Additional Turkic and Tungusic Borrowings into Yukaghir II

Yukagir Dilindeki Türkçe ve Tunguzca Alıntılara İlaveler II

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Continuing on previous research, in this second part of a paper series, ten newly found suggested borrowings from the Turkic, Tungusic and Mongolic languages into the Yukaghir languages and dialects of far north eastern Siberia are presented as loanword etymologies. The chronology of the borrowings is considered, and solid phonological and semantic considerations are given for each suggestion, and other possible cognates or borrowings in the surrounding languages are also discussed.

Key Words: Borrowing, Tungusic, Turkic, Mongol, Yukaghir.

1. Introduction

Research into additional Turkic, Tungusic and Mongolic lexical borrowings into the Yukaghir languages and dialects remains a productive field where further discoveries of etymological interest can be made. This gives us valuable information about the ethnic and linguistic prehistory of the area. Building on previous research, further papers on this subject will be prepared in a paper series. In this second part of a major study, additional lexical borrowings from the Turkic, Tungusic and Mongolic languages into the Yukaghir languages and dialects are thus presented in semantic and phonological detail, considering root structure, suffixation patterns and more. For all discussions and details regarding Yukaghir prosody, phonology, principles of synharmonism, sources of borrowings, principles of borrowings in general and general theories of borrowing chronologies into Yukagihr – matters of great important for the understanding of lexical borrowings between these languages as well as general information on the citation of lexical materials – I will refer to the first part of this paper series (Piispanen 2018).

Lexical borrowings into Yukaghir primarily, and most commonly, borrow only the root structure. The borrowed root, being mono-, bi- or trisyllabic-, is then readily suffixed for various semantic and grammatical functions. Suffixation may follow different patterns throughout different Yukaghir dialects and languages. Naturally, the borrowings adjust to Yukaghir prosody and phonology over time, but this process often takes many centuries, suggesting that aberrant phonology may be indicative of the root being a borrowing. Borrowing merely the root may seem contrary to the commonly held belief among linguists that only whole words are borrowed; while this too occurs on occasion, it is, at least historically, not the norm. The possibility and actuality of verbal root borrowings between languages has been readily demonstrated, for example, through research such as that of Vovin 2014. Although published in summary before, I will here again present Yukaghir prosody and phonology briefly, which is needed

to be able to follow the argumentation given under the respective loanword etymologies.[1]

2. On the "Altaic" Language Hypothesis

Since the presentation commonly touches upon Turkic, Tungusic and Mongolic forms, which are similar both phonologically and semantically, I should probably mention my own stance on the whole hypothesis of an "Altaic" language family so that my argumentation is read with the correct understanding. Extremely briefly, the hypothesis assumes a direct genetic language relationship between these three language groups (as well as according to some researchers also to Korean and Japonic; see for example Robbeets 2005). This question has produced an enormous amount of research and debate over the years with the Pro-Altaicists and Anti-Altaicists vividly discussing such matters. This debate and research was, for example, well summarized elsewhere two decades ago (Georg et al. 1998) and much has happened since. The topic of "Altaic" languages and a common prospective language family is probably to be considered a hot topic in current linguistics.

As to my own stance very briefly, with a few notes, I agree with RÓNA-TAS, as I have come to understand his argumentation: I do not flatly reject the possibility of relatedness of the "Altaic" languages. So when I say "related" or "correspondence" in my argumentation I mean exactly "either cognate or borrowing", or, in a few cases "mere look-alikes". Simply put, all the evidence presented thus far, literally thousands of pages, suggests one thing: there is clearly *something* there. Then, if *something* means an actual genetic language relationship (=the Altaicist stance) or extensive grammatical, lexical, morphological and phonological convergence of three unrelated language (families) (= the Anti-Altaicist stance) is another matter to settle in the future. At least Turkic, Tungusic and Mongolic *may* be genetically related languages, but proving this is by no means a small feat. There are enormous problems to overcome.

First, direct comparison between the three at the proto-language level may not be accurate as they represent languages spoken in three different eras, but this can be overcome by comparing the languages at a synchronic level, using daughter languages if needed (i.e. Old Turkic). Also, in order to effectively be able to compare the three groups on a proto-language level it would be most desirable to have new historical and etymological dictionaries at hand summarizing all such research made thus far, including reconstructed proto-language roots, but alas while the foundation is there, as far as I can tell, this update does not yet exist in readily accessible collected form for most of these languages. Second, if the three are related, two of them are likely more closely related to each other than to the third, but, again, this should not be held as an argument towards all three possibly being related. Third, of all the putative cognates presented, some will be mere look-alikes (and semantically not defensible), others will be lexical borrowings, while a few *could* represent an earlier common lexical stock. Fact is, even if only fairly few lexical items, along pronouns, numerals and morphology, could be shown to originate in a common linguistic core, the "Altaic" hypothesis could be considered proven. Although this would require solid and regular sound laws (with all exceptions reasonably explained) for a reasonably high number of basic lexical items, and then tools to accurately distinguish borrowed lexicon from inherited lexicon. This research would first hand need to discard the numerous look-alikes (as well as numerous ghost words) resulting from semantically overly permissive comparisons. Naturally, it is necessary to be utterly strict regarding the semantics, phonology, lexical attestation, morphology, *etc.* in order to avoid assigning cognancy merely on the grounds of wishful thinking and phonological similarity. Long listings of compiled, reiterated lexicon for comparisons without detailed phonological and semantic argumentation for each item will not benefit anyone. For exactly this reason I have herewith also opted to extend all etymological discussions in this paper series with further comments of interest, discussions on the phonology, possible connections with other lexicon, *etc.*, resulting in fewer suggestions in total *per paper*, but thus improving on the level of the research. Distinguishing all such matters between the three language groups is not a simple task (although I note that research, such as that

presented by B. KHABTAGAEVA regarding the determination of lexical borrowings, seems to be a step in exactly the right direction).

There would, at least to me, seem to be a few key factors to focus on in future research which *could* lead to new, surprising breakthroughs. As a mere layman of this field of research I would suggest this, some of it being very obvious of course:

1. Chuvash (Turkic): The whole *lir*-Turkic (Oghur)/*shaz*-Turkic (Common Turkic) controversy needs to find a definite solution. That is the question of which Turkic branch represents the first branching, and thus being closer to the phonological form of Proto-Turkic itself. It would seem to me, fairly conclusively actually, as if Chuvash (of Oghur Turkic) is lexically closer to the corresponding forms found in Tungusic and Mongolic, respectively, which should by absolute necessity and logic suggest that Chuvash (and the other extinct Oghur languages) represents the earliest Turkic branch splitting off before the rest turning into the Common Turkic languages. I am by far not the first to suggest this. Thus, further research into Chuvash etymology could be of great benefit for more accurately reconstructing Proto-Turkic roots which will then be better comparable to both Tungusic and Mongolic roots. Literature: A useful resource for Chuvash studies would be, for example, the seventeen volume thick dictionary by N. Ashamarin Cheboksary 1928-1950. A much shorter, but still most useful dictionary is Andreev *et al*'s Chuvash-Russian dictionary (of more than 40 000 words) from 1985. Other key works include two Chuvash etymological dictionaries by V. Egorov in 1964 (one volume) and by M. Fedotov in 1996 (two volumes), respectively.

2. Khalaj (Turkic): Another candidate for immediate study should be the peripheral Turkic language of Khalaj, spoken in Iran. It exhibits many archaic features, and bears some unusual similarities for example with Chuvash. Literature: the logical starting point for this line of research would be Doerfer's seminal book of Khalaj field data (1971).

