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Additional Turkic and Tungusic borrowings into Yukaghir

Peter Sauli Piispanen

This paper presents twenty-five newly found suggested borrowings from the Turkic, Tungusic and Mongolic languages into the Yukaghiric languages of far northeastern Siberia. The chronology of the borrowings is considered, and solid phonological and semantic considerations are given for each suggestion. Several of the new borrowings are quite recent and the majority relate to technological terms, social life and elementary actions. This would speak for a situation in far northeastern Siberia of intimate tribal contacts where multilingualism was the norm historically, hunting techniques were shared and inter-tribal marriages were commonplace. Additionally, two prospective borrowings related to reindeer terminology are discussed. Furthermore, borrowings from Yukaghiric into other languages, barely discussed in scientific literature, are also analyzed and commented upon briefly.
Keywords: borrowing, Tungusic, Turkic, Mongol, Chukchi, Yup'ik, Yukaghir

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1. Introduction

In the vast northeastern Siberian land area there exists a complex mosaic network of lexical borrowings throughout many language families (involving mainly Turkic, Tungusic, Mongolic and Yukaghiric, but also Samoyedic and Yeniseic, etc.). In this article we shall discuss both twenty-five new borrowings into the Yukaghiric languages and dialects and Yukaghiric borrowings into other languages.

Lexical borrowing into the Yukaghiric languages has been relatively commonplace throughout history. The numerous suggested borrowings, within practically all semantic fields, have originated from several different neighboring sources (Russian, Tungusic, Turkic, Chukchi, Koryak, Mongol, Eskimo, etc.; Nikolaeva 2006). Recently, further borrowings from Turkic (older Turkic in Piispanen, 2017b, Pre-Yakut in Piispanen 2013b, 2015b, 2017a), Tungusic (Piispanen 2015b, 2017a, 2017c) and Mongolic (Piispanen 2017a) sources into Yukaghiric have been reported with suggested chronologies. Interestingly, Nivkh borrowings into Yukaghiric (and

into Chukchi-Koryak, Itelmen and the Tungus-Manchu languages)[1] have also been suggested in recent research (Nikolaev 2015).[2]

Borrowings from the Yukaghiric languages into other languages, on the other hand, are usually believed to be rare—probably because Yukaghiric is now a relatively small and moribund group of languages, although in historical times they used to be much more widespread and spoken by numerous speakers between the river Lena in the west and the river Anadyr in the east (Dolgikh 1960, Collinder 1965). The likelihood of Yukaghir borrowings into different languages is evaluated and commented upon below with chronological suggestions.[3]

2. A brief note on Yukaghir prosody

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-Yukaghiric consonant clusters or suffixes identifiable in other languages.

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

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1 Throughout this paper I will refer to the common ancestor of all the Tungus-Manchu languages as Proto-Tungusic.

2 (Northern) Nivkh borrowings (through a hypothetical Northern Sakhalin language) may etymologize at least the following: PY *tuk-nə- > KY *tuknə* 'nail (peg)'; PY *l'erkə- > KY *irkud'ə-* 'to shudder'; PY *qomo- > TY *qomoňe-* 'blue; green'; PY *poɣoδi- > KY *poɣožil* 'knee'; PY *ču: > KY *ču:l* 'meat'; PY *nuɣ- > KY *nug-* 'to find; to kill'; PY *kinʒə- > KY *kind'ə* 'moon; month'; PY *l'aqil-l > KY *laqil* 'tail; bottom (of the body)'; PY *mä:l- 'two' > TY *maala-* 'both sides; opposite'; PY *mi(ä)-kə > KY *me:kə* 'near'; PY *ilijə- > KY *il'ejə* 'wind'; PY *waqčə- > KY *aqčə* '(sharp) edge'.

3 Throughout this paper I have attempted to use the traditional transcription system of Turkology for maximum clarity and consistency. This has sometimes changed the forms given elsewhere in earlier, referenced literature (e.g. Nikolaeva 2006 for example for Yakut borrowings in Yukaghiric).

Noun root structures: ≠ (monosyllabic) CV-, Cǝ-, CVC-
Verbal root structures: ≠ (monosyllabic) CV-, Cǝ-, CV:C-

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.

3. 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 phonotactic 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.

4. Chronology of borrowings

As to chronology—summarizing the most recent literature—lexical borrowings into Yukaghiric may be categorized as having entered the language(s) in at least four different chronological waves:

Very early borrowings (dated to 2000–2500 BP)—these were borrowings into Middle Proto-Yukaghir (*aka* MY or Pre-PY), the ancestor language of Late Proto-Yukaghir from which all modern Yukaghir languages originated. Some early Turkic borrowings are known from this time[4] (Piispanen 2017b) and likely also from some very early Nivkh sources (unpublished personal notes).

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4   These include borrowings from early Turkic sources becoming Pre-PY *jap- 'to bump', and Pre-PY *kej-~*koj- 'to break into pieces'. Further, I suggest that based on certain phonological and semantic details, some of the suggested early (Northern) Nivkh borrowings into Yukaghir (Nikolaev 2015) also appear to be very early borrowings.

Early borrowings (dated to ca. 1500 BP)—as evident from borrowing vocalism, these were older borrowings into the earliest stages of Late Proto-Yukaghir. Turkic (Pre-Yakut in Piispanen 2013b, 2015b, 2017a) and Tungusic borrowings (Tungusic in Piispanen 2015b, 2017a, 2017c) are known from this time, as is a possible and rare Samoyed borrowing pertaining to reindeer terminology (Piispanen 2015b), although the direction of borrowing is unclear and it could arguably instead be a more recent borrowing.[5]

Late borrowings (dated to ca. 1000 BP)—as also evident from borrowing vocalism, these were older borrowings into the later stages of Late Proto-Yukaghir, just before its assumed breakup. Further Turkic (Pre-Yakut in Piispanen 2013b, 2015b, 2017a) and Tungusic borrowings (Tungusic in Piispanen 2015b, 2017a, 2017c) are known from this time.

Very recent, i.e. borrowings only a few centuries old into specific Yukaghir varieties only. The recent borrowings naturally come mainly from Russian sources, borrowed now practically without phonetic changes (Maslova 2003: 25), even though earlier Russian borrowings did ususaly take on Yukaghir phonetic features. There are also some very recent Mongolic borrowings through folklore (Piispanen 2017a), as well as further Tungusic borrowings, also mainly through folklore (Piispanen 2017a, 2017c).

I note that very short entries of roots in Nikolaeva's dictionary that are found only in certain idiolects have a rather high chance of being borrowings in Yukaghiric. Other hints of borrowings are atypical consonant clusters, atypical vowel lengths, broken synharmonism, foreign suffixation patterns (rare) or other phonological peculiarities in Yukaghiric roots.

While the vocalism of various borrowings into Yukaghiric is both formulaic and regular, there are also surprisingly many cases where seemingly irregular vowel correspondences are found. I suspect that hitherto non-described phonological conditioning factors are at work,[6] or borrowings from dialects where different vowels were actually spoken, in contrast to the modern standard languages.

