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An Etymological Dictionary

of Altaic Languages
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This is a first attempt at an etymological dictionary of Altaic languages. The history of Altaic comparative studies is a difficult one. Even now there is still no consensus among scholars on the very problem of the existence of Altaic as a genetic unit. We sincerely hope that this publication will bring an end to this discussion, which has lasted for more than 30 years.

The dictionary presented below should by no means be regarded as final and conclusive. We have tried to collect all existing etymologies that seem to be semantically reliable and fit the established system of phonetic correspondences. Among the 2800 etymologies presented approximately half are new, developed by our team during more than 10 years of preparatory work. New etymologies will most certainly follow, while some of those presented will doubtlessly be rearranged or even refuted in the course of future research. The current reconstruction will also inevitably change - as it happened with Indo-European, Uralic and most of the other established language families during the decades of their investigation. Nevertheless, we regard it as a valid starting point, worth presenting to the general academic audience, and look forward for criticism, suggestions and corrections.

Wherever necessary we give references to etymological literature, although we decided to keep the discussion as short as possible. Many existing etymologies are not mentioned in this dictionary because they contradict the system of correspondences followed in the present volume or because we think we have found better solutions. It would be futile, e.g., to struggle with some of the etymologies linking words with Jpn. *p- to those with Altaic *k-, since we do not believe that such a correspondence exists at all. We must say, however, that most of the etymologies presented in the classical works of G. Ramstedt and N. Poppe, as well as very many Japanese etymologies of R. Miller and S. Martin, have been preserved, which in itself shows that the proposed phonological reinterpretation of the Proto-Altaic system is just an extension of previous research.

The Altaic family as a genetic unity of Turkic, Mongolian and Tungus-Manchu languages had been proposed as early as 1730 by F. J. v.
Stralenberg. Until the early 20th century, however, there was no clear idea about the classification or comparative grammar of Altaic. The few scholars that studied the languages regarded them rather as part of a common Ural-Altaic family, together with Finno-Ugric and Samoyedic languages - an idea now completely discarded.

The undeniable father of scientific Altaic studies was Gustaf John Ramstedt. He started his research in the very beginning of the century, and made a huge contribution both to Altaic studies as a whole and to the study of individual subgroups of Altaic. His research was concluded by the fundamental “Einführung in die Altaische Sprachwissenschaft” published in 1952, two years after his death in 1950. Ramstedt formulated many basic phonetic rules of correspondences between the Altaic languages, laid the foundations of Altaic comparative grammar, and finalized the subclassification of the Altaic family by separating Uralic from Altaic and adding Korean and Japanese to its classic “Western” core.

Other scholars whose contributions to the Altaic field were really substantial are N. Poppe, K. Menges, V. Tsintsius, V. Illich-Svitych, S. Martin and R. A. Miller. A full account of their achievements would deserve a special study, but suffice it to say that due to their efforts a basic reconstruction of Common Altaic was already available by the late fifties / early sixties of the 20th century.

A reaction started in the sixties. A number of scholars (for some reason, primarily Turkologists) initiated what seemed at that time a counter-Altaic revolt. The names of the main anti-Altaicists are G. Clauson, G. Doerfer and A. Shcherbak. Among them G. Doerfer should be distinguished as the most consistent, most fruitful, and most vigorous in his anti-Altaic efforts.

Although the arguments of anti-Altaicists were many - from phonetic to lexico-statistical - their basic argument can be summed up as follows: the relationship between the Altaic languages is not what a genuine genetic relationship should be. All the numerous resemblances between them were explained as a result of secondary convergence within a “Sprachbund” of originally unrelated languages. The whole idea of the original Proto-Altaic unity was very seriously threatened.

Simultaneously the Eastern branch of Altaic - Korean and Japanese, or Korean-Japanese - was brought under heavy suspicion. No serious alternative for Korean was proposed, but an active search for non-Altaic relatives of Japanese began. Distinguished scholars like S. Murayama (who always hesitated between the Altaic and Austronesian affinity of Japanese) and P. Benedict started searching for Japa-
inese-Austronesian parallels, with Benedict (following mainly the Japanese scholar Kawamoto) finally proclaiming the inclusion of Japanese - without Korean and Altaic - into his Austro-Thai family.

