewish Ancestry Intermediate between Middle Eastern and European Populations," published also last year in *BMC Genetics*, vol. 10, by Naama M. Kopelman et al. It used 678 autosomal microsatellite loci in 78 individuals, but what is proven on a large scale seems equally true on the small scale of our three Jewish markers based on microsatellites forming part of your DNA fingerprint.

August 20, 2010

Signs of Crypto-Judaism

As part of our series on Jewish ancestry, we reproduce below an appendix from the book, *Jews and Muslims in British Colonial America*, by Elizabeth C. Hirschman and Donald N. Yates.

Rituals and Practices of the Secret Jews of Portugal

The following is an incomplete list of practices that may be indicative of Jewish origin among Anusim or secret Jews or former Jewish families in the New World today. Adapted from Professor Eduardo Mayone Dias, Department of Spanish and Portuguese, UCLA. .

Told one is Jewish explicitly by parents, grandparents, or other relatives,
a boy when he turns 13, a girl at 12.

Having Jewish family names: Duran, Lopez, etc.

Secret synagogues; secret prayer groups.

Avoiding church.

Churches without icons.

Lighting candles on Friday night when the first star appears.

Clean house and clothes for Shabbat.

Not allowed to do anything Friday night (not even wash hair).

El Dia Puro (Yom Kippur).

Celebrating a spring holiday.

Fasts: three days of Tanit Esther; every Monday and Thursday, fast of Gedalia.

Venerating Jewish saints, with celebrations: Santa Esterika, Santo Moises, etc.
 Eight candles for Christmas.
 Circumcision; consecration on eighth day (avoiding circumcision because that would bind child to the laws of Moses).
 Biblical first names, like Esther.
 Women taught Tanakh and ruled on questions.
 Married under huppah/canopy.
 Rending of garments; burial within one day; covering mirrors; spigots in cemeteries.
 Seven days, then one year, of mourning.
 Tombstones bearing Hebrew names, designations such as "daughter of Israel," and Jewish symbols (hand pointing to a star, open book of life, torah, star of David).
 Possessing talit and tefillin, mezuzot, Tanakh, siddurim other Jewish objects.
 Sweeping the floor away from the door (to avoid defiling mezuzah).
 Having Cabalistic knowledge and practices.
 Ritual slaughter (special knives, tested on hair or nails); covering blood with sand; removing sinew.
 Purging, soaking, salting, boiling meat.
 Avoiding pork and shellfish and other non-kosher foods (squirrel, rabbit).
 Avoiding blood; throwing out eggs with bloodspots.
 Avoiding red meat in general.
 Waiting between meat and milk.
 Eating only food prepared by mother or maternal grandmother.

Birth Rituals

To place a rooster's head over the door of the room where the birth will occur.
 After the birth, the mother must not uncover herself or change clothes for 30 days.
 To throw a silver coin into the baby's first bath water, especially a son's.
 To say a prayer eight days after birth in which the baby's name is included.
 Belief that the fairies (*hadas*) preside over a naming ceremony at birth

Wedding Rituals

Only home weddings.

To fast on the wedding day (both bride and groom, as well as two male friends of the groom and two female friends of the bride).

To bind the bride and groom's hands with a white cloth while a prayer is said.

To follow the wedding ceremony with a light meal consisting of a glass of wine, salt, bitter herbs, honey, an apple and unleavened bread.

At the wedding ceremony, bride and groom eat and drink out of the same plate and glass.

Marrying your brother's widow (Levirate law).

Funeral Rituals

To have ritual meals to which a beggar is invited and serve the food the deceased liked best.

To throw away all water in the home of the deceased.

To leave furniture overturned to show how a relative's death has upset the family.

To appear disheveled and careless about your own appearance during mourning.

To go to the deceased's room for eight days and say: May God give you a good night. You were once like us, we will be like you.

Not to shave for 30 days after the death of a relative.

Not to eat meat for one week after a death in the family, then fast on the anniversary.

Naming Rituals

Having two names, a private one in Hebrew (*kinnui*, e.g. Moses) and public one in the vernacular (Morris). Others: Jacob/James, Raphael/Ralph, Hannah/Johannah, Adina/Adelaide.

Allusions to mascots of Hebrew tribes like deer (Naphthali) and wolf (Levi).

Belief in being descended from the Biblical King David.

Naming after religious objects: Paschal, Menorah.

Translating Hebrew names, especially girls': Hannah into Grace, Esther into Myrtle, Peninah into Pearl, Roda into Rose, Shoshannah into Lillian, Lily. Simchah into Joy, Tikvah into Hope, Tzirrah into

Jewel, Golda into Goldie.

Allusions to Jacob's blessing of his sons and grandsons, e.g. Fishel for Ephraim because he was to multiply like the *fish* of the sea.

Use of Hebrew, but non-biblical names (e.g., Meir, Hayyim, Omar, Tamarah/Demarice).

Use of names from Jewish legend and folklore (e.g. Adinah, Edna, Adel, progenitress of the tribe of Levi).

Use of hypocoristic or pet names within the family alluding to Hebrew ones, for instance Zack or Ike for Isaac, Robin (Rueben) instead of Robert.

Adding the theophoric suffix -el to surnames, e.g., Lovell, Riddell, Tunnel.

Naming after a living relative, preferably the eldest born after the grandfather or grandmother, the next born after uncles and aunts and only after the father when these names are exhausted (Sephardic) or naming only after dead relatives (Ashkenazic).

Use of double names like Edward Charles and James Robert.

Changing the name of a child who becomes ill to foil the angel of death.

Giving a child an amuletic name like Vetula ("old woman") to bring long life.

Favoring names that begin with Lu- to remind the child that the family was once Portuguese (Lusitanian): Louise, Luanne, etc.

Belief in gematria (numerology of names, determined by Hebrew alphabet)

Avoiding saint's names (Paul, Peter, Barbara) and using Marianne or Mariah instead of Mary.

Jokes about the virgin birth of Jesus by Mary

Using names like Christopher or Christina to dispel doubts about conversion to Christianity.

Knowing whether your family belongs to the Kohanim (priestly caste), Levite (House of David) or Israelite (all the rest) division of Jews.

Other

Swearing an oath with your hat on.

Not mentioning the name of God. Writing it G*d.

Washing your hands before prayer.

A father blessing a son in public.