3. Jurchen & Manchu (Tungusic): In recent decades, the lexicon of the Tungusic Jurchen language has been made readily available to westerners, which will

facilitate etymological research into this peripheral and possibly archaic Tungusic language. As Jurchen eventually became Manchu, the latter too should be the subject of further detailed study. Consider their geographic position they might perhaps reveal some ancient Tungusic traits and further clarify the language contact situation throughout the ages. Literature: An early work of importance is Wilhelm Grube's *Die Sprache und schrift der Jučen* from 1896. The lexical works of Jin Qizong and Daniel Kane are of importance. Useful Mongolian and Manchu indexes are available, for example, by Kuribayashito. I must suggest, that in future studies, the source of Jurchen must be carefully specified. There have been Jurchen A (which was documented by Grube, Kiyose, in 1977 and 2004/2005 and Aisin Gioro, in 2009) and Jurchen B, as well as other texts made in Jin and Yuan times, all of which fall outside of the categorization into A or B. Jurchen A represents the written language as documented by the Bureau of Translators, while Jurchen B represents the colloquial language documented by the Bureau of Interpreters.

4. Bala & Alchuka (Tungusic): These two constitute additional peripheral Tungusic languages of interest to study in greater detail.

5. Dagur (Mongolic): Further research into borrowings to and from the Mongolic Dagur language into surrounding languages (the Tungusic Solon Ewenki, Manchu *etc.*) may be very fruitful in understanding the ancient languages, their contact situations and interrelatedness. Literature: For basic Dagur studies, the works of Todaeva (on the Dagur language from 1986) and Tsybenov (a short dictionary from 2014) are of importance, as well as the dictionary by Enhbat from 1984. A useful initial lexical source for Dagur could be, for example, J.A.A. de la Fuente's Dagur Index (2013). Additionally, the work *Dayur kelen Mongγol kelen-ü qaričaγulun* from 1983 also contains a short vocabulary.

6. Khitan (Mongolic): Then, in order to truly understand Mongolic pre-history in greater detail further studies of the para-Mongolic language of Khitan is obligatory. Literature: The state-of-the-art of current Khitan studies is well summarized elsewhere (Chinggeltei 2002a, b; Kane 2009; Wu-Janhunen 2010; Janhunen 2012; Róna-Tas 2016; Apatóczky-Kempf 2017, *etc.*).

In other words, etymological studies and other comparisons targeted mainly at Chuvash, Khalaj, Jurchen/Manchu, Dagur, and Khitan for starters could prove to be very fruitful for answering the key questions of the "Altaic" hypothesis. I believe that the latter four were spoken around the same peripheral area and that at least extensive lexical borrowings will be found, but also traces of Pre-Mongolic and Pre-Tungusic suffixation patterns, pronouns, morphology, original semantic meanings, historical phonological development and more. Chuvash, and Khalaj, both then, may represent other peripheral ends giving enormous amounts of information directly on Proto-Turkic. The combined findings then – along everything not just related to lexicon – should better answer the questions of if these languages are related to each other or not.

3. A brief Note on Yukaghir Prosody

The following reiterates what has already been described several times earlier in the scientific literature for the sake of the reader. Yukaghir tends to borrow only the bare root stem and then tries to accommodate it to valid prosodic structure. Since phonological adjustment often takes time, borrowings will tend to have remaining phonological irregularities, such as the lack of synharmonism, unexpected closed long vowels or morphologic complexities such as the presence of non-Yukaghir consonant clusters or suffixes identifiable in other languages.

Valid prosodic structures in Yukaghir include (V=any vowel except ə; C=consonant):

Nouns root structures: (monosyllabic) (C)V: -, (C)V:C-,

(bisyllabic) (C)V: Cə-, (C)VCV/ə-, (C)VCCə-

Verbal root structures: (monosyllabic) (C)V: -, (C)VC-,

(bisyllabic) (C)V: Cə-, (C)VCV-, (C)VCCə-

Trisyllabic roots are usually formed by adding a syllable -Cə, -CV:, -Ci or -uC to a bisyllabic root. There is a very strong tendency in Yukaghir towards re-

duction of the number of stem syllables, which is why trisyllabic roots are exceptionally rare and which is why the second syllable often still bears traces of ancient suffixation patterns. Invalid prosodic structures in Yukaghiric include:

Noun root structures: ≠ (monosyllabic) CV-, Cə-, CVC-

Verbal root structures: ≠ (monosyllabic) CV-, Cə-, CV: C-

Naturally, the prosody of the Tungusic and Yukaghiric languages are different, and a Tungusic borrowing will therefore often have aberrant phonological structure in Yukaghiric. In other words, any remaining deviant prosody strongly indicates that the item must be a quite recent borrowing. Prosodic control—i.e. the drive to remake a root into a valid Yukaghiric prosodic structure—well explains many cases of vowel lengthening or apocope in borrowed lexicon in Yukaghir, and this is also clearly found with the suggested borrowed items in this paper.

4. Yukaghir Phonology, Prosody and Synharmonism

The important principle of synharmonism in Yukaghir needs to be clarified (and is explained in detail in Nikolaeva 2006: 40–41). Like in the Uralic and Turkic languages, there is a form of vowel harmony in Yukaghiric; all root vowels are either harmoniously back (i.e. *a, o, (u), i*) or harmoniously front (i.e. *e, ö, u, i*). This underlying vowel harmony controls the conditions of the rules of synharmonism, i.e. the distribution of velar and uvular consonants in Yukaghiric. The rules state that Yukaghir front stems may only contain k or g, while back stems may only contain *q* or γ (Nikolaeva 2006: 40–41). Vocabulary that phonologically breaks synharmonism, for example by having irregular vowel harmony, including irregular clusters that violate the phono tactic constraints of the Yukaghiric languages, or by having unexpected closed long vowels, is thus very indicative of borrowing. This rule is paralleled by that found in the Turkic Yakut, which takes *k* with front vowels and *q* with back vowels (Anderson 1998), and I suggest that synharmonism can be considered a shared Sprachbund feature encompassing at least these two genealogically non-affiliated languages.

5. On the Chronology of the Borrowings

Earlier research had developed a rudimentary system for determining the chronology of lexical borrowings into the Yukaghir languages and dialects. This system was mostly based on vowel correspondences, and originally classified all borrowings as either *early* or *late* borrowings. Both these stages still implied borrowings into two different stages of Late Proto-Yukaghir (with early *meaning* approximately around 1400-1630 BP and *late* meaning approximately around 900-1300 BP). This system has later been expanded to also include *very early* borrowings (at around 2000-2500 BP) and *very recent* borrowings (borrowings made during the last few centuries only)(all this has recently been summarized in: Piispanen 2018:110-111). In this system there are thus four different eras representing different chronological waves of borrowings occurring in several different places. It was suggested elsewhere (Piispanen 2018b) that Eskimo and Nivkh borrowings into Yukaghir would typically constitute *very early* borrowings (which would place such borrowings into Middle Proto-Yukaghir, or Pre-PY), although some Eskimo borrowings (of the Yup'ik type) are *early*, *late* or even *very recent* borrowings. Turkic, Tungusic and Chukchi borrowings will be *early*, *late* or *very recent* borrowings, while Mongolic borrowings will be post-*late* or *very recent*. All Russian borrowings are of course *very recent* borrowings and found only in individual Yukaghir languages or dialects.