After a critical evaluation of the problem we came to the conclusion that Altaic should be still characterized as a genetic unity, probably forming a branch of the larger Nostratic macrofamily, but certainly a separate family on its own. The very fact that it is possible to compile a dictionary of common Altaic heritage appears to be a proof of the validity of the Altaic theory.

The work on the dictionary started in the late 80’s. Initially we worked together with I. Shervashidze, who later switched to different projects, and the work was continued by S. Starostin, A. Dybo and O. Mudrak. We must gratefully mention our numerous younger colleagues and students who helped at various stages of compiling the dictionary, and especially Ilia Gruntov, Vladimir Glumov, Vasily Chernov and Martine Robbeets. The work was sponsored by grants from the Soros (“Open Society”) foundation, from the Russian Foundation of Fundamental Research and the Russian Foundation of Humanities; since 1997 the research was supported by the Investor Group “Ariel” within the framework of the “Tower of Babel” project.

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INTRODUCTION

(by S. A. Starostin)
CHAPTER ONE

THE PROBLEM OF INTERLINGUAL BORROWINGS IN ALTAIC LANGUAGES

Since the gist of the anti-Altaic criticism is the idea that what Ramstedt and Poppe regarded as common Altaic heritage is in fact a result of later borrowings, it is this problem that we shall tackle first in the introduction.

This problem is of utmost importance for the whole Altaic theory. We must be able to distinguish between commonly inherited morphemes and borrowed ones - since interlingual borrowing was very widely practiced during the final stages of the development of Altaic languages.

There are two basic contact zones in the Altaic area: the Turko-Mongolian and the Mongolo-Tungus. There had also been some contacts between Tungus and Korean, Korean and Mongolian, Korean and Japanese - but they are relatively insignificant in comparison with the very intense Turko-Mongolian and Mongolo-Tungus contacts.

1.1. Turko-Mongolian contacts.

It has been convincingly demonstrated by several authors (in a most detailed way by Clark 1980) that there are no (or almost no) Mongolian loanwords in Early Old Turkic, i.e. before the 13th century A.D. However, already in the Secret History of Mongols (13th c.) we find a number of identifiable Turkic loanwords. Logically enough, in Late Old Turkic, Middle Turkic and modern Turkic languages we also find a large number of Mongolisms.

This can only mean that Turko-Mongolian contacts started in the 13th century, and there were no direct contacts before that time.

But there is also a large number of Turko-Mongolian matches that cannot be explained as post-13th century loans. This fact was acknowledged by most critics of the Altaic theory, and a bold attempt was made by Doerfer to explain such matches as being prehistoric loans from Turkic into Mongolian (for Altaicists, of course, such matches represent rather common inherited vocabulary).

Let us formulate the criteria that distinguish early Turkic borrowings in Mongolian loans from the inherited vocabulary ( = prehistoric loans in Doerfer’s terminology).
1. The words involved are attested in Turkic before the 13th century;
2. They appear in Mongolian in a form typical for 13th century Uyghur/Karakhanide Turkic

The latter criterion means that in the donor language the following changes occurred, compared with Proto-Turkic: a) voiced *d-, *g- > *t-, *k-; b) *I > *E, *E > *S, *Z; c) long vowels and diphthongs disappeared.