DONALD N. YATES and TERESA A. YATES

Saying grace after the meal.
Bowling and bobbing during religious service.
Jokes about the central tenets of Christianity (Immaculate Conception of Mary, rising from the dead of Jesus, etc.).
Deriding idolatry of saints and ornate decor of churches.
Hatred of the pope.
Preparing Saturday's meal (often a slow-cooking stew, for instance of eggplant) on Friday afternoon so no work is performed on the Sabbath.
Eating preferably fruits that grow in the land of Israel (dates, olives, oranges, grapes, peaches etc.).
Spreading sand from Israel on a grave or in a sanctuary.
Eating tongue on Rosh Hashanah to symbolize *head* of the year.
Having Bibles containing only the Old Testament and prayer books consisting only of the Psalms.
Having pictures of rabbis and scholars rather than saints in the sanctuary.
Performing tashlich, letting old clothes float away in running stream to mark a new year.
Forgiving a debt on Yom Kippur.
Facing Jerusalem during rituals.
Uttering brief blessings when you see lightning, mountains and other natural wonders.
Using only percussion instruments like the tambourine and hand clapping in services.
Silent prayer by congregation after prayers made out loud.
Worship services in the home.
Having 11 elders in a place of worship (minyam).

August 25, 2010

Abraham's Children: A Review

Implications for Jewish History and Genealogy

Article: Gil Atzmon et al., "Abraham's Children in the Genome Era: Major Jewish Diaspora Populations Comprise Distinct Genetic Clusters with Shared Middle Eastern Ancestry," *American Journal of Human Genetics* 86 (June 11, 2010) 850-859.

This blog post attempts to summarize this important article and translate its technical results into layman's language for the sake of our customers. From the genetic evidence, we hope to glean some useful information about Jewish history and genealogy, especially for those who find they have "some" Jewish ancestry in their family tree but who are non-Jewish in the way they identify.

The eleven authors represent a stellar team of international researchers specializing in population genetics. The institutions involved are leading centers of genetics and biomedicine, starting with the Albert Einstein College of Medicine in New York and including Tel Aviv University in Israel. Appearance in the *American Journal of Human Genetics*, a publication of the American Society of Human Genetics, assures prestige and finality of the highest order.

The study uses a new sample of 237 carefully qualified Jewish subjects, which it compares with data from the Human Genome Diversity Project started at Stanford in the 1990s, as well as the Population Reference Sample (PopRes) project, containing hundreds of thousands of SNPs (single nucleotide polymorphisms, used to differentiate genes that show heredity lines and disease linkage in populations).

The scale of the project is colossal, and it must have taken years to complete. Financial support came from private and public sources, including the U.S.-Israel Binational Science Foundation and NIH. It supersedes (while it confirms or clarifies) the two types of previous approaches to the problem: 1) genetics studies on blood groups from the 1970s, and 2) recent studies of Y chromosomal and mitochondrial haplotypes. The latter "uniparental" studies could only offer a limited view of the subject. This study uses autosomal DNA to its full advantage. The scientists had supercomputers and the latest tools in biostatistics at their disposal.

Material and Methods

The two cornerstones of any statistical study are reliability and validity. Experts would be challenged to find anything wrong with the reliability of "Abraham's Children." State-of-the-science genotyping, phylogeny, bootstrapping and GERMLINE algorithms are employed. But validity

issues may be mentioned as likely to call some of the findings into slight question in some areas. Subjects were recruited in New York (Iranian, Iraqi, Syrian and Ashkenazi Jews), Seattle (Turkish Sephardic Jews), Greece (Greek Sephardic Jews) and Rome (Italian Jews). The main divisions into Italian, Ashkenazi, Syrian, Middle Eastern (termed Mizrahi, or Eastern, Jews here) can be seen in some instances to be question-begging, and there are equivocations in labels that might, conceivably, create "desired results." Moreover, subjects "were included only if all four grandparents came from the same Jewish community." Such a rule might have influenced one of the findings, namely, that "Jewish Communities Show High Levels of IBD," or Informative By Descent, shared segments of DNA (p. 855f.).

Notably, the conclusion that Ashkenazi Jews are highly inbred, with most being as close as third or fourth cousins to each other, could be an effect of the sample selection from New York Ashkenazi Jews, who often emigrated together and belonged to the same synagogue for several generations. A larger, more randomized selection would have been better. The total number of Ashkenazi Jews used was only 34 persons.

Jews now living in Rome are not the same as Roman Jews. Traditional schemes of Jewry speak of the Romaniot Jews, but these were traditionally at home in the Byzantine Empire. Are Syrian Jews mostly Middle Eastern or are they another amalgam of émigrés and remnants? Where are Central Asian Jews like the large Uzbekistani population my local barber represents? The absence of Caucasian and Central Asian Jews may have affected the study's rather resounding, overconfident statement that it "refutes" the contention that Ashkenazi Jews have little Middle Eastern heritage and rather more of a contribution to their genetics from Khazars and Slavs. The study, like many, seems at pains to prove Middle Eastern connections of Ashkenazi Jews, who are the leading force in present-day Israel.

There are no German, Dutch, Spanish, Portuguese or English Jews in the study. "Ashkenazi" seems to represent Jews living in New York with rather uniform ancestry in Poland, Hungary, Ukraine, Lithuania and Russia. All Jews in the study seem to be of the "go to temple" (at least on the High Holy Days) sort, although no mention is made of religious orientation. Subjects were chosen because of their ostensibly "pure" Jewish roots.

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Seven Jewish population clusters are defined:

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- Italian Jews
- Greek Jews
- Turkish Jews

These were sorted out into three major groups of the Jewish Diaspora:

- Eastern European Ashkenazim
- Italian, Greek and Turkish Sephardim
- Iranian, Iraqi and Syrian Middle Easterners

How Different are Jews?

Table 1 on page 853 shows F_{st} values, which indicate the degree of projected inbreeding within a cluster and allow one to make comparisons between clusters. If we look at the table of genetic diversity among Jews, we can pick out some of the following points of interest:

- Ashkenazi Jews are very, very different genetically from Italian (Sephardic) Jews: genetic distance between the two populations is over 3.1, whereas that between Ashkenazi Jews and non-Jewish European populations such as Russian or French hardly ever goes above 1.0.
- Syrian and Iraqi Jews are also very different from each other; Syrian Jews group together with European (Ashkenazi and Sephardic) Jews, a major finding of the study.
- All Jewish populations, including Ashkenazim, resemble genetically the Druze, a Middle Eastern population that is still in its original place in Lebanon and Israel. Syrian and Turkish Jews (Sephardim) most resemble Druzes.

