



# Turkic-Mongolian Language Parallels in Comparative Historical Outline

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## Abstract

Among the Altaic languages, Turkic and Mongolian have a lot of similarities due to their prolonged contact and a common lineage. The two languages share several parallels in vocabulary, sound correspondence, phonotactic rules, and grammar. This study aimed to explore the comparative-historical aspects of Turkic-Mongolian language parallels in lingua-contactological terms. Data was collected to understand various aspects of Altaic languages interaction, and how a formation of lexical corpus of each individual language developed a distinct genre of the Altaic studies. The comparative-contrastive methodology with historical approach was used to examine how linguists of various periods, majors, schools and directions discovered material similarities among the Turkic, Mongolian and Tungus-Manchu languages, covering almost all structural levels, such as phonetics, morphology, vocabulary and syntax. The findings reveal that the Altaic languages present a differentiation of various chronological and linguistic layers of borrowings. The earliest layer of it, accessible to linguistic and historical explanation of current Altaic studies, is made with Proto-Bulgarian ones in (Proto)Mongolian, considered by traditional Altaic studies as common heritage. It was also found that Altaic studies are evidence of root correspondences between numerous groups of Altaic languages representing all layers of inter-borrowings. The similarities were found in grammar, vocabulary and phonetic rules between the Turkic, Mongolian and Tungus-Manchu languages, suggesting that a comparison of different layers of diachronic and diatopic borrowings often result in building a structural framework.

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**Keywords:** Altaic Languages, Altaic Studies, Turkic-Mongolian Parallels, Theory of Borrowing, Genetic Relationship.

## Introduction

The Altaic languages, originated in Northeastern parts of Asian subcontinent, include the five distinct language families: Turkic, Mongolic, Tungusic, Koreanic and Japonic. (Németh, 1912). Though each language family has a different origin and region where it is spoken, there exists a genetic relationship with common features like agglutinative morphology, head-final word order, sound harmony, verb-final word order, use of numerous nonfinite verb constructions, and lack of tonality. Altaic studies have also developed a branch of comparative-historical linguistics and contributed to the scientific progress of numerous Turkic, Mongolian, and Tungus-Manchu languages traditionally forming the Altaic family (Sunik, 1947, 1976). In due course, the Altaic studies developed as a distinct genre based on theoretical issues of structural-typological origin of all languages in the Altaic family. This genre included comparative-contrastive as well as comparative-historical study of these languages by linguists of various majors, schools and directions. Researchers of the Turkic,

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Mongolian and Tungus-Manchu languages further established numerous material similarities among them, covering almost all structural levels, such as phonetics, morphology, vocabulary and syntax.

Among the Altaic group, Turkic and Mongolian are the two languages that have a lot of similarities due to their prolonged contact. It is often argued that Turkic and Mongolian have a single common root and got split due to some socio-political or historical reason. The two languages share several parallels in vocabulary, sound correspondence, phonotactic rules, and grammar. The similarities in vocabulary are found in the Turkic loanwords most commonly used in the Mongolian language. There are also systematic sound correspondences between the two languages, such as the equivalence of “Z~R” and “SH (Š)~L” consonants. The two languages also have highly similar phonotactic rules in their phonologies. Regarding grammatical similarities, both languages have a lack of grammatical gender and use extensive agglutination. Due to these numerous parallels between the Turkic and Mongolian languages, there also emerged the Altaic theory which postulated that the majority of material similarities among the Turkic, Mongolian and Tungus-Manchu, as well as Korean and Japanese languages, are a common genetic pool inherited from the proto-Altaic ancestral language. The current study is an attempt to examine various lexical elements of the Altaic languages from the comparative-historical lens and identify mutual borrowings among the languages. The main objective of this study is to determine what factors impacted the relationships between the Turkic, Mongolian and Tungus-Manchu languages (Rahmatdildaevna Kurmanbekova et al., 2023).

## Problem Statement

The genre of Altaic languages, ever since its recognition in literary circles, has been subject to a debate. Some linguists argue that Altaic languages should only include the Turkic, Mongolian and Tungus-Manchu language groups, while others propose expanding this framework to include the Korean and the Japanese languages. Secondly, there are several unconfirmed hypotheses regarding the closeness of these languages at the levels of phonetics, grammar and vocabulary, which have given rise to several scientific theories. One of them is the Altaic hypothesis, which explains the closeness of the aforementioned languages by their genetic commonality and postulates the existence of a hypothetical Proto-Altaic language (Dilâçar, 1978; Poppe, 1965; Ramstedt, 1935). In addition, the opponents of the theory on original genetic relationship of the Turkic, Mongolian and Tungus-Manchu languages have also emphasized on the need to revise the methodology and update the searching practice to lead Altaic studies out of the impasse and protect it from endless polemics (Rahmatdildaevna Kurmanbekova et al., 2023). Owing to these issues, the genre of Altaic studies comprising Turkic, Mongolian, Tungus-Manchu and other languages was left completely ignored from the inclusion in “so-called traditional Altaic studies.” As a result of this stagnation, not many studies have been carried out to study the long-established similarity patterns in the sound and grammatical structure of the Altaic languages nor any serious attempt has so far been made to understand the general and specific patterns of their structure development (Sunik, 1976).