The most obvious criterion here is b), since the correspondences
Turk. *ĺ (>) š : Mong. s and Turk. *č (>z): Mong. z, ž, s only occur within
this layer of loanwords (see Clark 1980). Let us take a closer look at such cases:
PT *jäilil ‘green, greens’ (OT jašil): WMong. jašil ‘buckthorn’
PT *gērik ‘turn, order’ (OT kezik): WMong. kesig ‘wake, turn’ (already in
MMong. as kešik)
PT *gē- ‘to walk, walk through’ (OT kez-): WMong. kesü-, kese- ‘to wander, roam’
PT *čeli ‘lady, beg’s consort’ (OT iši): WMong. esi ‘empress’ (MMong. esi)
PT *šerik ‘feeling’ (OT sezik): WMong. sesig
PT *(i)āl-ru ‘exceedingly’ (OT ašru): WMong. asuru
PT *dāl- ‘to meet’ (OT tuš-): WMong. tus(u)-
PT *kil ‘sable’ (OT kiš): WMong. er-kiš ‘male sable’, ebši-gis ‘female sable’
PT *Kol ‘pair’ (OT qoš): WMong. qoš(i) (MMong. qoši) id.
PT *Kol ‘hut, camping’ (MK qoš ‘family’): WMong. qoš(i) (also qošilɨ >
WMong. qošilɨ)
PT *jūrūm ‘grape’ (OT üzüm, jüzüm) > WMong. üšüm
PT *jemiši ‘vegetable(s)’ : MMong. (HY) ժեմիշ
PT *Kâli- ‘to scrape’ (OT qaši-), *Kâli-gu ‘scraper’ (e.g. Chag. qašayu):
MMong. qaši ‘ur ‘scraper’
PT *bilič-, *bilič- (OT biš-) ‘to become boiled’, *bilič-lak ‘smth. boiled’ >
WMong. bis(i)lay, basilay ‘a k. of home cheese’
PT *Kar- ë ‘opposite’ (OT qarši) > WMong. qarsi
PT *tulul ‘country, city’ (OT uluš) > WMong. ulus
PT *jali- ‘blaze’, *jalin ‘lightning’ (OT jašu-, jašin) > WMong. jašin id.
PT *jeř ‘copper’ > WMong. ژes id.
PT *böl ‘free, empty’, *bolan- ‘to become empty, poor’ (OT boš, bošan-) >
WMong. busan- id.; *bolug ‘permission’ (OT bošuŋ) > WMong. bošuŋ id.
PT *ařig ‘fang’ > MMong. *ažuŋ (ačuy in Uygh. script)
PT *bogar ‘pregnant’ (OT boyaz) : WMong. boyus
PT *Kâl ‘jade’ (OT qaš): WMong. qaš(i) (MMong. qaši)
PT *čdil ‘vessel’ (OT ebiš): WMong. idis(i) id.
PT *Kebi ‘carpet’ (OT kebiž): WMong. kebīs id.
PT *keleř / *keler ‘lizard’ (OT keler): WMong. keles
PT *arbî ‘magic’ (OT areiš): WMong. arbis ‘knowledge’

PT *dula- ‘to hobble’, *dulak ‘hobble’ (OT tuša-, tušaq): WMong. tuša-, tusi- ‘to hobble’, MMong. tuša ‘hobble’

PT *Kalany ‘lazy’ (OT qašan): WMong. qašan id.

PT *Köî- ‘to screen’, *Köî-ge ‘shadow’ (OT kösi-, köšige): MMong. kösi-, köšige

From these loans we may infer that:
1. OT š ( < *l) is rendered in Mong. as s, frequently followed by optional -i (Mongolian lacked a phonological distinction between š and s, but s was pronounced as š before i); sometimes we find -š- in front of other vowels (bošyń, tuša-) - an obvious feature of incompletely adapted loanwords;  
2. OT z ( < *r) is also usually rendered as s, but in a few cases—as ź;  
3. Initial j- is rendered either as j- (jasîl, jaśîn) or as ǯ- (ʒemiši, ʒesi). This may reflect dialectal variation within Turkic (note that many modern languages also display the variation j-/ʒ- < PT *j-) or an OT articulation like *d-;  
4. No voiced initial consonants - except b - are present in this layer of loans, which is quite consistent with OT phonology;  
5. Turkic syllabic structure is retained with the following details:  
   a) verbal stems usually add a vowel (kez- > kese-, kesii-; tuš- > tus(u)-);  
      this is explained by the fact that Mong. has very few monosyllabic verbal stems.  
   b) polysyllabic nominal stems usually do not, but occasionally also add one (tušaq > tuša);  
   c) monosyllabic nominal stems never add a vowel (except the parasitic -i after -s - to render Turkic š);  
6. vowels are usually quite faithfully retained - except i which is regularly rendered by i (of course there is occasional variation between o and u, and of weak vowels in the non-initial syllable);  
7. voiced intervocalic consonants are rendered as voiced (notably -g- is rendered as -ʁ- > -0- in boɣaz > boɣus, cf. Kalm., Dag. bős).