The study identifies two major groups of Jews, characterizing them as Middle Eastern Jews and European/Syrian Jews. Of the Middle Eastern Jews, the Irani and Iraqi were scarcely distinguishable. The Europeans have varying degrees of admixture with non-Jewish populations into which they have been dispersed. European Jews are 20 percent to 40 percent (or on another page, 30 percent to 60 percent) European, the study concludes, while Sephardic Jews have 8 percent to 11 percent North African (Berber) DNA. Italian, Syrian, Iranian and Iraqi Jews are the most inbred.

All these statistics "highlight the commonality of Jewish origin" and expose the Middle Eastern origins and genetic unity of Jewish people, even in dispersal from their homeland in ancient Israel.

The flipside of inbreeding is outbreeding or exogamy. If European Jews are highly admixed, by the same token, many Europeans must have some degree of Jewish admixture. Gene flow did not go just one way. What are the most outbred Jewish clusters according to the study? It is the Sephardic Jews from Italy, Greece and Turkey, with low rates of shared IBD and greater diversity than the Ashkenazim.

Lost Tribes Still Lost

The brief discussion section at the end of the article attempts to put the statistical findings together with an outline of Jewish history and resolve some of the mysteries of Jewish genetic makeup, chiefly the Khazar question. "Each of the Jewish populations formed its own cluster as part of the larger Jewish cluster," the authors conclude. "Each group demonstrated Middle Eastern ancestry and variable admixture with European populations."

Next, the authors attack the difficulty of determining when the major split between Eastern and Western Jewish groups occurred (with Syrians falling out with the Sephardim and Ashkenazim in the West, although intermediate in genetic distance with Middle Eastern Jews like the Iraqi and Irani). Based on IBD or calculations of shared genes on the front end or bottlenecks and back end or genetic drift, "a split between Middle Eastern Iraqi and Iranian Jews and European/Syrian Jews...is 100-150 generations [or] 2500 years ago." They correlate this population divide with the Babylonian and Persian periods of Jewish history. These

disturbances began in the 900s-800s B.C.E. when the Kingdom of David fell apart into the Kingdom of Jerusalem and the Northern Kingdom (Samaria, Israel, Ephraim) and were finalized in the 6th century B.C.E. when King Cyrus of Persia granted permission to the exiles to be repatriated from Babylon to Jerusalem.

In the shuffle, the so-called Lost Tribes representing the Northern Kingdom had been dispersed "beyond the river" into Central Asia, leaving the Judeans in the ascendancy in Israel. Although the authors do not explicitly state it, the fact that Syrian Jews are several quantum lengths closer in affinity with European Jews than Middle Eastern Jews seems to reflect the historic Return to Zion and inauguration of the Second Temple in Jerusalem in 516 B.C.E. and to explain why European Jews, especially Sephardim, emphasize the House of David and Tribes of Levi in their traditional ancestral accounts. So far, the autosomal clock of change seems to beat with the march of history.

The article is clear about another thing, "the idea of non-Semitic Mediterranean ancestry in the formation of the European/Syrian Jewish groups," attributing this to the mass conversions and proselytism during Greco-Roman times. It mentions that there were 6 million Jews in the Roman Empire, when Judaism accounted for 10 percent of the population. But here is where the authors' sense of history begins to get fuzzy. They do not speak of medieval conversions or mention, for instance, the Jews of Visigothic and Berber Spain and Septimianian France and gloss over the huge Khazar conversion and expansion event, 600-1000 C.E. Again, medieval history does not seem to be geneticists' strength.

"Abraham's Children" claims that the genetic composition of European/Syrian Jewish groups "is incompatible with theories that Ashkenazi Jews are for the most part the direct lineal descendants of converted Khazars or Slavs" (p. 857). In this brief sentence, are a number of fallacies, special pleading, misnomers, false assumptions, sleights of hand, straw arguments and equivocations. This blog posting can only touch on the controversy, but to begin with, as we have seen, Ashkenazi Jews (n=34, all from New York) are lumped together with Sephardim and Syrian Jews as having Middle Eastern core pedigrees, even though they have the highest amount of local population admixture. Are Khazars the same as Slavs? Not ethnographically. They are sometimes treated as

Middle Easterners and sometimes as Europeans or other interlopers in this article, but it doesn't seem to matter really, because there are no Khazars in the study sample. The authors are thus stalking a phantom, which they duly track down and slay.

Ghost in the Machine

Using haplogroup studies, the authors raise the possibility of 12.5 percent non-Middle Eastern admixture per generation in Ashkenazi Jews (based on Hammer et al.). They also draw attention to the 7.5 percent frequency of haplogroup R1a1 among Ashkenazi Jews, a non-Middle Eastern, rather Eastern European male lineage. But R1a1 is not diagnostic of Khazars; try maybe G. R1a1 descendants are typically fair haired and light-eyed; Khazars had a Middle Eastern, Turkic appearance, with dark features.

In a sense, geneticists always seem to find support for what they set out to prove in the first place. It is small wonder that "Abraham's Children" comes at the end of and completes a decades-long push by Big Science to legitimize Jewish claims to Middle Eastern roots. It is a splendid survey, the last in a long series, but it is not the final word on the subject. There are flaws both in the sampling and historical thinking.

The Thirteenth Tribe by Arthur Koestler, a Hungarian Ashkenazi Jewish author, advanced the thesis that the modern Jewish population in Central and Eastern Europe is not descended from the historical Israelites of antiquity, but from Khazars. This Turkic people of the Caucasus region converted to Judaism in the eighth century and moved into Russia, Hungary, Ukraine, Poland, Belarus, Lithuania and Germany during the 12th and 13th century when the Khazar Empire was collapsing. Koestler's work was founded on that of the French scholar Ernest Renan and set off a firestorm of controversy among Zionists.

August 26, 2010

Does He or Doesn't He? Only His Geneticist Knows for Sure

A visit to the temple by a Canadian doctor and one-page letter to the journal *Nature* in 1997 started it all, a frenzied hunt for the multi-study, double-blind, placebo-controlled proof that Jewish men of the surname

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Cohen carried the same genes as the biblical patriarch Aaron, the mystical Cohen Modal Haplotype (Skorecki et al., 1997). Early testing showed that nearly half of men named Cohen—Cohanim in the Hebrew plural—had the same values at six locations on their Y chromosome. For the record, here are the magic numbers that first defined the “Y chromosome of Old Testament Priests”:

DYS19 - 14
 DYS388 - 16
 DYS390 - 23
 DYS391 - 10
 DYS392 - 11
 DYS393—12

But having those scores did not make you a member of the club. As the authors of an article on the “extended CMH” finally appearing last year write, the original research by Thomas et al. (1998) “produced a ‘low resolution’ CHM that was shared among many non-Jewish populations” (M.F. Hammer et al., “Extended Y Chromosome Haplotypes Resolve Multiple and Unique Lineages of the Jewish Priesthood,” *Human Genetics* 126:707-17).