There is no doubt in the close affinity due to the presence of long, diverse and multiple historical contacts between Turkic-Mongolian, on the one hand, and Mongolian-Tungus-Manchu, on the other. This fact is equally accepted by both traditional and moderate Altaists, as well as by anti-Altaists. Consequently, the presence of borrowings in composition of Turkic-Mongolian and common Altaic lexical parallels is not excluded. Moreover, it is quite acceptable that all Turkic-Mongolian and, more broadly, common Altaic lexical, as well as morphological parallels include numerous and diverse mutual borrowings. Many years of Altaic studies, and especially the ones in terms of the Turkic-Mongolian language community, launched revising the methodology and working out a different approach to settle the issue, but without any robust solution. The reason for the impossibility of an unambiguous solution to the Altaic problem, including the Turkic-Mongolian language community, lies in insufficiently correct methodology of the research conducted by orthodox Altaic studies. Therefore, it is now essential to conduct serious research on common lexical elements of the Altaic languages in a comparative-historical point of view to identify mutual borrowings. There is also the need to determine the impact of the most ancient and diverse contacts between the Turkic, Mongolian and Tungus-Manchu peoples traditionally united into a hypothetical Altaic family. The current research is an attempt to achieve these objectives and contribute to the domain of Altaic studies in terms of the comparative historical aspect of the inter-relationship between Altaic languages.

## Literature Review

The term Altaic was first used in 1845 by a Finnish linguist, ethnologist and philologist Matthias Alexander Castrén (1832-1852) who pioneered the study of the Uralic languages and who believed that the Altaic languages also included the Uralic languages, since the Altai region had expanded in southern Siberia and western Mongolia (Stammler-Gossmann, 2009). Hence, he was hinting at a genetic affinity between all these languages. However, later scholars rejected the idea of a Ural-Altaic affinity (Paasonen, 1912/1913-1916/1917; Shirokogoroff, 1931a, 1931b) and considered Uralic as a separate language family. Later, in mid-20<sup>th</sup> century, the relationship between Altaic languages with other languages in the surrounding region

emerged once again when the Finnish linguist, Gustaf John Ramstedt (1873-1950) developed the idea of a unified language family comprising Turkic, Mongolic, and Tungusic languages, and later added Korean and Japanese as well (Ramstedt, 1935). This argument about the Altaics' affinity with other languages was supported by Nicholas Poppe (Poppe, 1965, 1969).

The critical works of Ramstedt and Poppe have unitedly built the so-called Altaic Hypothesis, or the Altaic Theory (Poppe, 1965), which has been criticized severely on several grounds resulting in two groups, Pro Altaics who favored the Altaic hypothesis and Anti Altaics, were who against it (Doerfer, 1970; Kotvich, 1962; Ligeti, 1960; Shcherbak, 1993). However, despite a long series of debates and arguments by both groups for decades, a consensus was reached regarding the inclusion of Japanese in the Altaic context (Miller, 1992; Robbeets, 2008); however, methodological differences still remained in making comparisons between selected pairs of languages, such as Tungusic and Mongolic (Doerfer, 1970; Janhunen, 2023) or Koreanic and Japonic (Hattori, 1974; Kuribayashi, 2010). The point of disagreement was mainly in the lexical items and grammatical features in any given Altaic language, as well as insufficient linguistic sophistication. This made a comparison between similar items or features difficult in Altaic languages, and any genetic resemblance irrelevant.

Linguists like (Alpatov, 2020; Hattori, 1974; Novgorodov et al., 2020; Starostin, 2005; Vovin, 2009), in their comparisons of Altaic languages, did recognize the presence of a large corpus of lexicon as a whole, but also stated that individual languages like Koreanic and Japonic possess much less lexical material that might not sufficiently link them to the Altaic corpus. By making use of methods of historical linguistics, a few historians like (Hattori, 1974; Martin, 2004; Novgorodov et al., 2020; Starostin, 2005; Vovin, 2009) attempted to draw some parallel between the Altaic languages and their inter- relationship, but could not find any traces of actual contact between the two languages. Several Japanese historians and writers have produced inscriptions, texts and documents on Turkic languages (Georg, 2003; Hattori, 1974; Kuribayashi, 2010). They have given important contributions to Old Turkic and Turkic linguistics, and thus formulated the comparative studies of Turkic with other Altaic languages. They made linguistic observations of the Turkic inscriptions from the historical point of view and discovered a new kind of grammatical category in Turkic languages. These writings started a new era of Mongolian-Tungusic combination. Even though Japanese linguists did not agree to accept Turkic, Mongolian, Tungusic, Korean, and Japanese as one language family, Japanese linguists like Hattori (1974), and Robbeets (2008) have pioneered comparative studies in Turkic and Japanese linguistics.

Gustaf John Ramstedt is rightfully considered the founder of modern Altaic studies. His first works in the field of comparative study of Turkic, Mongolian and Tungus-Manchu languages had great success. With this research, he prepared a ground for the modern linguists (Burykin, 2020; Dybo, 2021; Malchukov, 2020; Sechenchogt, 2020). His research inspired the deciphering of the Orkhon-Yenisei monuments and the discovery of the Uyghur script, and brought a paradigm shift in comparative and historical phonetics of the Turkic languages. Ramstedt, however, did not express a definite opinion on the nature of Mongolian-Turkic linguistic relationships in his first comparative studies (Oskolskaya, Koile, & Robbeets, 2022). Additionally, (Ramstedt, 1935) believed in significant closeness of the Mongolian and Turkic languages as the result of mass borrowings. Establishing a number of important Mongolian-Chuvash-Turkic phonetic relationships and identifying common elements of those languages, (Ramstedt, 1935) found the Mongolian and Turkic languages relationship. In subsequent works, he emphasized upon the genetic relationship of the Altaic languages and the Altaic proto-language

The relationship between Mongolian and other Altaic languages, postulated by Ramstedt, was not accepted by all researchers. For instance, Németh (1912) expressed a skeptical attitude towards the theory of Turkic-Mongolian linguistic relationship, but later came to the conclusion that the Turkic and Mongolian languages were possibly related in the very distant past. Németh (1912) established four main stages of contacts among the Turkic, Mongolian and Chuvash languages: 1) the period of initial affinity; 2) the period of Chuvash-Mongolian linguistic mutual influence; 3) the period of Tatar-Mongolian linguistic mutual influence; and 4) the period of Mongolian penetration in the Yakut language. In particular, Németh (2020) considered the correspondence of Mongol-Chuvash sounds *r* and *l* to the Turkic *z* and *sh* as a result of the joint development of the Mongolian and Chuvash languages during the second period. By this, he strove to more accurately establishing the position of the Chuvash language among the Turkic and Mongolian languages, assuming that, the period of the Mongolian-Chuvash linguistic union followed the period of Mongolian-Turkic unity in the history of the Altaic languages.