However, this distinction, which has been used in much research, is not problem-free, as was pointed out by an anonymous reviewer, and is not well-established. It is problematic because there is a fairly regular sound correspondence today between the front -o- of most Ewen dialects and -u- in Ewenki. Also, in many northern Ewen dialects there is today -u- instead of the original *-o-. Thus, alternations could reflect borrowings from different historical dialects (for example North contra South Ewen or Ewenki dialects) instead of reflecting true chronology from an identical source changed over time. Furthermore, the apparently earliest Tungusic borrowings in Yukaghir almost seem to predate the times of the Tungusic migration itself into the ancient Yukaghir lands. Thus, there appears to be a need to evaluate the details of this methodology in the future to fully verify its claims and applicability for chronological purposes. In

other words, the chronological suggestion given each respective borrowing in this paper should be considered tentative and subject to possible reevaluation and change in the future. Nevertheless, while there may be a weakness in the analyses of chronology, readily identifying the donor language as being Turkic, Tungusic, Mongolic, Eskimo, etc. is still most accurate even without having to resort to using high-definition dialectal dictionaries (for example Cincius for Ewen vocabulary) instead of using a simplified dictionary (like Robbek & Robbek for Ewen vocabulary used in this paper). Until the system has been redone, however, I shall still classify borrowings according to the aforementioned chronological stages.

6. New Borrowings into Yukaghiric

Below I present *ten* new suggested Turkic, Tungusic and Mongolic borrowings into the Yukaghiric languages and varieties. In typical fashion, Yukaghir will only borrow a short root stem, and then often suffix it, which may make the borrowings appear more (phonologically) complex than they actually are. The semantics and phonology are discussed with each suggestion, and when possible a suggested chronology is given, following the same format as outlined above (a methodology also used in earlier research), along further notes of interest, including further possible cognates or borrowings in other surrounding languages. Yakut borrowings into Yukaghir are of particular interest since they are often early enough to be classified as Pre-Yakut, which in the best case scenario shows us exactly what the Yakut form historically used to look like. Many Tungusic borrowings will be from early Ewen, but some instead from Ewenki. The Mongolic borrowings are practically never directly borrowed into Yukaghir, but have arrived there through an intermediary proxy language (as specified under each relevant entry).

Late Proto-Yukaghir reconstructed forms are from the generally well-received *A Historical Dictionary of Yukaghir* by Irina NIKOLAEVA, although in a few cases new reconstructed forms are offered. The lexical comparisons are presented using the exact transcription of the referenced sources, except for most Turkic forms which have often been rewritten into the traditional transcription format used in Turcology. Numerous dictionaries and other scientific literature

are used for the individual languages of the Turkic, Tungusic and Mongolic language groups as referenced. Many of the reconstructed Proto-Tungusic, Proto-Turkic and Proto-Mongolic forms are taken from *An Etymological dictionary of Altaic languages* (= EDAL) by Starostin et al.—because more detailed comparative linguistic studies of these languages often remains to be done—and it should be kept in mind that the EDAL is a controversial source that is not accepted by many scholars. In cases where it has been possible, I have therefore instead opted to use the, in my eyes, very accurately and convincingly reconstructed Proto-Mongolic roots found in Hans Nugteren's thesis (2011), that is if the respective root is available therein. All Tungusic proto-forms are based on the generally well-received *Sravnitel'nyj slovar' tunguso-man'žurskix jazykov* 1-2 [Comparative dictionary of the Tungus-Manchu languages 1-2] by Cincius, aka the TMS, even though the dictionary does not present Proto-Tungusic roots as such, or, again, as presented in the EDAL. In the future, Doerfer's Tungusic reconstructions (Doerfer 2004) amplified by details from Talvitie's Tungusic vocal reconstructions (Talvitie 2016) might be useful. In a few rare cases, I may suggest other possible reconstructions based on a number of factors in my argumentation.

New borrowing

Proto-Turkic *sanč- > Old Turkic *sanč-* 'stoβen'; Yakut *as-* 'толкать, прихать, отпихивать = to push; тыкать, колоть, вознать, пронзать = to poke, to prick, to pierce; stoβen, stechen; itmek' (JRS 48; Vasiliev 1995: 135), borrowed as: KY *aššə-* 'to prick' (< *as-sə-) (Nikolaeva 2006: 83), *aššəm* 'уколоть = to prick' (Nikolaeva-Shalugin 2002:16).

This totally isolated KY verbal form (i.e. it is not attested anywhere else in Yukaghir) is a borrowing from a Yakut verb. The Yakut root was etymologized elsewhere (Stachowski 1994: 178); this Yakut verb is not to be confused with the homonym *as-* 'to open', given on the same page, which, however has another origin in Proto-Turkic *ač-.

In Yukaghir, KY -*šə*- (< PY *-sə-) is a transitive verbal marker (Nikolaeva 2006: 83), while the change of *s* > KY *š* is fundamental and fully regular. As to the semantics, the JRS gives the meanings 'to poke, to prick, to pierce' which agree

perfectly with that found in Yukaghir 'to prick'. The straight-forward phonological and semantical details leave no doubt about this being a direct and recent Yakut borrowing into Yukaghir.

New borrowing

Polish *proszka* 'powder; genitive form', borrowed as: Yakut *pruoška~boruoska* 'нюхательный табак = snuff (tobacco); penis of a baby', *boruoskalaa-* 'нюхать (нюхательный) табак = to sniff snuff tobacco', *boruoskahyt* 'snuffer (of tobacco) (JRS 76) (& Indigirka Russian '*proška* 'snuff (tobacco)'), borrowed as: TD *procke-* 'tobacco' (Nikolaeva 2006:362).

This is a correction of an older loanword etymology, and an interesting case of borrowing into Yukaghir. The TD form *procke-* 'tobacco' has previously been compared to Rus. *porošok* 'порошок = powder', as the lexical source of a borrowing (Nikolaeva 2006:362), but more recent research suggests that this is actually not the case. Rather, the phonology strongly suggests that this borrowing is, believe it or not, from a Polish word, and intermediated into Yukaghir through Yakut. Very recently, STACHOWSKI brilliantly demonstrated (2018) two Polish lexical borrowings into surrounding languages from Polish exiles, residing in their own district (one of four) in the city of Yakutsk, dedicated to them in 1678-1681 by the mayor BIBIKOV (Armon 1977: 22). The Polish word for *tobacco* found itself borrowed, probably independently, into local Indigirka Russian, and into Yakut, and later on, apparently, also into Yukaghir (< Yakut). While the borrowing could, in theory, have arrived through Indigirka Russian, Yakut is the most likely donor language as it has commonly been the source exactly of this type of trade contact loanwords. This borrowing is only attested in one dialect of Yukaghir, and we may assume **pruoška > procke-*; the root-initial cluster is non-native to Yukaghir and readily demonstrates that this word is indeed borrowed. The change *-šk- (& *-sk-) > *-čk- is irregularly demonstrated in a number of cases by Russian borrowings into KY, and a similar irregularity must also have occurred with this *very recent* borrowing into this dialect of TY. The change of the word-final vowel must have been driven by prosody as the final *–e* has resulted from adjustment to the valid prosodical noun structure of *(C)VCCə- (regularly > TY (C)VCCe-).

New borrowing

Proto-Tungusic ***araj** 'barely' (TMS 1 48) > Ewen *arai~araj* 'suddenly, abruptly; apparently; only' (Robbek & Robbek 2005:45)(& Ewenki *araj* 'едва, чуть, только; как только, вдруг = barely, a little, only; as soon as, suddenly')(Vasilevič 1958:34), OR Yakut *araj~*dial.*raj* 'только, лишь; вот; вдруг; едва; хотя, разве = only, just; here; suddenly; barely; although, perhaps' (JRS 44; Pekarsky 1959:129,130,2001), borrowed as: KY *raj* 'кстати = incidentally; on the way, by the way' (Nikolaeva 2006:391), *raj* 'кстати = by the way' (Nikolaeva-Shalugin 2002:66).