That would never do. Moreover, such sketchy data “did not provide the phylogenetic resolution needed to infer the geographic origin of the CHM lineage.”

So, Hammer at the University of Arizona, partnering with the National Laboratory for the Genetics of Israeli Populations, spent 10 years and millions of dollars narrowing down the definition of the CMH and pinpointing its origin in history. Glossing over the statistics, subjects and methods—are you ready—the *extended* CMH is not much different from the *original* CMH, only it has no living matches.

Yes, you read that right. Whereas Skorecki’s minimal six-locus haplotype might be proudly shared by thousands who eagerly sent in their DNA samples to genetic testing companies over the years, the new and improved CMH of Hammer et al. with twice the definition or 12 loci when “compared with the YHRD (Y-STR Haplotype Reference Database in Berlin) ... yielded zero out of 10,243 possible haplotypes in 66 populations” (p. 711).

Way to go, I hear from Marketing.

From a dybbuk the CMH has gone to being a dinosaur. It was once doubted whether it existed. It is now proven to be extinct.

No further research is needed on this subject as far as I'm concerned.

August 28, 2010

Heretical History

Ashkenazi Jews May Have Founded Israel, But Hebrew-Speaking Khazars Created Ashkenaz

Yes, the Khazars spoke Hebrew. It was the official language of the medieval kingdom, just as it is today in Israel. That is one of the surprising revelations of a book titled *The Invention of the Jewish People*, by Tel Aviv history professor Shlomo Sand, who devotes half a chapter to the "strange empire in the East" (London: Verso, 2009).

Judaism has not always been a closed society. During all but the last four or five centuries of its existence, it has been a proselytizing (and stabilizing) force in world events. Great states like the now-forgotten Khazaria played a role in the balance of powers and destiny of world civilization. The policies of the Kagan and his viceroy the Bey were praised everywhere for creating a prosperous, multiethnic, multifaith state that held sway over the lives of millions for five centuries (700-1200).

In an older book, *Catastrophe* (New York: Ballantine), David Keys has a chapter on Khazaria, "The Jewish Empire." In it, after reviewing what we know about the medieval state, he concludes: "The Khazar empire prevented the westward spread of Islam. If it had not been for the military might of the empire, Islam would likely have rolled west into pagan eastern Europe and possibly even into pagan Scandinavia in the eighth and ninth centuries A.D." He postulates that the Vikings could well have become Muslim, as well as Poland, Hungary, Romania, eastern Austria, the Czech and Slovak lands, Germany, Denmark, Sweden, Norway and Danelaw, the Viking state that emerged in eastern England.

"If the Khazar empire had not prevented Islamic expansion, it is even possible that the Normans (originally Vikings from Denmark) might have already been Muslims for two hundred years by the time they conquered England in 1066. What's more, if the Arabs had occupied

what is now the Ukraine and Russia (rather than the Khazars, who founded Kiev, Russia's first capital), a Viking people known as the Rus would never have been able to push south and east from the Baltic to establish Russia" (p. 98).

An "investigative archeologist," Keys attributes the rise and spread of the Khazar state to a devastating volcanic explosion in Java in 535 that caused worldwide darkness, crop loss, famine, droughts, floods, migration of peoples and destabilization of regimes. Among the losers in what has passed into history as the Dark Ages were the Byzantines, Britons, French, Spanish, south Arabs, Tang Chinese, Teotihuacan and Peruvians. The winners were Avars, Huns, Koreans, Japanese, Toltecs, Incas, Mohammedans, Angles, Saxons, Jutes, Vikings and Visigoths. The global disaster had far-reaching effects that formed the modern world.

Sand is a professor in the department of European history (separated, curiously, from "Jewish" history in his country, Israel) and is concerned, as all historians are, with books. On the basis of records and written accounts, he reveals Khazaria's rise as no opportunistic accident to adorn a schoolboy's tale but as a historical phenomenon central to the formation of world Jewry. What Sand and Keys have in common is their iconoclastic, multidisciplinary approaches. Independently, they assign a prominent role to Khazaria in world history. Both attack taboo subjects with relish and finesse and are soundly ignored, no doubt, in the balkanized institutional world of learning.

Sand was apparently unaware of Keys or the global catastrophe of 535, but Keys has an excellent genetic summary of the heritage of the Khazars, one that is consistent with the latest research into the unity and diversity of the Jewish people(s).

"The Jewish empire's other legacy was the creation of a large pool of Jews of ethnically non-Jewish origin who subsequently became a major part—perhaps even the numerically dominant part—of northeast European Jewry and subsequently of world Jewry," Keys writes (p. 99). He goes further and substantiates and characterizes the convert origin of the Ashkenazi community in the ascendancy in modern Israel and the United States.

"This group, according to tradition, comprises the majority of the descendants of the ancient Israelite tribe of Levi—people who today still

bear the name Levi or Levy. Significantly, it does not include a Levite subgroup—the Priests themselves—who often have the name Cohen. ... This genetic marker does not even show up among the Cohens (descendants of the ancient Israelite Chief Priests)—but only among the descendants of Assistant Priests (Levites). And then only within Ashkenazi (northern European) Jewry. ... If some top Khazars were adopting Cohenic Levitical status (i.e., Chief Priest status), then it is more than likely that others—a larger number—were adopting ordinary Levitical status (i.e., Assistant Priest status). Adoption of Cohenic or ordinary Levitical status by converts was and is expressly forbidden by rabbinical law, so the Khazars had to develop a mythic national history that gave them the right to Levitical status” (p. 100).

Kaftans and Yarmulkes

Both Keys and Sand write of the revealing role of Yiddish, the lingua franca of medieval European Jewry and first language of 80 percent of the settlers in the modern-day Land of Israel. They agree that Yiddish, even though it has a medieval German base, has more elements that are Slavic, Romance, Hebrew, Aramaic and even Turkic and is more accurately to be regarded as the result of a relexification process by originally mixed Sorbs, Magyars, Khazars and others, not as the dialect of west German or Rhineland Jews. In conventional Jewish teaching, Yiddish is regarded as a prestigious import from the Rhadanite and other Romano-Frankic Jews (who were Judean merchants under the Romans, according to most, hence retaining the desired link to ethnic origins in the Middle East). In the new view, Yiddish loses a lot of its special historical claims and becomes simply a language of convenience in the polyglot Khazar domain of former times.

