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# GENDER ASPECTS OF HISTORICAL MIGRATION AS A FACTOR OF ETHNO-SOCIAL TRANSFORMATIONS ON THE MIDDLE LENA (STATEMENT OF THE QUESTION)

### **ABSTRACT**

The article considers discussion issues of the Yakuts (Sakha) ethnogenesis. Comparing the results of the latest genetic studies with linguistic data, as well as with existing literature on the history, ethnography and social anthropology of the Sakha people, the authors discuss the little-studied aspects of global ethno-social transformations in the middle Lena, which led to the formation of a peculiar gene pool of modern Sakha.

Keywords: Y-chromosome, mtDNA, Yakuts, population, ethnogenesis, migration of pastoralists, ethno-social transformations.

The ethnic history of population of Yakutia, in particular the origin of the Yakuts (Sakha), one of the numerous populations of the north-east of Eurasia, remains among the most controversial issues in Russian historiography. Note that in the existing literature there are different concepts about ethnogenesis of the Yakuts, among which two hypotheses are distinguished with most argumentation. Thus, various versions of the «southern» origin suggest long migrations of the ancestors of the Yakuts from the south (Central Asia, Southern Siberia) to Vilyui and the middle Lena, where separate groups of migrants mixed together [8,9,10,11,22,23,28, 29]]. In line with the «autochthonous» theory, is opposite, supported the concept of a mix of the alien southern substratum with the predominance of the aboriginal population of Yakutia, which resulted in the formation of a modern Yakut ethnos [2, 31]. Mainly on language affiliation, important elements of material and spiritual culture of the Sakha people to the shared roots of the Turkic world is justified domination of turkic-speaking tribes in their ethnogenesis, occurs with the participation tungus and mongolian groups. For instance, according to the concept of G.V. Xenophontov [19], the Yakuts are a people of ethnically mixed origin, which included three «waves» of turkic-speaking immigrants from the Angara and the Baikal area. According to his assumption, the gradual penetration of ancestors of the Yakuts into the territory of their modern settlement, first «deer» Yakuts, later - Yakut cattlemen, lasted from the I to XII century AD. The multi-component cohort of the ancestors of the Yakuts is also argued by the data of comparative linguistics [5,28,34] and numerous archaeological artifacts

[4,12,26]. Today, researchers are inclined to a compromise approach, according to which the basis for formation of the Yakut population is temporally separated migration flows of people from south of Siberia to the north along the Lena river, who entered into close ethno-cultural contacts with various autochthonous tribes [22]. At the same time, there are also significant disagreements over the expected geographical outlets, the chronological linkage of migrations, their logistics and route, the ethnic composition of the migrants, and others.

It is noteworthy that new horizons in the study of existing lacunae in ethnography of the Yakuts (Sakha) are associated with the development of molecular genetic studies characterized by high representativeness of the results. Thus, in the light of the new data on the genetic characteristics of human populations identified by the DNA marker technique, there is interesting hypothesis of formation of the Sakha people on basis of mixing of the region indigenous male population with the newly arrived, predominantly female population from the south.

Objectively, the starting point for the relevant reflection is the fact of the interrelation between historical migrations and the gene pool of the modern peoples of Yakutia [36]. As is known, there are basic paired (autosomal chromosomes, 22 pairs), mitochondrial DNA (mtDNA), sex X and Y chromosomes. In this case. if the Y chromosome determines the male gender and is passed from father to son, then mtDNA is present in both men and women, but is transmitted only from mother to all children, regardless of their gender. The DNA markers chromosomes) characterize the community as a whole, without distinguishing the genetic contribution of each of the sexes. However, by the types (characteristics) of polymorphism (diversity) of DNA, one can evaluate certain events that occurred during the historical development of a given population. Thus, the reliability of the presence of genetic traces of migrations in gene pool of the population provides a basis for historical reconstruction of the ethnogenesis model of any nation.

