

Black Jews of South Africa: biological and cultural constructions of identity

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## *Introduction*

Walking through the Venda Plaza shopping center in Thohoyandou, South Africa, Rudzani waved to a man and said to me, “That is one of my Jewish brothers.” Giving him a puzzled yet intrigued look, he explained, “I am a Black Jew. We came from Israel a long time ago. They have proved it with genes.” Not knowing what to say and not having heard about this before, I let his statement pass. My time in South Africa was devoted to working with a victim empowerment program, but I continued to wonder about the idea of Black Jews.

The Black Jew or Lemba population creates a blip on a cultural map of sub-Saharan Africa. When researchers discovered and studied them over the last fifteen years, the Lemba also made a blip on the genetic map of sub-Saharan Africa. Genetic analysis of the Lemba has focused primarily on the Y chromosome, which is useful for studying variation among and distance between populations. The Lemba genetic markers support the oral tradition which says the Lemba came from the north. This paper reviews biological and cultural studies of the Lemba and the correlation between genes and oral tradition to propose a biocultural history for the Lemba people.

## **Biology**

### *Genetic Variation across Populations*

Much of the study of genetic variation has focused on dissimilarity between groups. Genetic variation over time is used to postulate about the place and time of the origins of modern humans as well as subsequent movement and migration. Genetic variation is the greatest in Africa, and it is reasoned that the longer a group has been around, the more variation it will have in its gene pool. Additionally, the longer groups are apart, the greater their genetic distance (Cavalli-Sforza and Cavalli-Sforza, 1995). Maps of variation show migrations out of, around,

and back in to Africa (Cavalli-Sforza and Cavalli-Sforza, 1995). Based on comparison of genetic landscapes, maps by Cavalli-Sforza and Cavalli-Sforza (1995) show the arrival of Neolithic cultivators in northern Africa 8,000 to 9,000 years ago. The migration of people continues down the eastern side of Africa, with groups mixing and moving. According to Cavalli-Sforza and Cavalli-Sforza (1995), the Bantu arrived in South Africa 300 to 400 years ago, and the archaeological and linguistic data support the history of Bantu expansion.

Cavalli-Sforza's trees of phylogenetic relationships are generated through average linkage analysis. Synthetic maps are produced from principle-component analysis of multiple gene frequencies. MacEachern (2000), however, criticizes Cavalli-Sforza's synthesis of genes and language for its assumptions about the nature of language and groups and its lack of consideration of the diversity of human societies. "African ethnic units are not bounded, homogeneous monoliths either frozen in place since before A.D. 1492 or caroming around the continent like cultural-bearing billiard balls" (MacEachern, 2000:370). General synthetic maps provide a visual representation of variation, but they do not show how the variation came to exist nor do they reveal anomalies. The Lemba are an anomaly in the genetic patterns of Southern Africa.

#### *Variation and the Y Chromosome*

The primary genetic research on the Lemba has used the Y chromosome for comparison with other groups. The Y chromosome has many characteristics that make it favorable for investigating lineage. Almost all of the Y chromosome consists of non-recombining regions and the information is passed intact from generation to generation, from father to son. The variations, called polymorphisms, occur so infrequently that they are commonly called unique event polymorphisms (UEPs) (Stumpf and Goldstein, 2001). UEPs occur along male lines in

different time intervals, thus the changes can be compared between and among groups to examine relatedness and age by identifying variations (Bradman and Thomas 1998). More changes on the Y indicate an older line, and more shared sequences between Ys indicate a more similar gene pool.

Once thought of as mainly junk, researchers have identified 20 different genes on the Y (Lowenstein, 1999). The function of Y is related to imparting maleness and to fertility (see figure 1).