The two books attribute also a superabundance of anthropological characteristics of Ashkenazi Jews to Khazar predominance, including shtetls (townlets), silk kaftans, fur headdresses, naming individuals after Jewish holidays (we have an Aunt Hanukkah and Uncle Pesach in our family tree) and innumerable place-names in Eastern Europe. Finally, Sand notes that the word yarmulke is derived from a Turkic word (p. 247).

Although the “Khazar thesis” is largely ignored or even silenced by

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Israeli leaders and Jewish scholars, it is unlikely that the rulers of the modern state of Israel will make any constructive impact on the course of world events on the scale of Khazaria. Jews should reject the chauvinistic histories of 19th-century Zionists. As Sand says, "Why not begin to dream the future afresh, before it becomes a nightmare?"

September 4, 2010

Round Up the Usual Suspects

Book Review: *Abraham's Children. Race, Identity, and the DNA of the Chosen People*, by Jon Entine (New York: Grand Central, 2007).

Jewish DNA is full of controversies and the journalist Jon Entine shies away from none of them in this bestselling compendium. Interesting for our readers may be to note where he falls out on some of the more-vexed issues after taking the trouble to interview genetic news makers such as Karl Skorecki ("Genes of Old Testament Priests") and Father William Sanchez, the "poster boy" for New Mexico crypto-Jews.

Is there a Jewish "race"? That is probably not the right word, but yes, writes Entine, there is definitely a Jewish ethnicity that has been preserved in exile from the beginnings of Judaism in the Middle East over 3,000 years ago. Even Ashkenazi Jews are, genetically speaking, more similar to themselves and Middle Easterners than they are to Czechs, Poles and other Central and East European neighboring populations.

Is the Bible a true and accurate history of the Jews? No, for one thing, events in the Old Testament are corroborated by only a handful of contemporary records, including one Egyptian document and one Assyrian proclamation. The early books were rewritten several times, most famously by the patriarch scribe Ezra. The Jews returning from Babylonian Exile burnished the existing scriptures and introduced political themes that put the Northern Kingdom in a bad light. The word "Jew" was not actually used of the inhabitants of ancient Israel until around 520 B.C.E., when the "battered capital city, Jerusalem, surrounded by a scattering of towns" (p. 107) was called Yehud, the Aramaic name of a new province in the Persian Empire.

Do the Samaritans retain the closest genetic resemblance to Abraham's descendants? Here is what Entine writes:

The scientists speculate that not only are today's Samaritans likely descended from the Israelites, they may be the ancestral remnants of a breakaway group of Jewish priests that did not go into exile when the Assyrians conquered the northern kingdom in 721 B.C.E. Instead, these Cohanim may well have stayed, "but married Assyrian and female exiles relocated from other conquered lands, which was a typical Assyrian policy to obliterate national identities." It may just be that the tiny clan of Samaritans are a rare surviving branch of the ancient Israelites.

Among Entine's sources are Batsheva Bonne-Tamir, an Israeli geneticist who began studying Samaritan DNA when the population had dwindled to only a few families in the 1950s. Other authorities interviewed include: Karen Avraham (deafness in Jews), Doron Behar (Jewish founding mothers), Neil Bradman (Lemba Jews), Luca Luigi Cavalli-Sforza (Stanford's grand old man of DNA), Jared Diamond, David Goldstein (Jewish diseases), Michael Hammer (Y chromosomes), Mary-Claire King (disease studies), Jonathan Marks (critic), Tudor Parfitt (African and Indian Jews) and Mark Thomas (Cohanim).

What happened to the 10 Lost Tribes? Entine adopts a wry and caustic attitude toward this subject, beginning his chapter "Wandering Tribes" with a piece on the Worldwide Church of God, a Pasadena, California, sect founded by an ex-advertising agent, Herbert W. Armstrong, in the early 1930s. Armstrong was a proponent of British-Israelism, the belief that England is the heir to ancient Israel, the tribe of Ephraim having settled in Britain and the word "British" being derived from the ancient Hebrew word *beriyth*, which means covenant. "When Armstrong died in 1986, the WWCG claimed more than 150,000 members and an annual budget of \$130 million" (p. 130).

Are Ashkenazi Jews really Khazars (i.e. non-Semitic)? Their genetic mix contains some Turkic elements from the Khazars, but even the Khazars were not 100 percent Turkic. Entine does not believe in the mass conversion portrayed in works such as Judah Halevi's medieval account *The Kuzari: A Book of Argument in Defense of a Despised Religion*. Following the author Kevin Brook ("not a formally trained historian but an impressively self-taught scholar ... creator of the Web

site khazaria.com," p. 199), Entine says "the number of Khazarian Jews probably numbered no more than 30,000 out of a total population of 100,000, including a few thousand nobles and royalty" (p. 201).

Do you have to have a Jewish mother to be Jewish? Entine investigates this ruling very thoroughly and shows that Judaism was spread primarily by men with Middle Eastern roots who married local women of non-Semitic ancestry who converted to the husband's religion. The Jewish mother criterion came about in rabbinical times under the influence of Roman law. In Biblical times, Jewishness always came from a Jewish father.

Is there an "intelligence gene" among Ashkenazi Jews? Yes, it emerged in the age of the ghetto when survival selected for males who could earn a livelihood with their wits rather than hands or bodies.

Having touched on these questions, I would like to point out that many of the solutions seem rather superficial. Entine's research is not very deep or wide ranging. Nowhere in the chapter on mass conversions does he speak about the Babylonian principality of Narbonne in the South of France during Carolingian times. His treatment of Sephardic Jews is meager. There are other limitations in the scope of the work, but, in general, *Abraham's Children* is to be recommended as a solid, reliable, seemingly effortless account of a subject on which blood, sweat and tears have been spilled on every page in the past. That is no small feat.

October 7, 2010

Note on German Jews

Jewish II is characterized as the "strongest" marker, correlating very often with Ashkenazi Jewish parentage, especially in its double allele form (two checks under parents' columns on an 18 Marker Ethnic Panel or Jewish DNA Ancestry report). This description is validated by ENFSI results for 22 countries of Europe, where its strongest showings are in Czechoslovakia, Croatia and Slovenia (all Central European Slavic populations).