Now if we investigate the loans from Mongolian into modern Turkic languages we find a very similar system of correspondences:  
WMong. sibaɣu(n) ‘bird’ (MMong. šiba’un) : Chag. šibayun  
WMong. qawraï ‘dry’ > Tat. qawrai  
WMong. qaʁʃıɣar ‘beak, nose’ > Uzb. qanıʃar  
WMong. dabayun, MMong. daba’an ‘mountain pass’ > Chag. taban  
WMong. yaqursu (Khalkha gürs) ‘chaff’ > Kirgh. qaursu  
WMong. qara- ‘look’, qaraɣul ‘patrol’ (MMong. qara’ul) > Chag. qara-, qarawul
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WMong. *žabsar, MMong. *žab(u)sar ‘gap, interval’ > Kirgh. *žapsar
WMong. *silegüsü(t)n ‘lynx’ (MMong. *šile’usun) > Kum. *silewsün
WMong. *šuqa ‘stove’ > Leb., Kumd. *joqqi

Of course the system slightly differs: Mongolian voiced initial consonants are usually rendered by voiceless Turkic ones (since voiced consonants are only retained in Oghuz languages that had hardly any direct contacts with Mongolian and obtained all their Mongolisms through Kypchak and Karluk intermediaries). But in general we see that both loans from Turkic into Mongolian and vice versa reflect generally a single socio-linguistic situation: intensive Turko-Mongolian contacts after the 13th century, with loanwords flowing in both directions - a situation quite consistent with what we know about the history of Turkic and Mongolian peoples.

A well-known fact, however, is the existence of a large number of different Turko-Mongolian matches, frequently doublets to those investigated above. Thus we have OT *azîy ‘fang’ (PT *ařîg) corresponding to WMong. *araγa, *arija, MMong. *ara’a, *aral id. Doerfer and other anti-Altaicists (e.g. Shcherbak) would like to view such cases also as borrowings, but belonging to an earlier stratum.

We can indeed reconstruct a hypothetical (as Doerfer would put it, “teleologische Sternchenform”) PT *ařîga borrowed in PM as *ariγa, and having later lost the final vowel. Note that we cannot presume the other direction of borrowing, since PM had no *-i-, and in the case of a borrowing from Mong. into Turkic we would expect something like *ařig. But what about MMong. *aral ‘fang’, *ara-tai ‘predator’ - forms clearly derived from a root *araγ (‘ariγ-, together with the form *araγa/ *ariγa? In order to explain these forms we have to use a more imaginative scenario: a) either postulate a PT root *aři, lost in all attested Turkic languages and borrowed in Mong. as *ari (‘araγ), along with its derivative, PT *ařiγa; later the new derivatives *aři-l and *aři-taj were formed on Mongolian ground, while the plain root *aři was lost, just as in Turkic; b) or postulate PT derivatives *ařî-l, *ařî-taj (with suffixation quite peculiar for Turkic) that were borrowed into Mongolian together with *ařiγa, but were subsequently lost in Turkic.

Needless to say, explanations like this are unsatisfactory. A much easier and more elegant solution is to trace both Turkic and Mongolian
to a common Altaic root "ari, with a common old suffix *-ga. As is frequently the case, the suffixless stem was not preserved, but it gave rise to a set of derivatives in Mongolian.

Besides providing a better explanation of Turko-Mongolian matches (and the case of *arig is not isolated - there are literally hundreds of such cases), such a solution also helps to avoid the inevitable conclusion at which Doerfer arrived in his investigations: that all early loanwords marched in only one direction - from Turkic to Mongolian. Indeed, Turkic has more distinctions than Mongolian in what concerns, e.g., the oppositions *l-ɾ* or *r-ɾ*. Mongolian has only *l and *r thus all cases of Turk. *l : Mong. *l and Turk. *ɾ : Mong. *r are to be explained as borrowed in Mongolian from Turkic; and there are no obvious cases of a converse situation.

But oneway borrowing is a specific situation which requires an explanation. This may be either a big difference in the cultural levels of contact participants, which we have absolutely no reason to suppose in this case, or borrowing from a dialect which once existed (and of course also borrowed from the other contact participant), but later ceased to exist. We would thus have to suppose that Old Turkic (and in fact all other Turkic languages) are descendants of a PT dialect that had no contacts with Mongolian; but there existed a hypothetical "sister-Proto-Turkic" that had contacts with Mongolian but later ceased to exist without leaving any trace.