Ramstedt (1935, 1957) rejected the Nemeth's assumption and expressed the opinion that the Chuvash language was formed as a result of the natural development of the Turkic ancestor language and, moreover, there was no influence from the Mongolian language. In this context, the views of Kotvich (1962), another prominent Altaist, are noteworthy. Many years of studying the relationships among the languages of the Altaic family, made him to reject the previously accepted hypothesis of genetic relationship of the Turkic, Mongolian, and Tungus-Manchu languages, believing that "its basis is not genetic relationship, but typological similarity, which is explained by the fact that the Turkic, Mongolian, and Tungus-Manchu languages develop with minor deviations" (Kotvich, 1962). A few linguists who denied the original genetic relationship of the Altaic languages tried to explain most of the revealed convergences among individual groups of the Altaic languages (they were relatively close to the chronological surface) by mutual influence of

originally unrelated language families. Their identification can provide invaluable material for a more adequate chronology of ancient language contacts. In this regard, the works of Ligeti (1960) were devoted to Mongolian borrowing in the Tungus-Manchu language; Vladimirtsov (1911) dealt with Turkisms in Mongolian languages. Additionally, the works of Róna-Tas (2011) on Proto-Bulgarian borrowings in Mongolian language and Mongolian borrowings in Chuvash are also of particular importance. These works, after final establishment of the Proto-Altaic vocabulary layer, helped to identify inter-Altaic phonetic correspondences and compile comparative phonetics and grammar of the Altaic languages.

## Research Methodology

### *Research Design*

A qualitative research design guided this study which enabled to focus on deriving Turkic-Mongolian language parallels in lingua-contactological aspect. A comparative historical approach was used to assemble various aspects of Altaic languages interaction pertinent to the domain of Altaic studies. The theoretical underpinnings of the study were borrowed from linguists like Ramstedt (1957) and Poppe (1969) who pioneered the concept of Altaic genre, and led to the understanding of the comparative aspects and differentiation of various chronological and linguistic layers of borrowings of the Altaic language's community.

### *Data collection*

Since the study focused comparative and historical approach, descriptive and historical methods were required to collect data from the Turkic and Mongolian inscriptions, ancient bilingual dictionaries in Turkic, as well as dialectological and professional vocabularies, and works in the Altaic languages. While the descriptive method helped to collect the data and classify it to determine the correlation of the individual borrowings in each language, the historical approach guided to place those example chronologically. The data reflected the historical lexicology and cultural linguistics of the Altaic community.

### *Data Analysis*

Etymological and component analysis methods were used to analyze the lexical aspects of Turkic and Mongolian language examples selected for the study. Linguistically, etymological analysis helps formation of derivatives where borrowings are involved, while the component analysis allows the freedom to dissect the linguistic components into minimal units of grammar, vocabulary and like.

## Results and Discussion

### *Linguistic Layers of Borrowings*

An important place in comparative study of Altaic languages is occupied by the differentiation of various chronological and linguistic layers of borrowings. In light of recent research, the theory of borrowings appears more scientifically acceptable and consistent. Doerfer (1970) posits that thinking and recognizing borrowings penetrated from some languages of the Altaic family into others in separate "waves" at different times has a great explanatory power. The earliest layer of borrowings, accessible to linguistic and historical explanation in current state of Altaic studies, are the Proto-Bulgarian borrowings compared with Proto-Mongolian borrowings, usually considered by traditional Altaic studies as common heritage, and exhibited in the following examples presented in Table 1. It is therefore, revealed that identification of Proto-Bulgarianisms in Mongolian languages is supported primarily by the signs of rhotacism and lambdaism, as well as other arguments [Róna-Tas, 1974, 31–42]. Table 2 cites a few examples of rhotacism and lambdaism in Proto-Bulgarianism.

It is interesting to cite the remark of the Chinese traveler Meng Hong in relation to the development of semantics on the tribes that lived in Mongolia: "... the year is counted by the growth of grass; when someone is asked how old he is, they say: the number of grass seasons" [Doerfer, 1963, 111–114]. Proto-Bulgarisms of the Mongolian languages have a continuation in Tungus-Manchu languages, and it is striking that Tungus-Manchu forms consistently reflect the Middle Mongolian state. This state of affairs can be easily interpreted taking into account that Mongolian languages contain Turkisms of a Bulgar character, which belong to the most archaic layer of borrowings. Table 3 presents examples reflecting this type of borrowings.

Quite often Since none of the ancient Turkic monuments dating back to the 7<sup>th</sup>-12<sup>th</sup> centuries contain the phenomena of rhotacism and lambdaism, it must be assumed that the *r*- and *l*- forms appeared in Mongolian languages much earlier than the 7<sup>th</sup> century: at least not later than the 4<sup>th</sup> century AD, when the Bulgar-speaking Turkic tribes appeared in Eastern Europe. Proto-Bulgar borrowings in Mongolian can be attributed to the Hunnic era (3<sup>rd</sup> century BC – 2<sup>nd</sup> century AD). In turn, Bulgaroid elements penetrated into Tungus-Manchu and Turkic languages from Middle Mongolian language. Chronologically, the earliest Mongolisms of Tungus-Manchu languages can be attributed to the era of the rise of the Mongols (11<sup>th</sup>–12<sup>th</sup> centuries AD).



