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On a Multidisciplinary Study of South Siberian Turkic Varieties (in Comparison with Yakut). Part I.

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Abstract

This study encourages a multidisciplinary research to identify parallels in the group belonging and chronology of South Siberian Turkic (Chulym Turkic and Bachat Teleut) and Yakut. There is solid evidence that the ancestors of modern Yakuts and their language originate from the Central Asian steppe Proto-Turkic community of the 1st century BC. South Siberian Turkic varieties have not been studied as thoroughly, but they are expected to have traces of some non-Turkic language substratum. The analysis of the Teleut gene pool has revealed two different components of the Turkic and non-Turkic nature, which gives reason to consider non-Turkic elements in Teleut as aboriginal. The gene pool study of the Chulym Turks is expected to contribute to the issue of language history and Chulym Turkic lexicon which is etymologically vague from the Turkic viewpoint.

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1. Introduction

The Siberian Turkic languages are a group of languages both closely related and considerably varying in some categories or functions. Instead of being traditionally analyzed in terms of their administrative geographical distribution, they should rather be analyzed as dialect clusters (Filchenko, 2010). For the present analysis, two ‘exotic’ varieties of the South Siberian Turkic (Schönig, 1997) cluster were taken: the Chulym Turkic and the Bachat Teleut due to their unique data.

A distinguishing feature of many Siberian Turkic languages is their heterogeneity in terms of ethnical components and migration waves. This is explained geographically. Since Siberia could not have been the cradle of cattle-breeding Turkic peoples, it must have mostly been invaded by nomadic Turkic tribes from the south, where they assimilated or pushed away local aboriginal tribes presumably of the Yeniseic or Samoyedic origin. This led to various lexical borrowings, which explicate language contacts during the Turkic Siberian resettlement.

Due to the lack of written tradition, such processes are hardly evident and must be determined by additional methods. Apart from addressing to historical sources, we propose to use the method of multidisciplinary studies and combine data from both purely linguistic and biological methods in order to establish some facts (i.e. possessing features distinguishing them as a certain group and their relative chronology) regarding the chosen group of varieties and testing that against a ‘litmus paper’, that is a language proven to have originated from these languages’ protocommunity. Due to formal reasons, introductory information, methodology and some results of the research conducted with natural science techniques will be presented in this paper. Purely linguistic analysis will be published later elsewhere.

In this respect, general data on the communities and languages under research must be given first.

The Chulym Turkic community is a minority group in the South-Eastern part of the Tomsk Region and the Western part of the Krasnoyarsk Territory (Krai) residing along the banks of the Chulym River. The present administrative division also marks differences in the language: both groups belong to the same dialect, Middle Chulym in the terminology by A. P. Dulzon (Dulzon, 1973), though they are varying sub-dialects, the Tatal and Melet respectively. The Lower Chulym dialect (now considered extinct) was spread over the lower flow of the river, bordered the Selkup varieties at the river estuary, and was far different (close to lack of intelligibility) from the sub-dialects mentioned above (Dulzon, 1952).

The number of the present-day Chulym Turkic community is probably not higher than 1000 people, and not fewer than 500 people. The latest All-Russian census of 2010 (Vserossiyskaya perepis’, 2010) indicated the community number to be 355 as opposed to the number of 656 in the census of 2002 (Vserossiyskaya perepis’, 2002). The reason for such a number decrease may have not been caused by natural forces, but rather by the community’s ethno-linguistic self-identity transformation (Lemskaya, 2013). It has been observed that the loss of ethnic language use (the oral tradition) directly results in the loss of national self-identity (see the discussion in Cabal-Guarro, 2013).

The Chulym Turkic language has never had any official writing system, standard or even alphabet. It remained an oral language of the community used basically in the household. Presently, the number of speakers is critical. In our estimations, it is fewer than 10 people who are ‘fluent/full speakers’ of the language with additional 30-50 ‘semi-speakers’ (cf. Anderson & Harrison 2003, 2004, 2006).

The long-term lack of written tradition and geographical & contact isolation may explain the number of unresolved linguistic instances in the Chulym Turkic. As noted by A. M. Maloletko, according to the anthropological data, Chulym Turks represent a two-component population: that of 1) the ancient aboriginal (taiga) and 2) the alien Turkic of South Siberian racial type (Maloletko, 2004).