5. Yukaghir borrowings in the surrounding languages and beyond

All in all, lexical borrowings in various languages of far northeastern Siberia form quite the mosaic pattern, and it is often difficult to trace all the details back and forth, with many borrowings even taking on the character of a *Wanderwort*. It is fairly easy to find borrowings into Yukaghiric, and such lexical borrowings from

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5   However, it must be pointed out that according to an anonymous reviewer, the chronology outlined here is not well-established. Thus, the chronology of borrowings presented here is to be considered tentative.

6   One such previously non-described conditioning factor is: *-ol- as found in Proto-Uralic cognate roots and the roots of older donor languages, which is then always found as a fronted -el- in the corresponding new Yukaghir languages, but still as -ol- in Old Yukaghir. This phonological change is thus fairly recent (Piispanen personal observation).

several different lexical sources have been subject to relatively much research (Krej-nović 1958, Nikolaeva 1988, 1992, 2003, 2006, Piispanen 2013b, 2015a, 2017a, 2017c, Tailleur 1959).

In this area, i.e. borrowings into Yukaghiric, what is needed are methods to distinguish the exact donor language (examples: Pre-Ewenki, Pre-Ewen) instead of merely stating that the donor language is Proto-Tungusic; after all, one does not state that Proto-Turkic is a source of borrowings into Yukaghiric eiher, but rather (Pre-)Yakut (which practically must be the donor language given that Yakut, being isolated from the rest of the Turkic languages, is directly neighboring the Yukaghiric languages), etc. Additionally, while there are a few Mongolic borrowings in Yuka-ghir, there are very likely no Yukaghir borrowings in Mongolic; most, if not all, Mongolic borrowings in Yukaghiric are derived through intermediary languages (e.g. Tungusic or Yakut) and folklore.

However, borrowings in the other direction, from Yukagiric to neighboring languages, have not yet been extensively researched. Indeed, there are a number of Yukaghir borrowings in the surrounding neighboring languages of the Ewen, Ewen-ki and Yakut/Dolgan,[7] and the matter deserves further note.

To briefly demonstrate the very numerous and complex areal borrowings between, apparently, most of the languages of northeastern Siberia, a few examples can be given. There are numerous borrowings between Yakut and the Tungusic languages, and between Yakut and the Mongolic languages (example: Khabtagaeva 2011), as well as, perhaps surprisingly, some Ket, Dolgan, Selkup, Khanty, etc. borrowings in Ewenki (Anderson 2004: 24). Further, for example, there are Turkic borrowings into the Samoyedic language of the Selkup (Helimski & Stachowski 1995: 39), and probably more Turkic borrowings into Samoyedic as well (Piispanen 2015b). Let these few examples demonstrate that no Siberian language has lived long in isolation, and multilingualism appears to have been the norm for very, very long periods of time for most (or all?) populations.

Borrowings into Yukaghiric have be chronologized as very early, early, late or very recent borrowings, and Yukaghir borrowings elsewhere can probably also be categorized as such even though it may be difficult to determine such chronologies based on the phonology alone. Which are the recipient languages of Yukaghir bor-rowings? We can probably expect a few Yukaghir borrowings in surrounding Russian dialects. However, we probably cannot assume any Yukaghir borrowings into larger, ancient Proto-languages (e.g. Proto-Tungusic, etc.), only into the descending languages. Thus, I do not believe there are any Yukaghir borrowings directly into Proto-Tungusic, as seemingly has been suggested by some researchers (Knüppel 2014). First, Proto-Tungusic may not have been spoken close enough to the early Yukaghirs (speaking something like Middle Proto-Yukaghiric) to share any lexical

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7   Recently, for example, the borrowing of Late Proto-Yukaghir *öjčə > Kolyma Yukaghir *i:či: 'penis', *etc.* (and KY *i:čə* 'top, point') (Nikolaeva 2006: 321), borrowed as Dolgan *öčö*: 'penis', was suggested (Piispanen 2017d).

borrowings between them, and second, the Tungusic lexicon, with many cognates throughout the Tungusic languages, clearly goes back to Proto-Tungusic and is not borrowed from Yukaghiric. Rather, such well-attested words in the Tungusic languages are clearly Tungusic borrowings into Yukaghiric.

Yukaghir borrowings—while probably a bit more common than what is usually believed—are in highest likelihood to be found in Ewen or Ewenki (Tungusic) or Yakut (Turkic), and by extension also in Dolgan (Turkic). A few Yukaghiric borrowings may perhaps also be found to the east among the Chukchi, etc. There are probably also Yukaghiric borrowings in (at least a few of) the Samoyedic languages (one possible example being found in Piispanen 2015b). Below, let us briefly review a few earlier possible Yukaghir borrowings (mentioned in Nikolaeva 2006, Knüppel 2014).

6. Some comments on Yukaghir borrowings

? KY *jaɣil*, TY *iɣil* 'edge', borrowed as: Ewen *ekyi* 'bark' (Knüppel 2014: 85). This seems like an unlikely borrowing both on semantic and phonological grounds. While *bark edges* are known in fine, handcrafted wood furniture, to semantically shift a lexical meaning from 'edge' to 'bark' may be uncommon. Both words are very basic, and may actually also be quite resistant to borrowing. The final *-l* in Yukaghiric is a nominal derivational suffix (Nikolaeva 2006: 81), and it seems unlikely that it would have disappeared altogether with the suggested borrowing. For these reasons, this seems to me an unlikely borrowing.

PY *a:rə > KY *a:rə* 'square or triangular diaper made of leather from a reindeer or hare that is sewed to a child's trousers together with dried moss or fur', KD *a:re~are* 'fur flap', TY *aare*, borrowed as: Dial. Yakut *āra*, and Dial. Ewen *a:ra* (DSJJ 38) (noted in Nikolaeva 2006: 112). The spread alone suggests the borrowing is from Yukaghir, as do both the phonology and semantics, with the recipients being limited to certain local dialects of Yakut and Ewen only.

PY *ar- > KY *arimə* 'sole'; KD *arime*; ?SD *-arbuna*, TY *arime* 'sole; paw; foot'; TK *arime-*, TD *arime*, KY *ariməl* 'bottom'; KK *arimel*, KJ *arimel*, KD *arimel*, SD *arymal-* 'bottom; sole', KY *arul* 'bottom', SD *aronmaljuget* 'from the bottom, along the bottom', borrowed as: Dial. Ewen *arima* 'skin under reindeer's hooves' (TMS 1: 50) (noted in Nikolaeva 2006: 112). First, the word is exceptionally well-attested in the Yukaghiric languages, second, the Ewen word carries the Yukaghir suffix *-mə*, which is a nominal derivational suffix (Nikolaeva 2006: 81), third, the word is only found in one dialect of Ewen, and fourth, the meaning is very specific in Ewen, as in a cultural borrowing concept. For these reasons, this is a secure Yukaghir borrowing into Ewen.