### Turko-Mongolian Linguistic Similarities

Another powerful layer of Turkic-Mongolian linguistic similarities is most consistently explained as a result of borrowing from languages of common Turkic type in Mongolian. Chronologically, Turkisms of common Turkic (non-Bulgar) type in Mongolian most likely go back to different levels. The first, earliest layer of Turkisms of the common Turkic type, obviously, developed in Mongolian during the period of close contacts between the ancient Turks and Mongols, which took place in the 4<sup>th</sup>-7<sup>th</sup> centuries AD on the territory of Northwestern China. The second, rather powerful layer of Turkisms in Mongolian languages was deposited during the period of intensive contacts between the Turks and Mongols in Baikal region in the 8<sup>th</sup>-12<sup>th</sup> centuries, when the Kyrgyz Turks partially assimilated the northern Mongolian tribes (late Old Turkic borrowings). Finally, the third layer of Turkisms in Mongolian languages was formed in 13<sup>th</sup>-14<sup>th</sup> centuries due to the active Uyghur-Mongol cultural ties in different regions of Turkestan (early Middle Turkic borrowings) (Shcherbak, 1993, 1995).

**Table 1:** The Proto-Bulgarian Borrowings Compared with Proto-Mongolian Borrowings.

Proto-Bulgarian	Proto-Turkic Equivalent	Chuvash Equivalent	Proto-Mongolic Term	Related Terms
*boyorla-	*boyaz ~	pyr < năšăp “throat” + -la – aff. verb denomination	*boyorla- “to cut the throat”, “to strangulate”	tat. <i>bogar-lan-</i> “to eat up to your throat”, bugardak “Adam’s apple” (Middle Mong.)
*ikir	*äkiz ~	yěķēr “twins” < äki “two” + -r – aff. dual number	*ikire	Yakut, <i>igire</i> “twins” (Middle Mong.); Hungarian <i>iker</i> (other bulg.)
*tü:rej	*ti:zej < *ti:z ~	chěr “knee”	*türei “bootleg” > Kh. -Mong. <i>tury</i>	hack. <i>tjrey</i> ; Middle-Mongolian <i>türei</i> → Manchu. <i>ture</i> “bootleg”
*qoyur ~ *qobur	*qobuz ~ *qoŋuz “stringed musical instrument”		*qoyur ~ *qobur “stringed musical instrument” > Old Mong. <i>quyp</i> ~ <i>qubur</i> (→ uyg. <i>qopur</i> “kind of guitar”) > Kh. -Mong. <i>χūr</i> “violin”, “harmonica”	T.-Manch. <i>ku:r</i> “stringed musical instrument”; Modern Chuv. <i>kupās</i> ← Tat. <i>kubyz</i> “harmonica”
*šubur ~ šibir	*sibizqī < *sibiz “wind musical instrument”	uăñăp “bubble”, “bagpipe”	*suyur ~ *subur “wind musical instrument”	Middle Mongolian <i>šoyor</i> (→ Alt. <i>shogor</i> ~ <i>shoor</i> , in Alt. <i>sybysky</i> ) > Kh. -Mong. <i>shuur</i> “the same”

**Table 2:** The signs of rhotacism and lambdaism (examples of Proto-Bulgarianisms).

Proto-Bulgarian	Proto-Turkic Equivalent	Chuvash Equivalent	Proto-Mongolic Term	Related Terms
*quduruq	*quduruq	xyre < xěspe; -d- went into -v- < *j- instead of the expected -r- before the subsequent -r- to avoid haplology	*qudurya “under-tail” (with actually Mong. <i>següt</i> “tail”)	Evenk. <i>kudurga</i> “under-tail”, Manch. <i>kudarkhan</i> ~ <i>kudarpan</i> “undertail”; T.-Manchu. *χürgü “tail” (→ Nan. <i>χujgu</i> > Ulch. <i>xzy</i> , Evenk. <i>irgi</i> “the same”)
*qadam	*qadın > Old Turkic <i>qadın</i> ~ <i>qazın</i> ~ <i>qajın</i> “relatives on the wife’s side”, originally “wife”, “woman”, “mistress” ← Sogd. <i>χwate:n-</i> “woman”	hurăn: in ancient ritual address to women <i>hurăn-surăn kassisem</i> , <i>hurăn- sūrăn</i> “honorable women”	*qadam “relatives on the wife’s side” > Middle Mong. <i>χadam</i> ~ <i>χadam</i> “relatives of husband and wife”	Evenk. <i>kadum</i> “in-law”; Middle-Mongolian <i>χatun</i> “lady”, “noble lady”, “princess” (← Persian <i>χatun</i> → Turkic <i>khatun</i> ) → T. Manchu. <i>katun</i> , Yakut. <i>khatyn</i> (with the actual Yakut <i>khat: khatyan</i> “hostess”, <i>hotuka</i> “hostess”); Chuv. <i>hun</i> “father-in-law” < <i>huiän</i> ← Kypch. <i>qajın</i> “relation by marriage”
*junduruq “fist”		çătăr “fist”; çătărla- “to make a fist”; -t- < *nd- preserved due to the presence of -r in the word	*nidurya (*j- > n- under the influence of the subsequent -n-)	Middle Khak. <i>munzuruχ</i> < *nunzuruχ < *junduruq “fist”