NIKOLAEVA's dictionary notes that this KY word is a likely borrowing (on account on the root-initial, non-native rhotic), and indeed it is. For some reason the word-initial vowel has been dropped with this borrowing, but perhaps a reasonable explanation can be given. In another borrowing, Rus. *raz* 'time; occasion', borrowed as: KY *aras*, *araŋo:ŋo:-* 'different; various' (2006:391), the borrowed form expectedly has an epenthetic root-initial vowel added in order to avoid an *r*-initial word (which would match badly with Yukaghir prosody), but the same has clearly not happened with this borrowing. However, Ewen seemingly displays an odd related phonological phenomenon with words like *rajkom~arajkom* 'district committee' & *rajon~arajon* 'area'. I conjecture that such word pairs may be found throughout different Ewen dialects, and since it would be counter-intuitive to eradicate the word-initial *a-* with a borrowing into Yukaghir, perhaps the KY word was simply borrowed from an Ewen dialect using *raj*, instead of the more standard form of *araj*. After all, the fairly modern Yukaghir speakers (of KY), likely being bilingual in both Russian (which has word-initial *r-*) and KY, may have grown comfortable enough with word-initial *r-* and so simply opted to neglect to add the epenthetic, word-initial vowel which would have made it a better fit with Yukaghir prosody. Then, there is another option, having Yakut *araj* ~ dial. *raj*, meaning the same thing. However, the form *raj*, as found also in KY, seems limited to dialectal Yakut (and it is missing from the JRS). This may suggest that the Ewen form was the donor language into KY in this case. Further, there are reasons to believe the Yakut form itself is an Ewen borrowing.

Semantically, 'suddenly' and 'abruptly' (Ewen, and Yakut) are synonymous to 'incidentally; on the way' (Yukaghir), as all relate to sudden, perhaps even surprising, events, for example during a sleigh ride (hence 'on the way').

The same Ewen word mentioned above has also likely correctly earlier been suggested the donor of TK *arej* 'suddenly'; TJ *arei* (Nikolaeva 2006: 112), and these must have been borrowed separately into TK/TJ and into KY, due to the unusual phonological differences. In other words, the Ewen word has served, possibly through different dialects, as the donor for the TK/TJ as well as the KY words, but again a Yakut dialect could perhaps instead, but this is less likely, have been the donor. There is also an Ewenki cognate, *ara~araj* 'barely, a little; all of a sudden', which would fit both phonologically and semantically as the donor language, but given that Ewen is a much more prevalent source of borrowings into Yukaghir, this too would more likely be a borrowing from the Ewen branch. Tungusic cognates are also found in Solon, Orok, Ulcha and Manchu – suggesting the primary meaning of 'barely' – making this a definite Tungusic root (with, importantly, Mongolian equivalents also being found; cf. Mongolian *araj* 'barely', *etc.* Mongolic forms are also mentioned in *the Secret History*, Alexander (Sulqarnai) manuscript, Dagur and Mongghul, and these are therefore exceptionally well-attested although for an unknown reason missing altogether from Nugteren's recent and excellent Mongolic reconstructive work (2011).

In fact, the Mongolian forms are considered by most sources to be the etymological origin for the forms found in Turkic and Tungusic (and now also Yukaghir)). As a final note, I suggest that this root, which is found to be extensively wide-spread, is actually a *Wanderwort* with complicated borrowing patterns (with borrowings and even reborrowings) at the very least between Tungusic, Turkic, Mongolic, Yukaghir and a few other languages (I hope to present a detailed study in the future, where a few new etymologies can also be suggested).

New borrowing

(Proto-Turkic ***ana~*eńe** 'mother' (EDAL 510) >) Yakut *iɟe* 'мать, материнский = mother, maternal' (< Pre-Yakut ***ińe** > Dolgan *ińe* 'mother') (JRS 144), borrowed as: BO *úaje* 'mother' (< *uːje~*uːjə)(Nikolaeva 2006: 450).

This borrowing is interesting for several reasons. In one very old note collected by BOENSING in 1781, mailed from around Gižiga to St. Petersburg, an un-

usual word meaning 'mother' was presented. BOENSING seems to have transcribed words of the *Chuvan* variety, spoken by the *Chuvantsi* tribe.[2] This particular word is borrowed only into *Chuvan* and must have come from Pre-Yakut *ińe 'mother', the very nature of the word suggesting close ties between the Chuvantsi and the Yakut.

Phonologically, the root in Turkic may appear difficult to reconstruct as the forms throughout various languages seem to suggest either *ana (unpalatalized) or *eńe (palatalized).[3] Turkologists generally seem to believe that the Yakut form arose from Proto-Turkic *eńe 'mother' (noted, for example, in Stachowski 2008:391; a paper that otherwise convincingly argues for the existence of a palato-velar *ŋ' in Proto-Turkic), and, indeed, it must have been so since there is also Dolgan *ińe 'mother' (Stachowski 1993: 127), clearly showing the word of 17th century (Pre-)Yakut.

The palatal Yakut form also goes well in hand with a comparison with Proto-Tungusic *eńi- 'мать = mother' (TMS 2 456), very well-attested throughout the Tungusic languages (Ewen, Ewenki, Solon, Negidal, Oroch, Ulcha, Udege, Orok, Nanai, Manchu, Jurchen). Given that all Turkic forms, except for Yakut and Tuvan *ije 'mother' (< *ińe), seem to point to Proto-Turkic *ana 'mother' it seems possible that the Yakut and Tuvan forms are actually instead Tungusic borrowings (from Proto-Ewen/Proto-Ewenki *eńi(n) 'mother'). While a Tungusic donor language could alternatively have been suggested in this case, it would not explain the phonological peculiarities of the Chuvan word in a way that borrowing

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[2]   The Chuvantsi, speaking the Chuvan language, is usually considered the easternmost Yukaghir tribe of the Anadyr, and the original ethnic group of Chuvanskoye village around 100 km west of Markovo. Sadly the Chuvantsi were broken up due to warfare with the Chukchi during the 18th century and were thereafter assimilated with other populations, although the Chuvan ethnicity still exists if not the language: one group went to Nizhnekolymsk and were assimilated into the Tundra Yukaghir in the 19th century, a second group were assimilated by the Koryak, and the third group ended up in Anjuj in Markovo and were assimilated by the Russians. Thus the Chuvan language became extinct in the early 1900s, but parts of it were luckily documented for posteriority. The ethnic Chuvans today all speak Russian and some also Chukchi, depending on their geographic location.

[3]   In addition, there is a known borrowing from Old Turkic into Tang Chinese, as 娘, 孃 *njaŋ* 'mother' (Vovin-McCraw 2011: 110-111), which conclusively demonstrates that the original Turkic form must have been *ana 'mother'.

from Pre-Yakut would do and does do. One may also add Proto-Uralic *enä 'big' > Proto-Saamic *eannē 'mother'; Komi-Zyrian *unaj* 'older uncle'; Proto-Samoyed *enä 'older brother', *etc.* to this comparison, albeit the similarity with the Uralic forms could be coincidental, in particular since the Uralic forms have arisen from the primary meaning of 'big'.