PY *emćə~*emjə > TY *emd'e* 'younger sibling', KY *emd'ə* E, 'id.', *emd'o:-* 'younger', etc., borrowed as: Dial. Ewen *emd'e* 'younger (sibling) (noted in Nikolaeva 2006: 158). This appears to be a very recent borrowing from Yukaghiric into one Ewen dialect with the meaning and voicing pattern intact.

PY *inte: > KY *ide*: 'father's younger brother'; KD *idietek*, KK *idietek*; KJ *idietek* 'father's younger brother; father's younger male cousin', borrowed as: Ewen *eńd'e* 'father's brother elder than the speaker' (TMS 1: 455) (noted in Nikolaeva 2006: 176). A probable Yukaghir borrowing into Ewen. First, the Ewen word shows traces of the original *-nt- cluster, which has contracted into the voiced -*d-* in Yukaghiric (while an earlier, hypothetical Yukagir *-t- (> modern intervocalic -*d-)* would not be borrowed as -*nt-/-nd-* in Ewen), and, second, semantically 'father's younger brother' is probably 'father's brother elder than the speaker' if the speaker is a *son* or *daughter* of that *father*; relating the speaker's age (the *ego*) to the word meaning is common in Tungusic kinship terminology, but not in Yukaghiric (which instead compares the relatives externally to each other). The meaning is a likely later development in Ewen after the term was borrowed, and, third, the word is not found beyond Ewen in other Tungusic languages, and is therefore also a likely borrowing.

PY *yɣə-~*yŋkə- > KY *iɣalkə* 'dried fish cut in two together with its head (normally used for feeding dogs)'; KJ *iɣal*, *iɣalke-*; TY *aɣile*, *eɣale* 'dried finely cut meat usually eaten with fat'; TD *ahile-*, borrowed as: Dial. Rus. *juxala*, *juxalka* (ESRD 716–717) (noted in Nikolaeva 2006: 200). This is usually assumed to be a Russian borrowing into Yukaghir, but the opposite is actually more likely: a Yukaghir borrowing into a Russian dialect. Speaking in favor of this hypothesis is its enormous spread in Yukaghir, as the word, with basically the same meaning, is found both in KY and TY, which are spoken very far from each other. Further, Russian -*x-* does not normally borrow into Yukaghir as -*ɣ-*, but the reverse could be possible. The Late Proto-Yukaghir reconstruction, lacking in Nikolaeva's dictionary because the Rus. word was believed to be the origin, would be *yɣə-~*yŋkə-.

? PY *kuku: > KY *kuku:l* 'sleeping bag', TY *kukuul'*, borrowed as: Dial. Yakut *kukūl* (ESRD 314). This is a possible Yukaghir borrowing into dialectal Yakut, instead of vice versa as usually assumed, as suggested by the presence of the Yukaghir derivational suffix -*l* (Nikolaeva 2006: 81) in the Yakut word, and by the fact that the word is widely attested in Yukaghiric. Then again, words meaning 'sleeping bag' are borrowed, for example, from Ewenki into Dolgan, and it seems more likely that the Yakut and Tungusic peoples introduced the concept to the Yukaghirs, which would instead mean that this set is a fairly early dialectal Yakut borrowing into Yukaghiric.

? KJ *kuqlanke* 'fur coat with the fur inside'; SD *kuqlengka*; TY *kukl'aanke* 'short fur coat of the Chukchi type, with the fur on the outside'; TK *kukl'anka-*, borrowed as: Dial. Russian *kuxljanka* (ESRD 314). The spread in Yukaghiric may suggest that this is not a dialectal Russian borrowing into Yukaghiric (as suggested in Nikolaeva 2006: 230). Indeed, Yukaghir -*k-/-q-* would likely be rendered as a Russian -*x-* under these phonological conditions, but the reverse cannot be true. The cluster -*nke* is native to Yukaghir, as it is found in many other (non-borrowed) words as well, but then again so is Russian -*nka*, also native to Russian. Additionally, the lexical item itself is likely borrowed into Yukaghiric from an external source, perhaps from Chukchi, as perhaps suggested by the semantics. So a hypothetical borrowing chain

of Chukchi > Yukaghiric > Dial. Russian can be assumed in this case, but this is not certain, and Chukchi > Dial. Russian > Yukaghiric is also possible.

PY *kö:kə > KY *kö:kə* 'head (of a fish, of an animal)'; KK *koke*; KJ *koke*; KD *koka*, KY *kö:kə-l'oŋke*: 'young of an arctic grayling (Thymallus arcticus) [lit. big headed]', KJ *koked-amun* 'skull [lit. bone of the head]', borrowed as: Dial. Yakut *kōko* 'fish head' (DSJJ 115) (noted in Nikolaeva 2006: 216). This is a very likely Yukaghir borrowing into a Yakut dialect, as shown both by the phonology and semantics.

PY *kökö- > KY *kökönək*, *köknə* 'hook used to hang the kettle on a tripod over the fire', SD *gogono* 'wooden hook for hanging clothes to dry'; TU *goko 'hook', borrowed as: Yakut *köxö* 'hook' (JRS 183, TMS 1: 158, noted in 861), as well as Yakut *köxö* 'hat rack, coat stand' (JRS 183) (noted in Piispanen 2013b: 124). The Yukaghiric items—bearing the suffix -*nə*—are likely cognates of PFU *kokka 'hook, protruding edge' (UEW 171–172), Fin. *kokka* 'protruding tip, front ship, upstanding' (Piispanen 2013a). The position of the Tungusic root in this comparison is not clear, but the Yakut word appears to be a Yukaghir borrowing (due to identical vocalism and the expected change of *-k- > -*x*- in Yakut, etc.).

PY *kö:ləke: > TY *kuolekee* 'navel, umbilicus', SD *kiolaka*, borrowed as: Ewen *kö:leke*, *kö:len* (TMS 1: 420) (noted in Nikolaeva 2006: 217). A quite likely Yukaghir borrowing into Ewen, even though the direction of borrowing still cannot readily be distinguished.

PY *kura:tli: > TY *kuraatlii* 'hat worn by smb being buried', borrowed as: Dial. Ewen *kura:tli* (TMS 1: 435) (noted in Nikolaeva 2006: 228). This would seem to be a straightforward and recent Yukaghir borrowing into dialectal Ewen, as all correspondences are identical, and the word has very limited spread in Ewen.

PY *law- > TY *law-* 'to drink; to smoke', *lawje* 'water', *lawnijaa* 'alcoholic', *lawjebuŋge* 'thirst (INTJ)', borrowed as: Ewen *l'abčakal* 'to be thirsty' (Knüppel 2014: 86). The Yukaghir root was earlier, in Pre-PY times, *lom- 'to drink; to smoke', and appears to be related through borrowing to Proto-Tungusic *lümŋe- 'to swallow' (> Ewenki *nimŋe-*, Ewen *ńimŋъ*, etc. (Piispanen 2017b). The (suffixed) Ewen word, however, would appear to be a possible Yukaghir borrowing; the semantics overlap exchanging -*w*- and -*b*- is very common in these languages.