**Table 3:** The Turkisms of a Bulgar Character, Which Belong to The Most Archaic Layer of Borrowings.

Proto-Bulgarian	Proto-Turkic Equivalent	Chuvash Equivalent	Proto-Mongolic Term	Related Terms
<i>*ti'al</i>	<i>*ta:š</i>	<i>chul</i> “stone”	<i>*ti:layun</i> > Middle Mong. <i>čilayun</i> > Kh. Mong. <i>chuluu</i> “stone”	T-Manchu. <i>золo</i> “the same” Hung. <i>süllő</i> “pike perch”; Wed-Bulg. <i>*sila</i> ~ <i>*šāla</i> → Tat. <i>syla</i> , bashk. <i>hyla</i> (~ <i>syla</i> ← Tat.), Kaz., K. Kalp., nog. <i>sila</i> , Turkmenistan dial <i>si:le</i> , Russian, Ukr. <i>sula</i> “pike perch” Tuv. <i>chalyy</i> “young”, “youthful”; Proto-Bulgarian <i>*ži'al</i> → Turk. <i>jil</i> , Mong. <i>žil</i> “year” → T.-Manch. (Sol.) <i>žil</i> “year”; Middle Bulg. <i>žol</i> “year”, “age”; Chuv. <i>yash</i> “young” ← Tat. Mish. <i>yash</i> ; Chuv. <i>eshēl</i> “green” – Tat. <i>yashel</i> T-Manchu. <i>tala</i> (Manchu), <i>tallama</i> (Evenk) “plain”, “field”; “steppe”; Mong. → Old Turk. <i>tala</i> “steppe”, Yak. <i>ta:la</i> “open country”, “plain”
<i>*ši:lüge</i> < <i>*ti:läge</i>	<i>*tišāk</i> “large-toothed animal” < <i>*tiš</i> “tooth”	<i>uāna</i> ~ <i>uānā</i> ~ <i>uānna</i> “pike perch”, cf. Kaz. <i>ticri</i> “pike perch” in the language of the Aral Sea fishermen	<i>*silüge</i> “animal with a full set of teeth”; Old Bulg. <i>*šiliy</i>	
<i>*ži'al</i>	<i>*ja:š</i> “green”, “young”, “fresh”, “green”; “age”	<i>çul</i> / <i>çol</i> “year”, “age”; <i>çulçā</i> / <i>çolchā</i> “foliage”, “plant leaf”	<i>*žalayu</i> “young”, “youth”; Kh-Mong. <i>zaluu</i> “young”, “youth”	
<i>*ta:l</i>	<i>*ta:š</i>	<i>tul</i> / <i>tol</i> “exterior”	<i>*tala</i> “steppe”, “plain”	
<i>*ba:lč</i>	<i>*ba.lč</i> > <i>Pra-Turkic</i> <i>*ba:š</i>	<i>nyç/noç</i> “head”	<i>*balži</i> : <i>in tarbalži</i> < “bald-headed bird”	<i>tar</i> ← Proto-Bulgarian <i>*tar</i> ~ Proto-Turkic <i>taz</i>
<i>*qalč</i>	<i>*qalč</i> ~ <i>Pra-Turkic</i> <i>qa:š</i> “eyebrow”	<i>khushka</i> “bald”, “with a white spot on the forehead”; but <i>kharsha</i> < <i>*khasha</i> ← Tat. <i>kash</i> “eyebrow”; in Chuvash – inserted -r- before the following -sh	<i>*qalža</i> “forehead ornament”, Po-Mongol. <i>çalčayai</i> “sparse, sparse, shabby”; <i>çalžan</i> ~ <i>çalžin</i> “bald”, “bald-headed”; “bald spot”	T.-Manchu.: Evenk, <i>кашану</i> “badger”, Sol. <i>халжа</i> : “bald spot”; Manchu. <i>каша</i> “bald spot”.

**Table 4:** The Proto-Turk and Proto-Bulg comparisons.

Proto-Turkic Term	Proto-Bulgarian Equivalent	Chuvash Equivalent	Pramongolic Term	Note
<i>*ayiz</i> ~ <i>ayuz</i> “colostrum”	<i>*ayiriiy</i>	<i>yrā</i>	<i>*uyuray</i> (> <i>Kh.-Mong. uurag</i> )	T. Manchu: Evenk, <i>u:rak</i> , sol. <i>o:ray</i> “colostrum”
<i>*ašiq</i> ~ <i>ašuq</i> < <i>*alčug</i> “ankle bone”	<i>*alčuy</i>	<i>elchē</i> ← Tat. dial. <i>alchy</i> ← Mong.; Chuv. <i>ashāk</i> < Tat. <i>ashik</i>	<i>*alčui</i>	T. Manchu: <i>alchu</i> , Neg. <i>alchukha:n</i> “ankle”, “beldame (playing)”
<i>*a:ziq</i> ~ <i>*a:zuq</i> “molar tooth”	<i>*a:ruy</i>	<i>vārā</i> / <i>urlā</i> : <i>vārshāl</i> , <i>urlāshāl</i> “molar tooth”, “fang”; <i>acav</i> ← Tat. <i>Azau</i>	<i>*araya</i> “fang” ( <i>aryali</i> “mountain ram”; <i>aržai</i> - “to bare teeth”)	T. Manchu: Manchu. <i>arūan</i> “fang (of the beast)”, <i>arūali</i> “chamois”; Mong. → Yakut. <i>aržai</i> - “to bare teeth”; Mong. → Turkic <i>arqar</i> “mouflon”, “arkhar”
<i>*āškāk</i> “donkey”	<i>*ālčigāk</i>	<i>ashak</i> ← Middle Turkic <i>āšāk</i>	<i>*elžigen</i>	Manchu. <i>eihep</i> (< <i>*el'kep</i> < <i>elžigen</i> ); Sol. <i>elig</i> ; Neg., ulch., nan. <i>ejhe</i> (< <i>*el'ke</i> < <i>*eižige</i> ) “the same”
<i>*biš-</i> < <i>*bilč-</i> “to prepare”, “to ripen”, “to boil”	<i>*bülč-</i> (cf. Uyg. dial. <i>püş-</i> , other Turkic <i>büşär-</i> )	<i>nuç-/něç-</i> : <i>pěçer-</i> “cook”	<i>*büle-</i> “to churn (butter)” ( <i>bülegür</i> “whisk”)	T. Manchu: Evenk, <i>bule-</i> “to catch fish (by shelter)”, <i>bulevun</i> “whisk”