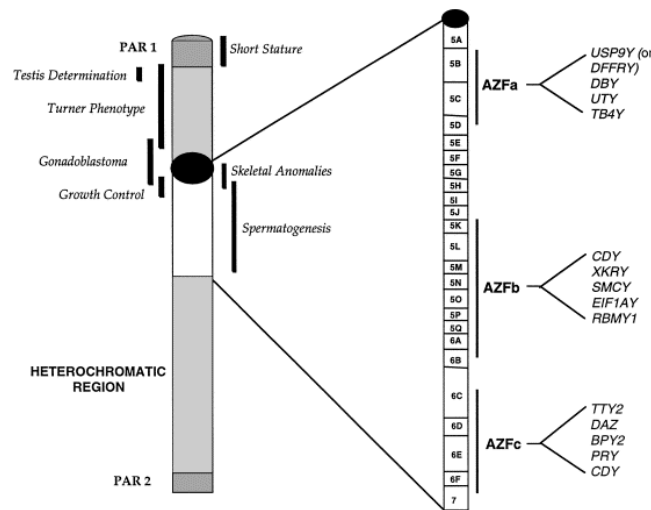


Figure 1: The human Y chromosome (Quintana-Murci et al., 2000:173)

Because most of the Y does not recombine, the Y chromosome is seen as a “uniparentally transmitted linkage group” which allows the history of the paternal line to be deduced (Poloni et al., 1997: 1015). The non-recombining section of the Y has the potential for a large number of different mutations (Stumpf and Goldstein, 2001). Because most variation in the Y is not expressed, changes are not selected for or against, which allows the record of these changes gets passed on (Bradman and Thomas, 1998).

Four types of changes can occur between generations: microsatellites, minisatellites, snips and indels (Bradman and Thomas, 1998). Microsatellites are a section of repeats of a short

nucleotide sequence and minisatellites are a section of repeats of longer sequences. Snips refers to single nucleotide polymorphisms, meaning one nucleotide is changed. Indels are insertions or deletions of DNA in a particular location (Bradman and Thomas, 1998).

An example of an indel is the Y chromosome *Alu* polymorphism (YAP). *Alu* is a sequence of about 300 base pairs which is inserted into a particular region of the DNA. There have been about half a million *Alu* insertions in human DNA and YAP is one of the more recent (Bradman and Thomas, 1998). Because they are *unique event* polymorphisms, YAP inserts and snips are unlikely to have arisen more than once in evolution (Thomas et al. 2000). An *Alu* can be copied, but it is not removed from a locus. After an *Alu* change, the YAP will accumulate new mutations at the same rate as surrounding DNA loci. One can think of an *Alu* insertion as a fossil, and patterns of new mutation allow the fossils to be sorted into lineages. (Dolan DNA Learning Center 2002).

Different combinations of polymorphisms are known as haplotypes (Bradman and Thomas 1998). The more similar the haplotype frequencies of two populations, the more similar their biological history is likely to be (Bradman and Thomas 1998). Quintana-Murci, Krausz, and McElreavey caution that genetic drift, founder effects, and male-specific migration processes may lead to over-representation of specific haplotypes (2001). Genetic drift refers to random change in gene frequencies between generations which will cause frequencies to fluctuate up or down (Releford, 2003). After enough time and if no other forces are acting on a population, variation within a population will be reduced (Releford, 2003). The founder effect is a type of genetic drift where a small number of people form a new population, causing allele frequencies to deviate from the parent population (Releford, 2003).

*The Lemba Y*

If Lemba migrated from Judea and Yemen and maintained the tradition of marrying only within the group, the Lemba Y haplotypes may be over-represented when compared to the neighboring populations. Thus, the Lemba Y is useful for comparison with African and Semitic populations their contribution to the Lemba. More genetic evidence of a non-Bantu origin for the Lemba is expected and found (Bradman and Thomas 1998). The Lemba Y has an additional genetic marker that indicates links to the Jewish priest class *Cohen*. Members cannot be appointed to this class and priesthood can only be inherited, thus a possible Jewish marker will be preserved down the line (Bradman and Thomas 1998; Cavalli-Sforza and Cavalli-Sforza 1995).