In Yukaghir, spontaneous changes between *ń~*j~*l' can sometimes occur and it would thus be easy to arrive at the Chuvan *-j-* from an original *-ń-*. However, instead of directly assuming an *ad hoc* hypothesis, reality may be more complex than that, and we may here actually have the opportunity to have a look at a borrowing taking place exactly during a major sound change in Pre-Yakut. The palatal *ń* must still have existed, on account of the modern Dolgan form, in the Pre-Yakut word of the 17th century, but the borrowed Chuvan word of the 18th century, already displays the semivowel *j*. The modern Yakut word of the 20th century then displays the voiced palatal stop ɟ, which is usually found as either *d* or *d'* in borrowed Yukaghir form (Piispanen 2013: 127-128), but the Chuvan form, in contrast, only displays an *j*. So it would seem as if the Chuvan form (which already has an irregular word-initial diphthong) actually shows an intermediate phonological form from a time exactly when the change *ń > ɟ took place in Pre-Yakut, thus also giving hints as to the nature of this unusual change (i.e. through a possible intermediate *j or something very close to it); this would, if correct, suggest a chronological chain of phonological development: Pre-Yakut *ińe (17th century) > *ije (18th century) > Yakut *iɟe* (20th century). In support of this is the alternative spelling (and supposedly (dialectal?) pronunciation) of the Yakut word, cf. Yakut *iye* 'mother' (Vasiliev 1995: 12).

Regarding the vocalism on the Yukaghir side, since the valid prosodic structure for a bisyllabic Yukaghir noun of this type is (C)V: Cə-, the origin of BO *úaje* could be reconstructed as either *u:jə or *wa:jə-, the latter as hesitantly suggested in Nikolaeva 2006: 450. However, the Chuvan word was, at the point of recording, a very recent borrowing, and likely not yet restricted to these prosodic structures. Thus, if only partially adjusted to Yukaghir prosody, as perhaps suggested by the diphthong originating in a long vowel, the word could well have kept the original word-final *-e*, instead of turning into the schwa, *-ə*, typical and

expected of a noun root. The Chuvan word does indeed have -*e*, but this could also have resulted from the change -*ə* > -*e*, instead of from retention, again fully possible just like regularly occurs in Tundra Yukaghir. In other words, the word-final sound would have been either *-e or *-ə in Chuvan. We may also presuppose the fully possible change *i- > *u- with the borrowing, and which would then be lengthened due to prosody, and thus would easily explain the formed word-initial diphthong. Thus, combining all phonological considerations into reconstructive ideas, and considering the vocalism of the Pre-Yakut word, we may probably reconstruct a borrowed form, *u:je~*u:jə, for the Chuvan word prior to recording.

New borrowing

Yakut *uburaa~uguraa* 'целовать = to kiss' (JRS 430; Pekarsky 1959:2973); borrowed as: (*uba:- >) TK *uba:-* 'to kiss'; TY *uwaa-* 'to kiss' (Nikolaeva 2006:446), *ubaam* 'to kiss', *ubaal* 'kiss' (Atlasova 2007:55).

This constitutes another lexical borrowing related to the most intimate of social concepts, 'kissing', clearly suggesting close ties between Yakut and Tundra Yukaghir speakers, likely due to intertribal marriages and bilingualism throughout generations. Contrary to what is reconstructed in Nikolaeva's dictionary (***uw**-), the TK form is earlier and shows an original voiced plosive *b, which had turned into the semi-vowel *w* in the later TY, a phonological change occurring fairly commonly throughout Yukaghir; in other words, here we can instead reconstruct ***uba**:- as the originally contracted borrowed form (< *uburaa-). A similar contraction has actually occurred also on the Yakut side with *uburaa > uuraa* 'целовать = to kiss' (JRS 448). The Yukaghir root looks like a prosodically odd fit, and, actually, Nikolaeva does note that the stem shows back vocalism.

Most interestingly, for an unclear reason there also exists a similar root found in the Chukchee-Kamchatkan languages, cf. Koryak *uwwat-* 'to kiss'; Alutor *uvvat-* 'to kiss'; Itelmen *'ow(w)a-s* 'to kiss', *etc.* These words have the –*w*- as found in later Yukaghir, which originally developed from –*b*-, and as originated in the Yakut form. The similarity could therefore be coincidental only. Still, the simi-

larity is quite astounding both in terms of phonology and semantics. Further-more, there are also somewhat similar Ewen *ābu-* 'to kiss' (TMS 1 6); *ābun* 'fun; passion; abstraction' (Robbek & Robbek 2005: 34), which seems related (through borrowing) to the Yakut form, but it has switched the vowels around irregularly, and therefore cannot be the source of borrowing into Yukaghir.

There are also other borrowed forms into Yukaghir meanings 'to kiss', namely Proto-North Tungusic **ńuka:n-* 'поцеловать = to kiss' (TMS 1: 644-645), borrowed as: KY *jugi:-* 'to kiss', *etc.* (Nikolaeva 2006: 199); I note that this borrow-ing is, more specifically, likely from Ewenki *ńukāldī-* 'to kiss', *ńukān* 'kiss', as there are only additional cognates within the Solon and Udege languages, with no known Ewen cognate.[4]

New borrowing

Proto-Turkic **tōr-* 'to become lean, hungry; lean, hungry' (EDAL 1462) > Yakut *tuor-* 'to be-come lean', *tuor* 'lean, skinny' (Pekarsky 1959:2824), *tuorxai* 'weak, powerless, puny' (Pekarsky 1959:2829), borrowed as: (**tor-* >) MC *toryny* 'thin'; BO *čóríne* 'thin' (Nikolaeva 2006:436); MC *toryny* 'only' (Angere 1957:241).

Two old and isolated Yukaghir words from the notes of Matjuskin (1841) and Boensing (1781) are Turkic borrowings. Semantically, 'lean' and 'thin' are synonymous, and require no further explanation. The bare root has been bor-rowed only as prosodically valid monosyllabic **tor-*, in contrast to a prosodically valid bisyllabic **toro-* hesitantly is suggested by NIKOLAEVA, as there is nothing supporting a root-final **-o-* here. Rather, the root was suffixed, with **-ine-*, mak-ing it fully comparable with and parallel to the complementary PY **köt-* > TY *köt-ine-* 'thick'; KK *köt-ine-* 'thick' (Nikoaleva 2006: 223), also suffixed in a similar man-ner. As such, there seems to also have existed a productive adjectival suffix **-(i)ne*, which is unrelated to the suffixes **-ńə-*, **-ń*, **-n*, *etc.*, and missing from the listed historical Yukaghir suffixes (Nikolaeva 2006: 79-83). It seems to have been mostly used in Tundra Yukaghir and related dialects only and could be added to the historical suffix listing with that note. We can probably assume the irregular

change of *tor-ine > MC *toryny.* Nikolaeva hesitantly suggests the, for nouns, prosodically valid bisyllabic proto-forms of *toro-* and *čoro-*. The Yakut form suggests that the former is correct (with irregular affrication, or even scribal error, in BO).

The same suffix, *-(i)ne- is also found elsewhere: TY *jar-ine* 'white, gray' (< PY *jara-; Nikolaeva 2006:184); TY *lite-ne-* 'strained, keen (of a look)'(< PY *l'ite-; Nikolaeva 2006:244); TY *lör-ine-* 'beautiful (of fur)' (< PY *lör-; Nikolaeva 2006:250); TY *löt-ine-* 'dirty' (Nikolaeva 2006: 250); TY *moj-ine-* 'soft, flabby' (< PY *moja-; Nikolaeva 2006:271); TY *ńor-ine-* 'yellow' (< *ńoro-; Nikolaeva 2006: 311); TY *not-ine-* 'beautiful; smart' (< PY *not-; Nikolaeva 2006:312); TY *poj-ine-* 'white' (< PY *poj-; Nikolaeva 2006: 355); TY *pot-ine-* 'full, filled' (< PY *poto-; Nikolaeva 2006: 363); TY *sab-ine-* 'smooth' (< PY *sampə; Nikolaeva 2006: 394-395). Do these somehow constitute a closed class of Tundra Yukaghir adjectives? Further, considering the semantics and the often limited attestation in Yukaghir, I would argue that at least some of these roots are also likely lexical borrowings (from unknown sources).