Pre-Ewen *nolima 'sledge' > Ewen *nolima* 'sledge' (TMS 1: 604), borrowed as: (PY *lolimə >) TY *lalime* 'sledge', *lalimed'aa* 'people with sledges', *lalimekaan* 'little sledge', MU *nalimme* 'sledge', MK *nalýma* 'sledge', etc. The direction of borrowing has previously been unknown (Nikolaeva 2006: 247). However, a few points immediately suggest that this is borrowed from Pre-Ewen into Yukaghiric (not in the other direction as suggested in Knüppel 2014: 88). First, Nikolaeva notes that the Ewen word shows that the original first syllable vowel must have been -*o*-, which is likely to be correct; cf. Old Yukaghir vs. New Yukaghir: MO *wogo*~TY *waɣa* 'face', MK *oljogá*~TY *al'ɣə* 'fish'. Second, TY *lalimekaan* 'little sledge' is an

obvious direct borrowing from Ewen since -*kan* is a likely diminutive suffix there![8] This can be inferred from the fact that the Ewenki suffix -*kan* has a diminutive function, and it probably similarly exists in Ewen as well (< Pre-Ewen *nolima-kan 'little sledge') (Nedjalkov 1997: 298). Third, changing between *l*- and *n*- is fully possible in Yukaghir, and the older lexicon still shows the original *n*-. The borrowing is likely so old that Pre-Ewen was the donor language. Fourth, sledge technology was probably introduced to the Yukaghirs from some other surrounding tribe, just like reindeer breeding, husbandry and many technologies were, and the rapidly expanding Ewen tribes are a good candidate for having introduced sledges (and most likely also reindeer taming, breeding, economy, etc.; Willerslev et al. 2014: 1) to the Tundra (and Kolyma) Yukaghirs.

PY *l'uw- > KY *immu*- 'to get drunk', *immo:*- 'drunk(en)', *jubo:*- 'to make a fool; wild, stupid', *jubugǝ*- 'to become full (with food); to stuff oneself', TY *iimu*- 'to get drunk', *iimie*- 'drunken', *iimus*- 'to fool', etc., borrowed as: Ewenki *iwul* 'wild; strange; fool' (TMS 1: 295) (noted in Nikolaeva 2006: 255). A Yukaghir borrowing into Ewenki through the sound changes of *l'uw- > *juw*- > *ji:*- > *i:*-. The final -*l* of the Ewenki form is a Yukaghir nominal derivational suffix, while the -*u*- is epenthetic in Yukaghir. Semantically, 'wild', 'fool > strange' are found both in Yukaghiric and Ewenki.

PY *me:(me:) > KY *me:me:* 'bear'; KK *me:me:*, *meme*(:), KJ *meme*, KY *me:-me:ča:n* 'bear'; KJ *memečen*; KD *memečen*, SD *mimecen*, TY *meemečeen* 'a woman in folklore, lit. bear-woman', KY *me:me:n-punbur* 'kind of long silky grass, lit. bear's bed', borrowed as: Dial. Ewen *me:meče(n)* (TMS 1: 568) and Dial. Yakut *mȫmö* (DSJJ 163) (noted in Nikolaeva 2006: 264). This is a likely Yukaghir borrowing; the Yukaghir form appears to be a reduplicated monosyllabic root to create a taboo word, 'bear', and the dialectal Ewen word even carries a final Yukaghir suffix. The dialectal Yakut borrowed the bare, non-suffixed root. It would seem fairly typical to create taboo fauna, like *bear* and *wolf* from foreign borrowings or through metaphors.

PY *mure > KY *mure* 'shoes, boots', *mur(u)d-u:* 'fur stockings', *muren-qond'ǝ* 'rope made of willow or skin to pull a boat against the current, lit. shoes rope', *morie*- 'to go by snowshoes', etc., borrowed as: Ewen *mïrïńta* 'fur-covered skis' (Knüppel 2014: 88). This is a likely Yukaghir borrowing where the Ewen form has been nativized through suffixation.

? (PY *ninpǝ >) KY *ninba:* 'board for cutting'; KK *ninba*; KJ *ninbe*; KD *ninbe*; TY *ninbe*; TK *ninber*-, borrowed as: Ewen *nimba* 'board used when stitching fur; board for cutting meat' (TMS 1: 594). This is another possibly early Ewen borrowing into Yukaghiric (as suggested in Nikolaeva 2006: 300, which would be contrary to the suggestion of Knüppel 2014: 89 in the other direction) which would display

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8   Granted, Yukaghir does also have a suffix –*kaan*, but it is normally used to denote a male character (i.e. it is an anthropomorphizing suffix) usually encountered in folklore (Piispanen 2017a).

the somewhat counterintuitive dissimilation of *-mb-* > *-nb-*. Instead, the phonological change of the assimilation *-nb-* > *-mb-* is fairly common throughout the world's languages, and so this could indeed be a Yukaghir borrowing into Ewen, as suggested by Knüppel. The Late Proto-Yukaghir form could be reconstructed as PY *ninpə, where *-pə- is a likely suffix.

TU *nime 'neighbor; household' (TMS 1: 595–596), borrowed as: PY *nime > KY *numö* 'house, yurt', TY *nime* 'house, yurt', and numerous other forms and compounds (borrowing noted in Nikolaeva 2006: 301). This was suggested as a Yukaghir borrowing into Proto-Tungusic elsewhere (Knüppel 2014: 88–89), but the reverse is much more likely for numerous reasons. First, it is unlikely that we will find any Middle or Early Proto-Yukaghir borrowings directly into Proto-Tungusic, and second, there are also other independent borrowings of the same root into Yukaghiric from Tungusic (e.g. the hitherto unnoticed TD *orod'e-nime* 'sledge, lit. (domesticated) reindeer's house' < *(j)oro-nt-e/i-nime, cf. Ewenki *oron* 'domesticated reindeer').

PY *ončə- > KY *o:žə-* 'to drink; to smoke', *o:ži:* 'water', *o:ži:du:-* 'watery'; TK *od'i-* 'water', etc., borrowed as: Dial. Ewen *o:ndi* 'water' (TMS 2: 18) (noted in Nikolaeva 2006: 331). This is another fairly obvious Yukaghir borrowing into one Ewen dialect with transparent phonology and identical semantics.

Dial. Rus. *palemka* (ESRD 437–438), borrowed as: TY *pal'aamka* 'knife used while eating' (noted in Nikolaeva 2006: 341). This is a likely Dial. Russian borrowing into TY only. Eating utensils of this type among the Yukaghirs probably originated in Russian contacts, and the phonology is typically Russian as well.

PY *qawa- > TY *qawarqa* 'pit; container', TK *qawarqa*, TY *qawarqad-enu* 'a river in folklore', borrowed as: Dial. Ewen *kawaku~qawaku* 'quag' (TMS 1: 357) (noted in Nikolaeva 2006: 381). This is another Yukaghir borrowing where the dialectal Ewen form still carries traces of the Yukaghir nominal derivational suffix of PY *-rqə (Nikolaeva 2006: 83). Semantically, equating 'pit' (through 'lake') with a 'marsh' or 'bog' is not unreasonable.