Judaism began in Semitic tribes living about 4,000 years ago in the Middle East. In 586 B.C., the Babylonian exile spread Jewish populations out of present-day Israel (Hammer et al. 2000). Hammer et al. (2000) used Y chromosome haplotypes to trace the parental origins of the Jewish Diaspora. Multi-dimensional scaling (figure 1 ) of frequencies of 18 Y-chromosome haplotypes in 29 populations produced three main clusters: sub-Saharan African, North African, and European.

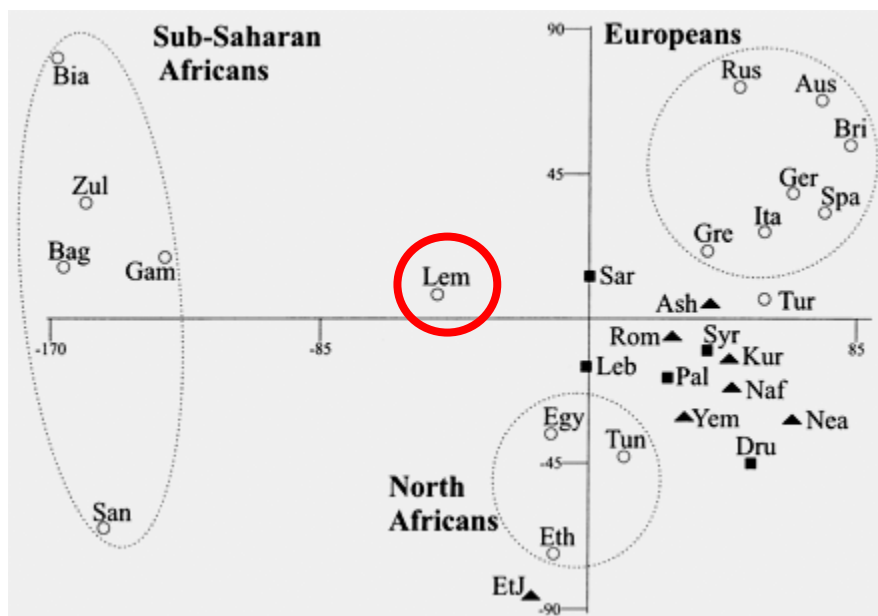


Figure 2: Multi-dimensional scaling from Hammer et al. (2000:6772)

The Jewish cluster appears in between the European and North African population clusters. The Lemba population is set halfway between sub-Saharan African and Jewish clusters (Hammer et al. 2000). Genetic and geographic distances were not correlated for other Jewish populations, which supports a recent dispersal and subsequent isolation model. Hammer et al. conclude that “a major portion of NRY biallelic diversity . . . traces to a common Middle Eastern source population several thousand years ago” (2000:6774). This is useful for evaluating claims of Jewish origins as well as for supporting old ties to the Middle East.

Once populations dispersed from the Middle East, gene flow with surrounding populations was likely. The Lemba present genetic markers identified with Bantu and Semitic populations (Spurdle and Jenkins, 1996; Wilson and Goldstein, 2000). Wilson and Goldstein (2000) examined 66 markers on the X chromosome to study the effect of admixture of Bantu and Semitic populations on linkage disequilibrium. Recent mutations will tend to have more linkage disequilibrium (LD) than will older ones (Wilson and Goldstein, 2000). “The significant difference between partially linked and unlinked loci rules out substructure as the sole source of the LD in the Lemba . . . Ethiopian-Bantu differentiation is not sufficient to produce the disequilibrium observed in the Lemba” (Wilson and Goldstein, 2000:932). The conclusion is that the Lemba LD has two sources: parental population and admixture.

