

Research articles:

George B. J. Busby, Francesca Brisighelli, Paula Sánchez-Diz, Eva Ramos-Luis, Conrado Martínez-Cadenas, Mark G. Thomas, Daniel G. Bradley, Leonor Gusmão, Bruce Winney, Walter Bodmer, Marielle Vennemann, Valentina Coia, Francesca Scarnicci, Sergio Tofanelli, Giuseppe Vona, Rafał Płoski, Carla Vecchiotti, Tatjana Zemunik, Igor Rudan, Sena Karachanak, Draga Toncheva, Paolo Anagnostou, Gianmarco Ferri, Cesare Rapone, Tor Hervig, Toralf Moen, James F. Wilson, and Cristian Capelli

The peopling of Europe and the cautionary tale of Y chromosome lineage R-M269

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First Europeans were Sub-Saharan Africans

Clyde Winters, Professor
Uthman dan Fodjo Institute

Bushby et al [1] argue that we cannot determine the date and geographical origin for R1b1b2-M269, because the microsatellite choice of STR-based time estimates fails to provide a conclusive date for the dispersal and origin of this haplogroup. This finding makes dating of the origination of R-M269 and its geographical origin and dispersal in Europe controversial because we cannot fully trust the coalescence time estimates between lineages.

It is the opinion of Bushby et al [1] that Y-STR sets cannot adequately provide time estimates for R-M269, pointing toward a Paleolithic or Neolithic origin for the spread of this y-chromosome as proposed by other authors [2]. Although we have to wait until we find ancient R-M269 DNA in Europe, to determine when the TMRCA of R-M269 "arrived" in Europe, we may be able to identify where the male lineage R-M269 originated.

Presently, the ancient DNA samples from the LBK are not R-M269. Using ancient DNA, Haak et al [3-4] makes it clear that during the Linear Pottery Culture (LBK), the predominate Western Eurasian haplogroup was N.

It is interesting that continuity exists between the Aurignacian people who carried haplogroup N and the first European farmers who appear 35ky later [5]. The archaeological evidence indicates that the LBK agricultural system was not sustained [6].

Bushby et al [1] supports a Paleolithic origin for R-M269, even though they admit that the R-M269 population may have replaced an earlier non-R-M269 lineage during the Neolithic. There is archaeological evidence supporting the replacement of much of Europe's prehistoric population. Shennan [5] and Shennan and Edlinborough [6] note a sharp decline in the prehistoric European population 7kya to manifestly low population levels for almost a millennium [6]. Males possessing R-M269 may represent this new population.

This replacement population that carried R-M269 were probably from Sub-Saharan Africa. Trenton W. Holliday [7] reported many Sub-Saharan Africans had dispersed into the Levant from Africa around 4000-2000BC. Holliday also found African fauna in the area [7].

These Sub-Saharan Africans moved into Eurasian. Brace et al [8] found that the craniofacial features of these early European farmers plotted with Sub-Saharan groups. This was not a new finding because many skeletons of Sub-Saharan Africans have been found at European sites.

There were a number of Sub-Saharan skeletons recovered from European farming sites [8]. Boule and Vaflois [9] note, "Two Neolithic individuals from Chamblandes in Switzerland are Negroid not only as regards their skulls but also in the proportions of their limbs. Several Ligerian and Lombard tombs of the Metal Ages have also yielded evidences of a Negroid element. Since the publication of Verneau's memoir, discoveries of other Negroid skeletons in Neolithic levels in Illyria and the Balkans have been announced. The prehistoric statues, dating from the Copper Age, from Sultan Selo in Bulgaria are also thought to portray Negroids. In 1928 Rene Bailly found in one of the caverns of Monlat, near Dinant in Belgium, a human skeleton of whose age it is difficult to be certain, but seems "definitely prehistoric" [9].

Haplogroup R1-M269 was probably introduced into Eurasia by Niger-Congo speaking Sub-Saharan Africans after 5.5-6kya. The Niger-Congo population originated in the Saharan Highlands. They belonged to the Ounanian culture.

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Haplogroup R-269 is a descendant of R-M173. The phylogeography of R-M173 Y-chromosome among Niger-Congo speakers vary [22]. Y-chromosome V88 (R1b1a) has its highest frequency among Chadic speakers, while the carriers of V88 among Niger-Congo speakers (predominately Bantu people) range between 2-66% [12-13]. Haplogroup V88 includes the mutations M18, V35 and V7. Cruciani et al [12] revealed that R-V88 is also carried by Eurasians including the distinctive mutations M18, V35 and V7.

R1b1-P25 is found in Western Eurasia. Haplogroup R1b1* is found in Africa at various frequencies. Berniel-Lee et al [13] found in their study that 5.2% carried Rb1*. The frequency of R1b1* among the Bantu ranged from 2-20. The bearers of R1b1* among the Pygmy populations ranged from 1-25% [13]. The frequency of R1b1 among Guinea-Bissau populations was 12% [14].

Around 0.1 of Sub Saharan Africans carry R1b1b2. Wood et al [15] found that Khoisan (2.2%) and Niger-Congo (0.4%) speakers carried the R-M269 Y-chromosome. The Niger-Congo speakers formed a significant population in the nomes of Upper Egypt, where the founders of the 18th dynasty originated.

The Niger-Congo speakers spread from the Saharan Highlands across the Sahara into North Africa. They remained in these areas until the Sahara became more arid after 4000 BC. After 4000BC through demic diffusion the Niger-Congo speakers or Kushites began to expand into Eurasia.

The Proto-Niger-Congo speakers were called Kushites. The Kushites belonged to the C-group people of Nubia. They introduced R1 to Eurasia [11]. These Kushites founded the Sumerian and Elamite civilizations [11].

Many of the African populations that carry R1* M173 are associated with the Kushite people of Nubia [11]. As a result we find many Eurasian ethnonyms of Anatolia and Mesopotamia that indicate a Kushite presence including the Ksaka tribe [16]; and Kings of Kish/Kush [11].

The craniometric evidence for the 4-5kya period indicates that many Mesopotamians were Sub-Saharan Africans [17-18]. The craniometrics for the Anatolians correspond to Niger Congo and Kerma (Kushite) populations [19-20].

The Niger-Congo speakers also settled in Europe. Here the Niger Congo speakers left place names. Campbell [21] believes Afro-Asiatic and Indo European speakers followed the Niger-Congo population. Dr. Campbell [21] provides a detailed account of the influence of the Niger-Congo Super family of languages and the Indo-European (I-E) group of languages.

In conclusion, Bushby et al [4], has speculated that a new population introduced R-M29 males into Europe, dissimilar to the original hunter gatherer and farming populations. This view is supported by the archaeological evidence, which indicates a collapse in agriculture in Europe 5kya and possible replacement of the earlier population [6-7].

This new population was probably Niger-Congo speakers. The Niger-Congo speakers left place names and represent a substratum language in many I-E languages [21]. The Niger-Congo Speakers probably introduced R-M269 which flourished in Eurasia [11,21], while other haplogroups descending from R-M173 ran into a bottleneck.

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Conflict of Interest:

None declared