The genetic history of population is most often considered according to the structural features of mtDNA and Y chromosome. Polymorphisms of mtDNA and Y-chromosome, transmitted from generation to generation along only one of the parental lines, allow (theoretically) to determine the origin of the population separately for the female and male lines. The variety markers of mtDNA and Y-chromosome is determined by the factors of microevolution (migration, selection, mutations). This approach is of particular importance in case of a small population size, its low settlement density, severe geographical and natural climatic conditions of residence, i.e. is fully consistent with the study of genetic history of the Yakuts. For example, analysis of haplotypes of the Y chromosome revealed motifs specific only for the Yakut population. A comparative study of the Yakuts mtDNA and other turkicmongolian-tungus-speaking populations revealed the genetic relationship of the Yakuts on the maternal line (mtDNA) with the South Siberian Turkic-speaking Tuvinians and Altaians [36,37]. Studies in genetic archeology [17,36] also allowed to date the general male ancestor of the sample 17 marker haplotypes (total 14) of the line N1c1, revealed by the results of testing human remains from burials in the territory of Yakutia [39]. The date of

the common male ancestor at a mutation rate of 0.002 per marker per generation: 42 generations from the average date of burial. When taking into account the last value, the date of the common ancestor of the buried people corresponds to the date of the common ancestor of the Yakuts, tested in our time. Thus, dating [1.36] of the common ancestor of the Yakuts of the line N1c1, when the rates of mutations are reduced to one value, gives the middle of the first millennium A.D.

Specific for the Yakut men N3chromosome forms a separate branch, which emerged 1540 ± 580 years ago [36]. In other words, it turns out that the Yakut men separated in the middle of the 1st millennium A.D. It is known that the population consists of representatives of individual genera and belonging to it is most often recognized by the male line. Even if agrees with the opinion that some groups or tribes of nomadic pastoralists came to the middle Lena from somewhere in the south, their ancestral Y-chromosome, which belongs to the socalled northern variant, they could already have in specified period, respectively, the Yakuts ancestors, probably, and earlier lived in the North. Immediately we stipulate that the attachment of the time of divergence to this territory does not yet have convincing evidence.

In gross, the results of biogenetic research in the comparative historical context make it necessary to further search for new knowledge related to the problem of the origin of Sakha people. If we proceed from the thesis of their addition as a result of the mixing of different ethnic groups over a long historical period, then in the light of the identified genetic profile of the Yakut population, a method of retrospective analysis is obtained, allowing to reactivate individual ideas of existing concepts and make non-standard interpretations of a vast historiographic information. In this article, a thematic discussion is offered to the little explored aspects of historical migration of the ancestors of Yakuts. characterized by a small number and low density of settlement, and their impact on the process of global ethno-social transformations in region.

In this context, the general problems the «demographic explosion», which has long attracted the interest of researchers, is noteworthy, but it still has no proper explanation. Thus, according to calculations by B.O. Dolgikh, specially studying the question of the number of Yakuts, in the middle of the XVII century,

there were 28.4 thousand people, both sexes [14]; a century later, in the middle of the XVIII century, their total number was approximately 69 thousand people [18], and at the end of the XIX century - 221.4 thousand people [25]. Note that throughout the history of human communities, a significant increase in population was achieved only because of cardinal changes in the way of life support (gathering, hunting, fishing, cattle breeding, farming) and the introduction of technological innovations. Applied to the Yakuts S.A. Tokarev pointed that when they were formed as a single community of heterogeneous components with predominance of the autochthonous element, «one of the most significant aspects was the transition of fishinghunting-reindeer breeding tribes to breeding of horse and cattle» [31]. The decisive role of economic factors in demographic processes was noted by G.P. Basharin, substantially bearing in mind the relationship between the change of landmarks in the dominant type of economy (the transition from breeding horses to the predominant content of cattle) and population growth [6]. course, such a transition dramatically increases the volume and quality of consumed products and their supplies, which directly affects the dynamics of the number of individual families and genera, and the population as a whole.

At the same time, demographic shifts, due to the specific nature of the process of population reproduction, usually take a long time and are not rapid. Accordingly, the comprehensive basis for the demographic development of the Yakuts was laid down even during the formation of the early cattle-breeding society, represented by the kulun-atakh archeological culture [12]. The diverse nature of the Yakut mtDNA indicates that the growth of the number of bearers of cattle breeding culture was due both to natural growth and the mechanical movement of the Turkic-speaking population of South Siberia, in which a significant place was occupied by women. Immediate impetus for formation of the gender profile of migration could be significant disparities in demographic structure of the population - sex, age, marriage, aggravated by high child and female death rate. Sustainable women's migrations could be supported by a generalized exchange of marriage partners, in which women were «changed» only in one direction (for example, a son could marry a representative of the same group from which his father took his wife,

and the daughter could not to marry a representative of the same group). In this context, is of interest the material about the system of terms of kinship and the Yakuts' property, which is distinguished by the differentiation of the categories of patrilateral kinship. The matrilateral line of kinship is represented by one term «taai», with the help of which it is modified in the form of a base: taai-balys, tay-ini, etc., i.e. all related by mother. In addition, the term «kylyn» is a bilateral term for kinship in marriage in Turkic languages, in the Yakut language it means, first of all, the relatives of the wife. According to experts, this is due to the earlier separation of the Turkic-speaking Yakut nucleus from its ethnic background [7].