The Bachat Teleuts represent another small-numbered Turkic ethnic group of South Siberia, residing mainly in the Kemerovo region in the valley of the Bachat river and in the outskirts of the city of Novokuznetsk. Some Teleuts also dispersedly live in the adjacent regions – the Altay Republic and the Altay Territory (Krai). An overall number of modern Teleuts is within the range of 2,500-3,000 people. They are supposed to originate from the nomadic *Tele* tribes of the Old Turkic epoch dwelling in the Central Asia. According to some scientists (like L. P. Potapov), the Teleuts made a significant contribution to all Altay Turkic peoples’ ethnogeny, including both the Northern and Southern Altays. Recognized as “white Kalmyk” in Russian historiography, the Teleuts played an important part in the Southern Siberian politics in the 17th century.

The linguistic status of contemporary Teleut is dubious, since there is a lack of solid criteria to claim any language variety “a language” or “a dialect”. Being rather close to the Altay language officially spoken in the Altay Republic, Teleut is supposed to manifest some vernacular features in grammar and lexicon, distancing it from Altay and bringing closer to the neighboring Turkic languages of Siberia. Yet, linguistic, cultural and ethnical homogeneity of the Teleuts and the Altays seems undisputable.

Currently as in case with other minority languages of Siberia, Teleut can be claimed endangered, though not as critically as other moribund languages like Chulym Turkic or some Samoyedic varieties. The short sociolinguistic survey made in 2013-2014, supported by ELDP (SG 0277) showed a certain trend for the language shift and distortion under the suppressing impact of Russian (Tokmashev & Fedotova, 2014). The set of reasons which lead to the involution of the language is very common and includes such interwoven factors as its “unofficial” status and the shrinking range of spheres where it can be implemented.

The Yakuts are a Turkic people of North-East Siberia. The Yakuts are about 500,000 people, the majority of whom live in the Sakha (Yakutia) Republic. A multidisciplinary study obviously shows that the ancestors of the modern Yakuts migrated to Central Yakutia from the south in the 14th century in quite compact mass (Novgorodov, 2013). On the basis of genetic, historical and linguistics data, it is proved that Yakuts and their language originate from the Turkic protocommunity of the 1st century BC in the Central Asia steppe region according to relative chronology (Novgorodov, 2014).

Any classification of peoples, the Turkic peoples in particular, is traditionally based mainly on language data due to the close connection between language and society. Thus, the loss of language as means of keeping and transmitting the national identity often leads to the deviations in the self-identification of people and their intermixture with other nations. Following the disappearance of a people, its language becomes dead. This is what is currently happening among the Chulym Turkic community with the language being on its ‘deathbed’.

The scientific research of the Turkic language origin begins with O. Böhlingk. In 1851, he published his work “Über die Sprache der Jakuten”. In that work, he argued that the ancestors of the Yakuts first separated from the Turkic proto-ethnic group. So, he offered the Turkic-Tatar languages to be called the Turkic-Yakut. In connection with the study of the Yakut language, O. Böhlingk questioned the Ural-Altai hypothesis that unifies bonds of kinship between the Ural and Altaic languages, the latter including Turkic, Mongolian, Manchu-Tungus, Korean, and Japanese. O. Böhlingk’s work “Über die Sprache der Jakuten” became the first scientific description of Turkic languages.

In 1882, Friedrich Wilhelm Radloff published “Vergleichende Grammatik der nördlichen Türkischen Sprachen” where he did not include Yakut and Chuvash in the classification of the Turkic languages. S. Shirokogorov also noted W. Radlov’s view that a group of languages (Mongolian, Turkic and Tungus) were completely independent, common words in these languages were seen as a mere cultural borrowing (Shirokogorov, 1922)

In Turkology, the Yakut and the Chuvash languages occupy different places in the synchronic and diachronic classifications by J. Nemeth, A. Samoilovych, N. Poppe, G. Ramstedt, A. Shcherbak, A. Róna-Tas, E. Ubryatova, N. Egorov, A. Dybo, O. Mudrak and others. For example, some scientists believe that the Yakut, Chuvash and their languages are properly Turkic (O. Böhlingk’s supporters), but others deny this opinion (W. Radlov’s direction). It should also be noted that the linguistic tradition in Turkey divides the Turkic languages into three groups: the Yakut, the Chuvash and other Turkic languages.