New borrowing

Proto-Mongolic *sokar* 'blind (person)' (Nugteren 2011:500) > Written Mongolian *soqur* 'blind', *soqurda-* 'to be blind; to blunder', *soqula-* 'to make blind', *soquj-~soqura-* 'to become blind', *soquilga-* 'to close or squint one's eyes' (Lessing 1960:730); Middle Mongolian *soxar* (Lewicki 1949:49), *soqor* (Haenisch 1939), *ṣoγor~suqar* (Aptullah 1934) 'blind', *etc.*, borrowed as: Ewenki *sokor* 'blind' (Doerfer 1985:128), borrowed as: TY *soquor* 'blind', *soquortege* 'a one-eyed reindeer (in folklore)' (Nikolaeva 2006:414).

Yukaghir borrowed a word for 'blind' from an Ewenki word meaning the same, which had, in itself, been borrowed from Mongolic, where the word is well-attested. Thus, again, Tungusic is intermediary to a Mongolic borrowing into Yukaghir.

Further, Tungusic also has this root seemingly natively with Proto-Tungusic *šoKa- (*čoka- according to Doerfer) 'one-eyed; to be purblind, sandblind; to shut eyes, blink' (EDAL 1331-1332) > Ewen *čoqaŋi-* 'one-eyed', Ewenki *čokotī~čokoro* 'слепой (на один глаз) = one-eyed' (TMS 2 404, 105). Note here the slight semantic difference of 'one-eyed' instead of 'blind'.

Both the original Tungusic ('one-eyed') and Mongolic ('blind') semantics are found in the Yukaghir forms; this may have resulted from contamination of the semantics of native Ewenki *čokoro* 'one-eyed' with the, from Mongolic, borrowed Ewenki *sokor* 'blind' in Yukaghir. The word and meaning for 'blind' indeed originates from Mongolic, but the meaning of 'one-eyed' is found only in Yukaghir folklore, thus likely originating in some native Tungusic tale (where a one-eyed reindeer could still function in some capacity, whereas a fully blind one could not). At the same time it must be noted that a derivative of this root in Written Mongol bears the meaning of 'to close or to squint ones eyes', but this appears to be a secondary semantic development.

There would appear to be some sort of correspondence also with Proto-Turkic **sĀkɨ-* 'mirage' (EDAL: 1331-1332). The EDAL suggests a further connection to Proto-Korean **sjōkjə′ŋ* 'blind' > Middle Korean *sjokjə′ŋ*, Modern Korean *sōgjəŋ* (Nam Kwang 1960: 312; Martin *et al.* 1967: 969) which, however, seems impossible. Native Middle Korean words do not have word-initial *sy-* (represented in the EDAL as *sj-*) except when onomatopoeia is involved. Further, accent structure RH is unusual in native vocabulary and very few native words end in -*ŋ*. A. Vovin suggests in private correspondence that the Korean form is an early Chinese loan from a word meaning 'small bright', a polite and politically correct nomination for a handicap, which is common procedure in East Asia. Similarly, in Japanese, for example, instead of using *mekura* 'blind', one is politely supposed to say –*no fujiyu-no kata* 'a person with eyes that are not free'. In other words, the Korean words probably have nothing to do with the Tungusic, Turkic or Yukaghir forms noted above. In the same way, the obvious but accidentally similar Fin. *sokea* 'blind' may be mentioned.

A semantic theme of 'having bad eye-sight' goes through all of these words, meaning 'blind; sandblind; purblind', 'mirage', 'one-eyed', and even 'to shut the eyes; to blink'.

Tentative borrowing

Proto-Turkic **ses* 'threat', **ses-kin* 'to threaten' (EDAL: 1236-1237; ESTJA: 7) > dial. Turkish *segsen-* 'to threaten'; Uyghur *säskin-* 'to threaten'; Kazakh *sesken-* 'to threaten', *etc.*, borrowed as: TY *seske-* 'to scold; to grumble (of a man)'; TK *seskere-* (Nikolaeva 2006:403).

A problematic and tentative borrowing suggestion at best. While the phonological overlap between the Turkic languages and Yukaghir is excellent and the semantics of 'to scold' (Yukaghir) may agree with 'to threaten' (Turkic) it has proven impossible to trace the way of this tentative borrowing into Yukaghir. While the well-attested Turkic root can clearly be separated into a noun form and a verbal form, as per above, the root is not attested at all in Yakut, which ordinarily would be likely donor language into Yukaghir; however, the borrowing would have to be old and prior to the regular eradication of word-initial *s- in Pre-Yakut (for example: Anderson 1998) to allow for the phonological shape found in Yukaghir through a borrowing.

The authors of the EDAL (1236-1237) compared the Turkic root to Proto-Tungusic *sesu- 'заказать, поручить = to order, to ask to do smth.' (TMS 2: 144, attested in Ulcha, Orok and Nanai only) and, being vaguely similar, perhaps they are somehow connected (i.e. the Turkic verb could be suffixed, compared to an unsuffixed root in Tungusic). The EDAL here fail to mention that the TMS (TMS 2: 144) connects these Tungusic words with *ser-, which is also present in Ewenki, Ewen and Negidal. In Nanai -su- is a kind of iterative marker (Avrorin 1961: 62), and verb stems with -r are generally not tolerated. In other words, an iterative form *ser-su- may have displaced *se(r)- in the ancestor of Nanai, Ulcha and Uilta, as suggested by my colleague E. Talvitie in private correspondence. These facts then do a connection between *sesu- (< *ser-su-) and *ser-. None of the Tungusic forms imply any *threat*, merely an *entrustment*, and these are therefore unconnected to the Yukaghir forms.

The Turkic root, then, does not otherwise exist neither in this phonological shape, nor with the same semantics, borrowed or else how in Tungusic (including Ewen and Ewenki, two possible donor languages into Yukaghir). Neither does the root have any known correspondences in Mongolic, while the EDAL suggests a comparison to Proto-Korean *sìskú- 'to contest, contend; to quarrel, to be annoying' (HMCH 333; Nam Kwang 1960: 327) and Proto-Japanese *sə́sə́- 'to allure, to incite' (Martin 1987:756), but this does not help explain the word's existence in Yukaghir. In other words, while the Yukaghir form is agreeable with the Proto-

Turkic root in both phonological and semantical terms, it is as this point impossible to trace the origin of the Yukaghir word and determine a donor language.

Additionally, as to the best of my knowledge, the following has never been taken into the comparison: Manchu *seshun* 'противный, Досадный, пошлый = nasty, annoying, foolish', *seshe-* 'to oppress; to bugger; to abhor, to disdain; to bore; to eat too much, to be fed up with; to feel sick; to pour a powder, to shake a powder off;' (TMS 2: 146; Zaharov 2010: 584); it must also be a borrowed form – and perhaps even two converged roots – although I have unfortunately not been able to trace the donor language in this case either. The "missing" donor language of both the Yukaghir and Manchu forms suggest that this root may be much more common throughout the "Altaic" languages than previously noticed (and attested). For example, given the borrowed forms in both Yukaghir and Manchu it *should* exist at least in Yakut and (dial.) Ewenki, and perhaps in Khitan as well, all being possible donor languages.

New borrowing

Proto-North Tungusic **siri-* 'кроить = to cut (in stripes); to cut off' (**sir-* in TMS 2 93-94) > Ewen *sir-* 'to cut'; Ewenki *sir-mī* 'to cut (out); to trim (veins and tendons from meat); to cut into stripes; to reject' (Vasilevič 1958:356-357)(& Negidal *sij-* (< **siri-*) 'резать, разрезать = to cut'), borrowed as: KY *šerilo:-* 'shaved (of wood)' (Nikolaeva 2006:403).