We see that the general scientific principle of Occam’s razor clearly speaks in favour of the genetic relationship between Turkic and Mongolian, since this is inevitably the simpliest solution in all available cases.

1.2. Mongolo-Tungus contacts.

Borrowings from Mongolian into Tungus-Manchu languages are quite abundant. The majority of them penetrated from Mongolian into Manchu, and from Manchu into the other Tungus-Manchu languages; but a considerable number penetrated also from Dagur into the neighbouring Solon language, and from Buryat into Evenki and the neighbouring Even and Negidal languages. How can we distinguish Mongolian loanwords from inherited common Altaic etyma?

Consider the following examples:
PM *hiṣayur ‘root’ : Evk. (Kamn.) iṣagur, Sol. oṣör
PM *hīre ‘seed’ : Sol. ur
PM *hergi ‘steep bank’ : Man. ergi
PM *hačyuri ‘favour’ : Nan. ačeuri
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PM *harga(l)-sun ‘dung’ : Evk. argahun
PM *hojimu-sun ‘stockings’ : Evk. oimahun, oimusu
PM *hab-taj ‘sorcery’ > Evk. aptaj, *hab-galdaj ‘shaman mask’ > Evk. awayaldaj
PM *huta-sun ‘thread’ > Evk. uta-sun
PM *hergi- ‘go round’, *hergiül- ‘turn round’ > Man. erguwe-, Evk. ergülge ‘device for tanning skins’ (= Mong. *hergiülge), Evn. ergin-

These and many other examples reveal one phonetic peculiarity: a correspondence of PM *h- : TM 0-. They also have another peculiarity: in the vast majority of them the wordform structure of Mongolian (including all derivational suffixes) is faithfully retained in TM languages. It is obvious that the words entered TM languages already after the loss of *h- in Mongolian - which (in Northern Mongolian dialects) occurred as early as in the XIVth century.

Consider now another group of examples:
PM *hila-yan ‘fly’ : Orok pulikte, pumikte, Evk. hunnikte (PTM *pulmi-kte) ‘midge’
PM *hüüir ‘smell’ : Orok pü(n) ‘smell’, Evk. hüüjuktke- ‘to smell’ (PTM *puñ-)
PM *halagan ‘palm (of the hand)’: Ul. pana, Evk. hanra, Man. falaŋyu id. (PTM *palŋa)
PM *hari- ‘be tired, exhausted’ : Evk. haru-, Man. fara- ‘to faint, feel giddy’ (PTM *paru-)
PM *heki ‘head’ : Evk. hēje ‘forehead’, Man. fexi ‘brain’ (PTM *pējKe)
PM *hiru-ɣar ‘bottom, ground’ : Evk. here, Man. fere, Ul. pere(g) (PTM *pere)

etc.

This group of examples has a quite different correspondence for PM *h-, viz., PTM *p-. If we suppose borrowing from Mongolian, we have to assume that:
1. This borrowing occurred long before the XIVth century, in the period when Mong. *h- was still pronounced as *p- (a feature not preserved in any Mongolian dialect);
2. This borrowing occurred even earlier, namely, during the epoch of Common TM unity (somewhere in the 1st millennium BC), since all of the above examples belong to the common TM wordstock, so apparently were borrowed into PTM;
3. Borrowed were not the Mongolian forms listed above, but their roots, which were later supplied (in many cases) with different TM suffixes.

Many other groups of examples also show very specific features. Cf.:
a) WMong. *qou ‘all’: Evk. *kūkte, Orok *kupu-kte
WMong. *qalu ‘to come near’: Orok *qal- id., Man. *xanči ‘near’

b) WMong. *qučil ‘to scrape with fingers’: Evk. *osi-, Orok *čosì ‘to scrape’
WMong. *kür ‘precipice’: Evk. *ure, Orok *xure ‘mountain’
WMong. *qudurya ‘tail strap’: Evk. *irgi, Orok *xudu ‘tail’

In group a) we have words with PTM *k-; in group b) - with PTM *x-. Mongolian in both cases has k- (*q- in front of back vowels). So why would TM languages borrow the same Mongolian phoneme both as TM *k- and TM *x-?