In the classification of peoples and their languages from the point of their origin and evolution, it is important to take into consideration the following material facts: data of archaeology, ethnography, history and other sciences. For example, in establishing the classification status of the Dolgan language/dialect, it is important to take into consideration both material and historical facts. Russian linguistics argues that the Dolgan language was formed in the contact of several ethnic groups and by all criteria is a separate language; the Evenki clans were the core of the Dolgan nationality. In general, the Dolgans are historically the former Evenki who had lost their native Evenki language and turned to the Yakut culture. Therefore, the Evenki language should be considered as a substratum in relation to the Dolgan language. In many ways, the Yakut language is not a substratum, but it is a superstratum or more precisely, it is the adstratum which has influenced all levels of the Dolgan language in the situation of bilingualism. However, the Dolgan language has preserved its original features in phonetics, morphology, and vocabulary (Shcherbak, 1994 and a written message to the author of this article). In Russian historical sources of the

17th century, it is mentioned that an Evenki clan of the Dolgans existed on the territory of modern Yakutia (Dolgikh, 1960). This material & historical fact can allow Russian scientists to consider that the Dolgans have originated because of a culture shift (language assimilation) of the former Evenki under a pressure of the Yakuts.

The material & historical facts are considered important circumstances in the establishment of the classification status of a language in terms of its origin and evolution, in other words, from the point of view of the diachronic classification. However, over time it has become clear that these material facts were not constant values, for example, cultural and anthropological types were changing. So, it was important for science to establish such material facts which would not be changed. Such a type has been found in connection with the successes of genetics (cf. Pakendorf, 2006). The haplotype (a combination of alleles (DNA sequences) at adjacent locations (loci) on a chromosome that are inherited together) was found. In the haplotype, Y-chromosome information is passed from father to son unchanged for considerable periods of time.

Thus, a new approach in investigating a character of relations of different peoples and their languages appeared and began to form. The essence of this approach is to establish the relationship of genetic and linguistic classifications in order to study the prehistory of the peoples (Comrie, 2000).

Currently, in terms of achievements of archeology, linguistics and genetics to explore the history of the modern Turkic peoples and their languages, it is logical to set the following problem: "Genetic and linguistic aspects of Turkic peoples ethnogeny". Before dealing with it, the results of one of the Turkic languages origin study must be presented, those of a multidisciplinary study of the Yakut origin. We will also present the preliminary results of investigating the origin of some South Siberian Turkic peoples, i.e. the Chulym Turks and Bachat Teleuts.

2. Discussion

The research starts when the genetic data are collected in an ethnic group of unrelated men from different regions of permanent residence according to the dialectological and ethnographic data.

For example, currently there are around 500,000 the Yakuts in the world, and in order to study the prehistory of the Yakuts, about 200 genetic samples were collected and analyzed.

The German linguist and geneticist B. Pakendorf proved with the genetic analysis that the Yakuts are one and indivisible people, 94% of whom contain haplotype N1c1, and that they migrated to modern Yakutia from the south region (see Pakendorf, 2006).

This haplotype N1c1 of the Yakuts markedly differs from the Mongolic (C3) and Tungusic haplotypes (C3c), and this circumstance proves the absence of the Mongolic and Tungusic substrata in the formation of the Yakuts and their language, as well as the unacceptability of W. Radlov's and E. Ubryatova's views on the origin of the Yakut language (Radloff, 1908; Ubryatova, 1960). It should be noted that the genetic analysis reveals the relationship of the Evenki and the Even and allows to reconstruct the North-Tungus intermediate ethno-cultural community (Pakendorf, 2007).

The next step of the research is when genetic samples are investigated from graves of in the different regions of the ethnic group in order to establish its evolution in time and space. This is especially important for the identification of former members of the archaeological cultures and contemporary ethnic groups.

For example, there is the Kulun-Atakh archaeological culture in Yakutia. It was proved by the radiocarbon method that the lower time boundary of the existence of this culture in Central Yakutia was in the 14th century (Gogolev, 1993). Archaeological evidence of this culture showed the type of pastoral farming. However, there was no direct evidence of identity of the Kulun-Atakh culture with the modern Yakuts.

In 2010, French archaeologists and genetics from the University of Toulouse studied and published materials from pastoralists culture graves of the 15th century Kulun-Atakh. They found the N1c1 haplotype in graves, which is identical to the modern Yakut haplotype (Crubezy, 2010; Mir drevnikh yakutov, 2012).