PY *saqlə > TY *sawle* 'polar owl', *saqlaŋaa* 'a man in folklore, lit. polar owl-man'; TD *saxle* 'polar owl', borrowed as: Dial. Ewen *saqla* 'owl' (TMS 2: 56) (noted in Nikolaeva 2006: 397). This is another Yukaghir borrowing with transparent phonology and identical semantics into dialectal Ewen.

PY *suk- > KY *šuku:* 'hand-made object', *šukumə* 'in vain, without purpose', TY *sukun* 'clothes, thing; nature, earth, world, sky; year, age, life', *sukiń* 'uninhabited place', *sukud-ańńuol* 'debt; penalty, lit. smth said', *sukun-dawa* 'cloud, lit. nature's skin', etc., borrowed as: Ewen *sukume* 'in vain' (TMS 2: 123) (noted in Nikolaeva 2006: 419). The Ewen word is borrowed from the practically identical KY word, which also carries the nominal derivational suffix *-mə* (Nikolaeva 2006: 81).

Dial. Russian *susedka*, borrowed as: KY *čičetkə* 'goblin'; KD *čičetka* (noted in Nikolaeva 2006: 420). This is a likely Russian borrowing into Yukaghiric through folklore.

Dial. Russian *sutury* (ESRD 514–515), borrowed as KY *suture*: 'long stockings made from the skin of a reindeer leg and worn over the boots'. This is a borrowing from Dial. Russian (as suggested in Nikolaeva 2006: 421), and is likely to be the plural of Rus. *sutura* 'suture', which describes how the stockings are made from reindeer leg skin.

Dial. Russian *tela* (ESRD 528), borrowed as: KJ *čala:*, *čela*: 'small pieces of meat which remain on the fish bones after the meat is cut off for drying'; SD *cala* 'pieces of jerked fish'. This is another Dial. Rus. borrowing into Yukaghiric (noted in Nikolaeva 2006: 428), as the dial. Rus. word should be connected to the standard Rus. word *telo* 'body; meat'.

Dial. Russian *upavan* (ESRD 587–588), borrowed as: TY *apawaan* 'fringe of fur at the bottom of a coat'. Another likely Dial. Rus. borrowing into Yukaghiric (as noted in Nikolaeva 2006: 444) due to the very limited Yukaghiric spread and the non-native for Yukaghiric phonological structure of the word.

Dial. Russian *vardina* (ESRD 152), borrowed as: KY *ba:rd'ina*: 'side lath of a sledge'; SD *barzyna*. Another likely dial. Rus. borrowing into Yukaghiric with the introduction of new technology. Indeed, borrowings with *w-/v-* often find a correspondence of *b-* in Yukaghiric, while the reverse would not be true into Russian.

In the case of dialectal Russian *čopka* 'deep place', it would seem to be a Yakut borrowing (cf. Yakut *čüöpkä* 'deep place' (ESRD 667) (also borrowed into Yukaghiric as TY *čuopke* 'very deep place').

In general, words found both in Yukaghiric and surrounding Russian dialects are primarily assumed in Nikolaeva's dictionary to be Russian borrowings into Yukaghiric (because the Yukaghir proto-form given is the Russian word), but there is probably no real reason for assuming this as the default, even though numerous Russian borrowings in Yukaghir are known, and a case to case analysis needs to be made. At least statistically it would seem to be much more likely—not taking sociolinguistic effects into account—that at least a few of these words are instead Yukaghir borrowings into the surrounding Russian dialects, if said words are also not found elsewhere in Russian. More possible Yukaghir borrowings as dialectal Russian words include *butul* 'fur stockings' (ESRD 148) (noted in Nikolaeva 2006: 120), *čum* 'big sack' (ESRD 673) (noted in Nikolaeva 2006: 144), *čuval* 'stove with flue on the top' (ESRD 668–669) (noted in Nikolaeva 2006: 146), *gatka* 'hatchet' (ESRD 164) (noted in Nikolaeva 2006: 167), and *koltun~kolton* '(snuff-)box made of birch bark' (ESRD 241) (noted in Nikoleava 2006: 218). The determination of Russian or Yukaghiric borrowing in each case needs to be subject to more analysis in the future.

7. New borrowings into Yukaghiric

Below I present *twenty-five* new suggested Turkic, Tungusic and Mongolic borrowings into the Yukaghiric languages and varieties. In typical fashion, Yukaghiric will only borrow a short root stem, and then fairly 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. In the case of Yakut borrowings into Yukaghiric, we are usually dealing with borrowings from Pre-Yakut, i.e. from lexical forms before certain sound changes had occurred in Yakut (for example Pre-Yakut *-k > Yakut -x). 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 Turkology. Late Proto-Yukaghir reconstructed forms are from the generally well-received *A Historical Dictionary of Yukaghir* by Irina Nikolaeva. Most of the reconstructed Proto-Tungusic, Proto-Turkic and Proto-Mongolic forms, however, are taken from *An Etymological dictionary of Altaic languages* (the EDAL) by Starostin, Dybo and Mudrak—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. Therefore, instead of using what is presented therein verbatim I occasionally instead argue for new reconstructed forms for the respective proto-language based on various known phonological principles.

New Borrowing
Proto-Mongolic *medēl- 'to inform, to inquire about' > Lit. Mongolian *medegele-, medūl-* 'caus. to report, to inform, to notify', *mede-* 'to know', borrowed as: TU *mete- 'to let know; to warn' (TMS 1: 572; EDAL 916), borrowed as: PY *met- > KY *metči:-, metti:-* to inform; KK *met-*, KJ *met-*, KD *meč-, met-*, TY *met-*, TJ *met-*, TD *met-* (Nikolaeva 2006: 267) & (PY *motu:kə >) TY *motuuke, motuukaa* 'cunning person', TY *motuu* 'a woman in folklore, lit. cunning woman' (Nikolaeva 2006: 278).

The bare root of an underlying PY *met- 'to inform'—borrowed from TU *mete- 'to let know; to warn'—is sufficient to describe all items from the two PY roots presented by Nikolaeva. There is no need to reconstruct the PY form of *motu:kə at all, since the given TY forms (with *mot-*) are derived through labialization of the root *met-, followed by suffixation twice. This can phonologically be directly compared to PY *mət > KY *mət* 'I; reflexive marker', TY *met*, but: MK *mot*, SU *mot*, RS *mot*, etc. (Nikolaeva 2006: 267), cognate with PU *mV 'I' (UEW 294). The suffixes are PY *-u: and TY *-ke~-kaa* (< TY *-ka(:n)*, changed to accommodate prosody), respectively, i.e. *met-u:(-kə) > TY *motuu(ke)*, etc. Both of these suffixes are used regularly in Yukaghir folklore and to describe persons (Nikolaeva 2006: 83, Piispanen 2017a). Therefore, the meaning of TY *motuuke* is literally 'informed person', which is what a 'cunning person' is.