As a replica of migrations stimulated among other reasons by the need to search for marital partners, one can also take the Yakut proverb: «Uluu doydu ospoostaah, aan doydu aattiktaah, kueh dalai olomnooh, hara tia ilyktaah» (a large country has a road uphill, the land inhabited by people - mountain pass, deep, wide river - ford, dense forest - paved trail). Note that the excellent knowledge of diverse landscapes (large orographic objects and river systems, taiga) and, accordingly, the ability to navigate in large physical and geographical spaces, is evidence not only of the vibrant migration movement of the ancestors of the Yakuts, but also their active involvement in the Eurasian circle of ethno-cultural interactions.

The gender-migration component of development of the human potential of the pastoral population may be indicated by the system of social norms of demographic behavior, which is implicit in many attitudes, associations and metaphors. For example, these are ancient parables associated with the approved matrimonial behavior: «yu chugaha, uruu uraaga orduk» (it's better when the water is close, and the relatives are far away); «kyys ogo - omuk anala» (the destiny of daughter is another tribe / people), as well as with the censure of marital ties within its community: «teltgehattitten tiinnneebikke. kurdugutten bultaabikka dyli» (like a man who hunted in his own yard).

In the cultural tradition, the Yakuts cannot help attracting attention to the woman as a «temporary» person in the father's house and «stranger» in the home of her husband's parents. At the same time, it is with the figure of a woman that not only the cattle-breeding economy itself is associated, but also its life purpose, prescribed by the family

and the social environment. All this is contained in the formula of parental blessing when a girl who marries leaves home: «inniger uuruulen, canniger seetilen» (drive cattle in front, lead horses behind). In this connection N.V. Emelianov rightly observes: «First of all, the wife is a worker. Female labor ... was the most debilitating, hard work. Indeed, as the proverb says: Dyakhtar oronuttan turan wot otuor dieri tuort uon sanaana sanyyr (a woman, rising from her bed, while she will dissolve the fire, the forty thoughts will change her mind). She works constantly ... at home, looks after cattle, cleans the cowshed, feeds the whole family, shepherds, clothes, nurses children. How can she not change her thoughts!»[16]. The gender reality of the woman as an integral part of cattle breeding and the keeper of home was preserved in social notions of the mother as the basis of the family / household prosperity («dyie - yial yiyetinen»). Presumably, the economic necessity of conducting a large cattle-breeding farm and practiced virilocal exogamy promoted the spread of polygamy «keep as many wives as they can feed», which was preserved by the Yakuts before the XVII century [6,32].

In connection with the above, the question of türkic-speaking Yakuts (Sakha) is reactivated as a result of the integration of ethnically differentiated groups [29]. As you know, an outstanding orientalist-turkologist V.V. Radlov (1837-1918) regarding the Yakut language adhered to the concept of the turkization of the non-türkic language. For a comparatively historical study of the Yakut lexicon, he attracted 1,748 root and indissoluble foundations, of which 32.5% were identified as turkic elements, 25.9% as mongolian, 41.6% as elements of «unknown origin,» and concluded, that the number of mongolisms can be considered equal to one-third of the lexical stock of the Yakut language [40]. E.I. Ubryatova, who shared the opposite opinion, nevertheless believed that he was «somewhat right when he expressed his supposition about the participation of non-türkic elements in the formation of the Yakut language, the phonetics and grammatical structure of the Yakut language bear the imprint of the deep influence of Evenk and one of mongolian languages «[35].