Its lowest frequency occurs in Germany, Denmark and the Netherlands, countries with few Ashkenazi Jews today. There are no data for Hungary in ENFSI. Czech is the closest population in geography and

historical composition. Likewise, there are no data for Slovakia, the southern part of the former Czechoslovakia, as Slovakia chose not to participate in ENFSI.

In Czechoslovakia, nearly 1 in 26 people carry Jewish II in its double allelic form, suggesting both parents were Jewish. The lowest frequency of Jewish II occurs in Scotland, where only 1 in 65 have it.

Note that even though most Ashkenazi Jews spoke Yiddish, a Germanic dialect, they were not necessarily German in origin. More likely they belonged to the Slavic peoples. Yiddish is not linguistically descended from Rhinish or Low German but a High German language of convenience adopted by Slavic-speaking Jews during Germany's medieval *Drang nach Osten* (Push to the East). Germany itself was considered a predominantly Slavic nation by geographers until the 19th century, when it was first unified under the Prussian monarchy.

The reason Jewish II is not detected at a higher level in today's German population is because of the ethnic cleansing and genocide committed by the Nazi government in the Second World War. For various reasons, Czechoslovakia and Hungary's Jewish populations, many of them assimilated Jews, survived better than Germany's.

The best book about German Jewry is probably *The Pity of It All, A History of Jews in Germany, 1743-1933*, by Amos Elon (Macmillan, 2002), although many readers will find the author's approach to Jewish ethnicity Zionist and doctrinaire.

October 13, 2010

The Greatest Divide

You hear a lot of talk about the Neolithic Revolution—the gradual adoption and spread of agriculture, animal husbandry and town life by our prehistoric European ancestors—but the most important epoch in the course of civilization goes largely unnoticed in the history books. That was the abrupt shift from matriarchy and worship of the Great Goddess to the warrior-based governments and language stocks of the steppe-dwelling Indo-Aryan barbarians who invaded Old Europe beginning in the late fourth millennium B.C.E.

The roots of Europe's original female-oriented religion are lost in the mists of the early Stone Age, and may even precede the arrival of

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October 13, 2010

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"modern humans" in Europe and be part of the heritage of Neanderthals. This substratum of a long-lasting peaceful hunter-gatherer society organized around the religion of the Great Goddess absorbed the spreading practice of agriculture from the Middle East beginning in the fifth millennium and reached its apogee of development in a pure form in the fourth millennium.

The cult of the Great Goddess, as depicted in an enthroned deity with flanking felines from Çatal Hüyük, an 8,000-year-old shrine in present-day Turkey (p. 107), was the lifelong object of study by Lithuanian-American archeologist Marija Gimbutas, whose most influential book is probably *The Language of the Goddess* (London: Thames & Hudson, 2006).

The ax fell on this ancient civilization—quite literally—around 3000 B.C.E. As confirmed in Jane McIntosh's *Handbook to Life in Prehistoric Europe* (New York: Facts on File, 2006), there was a clear line of demarcation between old and new Europe, from the Balkans to Britain, Spain and Scandinavia. The archeological record tells the story of a sweeping and abrupt end to things. The first metal weapons appear in the graves of elite males along with hoards of gold and jewels. Axes previously used to clear forests for agriculture are now battle-axes. Burials are single rather than family and clan-oriented. Whole villages were massacred and depopulated. Fortifications grew as violence escalated. The horse, venerated as just one of the totem animals of the Goddess since the early Stone Age, becomes the symbol of the warrior, along with the chariot and boat. Rock art features ithyphallic warriors wielding weapons or shooting arrows at each other. The transition can also be seen in the establishment of the Pharaohs in Egypt about 3500 B.C.E.

The invaders brought their male pantheon of war gods, Indo-European languages, aristocratic forms of government and Central Asian/Caucasian genes. The goddess cult underwent radical male adaptations, surviving in out-of-the-way places like Crete and Brittany.

So, rather than one transformation, European civilization first went through a Neolithic Revolution, then conversion to warrior-dominated patriarchal societies. It can be postulated that the matriarchal societies eagerly adopted agriculture but exhausted soils, destroyed vital forests and became weaker and smaller-bodied due to a changed diet, falling

DONALD N. YATES and TERESA A. YATES

prey around 3000 B.C.E. to the barbarian warriors of the steppe, who found the accumulation of wealth and unprotected agrarian settlements of Old Europe easy pickings. Climate change could have been a contributing factor.

James Joyce called history "the nightmare from which one cannot wake." If we take a long view of human events, this nightmare began about 5,000 years ago. Otherworldly religions like Christianity introduced a further element of alienation and turning away from the sources of life. Before that, to judge from archeology, people were happily alive, awake and in tune with nature under the auspices of matriarchy.

October 28, 2010

Abraham Lincoln's Jewish Roots

The Abraham Lincoln Presidential Library and Museum is interested in their namesake's Jewish ancestry. Do a Google Search and you'll get numerous hits under "Abraham Lincoln Jewish Ancestry." They can all be traced back to the work of Rutgers University professor Elizabeth C. Hirschman, who published her findings in *The Melungeons: The Last Lost Tribe in America* in 2005 (Mercer University Press). Melungeons.com immediately reported the news in an article on Abraham Lincoln's mother, Nancy Hanks, in March 2005.

Actually, the revelation goes back to Abraham Lincoln's own lifetime. In 1909 a book was written by Isaac Markens titled *Abraham Lincoln and the Jews*. In it is the germ of the controversy. Rabbi Isaac Wise of Cincinnati wrote in 1865, "Abraham Lincoln believed himself to be bone of our bone and flesh of our flesh. He supposed himself to be of Hebrew parentage, *he said so in my presence*, and indeed he possessed the common features of the Hebrew race both in countenance and features."

Lincoln's son Robert later denied the admission of Hebrew ancestry. He told Markens that he had "never before heard that his father supposed he had any Jewish ancestry." Markens dismissed the exchange between Lincoln and the rabbi as a "pleasantry."

Pleasantry or not, the rumor seems to reflect historical truth.

"The Lincoln material in my book traces his family's arrival from England into the New Hingham Colony in Massachusetts and their

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migration down to the Appalachian area," Hirschman told the curator of the Lincoln Collection, James M. Cornelius, who contacted her in September. "I use genealogies, marriage practices, wills and cemetery inscriptions to build the case for his Jewish—and likely Sephardic—ancestry."