Another examination on the worldwide distribution of Y haplotypes (Poloni et al., 1997) found a significant correlation between genetic and linguistic distances. The picture of genetic affinities places the Lemba not with other sub-Saharan African populations but with Afro-Asiatic populations (figure 2 ) indicating admixture or a different parent population from other sub-Saharan groups.

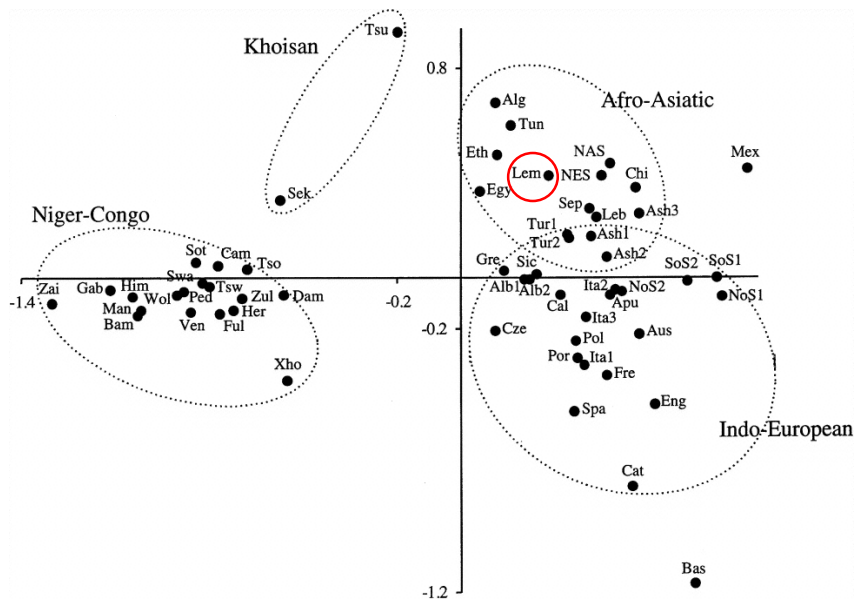


Figure 3: Multi-dimensional scaling from Poloni et al. (1997:1019)

Spurdle and Jenkins (1996) also looked at Bantu-Semitic variations to establish genetic affinities and offer a model for the origin of the Lemba. Their study analyzed allele frequencies of Y-linked Restriction Length Fragment Polymorphisms (RLFPs). Ht4 is a typical Negroid haplotype and it is found in the Lemba sample at a frequency of .20, which indicates significant Negroid male gene flow into the Lemba (Spurdle and Jenkins, 1996). Ht7, Ht8, and Ht11 are Caucasoid markers and the Lemba show high frequencies of these markers as well. These haplotypes seem to be typical of Jewish populations but also occur in Asiatic Indians, thus it is not possible to distinguish between Semitic and Asiatic Indian sources with these markers (Spurdle and Jenkins, 1996). The allele frequencies of the Lemba are significantly different from those of the Bantu-speaking Negroid population and the European population but not from those of the Jewish group. Spurdle and Jenkins (1996) conclude that 50% of the Lemba Y chromosomes analyzed appear to be of Caucasoid origin, and 36% appear to be of Negroid origin.



One possible method for distinguishing a Semitic origin, versus a general Middle Eastern origin, of the Lemba is to make comparisons with the Cohen modal haplotype, which is dominant in the Jewish priesthood (Thomas et al., 1998). There are three castes of Jewish males: Cohanim, the paternally inherited priesthood; Leviim, non-Cohen members of the paternally defined priestly tribe of Levi; Israelites, all non-Cohen and non-Levite Jews (Thomas et al., 1998). If the Lemba Y has Jewish origins, the Cohen modal haplotype is expected to be present.