Thus, it was clearly shown that the traditional culture of the modern Yakuts originated from the Kulun-Atakh culture, and the Yakuts migrated to modern Yakutia from the south region in the 14th century.

In general, the N1c1 haplotype is not found only among the Yakuts. It can be traced among modern peoples, such as the Chuvash, Tuvan, Altaian, Bashkir, Komi, Udmurt, Mari, Karelian, Vepsian, Estonians, Finns, Yukagir, Inuit, Chukchi, Russians (e.g. Rurik), Ukrainians and Slovaks.

Thus, the preliminary genetic data of the Chuvash show that there is a similarity among the lower Chuvash, the Tatar and the Bashkir; but the mid-lower Chuvash are closer to the Mari, the Mordvin, the Komi, and the Udmurt (Limborskaya, 2002). As for the Chuvash graves, archaeologists and genetics have not till present made a genetic analysis, so there is lack of data.

Back to the study of the Yakut, it is important to note that in the case of a bigger number of analyzed microsattellites, for example from 6 to 17, the differences among the peoples who have the N1c1 haplotype increase. This fact indicates that the Yakuts will always be apart from the peoples who have the N1c1 haplotype and this fact shows an isolation of the Yakuts.

It is known that the origin of different haplotypes occurred in a fairly remote period of time. For example, genetic studies have recently shown that modern humans (*homo sapiens*), from the point of the Y chromosome, originated around 75,000-120,000 years ago in Africa.

This fact can serve as a basis for a multidisciplinary study on the nature of relations of different ethno-linguistic groups from the Bronze Age. It should be mentioned that the Bronze Age (the ending of the 4th – the beginning of the 1st millennium BC) is the lowest time boundary of a comparative study of languages.

The primary divergence of the N haplogroup, in which the N1c1 haplotype is found, occurred about 12-14 thousand years ago in China (Rootsi, 2007). Also, it should be noted that the N1c1 haplotype is quite different from the Mongol (C3) and the Evenki (C3c) haplotypes. The divergence of the C haplogroup occurred before the divergence of the N haplogroup and this fact makes it impossible to use historical and comparative linguistics for the language reconstruction in connection with the Ural-Altai (resp. Altai) hypothesis, since, in this case, the study of languages is beyond the acceptable chronological framework. This fact undermines the Ural-Altai (resp. Altai) hypothesis (Schot, 1847; Samoylovich, 1926; Ramstedt, 1957; Poppe, 1960). It should also be kept in mind that the morphological and lexical similarity of the Turkic, Mongolian, Tungusic, Korean and Japanese languages arises mainly from contacts and does not have much time span (Shcherbak, 1997; Shcherbak, 2005).

So, in essence, the isolation of the Yakut N1c1 haplotype proves O. Böhlingk's opinion about the early separation of the Yakuts from the Turkic ethnic community and the divergence of the Yakut language from the Turkic protolanguage, as well as his doubts about the Ural-Altai hypothesis.

The Isolation of the Yakut N1c1 haplotype also creates an obstacle to the reconstruction of the Yakut-Chuvash, the Yakut-Oghuz, the Yakut-Uriankhai intermediate ethno-linguistic communities, united by their protolanguages (Nemeth, 1917; Tenishev, 2002; Dybo, 2007). Reconstruction of given communities is obstructed by the lack of material evidence of the former unity of ancestors of the Yakuts, Chuvash, Tuvan and Oghuz in the intermediate ethno-linguistic communities.

Ignorance of these material facts leads to an abstract study of correspondences in the study of language evolution, but not its actual and evolutionary paths that existed historically.

On the basis of these experiments, it is clear that the genetic data for ethnogeny of Turkic peoples can be used to establish the main or major haplotypes of a modern nation, to explore issues of linguistic substratum, to identify the modern peoples with different burial sites of archaeological cultures and to identify the nature of bonds of different ethnic cultures.

Another study of the Teleut haplogroups has revealed the following five types within 35 blood specimens: R1b* (11), R1a1 (11), N3a (10), C3xM77 (2) and R1b3 (1) (Kharkov et al., 2009). The R1a1 haplotype attributes Teleuts to Southern Altays closer than to any other Siberian aborigines. Still, the analysis of haplotypes within the N3a-haplogroup reveals specific features close to the ones of the Tomsk Tatars – another Turkic community of the lower flow of the Tom river. The ethnogeny of the Tomsk Tatars who currently live near Tomsk also includes Teleut components. The authors conclude that the Teleut gene pool has at least two heterogeneous genetic complements, connected with the Old Turkic and Samoyedic ethnic components.