This is a clear Tungusic borrowing, cf. Proto-Tungusic *mete- 'to warn, to let know' (> Ewenki *metew-* (TMS 1: 563), Ewen *metu-*, Negidal *metew-*, Orok *metteu-*, etc.) (TMS 1: 572), although the exact donor language is difficult to deter-

mine, as either (Pre-)Ewen or (Pre-)Ewenki is possible. The -*w*- in the Ewenki forms may be a passive suffix. As was kindly pointed out by an anonymous reviewer, the Tungusic forms themselves likely originate from a Mongol borrowing (Proto-Mongolic *medēl- 'to inform, to inquire about' > Lit. Mongolian *medegele-* (< *mede-GA-lA-), *medǖl-* 'caus. to report, to inform, to notify', *mede-* 'to know' with the final Mongolic -*l* having been deleted in the Tungusic verbs.

In typical fashion, the bare root—desyllabilized through apocope—has been borrowed into Yukaghir. The verb 'to let know' is indeed synonymous with 'to inform'. Also, if forms such as Proto-Mongolic *möči-~*mötü- 'to examine, to investigate' (KW 267, TMN 1 502) are also related to these roots, then a larger areal borrowing hypothesis can be presented, unless the Altaic hypothesis is preferred. The age of the borrowing is difficult to decide based only upon the vocalism, but the spread and phonological changes (we have PY *-o-, and not *-u-)—even if semantically unchanged—could suggest that this is an *early* borrowing (i.e. around 1500 BP; Piispanen 2013b: 118).

New borrowing
Proto-Tungusic *ǯaPku 'quiver' (EDAL 389) > Lit. Manchu *ǯabqu* 'quiver', Ulcha *ǯa-pauÚ(n)*, Nanai *ǯafuÚ*, Oroch *ǯapku* (TMS 1 251), borrowed as: PY *čaw- > TY *čawur* 'arrow'; TK *t'awur*, TD *čour*; TY *čawud-awur* (< * čawu(r)-nt-awur) 'quiver, lit. arrow container'; TK *t'awund-awur*; TD *čound-aur, čound-awur*, and PY *čowinə (< * čaw-i-nə) > KY *čobinə* 'spear'; KK *t'obine-*; KJ *čobine* SD *cobine*; SU *čowina*; MC *sawincr*, ? MO *čewogo* 'arrow'; B *tshovincr*, ME *tschovinna*.

The Yukaghir roots appear to originate in unspecific Tungusic borrowing into PY; the root could hypothetically have existed in early Ewen or Ewenki, serving as the donor language, but has been lost since. Phonologically, the borrowing follows the expected pattern: *ǯ- > *š- > *č-, since Late Proto-Yukaghir lacked any voiced obstruents (Nikolaeva 2006: 65–66). As mentioned earlier, optional fronting of the vowel *a* after the palatal *č*- may occur, just as it has in this case with all the suffixed forms meaning 'spear'. It would still seem as if PY *čowinə 'spear' needs to be constructed in parallel with PY *čaw- 'arrow', even though it must have arisen from *čawinə 'spear', which also interestingly seems to be suggested by MC *sawincr* 'spear'.

Semantically, words often mean either 'bow' or 'arrow' in different Yukaghir dialects (e.g. TY *nond-awje* 'bow'~TJ *noŋd-o:je* 'arrow' & KY *lukil~lökil* 'blunt arrow without a head used as a child's toy' & KJ *lokil, lokkil* 'bow', borrowed from: Ewen *luki* 'toy arrow' (TMS 1: 507). A similar connection can no doubt also be made between 'arrow' and 'quiver'; the basic Tungusic meaning of 'quiver', which literally is an 'arrow container' came to mean merely 'arrow' (and then only 'arrow container' as a compound) as well as 'spear' in a suffixed form (the inclusion of the MO, B and ME forms here, however, are uncertain). A 'spear' is basically just a longer, more sturdy 'arrow' even though it is flung instead of shot. This root is

widely attested in Yukaghir and likely represents another *early* borrowing, like the above set.

New Borrowing
Proto-Turkic *terkü~*terki 'saddle straps' (VEWT 475–476, EDT 544, TMN 2 499–500, EDAL 1446) > Yakut *törgü* 'saddle straps' (& Turkish *terki* 'rear saddlebow'; Chuvash *türt* 'back (side)', *türt-ləx* 'backband'), borrowed as: (PY *törki: >) TY *törgii* 'straps behind the saddle'.

This is a phonologically and semantically straightforward, and probably, very recent borrowing from Yakut directly into Tundra Yukaghir only, and thus a reconstructed Late Proto-Yukaghir form is not necessary. Likewise, the Rus. word *alyk* 'strap' is another very recent borrowing into Kolyma Yukaghir as *alik* 'strap of a harness' (noted in Nikolaeva 2006: 102); in both of these borrowings, an original -*y*- is found as a borrowed -*i*-, which is in better accordance with Yukaghir phonology. The voiced plosive was probably retained directly with this borrowing (in contrast to earlier borrowings into Late Proto-Yukaghir where no voiced plosives were possible). There are also the similar Ewenki *ṭirii* 'straps' and Ewen *ṭịṛị* 'straps' (< Proto-Tungusic *türü) (TMS 2: 187), which appear to be somehow related, and the etymological origin of Dolgan *türü muos* 'strap(s) horn' (Piispanen 2017d).

The numerous borrowings into Yukaghir pertaining to reindeer economy, husbandry and technology (Piispanen 2015b) suggest that such matters are not native to the traditional Yukaghir lifestyle, but are later cultural, economic and sociological elements; indeed, reindeer taming in Siberia itself is only 2000–3000 years old, and probably began with the ancestors of the Ewen and Ewenki (as suggested in Willerslev et al. 2014: 1), which is also the source of the majority of such borrowings. This borrowing is only the third Yakut borrowing related to reindeer terminology, the others being Yakut *saŋïyax* 'fur coat', borrowed as: KY *šaja:q* 'coat with fur outside made of a large reindeer skin', and Yakut *ūčax(~ugučak)* 'saddle-reindeer', borrowed as: KY *u:ca, u:caq* 'saddle-reindeer'.

New Borrowing
(Proto-Mongolic *dorugun (EDAL 484)~*dorokon 'badger'[9] >) Written Mongolian *doroɣon, doruɣu(n), dorɣu* 'badger' (Lessing 1960: 262–263), Middle Mongolian *dūr-qan* 'badger' (Poppe 1927) (& Khalkha *dorgo*; Buryat *dorgon*; Ordos *dorGo* 'badger'), borrowed as: Ewenki *dorokon*, etc. (see Doerfer 1985: 39, Rozycki 1994: 62), further borrowed as: TY *d'oroqo* 'a lake in folklore, lit. badger lake'.

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9   While the Proto-Mongolic form is reconstructed as *dorugun for example in the EDAL, I
     argue that the various Mongolic forms instead suggest *dorokon, which would also be
     much closer to the forms found as borrowings into Tungusic and Yukaghiric.