This constitutes a fairly straight-forward borrowing, likely from Ewen into modern KY only; however, I conjecture that its omission from earlier sources like KD, KJ, KK, KL, SD and MK simply stems from incomplete data gathering which very likely misses words of such specialized, peripheral meanings. As usual, the bare Ewen verbal root of *sir-* was borrowed and then suffixed twice, first with the nominal derivational suffix PY **-l* > KY *–l* (Nikolaeva 2006: 81), and then with the resultative verbal suffix PY **-əw* > KY *–o:-* (Nikolaeva 2006: 82). This suffixation pattern is particularly common in KY and a relevant comparison here, both phonologically and semantically, is to KY *ńid'i:-* 'to stroke' > *ńid'ilo:-* 'smooth' (Nikolaeva 2006: 303). This borrowing was made early enough to allow for the regular phonological change of **s-* > KY *š-* (because some very recent borrowings with word-initial *s-* are still found as unchanged *s-* in KY), but at the same time late enough to avoid lateralization of the root-initial sibilant (because according to

the previously stated rules regarding the development of root-initial sibilants in Yukaghir, the structure *sVr- would have undergone lateralization into *lVr- if it were an sufficiently old word; Piispanen 2015: 267). To allow for the regular change of root-initial *s- into KY š-, but avoidance of lateralization, we can conclude that this borrowing is not exceptionally recent, but from sometime between *late* and *very recent*.

It is quite clear from the Tungusic semantics of 'to cut out; to cut into stripes > to reject' that Yukaghir took on the meaning of 'shaved (of wood)'. *Shaved wood* is planed wood with all surface protrusions and unevenness *cut out* (and *rejected*). While the EDAL presents the Tungusic roots as ***sir**- it was more likely ***siri**- as suggested by the Tungusic representatives, and it is merely a North Tungusic root.

New borrowing

Persian یسرا 'sarai = house, palace' borrowed as: Ottoman Turkish *saray* 'palace, castle, mansion', borrowed as: Russian saraj 'сарай = barn; shed, storage building (small wooden construction); uncomfortable untidy room, pigsty', borrowed as: Ewen *saraj* 'barn; shed' (Robbek & Robbek 2005:237), borrowed as: TJ *sharai* 'barn'; TY *saarej* 'kind of coffin made in the form of a boat standing on two poles' (Nikolaeva 2006:398).

This constitutes an obvious and direct borrowing from Russian, most likely, but not necessarily, by way of Ewen as intermediate, into Yukaghir, with very little additional explanations needed. The word actually originates in Persian, which was borrowed into Ottoman Turkish, and then finally into Russian with an obvious semantic shift; the change of 'palace' to 'barn' would be most ironic, unless the meaning as understood by the Russians was merely 'some type of house' > 'barn'. The semantics make it clear that this word arrived into Yukaghir from either Russian or Ewen, and not directly from any Turkic or Persian source. The Russian way of raising barns was quite likely introduced to the Ewen, who in turn spread the knowledge to the Tundra Yukaghirs. The meaning of 'barn' is attested throughout all forms, with Yukaghir also displaying secondary semantics in TY where a construction for specific purposes has been made based on barn construction (either for burial purposes (i.e. as grave-boxes) or for food storage away from the reach of animals, similar to a Saami *njalla*). Phonologically

and semantically the borrowing is practically impeccable in every way. So, all in all we have the borrowing chain for this incredibly well-preserved root of: Persian > Ottoman Turkish > Russian > Ewen > Yukaghir.

7. Structured semantic fields

Dividing the found borrowings into various cultural and technological spheres of semantics (as per Rédei 1999), produces the following groups:

e. types of work and tools: shaved (of wood) (Ewen); barn (Russian > Ewen)

f. trade: tobacco (Polish > Yakut)

i. social life and kinship terms: mother (Yakut)

k. health, illness and death: blind (Mongolic > Ewenki)

m. elementary phenomena, actions and perceptions: to prick (Yakut); to kiss (Ewen); to scold (Turkic?); thin (Yakut)

n. other: incidentally (Ewen)

The following categories had no representatives among the borrowings in this paper: a. body parts of humans and animals; b. animal kingdom (i.e. fauna); c. plant kingdom (i.e. flora); d. nature, natural phenomena and natural places; g. habitation; h. clothing; j. tribal or population names; l. religion.

Like for the borrowings presented in the last part of this paper series, the majority of the borrowings pertain to technological terms, social life and elementary actions. Interestingly, two borrowings related to trade items are also found, both originating from far-away civilizations by way of local proxy languages. As usual, there are more Ewen borrowings than Ewenki borrowings, and further Russian borrowings into various Yukaghir dialects also unsurprisingly continue to be found.

Abbreviations

B = Materials of Billings 1787.

BO = Materials of Boensing 1781.

DSJ = Afanas'ev et al. 1986.

EDAL = Starostin et al. 2003.

EDT = Clauson 1972.

ESTJA = Sevortjan 1974–2000.

KD = Kolyma Yukaghir from Jochelson's manuscript dictionary.

KJ = Kolyma Yukaghir materials of Jochelson 1898 and 1900.

KK = Kolyma Yukaghir materials of Krejnovič 1982.

KL = Materials of Klitschka 1781.

KW = Ramstedt 1935.

KY = Modern Kolyma Yukaghir.

Leksika = Tenıšev 1997.

M = Materials by Maydell presented by Schiefner 1871a and 1871b.

MC = Chuvan materials of Matjuškin in Wrangel 1841.

ME = Materials of Merk 1787.

MK = Kolyma Yukaghir materials of Mueller and Lindenau in 1741.

MO = Omok materials of Matjuškin in Wrangel 1841.

MU = Ust'-Janskoe materials of Mueller/Lindenau 1741.

RS = Materials of Rajskij and Stubendorf presented by Schiefner 1871a.

SD = Kolyma Yukaghir materials of Spiridonov 2003.

SU = Materials by Suvorov presented by Schiefner 1871a.

TD = Tundra Yukaghir materials of Jochelson 1926.

TK = Tundra Yukaghir materials of Krejnovič 1958 and Krejnovič 1982.

TMS 1 = Cincius 1975.

TMS 2 = Cincius 1977.

TY = Modern Tundra Yukaghir.

UEW = Rédei 1988–1991.

VEWT = Räsänen 1969.

W = Early materials of Witsen in 1692. All the older materials are fully described and referenced in Nikolaeva 2006.

References

AFANAS'EV, P. S. et al. (1986). Dialektologičeskij Slovar' Jakutskogo Jazyka, Moskva.

ANDERSON, G. D. S. (1998). "Historical Aspects of Yakut (Saxa) Phonology", Turkic Languages, 2: 3-32.

ANGERE, J. (1957). Jukagirisch-Deutsches Wörterbuch, Wiesbaden: Otto Harrassowitzh.

APATÓCZKY, Á. B. & B. KEMPF (2017). "Recent developments on the decipherment of the Khitan Small script", Acta Orientalia Academiae Scientiarum Hungaricae, 70/2: 109-133.

APTULLAH, B. (1934). İbnü-Mühenna Lûgati, İstanbul.

ARMON, W. (1977). Polscy badacze kultury Jakutów, Wrocław.

ATLASOVA, E. S. (2007). Slovar' jukagirsko-russkij i russko-jukagirskij (tundrenyj dialekti) – okolo 3500 slov, St. Peterburg: Filial izdatel'stva <prosveshchenije>.

AVRORIN, V. A. (1961). Grammatika Nanajskogo Jazyka I-II, Moskva-Leningrad: Nauka.