Thomas et al. (2000) continue the study of Bantu and Semitic markers in the Lemba adding the investigation of the Cohen modal haplotypes. Y chromosomes were analyzed for six microsatellites and six biallelic markers in the Lemba, Bantu, Yemini-Handramaut, Yemeni-Sena, Sephardic Jews, and Ashkenazic Jews. The twelve polymorphic markers were characterized in multiple Jewish populations and identified single haplotypes (Thomas et al., 2000). Genealogical trees were drawn based on microsatellite variation to explore possible origins of the Lemba Y chromosomes (Thomas et al., 2000). The trees can be used to assess whether each Lemba haplotype has a close genealogical relationship with one or more haplotypes in the other five populations. Trees for the individual haplotypes were drawn for each UEP group by measures of average squared distance and proportion of shared alleles (Thomas et al., 2000). Thomas et al. (2000) designate 67.6% of Lemba chromosomes as having a Semitic origin and the other 32.4% to have a Bantu origin. The high frequency of the Cohen modal haplotype in the general Lemba population supports a Jewish contribution to Lemba gene pool found. The Cohen modal haplotype is observed only moderately in Ashkenazic and Sephardic Israelites, in a single Yemeni, and is present in a very low frequency in Palestinian Arabs (Thomas et al., 2000). The genetic evidence is consistent with the Lemba oral history of Jewish origins in a population outside of Africa followed by admixture with Bantu neighbors.

## **Culture**

### *Oral tradition and Origins of Lemba*

The Lemba people claim ancient Jewish origins. According to oral history, they come from Judea, from whence they traveled to Sena. From Sena they crossed into Africa, moving down the coast, building great cities in Zimbabwe, and finally settling the northern part of South Africa. Additionally, the Lemba assert Jewish identity through their customs of food prohibitions, ritual slaughter of animals, and circumcision (Buijs, 1998; NOVA 1999; Parfitt 1992). These are not black people who have been recently converted to Judaism. Judaism is not a proselytizing faith thus conversion and intermarriage as an explanation for Jewish genes is unlikely (Cavalli-Sforza and Cavalli-Sforza, 1995). However, many groups across the world claim connections to lost tribes of Israel (Parfitt, 1992). Furthermore, the surge in Lemba Jewish identity is connected to political economy and other social circumstances in South Africa in the last fifty years (Buijs, 1998).

The Lemba say they came from the North, possibly from Judea. Then they went to Sena, they crossed Pusela and came to Africa, where they broke the law of God and were scattered across African nations (NOVA, 1999). Parfitt (1992) located Sena in a remote valley of Southern Yemen. Parfitt reasons that Pusela is similar to the Masilah River, which they would have had to cross to get from Sena to the sea. The port town of Sayhut was used for Arab exploration of Africa. In Hadramaut, the valley where Sena is located, tribes have the same names as Lemba tribe names (NOVA, 1999; Parfitt, 1992). Genetic samples of Lemba and of people in the Hadramaut showed similar features as well as the Cohen modal haplotype (NOVA, 1999).

### *Lemba Identity in South Africa*

The Lemba live in Mozambique, Zimbabwe, and South Africa, but according to Buijs it is only in South Africa where one finds the belief of Jewish origins (1998). The Semitic identity was propagated by early white missionaries and colonial officials; their writings emphasized differences of the Lemba by comparison with European Jewish communities (Buijs, 1998). These writings supported “an ethos of a distinct identity” (Buijs, 1998:661). Buijs (1998) notes that the Lemba were aware of their distinct cultural heritage prior to colonization, but when ethnic identity became important in Apartheid, the Lemba Cultural Association (LCA) became a medium for constructing a present day Jewish Heritage. Buijs asserts, “The insistence . . . on their Jewish heritage is a direct result of the struggle for resources, initially land and later civil service jobs, in the Northern Transvaal and Venda” (1998:662). Identity, including racial and ethnic identities, is not a static concept. Identity, especially during Apartheid, was tied to power. The Lemba Cultural Association was founded in the 1940s when Europeans were encroaching on resources. The LCA proclaimed a separate cultural identity and the Lemba’s importance identified the Lemba with a non-African community (Buijs, 1998).