While initially perhaps regarded as an odd match, this can be shown to have phono-logical parallels with another borrowing from the same source. In typical fashion, the bare stem, desyllabilized, is borrowed into Yukaghir. The *-jə must be a suffix as it is found in identical form with another known borrowing: TU *nelbi 'fringe' (EDAL 968), borrowed as: TY *nellije* 'fringe or tassel made of leather straps', TD *nel(l)eye*, (noted in Nikolaeva 2006: 295). There is no need to reconstruct a PY root either for this borrowing, or for TY *nellije*, as the borrowings occurred only into Tundra Yukaghir and its dialects, making both likely to be fairly recent borrowings. The borrowing probably occurred through the Ewen language, which is known to be a donor in numerous cases of borrowings in Yukaghir, but Ewenki is also possible. The original Yukaghir word for 'name' is otherwise derived from Pre-PY *nime 'name', a cognate of the identical Proto-Uralic root (Piispanen 2017b).

> New Borrowing
> Proto-Turkic *kạl(ɨ)- (EDAL 658)~*kalï- 'to rise; to jump up'[10] (> Yakut *kïlïj* 'to rise; to jump up') (VEWT 226; ESTJ 5 224–226), borrowed as: PY *kö:lp- > KJ *kuolbienu-* 'to jump'.

The Yukaghir root has an irregular long vowel in a closed syllable, which is com-monly found with and indicative of a borrowing. In Yukaghir, PY *-p(ə)- is a com-monly found verbal suffix (Nikolaeva 2006: 82). The vocalic correspondence is unusual, but the borrowed root was clearly front-voweled, like in Yakut (the donor language), since the original *k- has remained unchanged (i.e. has not changed to *q*-). Semantically, the meanings are identical and pertain to basic functions.

> New Borrowing
> ?Proto-Tungusic *kota- 'concave, cavity; to bend upwards' (EDAL 727) > Ewenki *koto-kon* 'concave, cavity'; Ewen *qotána* 'concave; cavity' (TMS 1: 418), borrowed as: PY *köt- > SU *kotuw* 'pit; mine', RS *kotu*; ?B *-kotunda*; SU *kotum~kotuk* 'to dig', RS *kotuk*; ?KY *kutujo:d'a:* 'a place in folklore in the upper basin of the Jasačnaja, lit. dug place?'; ?KJ *kutuč* 'a man in folklore, lit. digger?'.

Ewenki has served as the donor language in this borrowing into Yukaghir, which only borrowed the bare non-suffixed root. The borrowing seems limited, and is only found in SU and RS, and possibly also in B with a few local derivational suffixes, but perhaps also as part of folklore borrowings into Kolyma Yukagir. The change of

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10 While the Proto-Mongolic form is reconstructed as *kạl(ɨ)- for example in the EDAL, I argue that the many various and related Turkic forms (Uzbek *qalq-, qalqɨ-*; Tatar *qalq-*; Bashkir *qalq-*; Kyrgyz *qalqɨ-*; Kazan *qalqɨ-*; KKalp. *qalqɨ-*; Kum. *qalq-*; Noghidal *qalq-*; Khakas *xalï-* (dial. *Sag.*); Oyrat *qalï-*; Tuvan *xalï-, etc.*) instead suggest *kalï-. The Yakut final *–y* is a typical Yakut phonetic feature, and the verbs regularly have this additional final element—examples: Common Turkic *ačï-* 'to be bitter' > Yakut *ahïy-*, Common Turkic *isi-* 'to be hot' > Yakut *itiy-*, Common Turkic *uðï-* 'to sleep' > Yakut *utuy-, etc.*

*-o- > *-ö- is very common in Yukaghir, in particular in this phonological environment. The semantics are assumed to have undergone the minor shift of 'cavity' > 'hole; to dig', but this is not entirely satisfactory and so this borrowing should be considered tentative only.

> New Borrowing
> Proto-Tungusic *lurgi- 'to burn' (EDAL 882) > Ewenki *lurgi(-mī)* 'to burn', *lurgīderen* 'northern lights', *lurge-mī* 'to burn out' (Vasilevič 1958: 242) (and Negidal *lujgii-*, and possibly also: Literary Manchu *lur lur* (descriptive?)) (TMS 1: 512), borrowed as: PY *le:r- > TY *lieraj-* 'to burn; to touch'.

This is another case of borrowing the bare, desyllabilized stem into Yukaghir. As Nikolaeva notes, this root unusually took the suffix *-aj* instead of the expected *-ej* (Nikolaeva 2006: 241); indeed the reason for this would seem to be that the original root was back-voweled (in Tungusic), and must have become spontaneously fronted with time in Yukaghir (i.e. *-u:- > (?-o:- >) *-e:-), but left the suffix as the original back formed *-aj*. This fronting is reasonable given the numerous Uralic-Yukaghir cognates where Uralic *-o- very often corresponds to modern Yukaghir *-e-* (but still Old Yukaghir *-o-*) even though that occurs in a majority of cases where the vowel is followed by the liquid *-l-*, in this case instead preceded by it; i.e. *lu- > *lo- > *le-*. The semantics are identical, and the meaning of 'to touch' is secondary.

> New Borrowing
> Proto-Tungusic *loxa 'sword, sable' (EDAL 878) > Ewenki *likučiūn*, *lukučiur* 'sword, sable' (TMS 1: 509), *lukučiun* 'sword' (Vasilevič 1958: 240), borrowed as: PY *lo:qə >TY *luoqa* 'hook made of bone; hooked instrument for digging out birch trees from the snow; poker', TY *luoqačend'ekukun* (?< *lo:qə-čə-nt-e-kukun or, less likely, *lo:qə-čə-nće-kukun) 'smth hooked; shaman's attribute'; *luoqaa* 'man having a nose with a low bridge; a man in folklore', TK *luoqat'end'e* 'hump-backed'.

This is a borrowing made from Ewenki into Tundra Yukaghir only. In particular, TY *luoqačend'ekukun*, additionally suffixed or compounded, may reflect the fully borrowed Ewenki *likučiūn* or *lukučion*. Semantically, a *sword* or, in particularly, a *sable* may be considered a *hooked instrument*, depending on the model. Of course, in Yukaghir, secondary meanings include a 'nose with a low bridge' which is a 'hooked nose', while 'a hump-back' has a 'curved or hooked back'.

New Borrowing

Proto-Turkic *ok 'arrow' (EDAL 1046)[11] > Yakut *ox* 'arrow' (& Dolgan *ok* 'battle ar-
row with spear-formed tip' (Stachowski 1993: 191); Chuvash *oɣъ* 'arrow' & Turkish *ok*
'arrow', *oklagu* 'rolling pin') (VEWT 389, ESTJ 1 437–438, TMN 2 153, Leksika 577,
Fedotov 2 296) or Proto-Tungusic *ok- 'arrow with wooden head; fish fin; fishing
hook' > Ewenki *oki-kta* 'fish fin' (Vasilevič 1958: 317, TMS 2: 9–10), borrowed as: PY
*oɣunpǝ~*oɣunwǝ > KY *oyunbǝ* 'fork with which a trap for fish is set'; KJ *oyube* 'back
end'; KD *ohunge* [rect. *ohunbe*] 'hook', KY *oyubǝ* 'arrow-head'.