*buzayu “calf”	*bīrayu	pāry/pārāv	*birayu > Middle Mong. bura’i “same”	T-Manchu: Evenk, boro “stirk”; cf. Hungarian borju ← Old Bulg.
*boyazla- (<boyaz “throat”) “strangle”, “kill”, “slaughter (animals)”	*boyurla-	pyr < *pāvār “throat” < *boyur “throat”	*boyorla-	Turkic: Tatar bogarlan- “to eat to repletion”, literally “up to one’s throat”
*buḡyuz “horn”	*būḡüräk	māyra / māyraka / myraka; where b- > t- under the influence of -ḡ; -ḡg- > nj- > -j-	*mōḡüresün “cartilage”	Evenk. mune:rsen “cartilage”, mune, muni “tendon (at the end of a muscle)”; “thaw”, “muscle”
*küçük < *kölçük < *kölüçük “baby animal (mostly wild)”, “puppy” (cf. Turkish köşek “colt”, Kaz. көзбек “bunny”, “little hare-colored horse”)	*kölçüke	кчка/качка; in collective yit-качка “dog”, “canine”	*gölüge “puppy”	Old Bulg. kölçük → Hungarian kölyök “baby”, “puppy”, “kitten”; Turk. küçük, possibly from Old Bulg., with the original kö:šek
*omuz “shoulder”	*omuruq	āmār “collarbone”, “dewlap”, “chest of an animal”	*omuruyun “collarbone”	Turkic, omuruy ~ omuray “chest (of animals)”; “collarbone”
*qimīz “kumys”	*qimīr	kāmāška “mold”, kāmāška- “to mold”, kāmās “kumis” ← Tat.	*kimir “kumys”	Kaz. kymran “a mixture of kumiss with cow’s milk”, cf. Kalm. kimra:n “the same”
*qaš, qašqa “white mark on the forehead of an animal”	*qalči(qa)	khushka ← Middle Turkic, Kypch. qašqa	*qalžan > Middle Mong. ḡalžan ~ ḡalžin “bald”, “bald-headed”; “starlet on the forehead (of animals)”	T-Manchu: Sol. xalža “with a bald spot”; Manchu. kawža “bald head (from forehead to crown)”; Evenk. каузань “badger”; Mong. qaltar “bald, naked”, possibly from Proto-Bulgarian. *qaltī-r, where of Proto-Bulgarian qalči
*qoyuš “hollow”, “cavity”, “throat”	*qoyul	xāwāl “hollow”, “cavity”	*qoyulai > Middle Mong. ḡo’ulai “throat”, “pipe” > Kh.-Mong. khoology	T. Manchu: Evenk ko:laj “pipe”; Sol. kulan ~ kulan ~ xyala ~ hualyn ~ huar “kan (a type of warm bunks)”; Neg. kho:l “chimney (under the bunks of an old house with kans)”; Manchu. koloj ~ kholo “valley (between two mountains)”; “ravine”; “ditch”; “ditch”; “gutter” (to semantics of mid. Chuv. oronym Khāvāl çırma, lit. “Hollow ravine” > name of the village of Kushelga (Yalchik district of the Chechen Republic)
*küz- “wander”, “walk”	*kär-	kas- “wander”, “roam” ← Middle Turkic	*kerü-	T. Manchu: Evenk, kerin- “to go around”; nan. he:ri- “to wander”, “to lounge about”; Mong. → Yakut. kăpiän “circle”; kăpii- “to go around”, “to go around”, “to see over”
*ta:z “bald”	*ta:r (> Old Bulg. *tar Hung. tar “bald”)		*tar, taraqai	Yakut. tapamai “bald pate”, “bald”, “bald spot”, “bald head”; “reindeer calf up to a year old” → Evenk. mapayai “bald”; Mongolian → Manchurian taraka “bald”, etc.