CHINGGELTEI (2002a). "On the Problems of Reading Kitan Characters", Acta Orientalia Academiae Scientiarum Hungaricae, 55/3: 99-114.

CHINGGELTEI (2002b). Qidan xiao zi shidu wenti [Problems of the decipherment of the Khitan Small Script], Tokyo.

CINCIUS, V. I. (1975). Sravnitel'nyj Slovar' Tunguso-Man'žurskix Jazykov I, Leningrad: Akademia Nauka.

CINCIUS, V. I. (1977). Sravnitel'nyj Slovar' Tunguso-Man'žurskix Jazykov II, Leningrad: Akademia Nauka.

CLAUSON, Sir G. (1972). Etymological dictionary of Prethirteenth Century Turkish, Oxford: Clarendon.

DE LA FUENTE J. A. A. (2013). "Index of Dagur (达斡尔) words in 蒙古语族语言词典 Měnggǔ yǔzú yǔyán cìdián". Electronic edition. Available at: https://www.acade-

mia.edu/10045578/Index_of_Da-gur_words_in_%E8%92%99%E5%8F%A4%E8%AF%AD%E6%97%8F%E8%AF%AD%E8%A8%80%E8%AF%8D%E5%85%B8_M%C4%9Bngg%C7%94_y%C7%94z%C3%BA_y%C7%94y%C3%A1n_c%C3%ACdi%C3%A1n.

DOERFER, G. (1971). Khalaj Materials, Bloomington: Indiana University.

DOERFER, G. (1985). Mongolo-Tungusica, Wiesbaden: Harrassowitz.

DOERFER, G. (2004). Etymologisch-ethnologisches Wörterbuch tungusischer Dialekte (vornehmlich der Mandschurei), unter Mitwirklung von M. KNÜPPEL, Hildesheim-Zürich-New York: Georg Olms Verlag.

HAENISCH, E. (1939) Wörterbuch zu Mangholun Niuča Tobčaan (Yüanchʀao pishi), Geheime Geshichte der Mongolen, Leipzig.

HMCH = (1971) hun mong cahoi, Soeul.

JANHUNEN, J. (2012). Khitan: Understanding the Language Behind the Script, SCRIPTA, 4: 1-36.

KANE, D. (2009). The Kitan Language and Script, Leiden-Boston.

LEE, KI-MOON (1958). "A Comparative Study of Manchu and Korean", Ural-Altaische Jahrbücher, 30: 104-120.

LESSING, F. D. (1960). Mongolian-English dictionary, Los Angeles & Berkeley: University of California Press.

LEWICKI, M. (1949) La langue mongole des transcriptions chinoises du XIV-e siècle, Le Houya-yi yi-yu de 1389, Wroclaw.

MARTIN, S. E. (1987). The Japanese Language Through Time, New Haven-London.

MARTIN, S. E. et al. (1967). A Korean-English Dictionary, New Haven-London.

NAM KWANG, U. (1960). Koe sacen [Korean etymology], Seoul.

NIKOLAEVA, I. (2006). A Historical Dictionary of Yukaghir, Berlin & New York: Mouton de Gruyter.

NIKOLAEVA, I. A. & V. G. SHALUGIN (2002). Slovar' Jukagirsko-Russkij i Russkij-Jukagirskij (Verxnekol'mskij Dialekt), St. Petersburg: Izdatel'stvo "Drofa".

NUGTEREN, H. (2011). Mongolic phonology and the Qinghai-Gansu Languages, Utrecht: LOT.

Pekarsky, E. K. (1959). Slovar jakutskogo jazyka I-III, Akademija Nauk SSSR, Yakutsk.

Piispanen, P. S. (2013). "Further lexical borrowings from (Pre-)Yakut into the Yukaghiric languages". Turkic Languages, 17: 115–139.

Piispanen, P. S. (2015). "Evaluating the Uralic-Yukaghiric word-initial, proto-sibilant correspondence rules". Journal de la Société Fenno-Ougrienne, 95: 237–273.

Piispanen, P. S. (2018). "Additional Turkic and Tungusic borrowings into Yukaghir", Turkic Languages, 22: 108-138.

Piispanen, P. S. (2018b). Yup'ik Eskimo loan etymologies for the Yukaghir languages and dialects. [Submitted manuscript]

Ramstedt, G. J. (1935). Kalmückisches Wörterbuch, Helsinki: Suomalais-Ugrilainen Seura.

Räsänen, M. (1969). Versuch eines etymologisches Wörterbuchs der Türksprachen, Helsinki: Suomalais-Ugrilainen Seura.

Rédei, K. (1988–1991). Uralisches etymologisches Wörterbuch, Budapest: Akadémiai Kiadó.

Robbeets, M. (2005). Is Japanese Related to Korean, Tungusic, Mongolic and Turkic? Wiesbaden: Harrassowitz.

Robbek, V. A. & M. E. Robbek (2005). Evensko-Russkij slovar', Novosibirsk: <Nauka>. Sibirskaja izdatel'skaja firma RAN.

Róna-Tas, A. (2016). "Khitan Studies 1. The Graphs of the Khitan Small Script", Acta Orientalia Academiae Scientiarum Hungaricae, 69/2: 117-138.

Rozycki, W. (1994). Mongol elements in Manchu. Indiana, Bloomington: Research Institute for Inner Asian Studies.

Sevortjan, E. V. (1974–2000). Ėtimologičeskij slovar' tjurskix jazykov, Moscow.

Stachowski, M. (1993). Dolganischer Wortschatz, Kraków: Uniwersytet Jagiellónski Kraków.

Stachowski, M. (1994). "Urtürkisch *mč, *nč und der Jakutische Ordinalsuffix", Rocznik Orientalistyczny, 49/2: 177-183.

Stachowski, M. (2008). "Some thoughts on the Proto-Turkic palato-velar nasal", Türk Dilleri Araştırmaları, 18: 375-392.

Stachowski, M. (2018). "Two Polish loanwords in Yakut ('snuff [tobacco]'; 'thousand'), being also a look at their reflexes in some other Siberian languages as well as in Russian", Studia Linguistica Universitatis Iagellonicae Cracoviensis, 135: 107-111.

Starostin, S. et al. (2003). An Etymological Dictionary of Altaic Languages, Leiden: Brill.

Talvitie, E. (2016). K Voprosu o Pervičnyx Dolgix Glasnyx v Tunguso-Man'čžurskij jazykax, Helsinki University. [Unpublished master's thesis]

Tenišev, E. R. (1997). Sravnitel'noistoričeskaja Grammatika Tjurskix Jazykov, Moskva: Akademia Nauk.

Vasilevič, G. M. (1958). Evenkijsko-Russkij Slovar', Moskva: Gosudarstvennoje isdatel'stvo inostrannyx i natsional'nyx slovarej.

Vasiliev, Y. (1995). Türkce-Sahaça (Yakutça) Sözlük, Ankara: Türk Dil Kurumu Yayınları.

Vovin, A. & D. McCraw (2011). "Old Turkic Kinship Terms in Early Middle Chinese", Türk Dili Araştırmaları Yıllığı Belleten, 2011/1: 105-116.

Vovin, A. (2014). "Borrowing of Verbal Roots Across Language Family Boundaries in the 'Altaic' World", Altai Hakpo, 24: 151-161.

Wu, Y. & J. Janhunen (2010). New Materials on the Khitan Small Script: A Critical Edition of Xiao Dilu and Yelü Xiangwen. Folkestone.

Zaharov, I. (2010). Gramatika Man'čzhurskago Jazyka, Languages of Asia classic texts, 1, Folkestone, Kent: Global Oriental.