Now that Lincoln is beginning to be seen as having Jewish ancestry, what about his status as a Melungeon? That has now slipped into jeopardy, it seems. Jewish and Melungeon ancestry go hand in glove, except in the eyes of those who don't believe Melungeons are a distinct ethnic group at all. They are opposed to finding any unwanted ethnicity in people claiming to be Melungeon. We predict Lincoln's Jewishness will rapidly be disposed of by these devotees of the received standard version of American history.

September 12, 2010

Rabbinical Court Recognizes Majorcan Conversos as Jews

Ruling Applies to All Their Ancestors and Descendants

Majorcan Jews belong to the Sephardic (Spanish) division of world Jews. The name of the island is Majorca in Spanish, Mallorca in Catalan (in whose orbit historically it fell). In 2011, a rabbinical court recognized the Majorcan Chuetas and all their genealogically related families as Jews. It is possible that the Franciscan Majorcan Junipero Serra who founded California's Spanish mission system was Jewish (Converso), as was probably the family of Christopher Columbus.

DNA Consultants is fortunate to have population data on Majorcan Jews.

The Majorcan-Chueta (also spelled Mallorcan and Xueta) population data represent DNA samples from 102 unrelated Chuetan (Jewish) individuals on Majorca, one of the Balearic Islands, which mark the easternmost part of Spain.

Samples were obtained by the Genetics Laboratory of the Biology Department at the University of the Balearic Islands.

Source publication: Genetic Variability at Nine STR Loci in the Chueta (Majorcan Jews) and the Balearic Populations Investigated by a Single

Multiplex Reaction, *International Journal of Legal Medicine* (2000) 263-267.

March 9, 2012

The Thirteenth Tribe

Khazarian Hypothesis of European Jewish Origins Vindicated; New Genetic Study Shows Rhineland Hypothesis False

In "Heretical History" and numerous other posts, we have argued that the genetic and cultural contributions of the Turkic-Iranic Khazars deserve much more attention than the cosseted theories of European Zionist Jews and official views of the state of Israel on Jewish history. A new study by Eran Elhaik titled "The Missing Link of Jewish European Ancestry: Contrasting the Rhineland and the Khazarian Hypothesis," (*Genome Biology and Evolution* 5.1:61-74) bears out our thinking with hard evidence that seems capable of settling that rancorously-disputed question once and for all.

According to *Science Daily* (Jan. 16, 2013), "Despite being one of the most genetically analysed groups, the origin of European Jews has remained obscure ... but the new study ... sets to rest previous contradictory reports of Jewish ancestry." Elhaik's findings strongly support the Khazarian Hypothesis, as opposed to the Rhineland Hypothesis, of European Jewish origins.

Ashkenazi ("Germanic") Jews embraced a Western European origin myth not only because it presented Jews as very white, at the top of the race pyramid, but because of the prestige it brought them of being a spinoff of the Roman Empire.

The Khazarian thesis acknowledges that the most-important element is Middle Eastern among "brown" peoples, and that the period of efflorescence of Judaism in Europe began in the late Middle Ages under the influence of migrating Khazars.

That's an entirely different version of history, one much closer to Arthur Koestler's "Thirteenth Tribe" account, a theory for which he was castigated by fellow Jews and especially Zionists.

The new study was not possible until recently, when many of the gaps in Caucasian and Jewish genetics were filled for the first time, using

autosomal approaches rather than sex-linked haplotype surveys.

Elhaik's masterwork examines a comprehensive dataset of 1,287 unrelated individuals in eight Jewish and 74 non-Jewish populations genotyped over a range of half a million single nucleotide polymorphisms (SNPs) or markers. These data were adapted from a study by Doron Behar and colleagues from three years ago.

The central role of Khazaria was also not wanted or wished for among Eurocentric scholars, who tended to denigrate *Ostjuden* or Eastern Jews. Few historians conceded even the fact that Khazaria was a Jewish state that lasted nearly a millennium, where Hebrew was spoken, preferring to think of it as a sort of travelers tale or land of religious fiction.

Elhaik used seven measures of ancestry, relatedness, admixture, allele-sharing distances, geographical origins and migration patterns to identify the Caucasus-Near Eastern and European ancestral signatures in European Jews' genome along with a smaller, but substantial Middle Eastern genome. "The results were consistent in depicting a Caucasus ancestry for all European Jews," according to *Science Daily*.

Elhaik wrote: "The most parsimonious explanation for our findings is that Eastern European Jews are of Judeo-Khazarian ancestry forged over many centuries in the Caucasus. Jewish presence in the Caucasus and later Khazaria (a Hebrew-speaking Central Asian empire) was recorded as early as the late centuries B.C.E. and reinforced due to the increase in trade along the Silk Road, the decline of Judah (1st-7th centuries), and the rise of Christianity and Islam. Greco-Roman and Mesopotamian Jews gravitating toward Khazaria were also common in the early centuries, and their migrations were intensified following the Khazars' conversion to Judaism ... The religious conversion of the Khazars encompassed most of the Empire's citizens and subordinate tribes and lasted for the next 400 years until the invasion of the Mongols. At the final collapse of their empire in the 13th century, many of the Judeo-Khazars fled to Eastern Europe and later migrated to Central Europe and admixed with the neighbouring populations."

According to *Science Daily*, Elhaik's findings explain otherwise conflicting results describing high heterogeneity among Jewish communities and relatedness to Middle Eastern, Southern European, and Caucasus populations not accounted for under the Rhineland Hypothesis. Although the study links European Jews to the Khazars, there are still

questions to be answered. How substantial is the Iranian ancestry in modern-day Jews (Khazars were themselves mixed)? Since Eastern European Jews arrived from the Caucasus, where did Central and Western European Jews come from, those usually called Sephardic?

Finally, if there was no mass migration out of Palestine at the seventh century, what happened to the ancient Judeans? Shlomo Sand, author of *The Invention of the Jewish People*, has maintained there never were any expulsions or exoduses out of Palestine, only wholesale conversions to Islam. Thus, the true heirs of Judah are the persistent inhabitants who still occupy Jerusalem and the Holy Land, that is, Palestinians.

It is ironic, to say the least, that these ancient Judeans are dispossessed by a nationalist colonial power with roots no deeper than 19th century Europe, which exercises a force majeure based on mistaken notions of genetics and history.

March 22, 2013

Anasazi: Cannibals or Witch-Hunters?

Though having an exotic ancestry might be interesting, there are limits. You might not want to have cannibals for relatives. Luckily, you probably don't have to worry about that. Even if you are Navajo, or have some Navajo ancestry, they do not believe their "enemy ancestors," the Anasazi, were cannibals. And some anthropologists believe the violence is explained in other ways—like the executions of witches (or what the Navajo call "skinwalkers").