Note that both groups of examples seem to be archaic enough (different suffixation and wide distribution in TM).

To explain this picture we can either postulate two different phonemes in early Mongolian (at the time of borrowing > TM), e.g. *k₁ and *k₂, with this distinction lost and not reflected in any variety of Mongolian, or try to presume a different direction of borrowing (TM > Mong., with both TM *k- and *x- > Mong. k-; but why not *x- > Mong. h- in this case?).

This all is theoretically possible, but certainly the usual solution a historical linguist assumes in such cases is that we are dealing with genetic relationship and that two phonemes have to be reconstructed for Proto-Altaic (in our case - *k and *k‘), which converged in Mongolian, but stay distinct (as *k- vs. *x-) in Tungus-Manchu.

We see that here, too, a hypothesis about common origin fares much better than the loanword theory. Of course, there are loanwords from Mongolian into TM languages, but they are recent (certainly after the XIVth century) and penetrated from Mongolian into different TM languages (basically - into Manchu and Evenki, also through a different route - from Dagur into Solon) long after the split of Proto-Tungus-Manchu.

One of the significant arguments that Doerfer raised against the Altaic theory was the absence of common Turkic-TM vocabulary. Indeed, if the three families are not related and all the lexical parallels observed are due either to borrowings in Turkic from Mongolian, in Mongolian from Turkic, and in TM from Mongolian, we would expect no common
Turkic-TM parallels without Mongolian intermediaries. But in fact we do have quite a number of such cases, somehow overlooked by the critics:

PT *ačaj / *čeq 'elder female relative' : PTM *asī 'woman' PT *Ebü(r)dek 'duck': PTM *ābu, *ābu-lduka 'a k. of duck' PT *bak- 'to look, watch': PTM *baKa- 'to find' PT *bAja 'recently': PTM *başi- 'early' PT *bilik 'wick': PTM *bulin id.

PT *birak- 'to abandon, throw': PTM *buri- 'to lose, let go'

PT *bodu- 'to fasten, attach': PTM *boda- 'to accompany'

PT *bul- 'icy surface': PTM *belu- / *bul- 'slippery ice surface'

PT *būt 'thigh': PTM *begdi / *bugdi 'leg'

PT *čEl, *čEl-pe- 'film, membrane': PTM *čalba-n 'bark'

PT *jak- 'to burn': PTM *deg-še-gi- id.

and many, many others (see the body of the dictionary). To explain those cases we have either to refute them all, or to suppose a third ancient contact zone (Turkic > TM) which is extremely dubious (there exist loans in Evenki from Yakut and vice versa, apparently reflecting quite recent contacts; but no archaic contacts seem to be observable), or - which is the most preferable solution - once again to presume genetic relationship.

A very important issue while formulating any genetic hypothesis is the problem of basic vocabulary. However, to make a correct estimation of the proportion of basic vocabulary preserved in each branch, one needs to have a sufficient knowledge of comparative phonology, i.e. regular correspondences established between languages compared. Here we must agree with the critics: the correspondences established between Altaic languages in the classical works of Ramstedt and Poppe indeed were unsatisfactory in many respects, partially due to insufficient attention paid to the stratification of loanwords. But instead of trying to improve the correspondences and to untangle difficult phonological and lexical riddles, the critics had chosen an easier way: to refute the genetic relationship as such.

Some researchers, however, took a different approach. Among them we should name such distinguished scholars as V. M. Illich-Svitych (with his three-way distinction of stops in PA), V. Tsintsius (with her many papers on PTM phonology and the three-way correspondence of stops), S. Martin (with a pioneer attempt at the Korean-Japanese reconstruction, which was largely unsuccessful, but provided a lot of insights into the prehistory of Korean and Japanese) and R. Miller (with many successful attempts at establishing phonetic correspondences between Japanese and other Altaic languages).
All this work was summarized and continued in the book of one of the authors of the present dictionary (АПиПЯЯ). Even since that time many correspondences have been made more precise and some changed, during the prolonged collective processing of the vast Altaic evidence. Below we shall outline the reconstruction of PA phonology as it is now perceived by the authors.