These genetic data correspond to both linguistics, including the very toponym *Bachat* with the Samoyedic hydroformant *-chat* 'water; river' and ethnic history, which claims a series of originally non-Turkic but Turkic-speaking communities being assimilated by the Teleuts when they moved to the territory of the Kemerovo Region from Altay and the Ob river, the so-called *ash-kishtym* (Kimeev, 2014).

There has been no such natural science study of the Chulyum Turkic community yet. The only evidence at hand is, first, conclusions by A. P. Dulzon (1973) and logical assumptions derived from comparable data on the closely

related language communities. Thus, based mainly on his linguistic research, Dulzon mentions the Middle Chulym Turks to be directly linked to the Kyzyl Khakass group. Whereas Lavryashina et al. (2011) conclude in their autosomal DNA marker study that “the Kyzyl and Koibal who are the most Mongoloid of the Khakass nations are united into a single cluster with the Southern Altai.” So, it is logical to suppose that the Chulym Turkic haplogroups will also be in accordance with the Southern Altai type.

As for the linguistic data for ethnogeny of the Turkic peoples, it should be noted that the language prehistory can be studied on the basis of historical and comparative linguistics and language prehistory contacts.

For example, when studying the history of the Yakut, Chuvash and Turkic languages, it is very important to study the Leipzig-Jakarta list, different lexical groups and prehistory borrowings.

It should be mentioned that we previously came to a conclusion of the research based on the Leipzig-Jakarta list that the Turkic languages are divided into two main groups (Novgorodov, 2015a; Novgorodov, 2015b). The first one is the Yakut and the Kipchak languages, the second– the Chuvash and Oghuz languages.

We consider that the Chulym Turkic language is more similar to the Kipchak languages than the Oghuz Turkic ones from the Leipzig-Jakarta list point of view. In the history of the Yakut language we can find clear prehistoric borrowings from the Tungusic, Mongolian and Indo-European languages. Borrowings from the Tungusic, Mongolian languages are numerous. The Tungusic borrowings are studied in “The Yakut and the Evenki language contacts” (Novgorodov, 2009). Thus, about 600 Tungusic words were borrowed by the Yakuts from the Evenki language beginning from the the 14th century, in the territory of the modern Yakutia.

Furthermore, it is known that the Yakut language was influenced by the Mongolian languages in the Middle Ages after the rise of the Mongols in the era of Genghis Khan. From S. Kaluzhinsky's view, the bulk of the Yakut language mongolisms in the phonetic and morphological terms is not different from the Middle Mongolian of the 13-14th centuries (Kaluzhinskiy, 1961; Kalużyński, 1995). Hence, it becomes clear that the Yakut mongolisms do not have significant differences from their foreign language counterparts, and this fact allows to suggest that the Yakut language was formed with all its peculiarities before the rise of the Mongols in the Middle Ages.

Early Indo-European borrowings have not been studied in Yakut yet. However, we can trace these words as they are found in the Old-Turkic, Chuvash, Yakut and other Turkic languages; thus, these words were copied during the Turkic protolanguage time, for example:

OT *čerig* (DTS, 144), Tof.*šerig*, Chuv. Jar, Yak. *serii* ‘army’ < I.E.: Sanskrit *ksatrika*;

OT *öküz* (DTS, 383, 382), Chuv.*vākār*, Yak. *oyus* ‘bull’ < I.E.: Tocharian B *okso*.

A. Shcherbak approves the existence of the Turkic protolanguage community in the steppe region at the end of the 1st century BC – the beginning of the 1st century AD based on a study of lexical groups indicating wild and domestic animals in the Turkic languages (Shcherbak, 1970; Shcherbak, 1961). A. Shcherbak’s opinion can be supported by the Chinese language data, when the Turkic ethnonym *gyangun* (Kyrgyz) first appears in 49 BC in the Chinese annals (Yakhontov, 1986), and we consider that the first close contacts of the Turkic peoples with the Chinese language world could have begun from that time. So, the first Chinese borrowings were written in the Old-Turkic runic monuments in Mongolia as direct loans from the Chinese language. These borrowings were studied by E. Yakhontov in the Old-Turkic runic monuments:

biti- (Chin.: *pir*<*piet* ‘brush for writing’) ‘cut label, write’ (Kul Tigin, small 13) (DTS, 103);

oŋ (Chin.: *won*): *oŋtutuq* ‘rank, position’ (Kul Tigin, small 31) (DTS, 367);

qunčuj (Chin.: *koŋ-čy*) ‘princess, the youngest Khan's blood relative, a woman of noble birth’ (Kul Tigin 20) (DTS, 466);