During Apartheid, literally meaning separation, people were classified by race: white, colored, and black. One’s social capabilities were defined according to these concepts (see Mandela 1994 for a first hand description of the Apartheid system). The Apartheid government, the white minority, knew that if black people were united, the white autonomy would be threatened. They instituted a Bantu education system that further classified blacks according to tribe and encouraged local identity and rule in hopes of keeping blacks divided (Mandela 1994). In the 1980s, as the white hold on power was becoming more and more challenged, the government created “independent homelands” which were set up such that they were still

overseen by South Africa but the government no longer provided money or services to these areas.

### *Lemba in Venda*

Vendaland was created and within these bounds were the Lemba. Before the independent homeland, it was favorable for “Black Jews” to identify themselves and be recognized as Lemba, because they were associated with whites and considered superior to other Blacks. However, in the “Black homeland,” where blacks set up their own government, it became more favorable to be Black and not associated with whites. A highly placed civil servant in Venda government commented ““with the Venda we were an elite group. In those days we were light-skinned . . . the Venda treated us like a sort of upper class . . . the Chosen people” (Parfitt, 1992:78). This refers to the days of their arrival in southern Africa. At the beginning of the century, in spite of the dark skin, the Lemba were commonly called *valungu* –white men (Parfitt, 1992). The civil servant remarked, ““As long as everything goes just fine, my being a Lemba doesn’t matter . . . But as soon as things start going wrong, it is attributed to my Lemba origin”” (1992:77). The status and identity of the Lemba has not been fixed and it has not always been Jewish.

Proclaiming a form of Judaism is an event of the 19<sup>th</sup> century, but it does come from an older, complicated religious identification (Parfitt 1992). “The Lemba seized a particular myth and used it as a means of ridding themselves of a rather ancient ambiguity at a time when new ambiguities were being created every day” (Parfitt, 1992: 255). The Lemba is group with particular traditional practices, and some say they are not a religious group but a cultural one (Sand, 2002). The Lemba culture today points to ancient Hebrew origins but some Lemba practice Christianity and Islam (Sand, 2002). The practices they do ascribe to ancient Jews would

not be identified as Judaism in the West, however they have adopted more Jewish traditions in recent years (Sand, 2002).

### *Lemba today*

In post-Apartheid times, the Lemba identity is flourishing. They continue to have LCA meetings (Buijs 1998). Websites about their heritage and culture are published on the Internet. People in South Africa can identify themselves with whatever group or groups they please. About 80,000 Lemba live in the Venda area of the Limpopo Province in South Africa as well as the Johannesburg township of Soweto (Buijs, 1998; Sand, 2002). Lemba are also found in villages in the southwestern region of Zimbabwe (Buijs, 1998; Sand, 2002).

In the Venda region, people speak TshiVenda. Another day when Rudzani and I were walking through the shopping center, he called up to a man with a phrase I did not understand. With a twinkle in his eyes, he told me that was the traditional greeting for a Jewish brother. Again, I let that pass, thinking he could translate it to mean whatever he wanted since I did not know TshiVenda (a favorite joke of my friends there). In reflection and after research, I do not doubt the old Jewish ties and if I go back to South Africa, I will be sure to find out more.

### **Conclusion**

The problem with constructing the history of the Lemba identity is that it has been passed down through oral tradition. When it was recorded at the turn of the twentieth century, it is possible the outside visitors were biased or projecting a Jewish identity on the Lemba. Genetic data support the oral tradition, and genetic research has identified anomalies in the Lemba population. Across the articles, the same information about the oral tradition and culture of the Lemba was offered. Ethnographic study of the Lemba traditions, not in contrast to Jews or other Africans, is needed to understand what being Lemba means today. Further research considering political

economy, as Buijs did, will continue to fill out the picture of constructions and projections of identity for the Black Jews of South Africa.

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