Whatever the explanation for the early violence of these people, it seems to have stopped around 1200 A.D. (Alexandra Witze). That is long enough ago that no one should be concerned about it. Why? First, scientists cannot determine exactly what happened. And many others of us probably had ancient ancestors that were violent in one manner or another that long ago as well.

We first visited Chaco Canyon in northern New Mexico, and the wind was cold and eerie as we walked along the deep, narrow canyon and gazed upward at the buttery apartment complexes made of stone and mud high above us. Tiny windows had been etched in them. An eagle flew high ahead.

Who were these people? The staff at the visitor's center was mostly Navajo and not descendants of the original inhabitants of the site, and either could not or would not tell us much. They said they were the Anasazi, a Navajo term meaning "enemy ancestors." What does that mean? When we pressed for more answers, I was told they belonged to the Chaco Culture. They were Chacoans. They created magnificent architecture. According to the *Smithsonian* article, "Riddles of the Anasazi," by David Roberts they were marvelous architects:

The Anasazi built magnificent villages such as Chaco Canyon's Pueblo Bonito, a 10th-century complex that was as many as five stories tall and contained about 800 rooms. The people laid a 400-mile network of roads, some of them 30 feet wide, across deserts and canyons. And into their architecture, they built astronomical observatories.

But who were these people? According to Alexandra Witze's *National Geographic News* article, "Researchers Divided over Whether Anasazi Were Cannibals," there are some archeologists who think the Anasazi were cannibals because of "piles of butchered human bones, some of which were apparently roasted or boiled. In one instance, ancient human feces even seem to contain traces of digested human tissue." Archeologist Christy Turner has collected over decades what he calls "incontrovertible evidence of cannibalism and violence among the Anasazi" at sites dating "between about A.D. 900 and 1250."

According to Amelie A. Walker in her article, "Anasazi Cannibalism?" there was evidence of seven people "not from burials" who were "dismembered, defleshed, (with) their bones battered, and in some cases burned or stewed, (and left) in the same condition as animals for food." She suggests that there are three possibilities: "ritual" or "hunger" cannibalism or "something else altogether." Is the culture of the Anasazi one of cannibalism? Others disagree and think this is something else altogether.

What else could it be? Local tribes are "deeply offended" by the suggestion that the Anasazi were cannibals says Witze. However, most scientists agree that the Anasazi experienced "brutal violence" though this "drops off after about A.D. 1200." They just disagree about how to

interpret that. J. Andrew Darling, an archeologist with the Gila River Community in southern Arizona thinks the answer is witch (or what the Navajo call "skinwalker") executions. Darling discovered "after researching the folklore of modern Pueblo tribes" that "dismembering a witch" was the "only way to prevent the witch from wreaking revenge after death." Debra Martin, an archeologist at Hampshire College in Amherst, Massachusetts, argues that "the bone destruction is best explained by several different reasons, including witch execution, chewing by a carnivorous animal, or being reburied" (Witze).

"The best documented indication that the Basketmakers were headhunters is ... Kinboko Canyon, evidence discovered by archeologist Samuel J. Guernsey of the Peabody Museum of Harvard in 1915, and reported in a 1919 publication of the Smithsonian Institution's Bureau of American Ethnology," writes G. F. Feldman in the chapter on the Anasazi. He goes on to describe this and other early excavations in the Four Corners area that were quickly hushed up and reburied in horror, including Battle Cave in Canyon del Muerto, now part of the Canyon de Chelly National Monument inside the Navajo Indian Reservation. We read now of flesh-stripping, bone crushing, roasting pits, and sliced off mastoids.

According to this article, around A.D. 950, 11 persons, including women and children, were killed and butchered, cooked, and eaten on Burnt Mesa in New Mexico north of the San Juan River. At a site near the Hopi villages in Arizona, a group of 30 individuals, 40 percent under the age of 18, were slaughtered and eaten. In a Colorado rock shelter, a large jar was found filled with splintered human bones. ...

The grisly record goes on and on. Feldman writes that, by the year 2000, the number of such sites in the San Juan drainage where the Chaco Culture was centered had risen to 40 (p. 136).

So, witch hunters or cannibals ... or something else? We may never know the truth. According to Michael Adler, an archeologist at Southern Methodist University, ... "Scientists may never be able to prove whether the cannibalism or witch killing theory is correct. Or something else altogether."

April 18, 2013

Cave of Forgotten Rites

Cave of Forgotten Dreams is a mystical and breathtaking 3D journey into a winding and enormous cave in Southern France, the Chauvet Cave, where the earliest Paleolithic cave drawings are filmed by Herzog and his team. This is far older than Catalhoyuk, the Neolithic site in Turkey previously thought to be the oldest site for cave drawings.

Animals of all sorts (horses, rhinos, hyenas, and lions) seem to dance in shocking, realistic, and vivid detail along the walls "as if they had been done yesterday" one expert suggests. Moreover, this is not primitive art. The brush strokes of these artists are those of skilled masters who not only depict these animals in exquisite detail but show them running and charging by painting more legs and providing other details to expertly express fluidity and movement. This is Paleolithic animation! 3D seems to make absolute sense for this movie.

Despite the odd Herzog touches, like the New Age choir in the background, and the shot of albino crocodiles at the end, this is an excellent, must-see film about one of the greatest discoveries in our lifetime. I suppose the music is supposed to make you feel this is a mystical and otherworldly journey, but I don't think it was needed. Also, there is an inference that we could not possibly know anything about these people—hardly more than if we were albino crocodiles. I could not disagree more.

Though someone on the team did suggest the drawings "could have been made by a woman," I found it startling that no one suggested any connection to the Goddess religion or the Goddess symbols in the cave like the bull intertwined in a loving embrace with a female figure. These are ancient and well-known symbols since the Minoan civilization and from antiquity. Marija Gimbutas, in *Language of the Goddess*, discusses how the bull was both her son and her lover—in perhaps the first "trinity."

According to Michael Balter, author of *The Goddess and the Bull: Catalhoyuk: An Archeological Journey to the Dawn of Civilization*, the Catalhoyuk cave included both symbols of the horns of a bull and the goddess.

Moreover, it was in a cave, in the womb of the Mother Earth—a symbol of the Mother Goddess. Horses also were sacred to the Goddess,

DONALD N. YATES and TERESA A. YATES

and they are everywhere. This was not an early museum of sorts. This was a very ancient sacred place.

July 9, 2014