šantuy (Chin.: *šan-ton*) ‘The North China Plain’ (Kul Tigin, small 3) (DTS, 520);

tabxač (Chin.: *thag-bar*<*thak-bat*, genus, who based Northern Wei dynasty in the North China (386-534 years AD) ‘China, Chinese, the Chinese’ (Tonjukuk 1, 2, 19) (DTS, 526);

tutuq (Chin.: *to-tog*) ‘tutuk job title’ (military governor of a region) and ‘title’ (a component of proper names) (Mojun-Churu, south 2) (DTS, 593).

These findings indicate a close and prolonged contact of the Chinese people and the creators of the Old Turkic runic inscriptions of steles from Mongolia.

Some of these words are found in the modern Turkic languages, such as Tuvan *kunčuy* ‘mother in law’. This fact generates an idea of direct continuity of the Tuvan language and that of runic inscriptions, or their contacts.

Gerard Clauson notes the relationship of the word *tabɣač* and the ethnonym *Chuvash*. If this assumption is correct, we can expect a more representative bulk of the Chinese borrowings in the Chuvash language. However, the Turkic ethnonym *tabɣač* may be linked with the self-designation of the Tuvans as *tyva*.

It is interesting that in the history of the Chuvash language, direct Chinese borrowings are also found, for example:

Chuv. *kunə* ‘coarse canvas, weaving in a special way’, ‘embroidery, sewing, knitting’, OT *kuyin* (Chin.: *kyæn*): *kuyinbitig* ‘scroll’ (DTS, 322);

znyj Chuv. **žinžü* ‘pearl’ (Hung. *gyöngy*), Chuv. *änče* id. < Tat.*enĵe* id., OT (Chin.: *činčy*) *jenčü* id.

All mentioned Chinese borrowings are not registered in Yakut. In Yakut there are no direct Chinese borrowings. The Chinese borrowings penetrate the Yakut language through Mongolian languages, for example:

Yak. *bičik* ‘pattern, decoration’ < Mong. *bičig* ‘writing’ < Turk.: OT *bitig* ‘book, inscription’ < *biti-* (Chin.: *pir* < *piet* ‘brush for writing’) ‘cut label, write’ (Kul Tigin, small 13) (DTS, 103);

Yak. *luo* ‘dragon’ < Mong. *luu* id. < Turk.: OT *lū* id. (Chin.: *luŋ* id.) (DTS, 334).

3. Conclusion

So, we conclude that the Yakut language diverged from the Turkic protolanguage before the Turkic and Chinese direct contacts, i.e. before 49 BC, which is derived from the relative chronology analysis.

On the basis of the genetic, historical and linguistics data, according to relative chronology, it is proved that the ancestors of the modern Yakut and their language originate from the Turkic protocommunity of the 1st century BC in the Central Asia steppe region. This period of time relates the time of the Xiongnu culture. It should also be mentioned that the N1c1 haplotype is not found in the graves of Xiongnu from Egyin Gol (Mongolia) (Keyser-Tracqui, 2006).

Separate South Siberian Turkic languages are not monolithic in terms of their origin, which is explained through a number of factors, including both natural and social. Among them are the Chulym Turkic and the Bachat Teleut. The analysis of the Teleut gene pool has revealed minimum two different components of the Turkic (R-haplogroup) and non-Turkic (Ugric or Samoyedic) (N-haplogroup) nature, which gives us reason to consider the non-Turkic elements in Teleut as aboriginal. The presence of the Mongolic C-haplogroup (10%) with the Teleuts may be the trace of the Mongol Empire in the Central Asia. The gene pool study of the Chulym Turks is expected to contribute a lot to the issue of language history as well as sparse elements in the Chulym Turkic lexicon which seem etymologically vague from the Turkic viewpoint.

These conclusions will be further verified by linguistic analysis data in comparison with those of the Yakut language, which is most reliable for comparative verification in terms of stating the Turkic nature of the language elements.

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