Without going into the subtleties of the theoretical discussion that continues to the present time [20], we only note the contribution of women to the creation of a single Yakut ethnos, aware of its

linguistic, ethnic and territorial community. and the formation of the Yakut language itself. Widely recognized and needs no proof of the fact that the construction and reproduction of linguistic and ethnic identity is greatly influenced by the primary socialization of human - language acquisition, learning social and cultural norms, acquisition of generic skills, etc., necessary for its life at small and large social groups. The mother woman, being the central figure in the economy and home life, was the most important agent of primary socialization, choosing the language of child-rearing and, accordingly, determining their linguistic and ethno-cultural identity. Naturally, the first language, assimilated by the child in the process of primary socialization, which is simultaneously an instrument of this socialization, was the language of his mother. It is no accident that in many languages of the world's people there is such a concept as «mother tongue», represented in the Yakut language as «iye tyl» (mother language) and «terebut tyl» (born tongue). Accordingly, with the migration of turkic women from the south, the progressive distribution of kulun-atakh cattle breeding culture and the further development of the traditional Yakut economy as a combination of sedentary pastoralism and shepherding are directly related.

But there is one question: why do the Yakuts have a predominantly dominant carrier of the N1c1 line? It seems that the answer to this question can be found by referring to the concept of so-called «bottle neck» in population genetics. In accordance with it, the Yakut ancestors' population, supposedly on the way from Baikal to Central Yakutia, passed through this «neck», but it turned out that N1c1 carriers mostly passed through it. The version that seems appropriate the modern genetic portrait of the Yakut men was formed, mainly due to the reconciliation of their biological features and factors (the spread of previously unknown diseases in Northeast Asia), conditionally called «Western civilization» [33]. The results of the last genochronological dating of the ancestors of the Yakuts have made it possible to clarify this basic scheme. According to E.Crubezy, «From the 17th to the 19th centuries, the epidemics of smallpox and measles, caused by contact with Russian settlers, devastated the Yakuts and their neighbors ...» [39]. A specific period of the smallpox epidemic is given, 1650-1653, which, he believes, DNA has profoundly affected the

characteristics of the indigenous peoples of Yakutia, including the Even and Evenk [1]. This phenomenon, if there was a place, could determine the effect of the «bottle neck». Equally, we can assume, and that the ancestors of the Yakuts by the XVI century already adapted to smallpox and measles, and in a broad sense to factors conventionally called «Western civilization».

Then another question arises: Why through the «bottle neck» were only men, and women - not? It can be answered only by admitting that the Yakut gene pool was constantly replenished by mtDNA from neighboring regions, mainly from Southern Siberia. Derenko and Malvarchuk indicate the colonization of the earliest (beginning of I thousand) by the Yakuts of the area of the middle Lena [13]. As they write, the modern population of Siberia is characterized by one of the most frequent group in Northern Eurasia (from Northeast Asia to Eastern Europe) group HG16. In the gene pools of ethnic communities in Southern and Eastern Siberia, its frequency varies from 2% in Shorians to 55.6% in Yakuts; for the Koryaks and Evens - about 30%. It is noteworthy that the group of HG12 (ancestral to HG16) is also present in the gene pools of the Altai-Sayan region ethnics, the maximum frequency of which is up to 35% - registered with the Shorians and Tofalars. Recent genetic studies [38] indicate the purely Asian origin of the haplogroup N3 in support of the high incidence of the HG12 group and the presence of the HG16 group in the Altai-Sayan populations [13].

The use of different methods of dating ethnogenesis (archeological, historical, genochronological, glottochronological) should reveal the coincident period of formation of the Yakut population only if integrity of the gene pool and language identity of the people are preserved to some extent. The approximate coincidence of time formation of population according to two methods (glottochronological and genochronological) and lack of confirmation of others (archaeological and historical) do not provide an opportunity to unambiguously define the «core» and «periphery» of a multi-unit ethnos. Despite this, it can be assumed that in the course of migrations, which could represent the infiltration of small groups into local communities, and later have a more massive character, factors of profound ethno-social transformations that determined a qualitative leap in demographic development of the Yakut population were formed. With reference to the problems of the article, the most important of them are changes in the ethno-demographic characteristics of the region population and the economic orientations caused by them. The place of these transformations can be identified as region of the middle Lena, where they could occur during the XIII-XIV centuries, which is generally confirmed by the wide diversity of mtDNA of the Yakut population, some of which are part of the gene pool of neighboring peoples living predominantly in Southern Siberia. Undoubtedly, the above material requires additional arguments and reinforcements in detail with other data, but still provides enough grounds for continuing the interdisciplinary discussion on various aspects of historical migration, the colonization of the region by pastoral communities and the formation of the language, identity and culture of the modern Yakuts (Sakha).

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