**Table 5:** Terminology of developed cattle breeding in Mongolian and Tungusic-Manchu languages of Turkic origin.

Proto-Turkic Term	Proto-Bulgarian Equivalent	Chuvash Equivalent	Pramongolic Term	Note
* <i>adyir</i> “stallion”	* <i>adiyir</i> ~ * <i>adijir</i>	äyär/äyrä/yrä “stallion”; -d- > -j- together with the expected -r-, since there is a second -r in the word	* <i>adiryā</i> > Middle Mong. <i>ajirya</i> (> (← Manchu), <i>ažupuan</i> ~ <i>ažupkhan</i> “stallion”; Yakut, <i>atyr</i> “stallion”, “bull”, “poroz”; “male” → Evenk. <i>atur</i> “male (not emasculated)”) Kh. -Mong. <i>azraga</i> )	T.-Manchu: Evenk. <i>ažurga</i> , Sol. <i>adirga</i> Nan. <i>ažüpuā</i> “stallion”; Yakut, <i>atyr</i> “stallion”, “bull”, “poroz”; “male” → Evenk. <i>atur</i> “male (not emasculated)”) T. Manchu: Evenk. <i>abdu</i> ~ <i>avdu</i> ~ <i>agdu</i> “cattle”, “herd”, “herd”, Sol. <i>adūū</i> “herd”, Manchu. <i>adun</i> “herd”, “herd”
* <i>at</i> “horse”, “steed”	* <i>aduy</i> ~ * <i>adiy</i>	<i>ut</i> / <i>from</i> “horse”, “steed”	* <i>aduyun</i> “horse”, “steed”, “herd (of horses)”	T. Manchu: Evenk. <i>baitahun</i> “yeld female”, Sol. <i>baitū</i> “yeld female mare”; The phonetic-morphological appearance of the Mongolian form is the closest to the reconstructed Bulgarian * <i>bajitay</i> , cf. Chuv. <i>putek</i> “lamb”; the semantic inversion “springing” → “enceinte”, “springing” is quite acceptable
* <i>bajit</i> - “to be with young”, “to be in foal (about cattle)”; cf. <i>bajtal</i> “mare” (> * <i>bajit</i> - “heifer calf”) ~	* <i>bajit</i> - “to be with young”, cf. * <i>bajitay</i>	<i>němě</i> < * <i>bajtay</i> “o be with young”; Chuv. Dial. <i>payttal</i> ← Tat. <i>baytal</i> “mare”	* <i>bajita-sun</i> > Middle Mong. <i>bajitasun</i> (> Kh. Mong. <i>baitsan</i> “farrow cow”, “female mare”)	T. Manchu. Sol. <i>unigē</i> ~ <i>unegē</i> , Manchu. <i>un'en</i> “cow”; cf. Bulg. <i>ünäg</i> → Hung. <i>ünő</i> “cow”
* <i>iñäk</i> “cow”	* <i>ünäk</i> ~ * <i>ünäg</i>	ēne “cow”	* <i>ünigen</i> > Middle Mong. <i>ünije(n)</i>	T.-Manchu: Evenk. * <i>žiree</i> ; Manchu <i>žoran</i> ~ <i>žuvaran</i> “trot”, “amble”; Mong. <i>Zhoroo</i> → Yakutsk. <i>žoruo</i> “amble”, <i>žruola</i> - “to run at an amble” → even. Orelan “courser”
* <i>zoruya</i> “pacer”, “pacing”	* <i>žoruya</i>	čäpxa “pacer”	* <i>žiruya</i> “pacing” (Kh. -Mong. <i>zhoroo</i> )	T.-Manchu: <i>temeye:n</i> , Manchu. <i>temen</i> , <i>oroch.</i> , Nan. <i>teme</i> “camel”; Yak. <i>taba</i> (< * <i>täbä</i> ) “deer” → Evenk. <i>tobo</i> “deer”; Mong. → Yak. <i>täbiän</i> → Evenk. <i>teve:n</i> “camel”; from a cultural-historical point of view, it can be noted that <i>Camelus bactrianus</i> initially spread from west to east
* <i>täbä</i> “camel”	* <i>täbä</i>	<i>tëve</i> / <i>töe</i> < * <i>tive</i>	* <i>tebegen</i> (→ Khak. <i>tebägä</i> , Yakut. <i>täbiän</i> , <i>timiän</i> “camel”) > Middle Mong. <i>temege(n)</i> (> H.-Mong. <i>temeen</i> ) “camel”	
* <i>ta:qiyu</i> “chicken”	* <i>ta:yiqa</i>	<i>ıăx(ă)</i> < * <i>tivüqi</i> ) — Hung. <i>tyúk</i> , <i>tik</i> (< * <i>tivüqi</i> < * <i>tī'ayüqi</i> “chicken”)	* <i>taqiya</i> , Middle Mong. <i>taχia</i> (Chinese-Mongolian <i>takhian</i> “chicken”)	T-Manch.: Oroch. <i>choco</i> , Nan. <i>chico</i> , Manchu. <i>choco</i> “chicken”

Turko-Mongol contacts continued in subsequent eras. They became especially active in almost the entire Turkic-speaking territory during the Mongol-Tatar expansion of the 13<sup>th</sup>-14<sup>th</sup> centuries. The Mongol conquests and their subsequent rule introduced hundreds of Mongolian words into emerging Turkic languages, although the Mongols themselves were Turkified after the departure of bulk of the Mongolian tribes to their homeland. At the turn of the 13<sup>th</sup>-14<sup>th</sup> centuries, the Mongols adopted Islam and became Turkified, and mixed with Uyghurs, Kipchaks, Oghuz, Bulgars and other Turks in Central Asia, Crimea, the Volga region, and the Caucasus. Along with the original Mongolian linguistic elements, they introduced early Turkic borrowings of the Bulgar and common Turkic type into Turkic languages, which further complicated the overall outline of Mongolian-Turkic linguistic convergence. Mongolian-Turkic language contacts in Central Asia were continuous for almost two millennia. In such conditions, it is more natural to see mutual borrowings in Mongolian-Turkic language coincidences. Many common elements are found on one hand, between Turkic and Mongolian languages, and on the other, between Mongolian and Tungus-Manchu languages. At the same time, there are incomparably fewer common elements equally inherent to all three groups - Turkic, Mongolian and Tungus-Manchu. Phonetic correspondences are very indicative. Mongolian forms in phonetic



terms, as a rule, always correspond exactly either to Proto-Bulgar (in cases of rhotacism and lambdaism) or Old Turkic archetypes, and Tungus-Manchu forms to Middle Mongolian. There are almost no indisputable common elements among Turkic and Tungus-Manchu languages, with the exception of common Turko-Mongol-Tungus-Manchu elements (Doerfer, 1970). Some phonetically and semantically similar words of the Turkic and Tungus-Manchu languages do not fit into the framework of phonetic laws established by traditional Altaic studies and, therefore, should be classified either as random coincidences or as a common heritage of the Proto-Altaic era. At the same time, the possibility of the loss or unrecordedness of the connecting Mongolian link is not excluded. This interpretation of the relationship among the Turkic, Mongolian and Tungus-Manchu languages is fully consistent with the above-mentioned historical and cultural background. Thus, it turns out that linguistic “waves” of borrowings, on one hand, went from the Turkic languages to the Mongolian languages and, on the other, from the Mongolian to the Tungus-Manchu languages, with Turkisms penetrating Tungus-Manchu languages through Mongolian mediation and are essentially Mongolisms. This position is well confirmed by the quantitative ratio of common elements between the Turkic, Mongolian and Tungus-Manchu languages.

Let us turn to the terms of highly developed cattle breeding – a branch, important in the past and present of the Altai peoples. It is a paradox, but all cases and coincidences are best explained with borrowings too, as exhibited in Table 4.

The terms of highly developed cattle breeding, like all other general lexical-semantic groups of words, developed in Altai languages as a result of centuries of borrowing. It is notable, that the direction and the time of borrowing (Turk. → Mong. → T. Manch.) consistently correspond to the direction and time of the nomadic cattle breeding spread. Most of the other terminology of developed cattle breeding in Mongolian and Tungus-Manchu languages is also Turkic in origin, as shown in Table 5.

These examples are evidence of the use of “core” terminology to present highly developed cattle breeding terms in Altai languages. These examples also show that the Mongolian and Tungus-Manchu languages constitute a certain system within the semantically related lexical-thematic group. The general terminology of highly developed cattle breeding in Altai languages, however, does not indicate the original kinship of this terminology, but hint at diachronic and diatopic borrowings. The most important and basic terminology of cattle breeding in Mongolian and Tungus-Manchu languages has a Bulgar character (primarily, signs of rhotacism and lambdaism), which indicates its Oghur (Proto-Bulgar) origin. Another part of cattle breeding terminology in Mongolian and Tungus-Manchu languages is borrowed from the languages of the common Turkic type. Cattle breeding terminology in Tungus-Manchu languages, which is Turkic in origin, formally repeats the Middle Mongolian, which indicates the mediation of the Mongolian language in penetration of Turkisms into Tungus-Manchu languages. Finally, it is also evident that Tungus-Manchu terminology of developed cattle breeding contains quite a lot of Mongolian terms that are absent in Turkic languages, which is an additional argument in favor of the opinion that Tungus-Manchu terms of developed cattle breeding, which are Turkic in origin, were borrowed not directly from Turkic languages, but through the Mongolian ones.

## Conclusion Recommendations and Implications

Existing comparative studies on phonetics and morphology of the Altaic languages are built mainly on plenty diachronic and diatopic mutual borrowings of the Altaic languages. The examples presented in the current study unveiled numerous aspects about Turkic, Mongolian and Tungus-Manchu languages, which can be used to make a few generalizations. First, it was found that at current development stage of Altaic studies, it can be assumed that even after removing all layers of inter-borrowings of different periods, root correspondences among groups of Altaic languages will remain. Second, it was evident from the findings that the number of root correspondences may be very small, and they will not always agree with the laws of phonetic correspondences of the Turkic, Mongolian and Tungus-Manchu languages established by traditional Altaic studies. Third, it was also revealed that these laws are based mainly on the comparison of different layers of diachronic and diatopic borrowings. The supposed pan-Altaic state must be attributed to more distant times than it is postulated by traditional Altaic studies.

The study was also able to outline the chronology of periods and directions of outlined borrowings in historical development of general cattle breeding terminology of in Altai languages namely 1) Proto-Bulgar penetrations period into Proto-Mongol, ranging from 3<sup>rd</sup> century BC – 2<sup>nd</sup> century AD; 2) Turkic (non-Bulgar) penetrations period into Mongolian languages, which can be divided into four periods: a) the Early Old Turkic period (4<sup>th</sup> – 7<sup>th</sup> centuries); b) the Late Old Turkic period (8<sup>th</sup> – 12<sup>th</sup> centuries); c) the Early Middle Turkic period (13<sup>th</sup> – 14<sup>th</sup> centuries); d) the Late Middle Turkic period (15<sup>th</sup> – 17<sup>th</sup> centuries); 3) the period of Middle Mongol penetrations into Turkic and Tungus-Manchu languages (10<sup>th</sup> – 13<sup>th</sup> centuries); and 4) New Mongol penetrations period into Turkic Tungus-Manchu languages (17<sup>th</sup> – 18<sup>th</sup> centuries). Thus, it can be stated with sufficient confidence that comparative-historical study of lexical coincidences among Turkic, Mongolian and Tungus-Manchu languages testify centuries-long intensive contacts. At the same time, the directions and periods of borrowings are quite clearly manifested, which fully corresponds

to historical and cultural evidence.

The presence of common structural elements at lexical, phonetics and grammar levels of the main Altaic languages groups – Turkic, Mongolian and Tungus-Manchu – should be perceived, regardless of their nature and genesis. It must certainly be used to establish the archaic state of phonetics, morphology and vocabulary of Turkic and other Altaic languages. Taking into account the data of comparative-contrastive phonetics, morphology and lexicology provides compelling grounds for putting forward a whole series of pure linguistic and extralinguistic hypotheses and theories relating to the very distant past of all the Altai peoples. Above all, the most ancient Turkic-Mongolian ethnolinguocultural mutual influences should be taken into account. Regardless of whether the significant material community of Altaic languages is genetic or acquired as a result of centuries-old mutual influences, an in-depth comparative-historical study of individual groups of them, as well as individual independent Turkic, Mongolian, Tungus-Manchu and some other languages, without taking into account and developing the materials and achievements of Altaic studies, is practically unthinkable.

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