The root was likely borrowed into Yukaghir from the Tungusic languages and suf-
fixed, as shown both by the phonology and semantics (i.e. 'hook; arrow-head');
however, Ewenki is, for semantic reasons, not the donor language, so the borrowing
is from an unspecified Tungusic source. While Pre-Yakut *ok 'arrow' (> Yakut *ox*
'arrow') would be a good fit phonologically, the semantics of 'hook' are missing,
which makes this a less likely donor language.

An original *-k- has become *-ɣ- with back vowels in Yukaghir due to the rules
of synharmonism. The Yukaghir root also bears unidentified suffixation. The *-npǝ
is a fairly common ending in roots, and at least the *-pǝ- is a derivational suffix seen
elsewhere; cf. Northern Tungusic *qaŋŋǝ (TMS 2: 314), borrowed as: PY *qaŋpǝ >
KY *qaŋbǝ* 'palm', etc. (noted in Nikolaeva, I. 2006: 378), and Proto-Tungusic
*xemŋe (EDAL 775), borrowed as: PY *kenpǝ- > KY *kenbunǝ-* 'broad, wide', etc.
(noted in Nikoleava 2006: 206).

New Borrowing

Proto-Tungusic *oran 'reindeer' (TMS 2: 24–25, EDAL 1063) > Ewenki *oron* 'domes-
ticated reindeer' (Vasilevič 1958: 327), Ewen *orъn/orán* 'reindeer', *orándadaj* 'to travel
by reindeer', etc. (Robbek & Robbek 2005: 224), borrowed as: (PY *oro- >) TD *oro-
d'e-nime* 'sledge, lit. reindeer's house' (< *oro-nt-e/i-nime); note that TD *nime* 'house'
is also borrowed (noted in Nikolaeva 2006: 301) from TU *nime 'neighbor; household'
(TMS 1: 595–596).

The compound includes the Yukaghir genitive element *-nt- (> KD *-d-*). However,
the following *-e-* is a bit confounding. It apparently palatalized the preceding plosive
into *-d'-* (normally expected with *-di-), but it is similar to that found, for example,
in: TY *moojend'e-rukun* 'creature having a magic spirit, lit. thing with a master' (<
TY *rukun* 'thing'; TK *mooje*, TY *moojče* 'master; boss'), and numerous other
words. The choice of the genitive marker *-nt- also clearly shows that the following

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11 Interestingly, it has been suggested that Proto-Turkic *ok 'arrow' in itself could be a
    borrowing from the Indo-European Tocharian languages (i.e. Tocharian A *ok*, Tocharian
    B *ak.watse* 'sharp') (Golden 1992: 32, paraphrasing earlier research by András Róna-
    Tas).

word must have started with a vowel, otherwise the prevocalic genitive marker *-n- would merely have been employed.

Semantically, a 'pulled sledge' may indeed be regarded as a 'reindeer's house'. This vocalism of the borrowing, made into TD only, may suggest Ewenki as the donor language. Whether this also means that the very widespread and widely attested borrowing of TU *nime into practically all Yukaghiric languages also comes specifically from (Pre-)Ewenki is not clear. After all, it has been suggested that reindeer taming, breeding, economy, etc. originated with the Tungusic tribes (Willerslev et al. 2014: 1), from which most such borrowings would originate, and it is also likely that sledge terminology came from Tungusic languages.

> New Borrowing
> Proto-Tungusic *(x)ila- 'to burn, to kindle' (EDAL 584) > Ewenki *ila(-mī)* 'to burn, to ignite' (Vasilevič 1958: 162, TMS 1: 303–304), borrowed as: ?PY *o:lə- > BO *ólaj* 'to burn'.

This is a localized borrowing from Ewenki (cognates seemingly are lacking in Ewen) into Old Yukaghir BO only. As usual, only the bare root was borrowed, neglecting the Ewenki infinitive marker *-mī*. The vocalism is unusual, but spontaneously mirrors for example KL *jilakin~jilakun* 'four' (& B *ye:laklon* 'four') contra MK *jolóklón* 'four', and KL *kejlanii* 'red' contra BO *kólene* 'red'. Perhaps the same change was also halfway underway in KY *mi:-la:γət* 'right side' contra B *miu-laa-nugan* 'right side'.

> New Borrowing
> Proto-Tungusic *tōli (EDAL 1432)~*tele- 'belt, strap for trousers'[12] > (Ilimpi and Nercha) Ewenki *tōl* 'belt' (Vasilevič 1958: 392, TMS 2: 232–233), borrowed as: KK *telgi* 'belt; strap'.

The borrowing is localized from an Ewenki dialect into only one dialect of Yukaghir, where the root was suffixed and obtained a prosodically valid noun structure with a short vowel. The vocalism is identical in this fairly *recent* borrowing. The suffix could be the adjectival suffix *-kə > KY & TY *-qə/-kə* (Nikolaeva 2006: 82), rendering the meaning of 'strapping'.

> New Borrowing
> Proto-Turkic *ūli- 'to cry, to howl' (EDAL 1493) > Yakut *uluj-* 'to cry' (& Dolgan *uluj-* 'to cry' (Stachowski 1993: 243) & Turkish *ulu-* 'to cry') (EDT 127, VEWT 512, ESTJ 1 595), borrowed as: ?PY *olo-~*jolo- > MC *olyndže* 'crying'; ?MO *jallok*.

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12 While the Proto-Tungusic form is reconstructed as *tōli- for example in the EDAL, I argue that the various and numerous related Tungusic forms instead suggest *tele- because in the Ilimpi and Nercha dialects labialization is a regular change.

This is another localized borrowing from Yakut into MC and MO only, where the semantics are a perfect match. The change *-u- > *-o- is typically found with old borrowings (Nikolaeva 2006: 58. Piispanen 2013b: 118). The Yukaghir vocabulary documented as MC and MO is Old Yukaghir, and so the modern phonological change of *-ol- > -el- had not yet occurred here (Piispanen personal observation).

> New Borrowing
>
> Proto-Tungusic *oŋka 'pasture, grass food' (EDAL 1056) > Ewenki oŋko 'pasture, grass food', oŋko-mī 'to pasture (about deer)', oŋkov-mī 'to graze (of a deer)', oŋkovukīt 'grazing', oŋkon 'old pasture', oŋkoīt-mī 'to catch pasturing deer', oŋkoīt 'pasture', etc. (Vasilevič 1958: 323); Ewen oŋqъ 'pasture, grass food'; Oroch oŋko- 'to graze'; Udighe oŋkosi- 'to graze' (TMS 2 21), borrowed as: (PY *öŋkə- >) KJ ogońe- 'to eat'; BO íngeńej, KJ ogoneš- 'to feed (TR)'; KD ohońec-.

This is another localized borrowing from Tungusic into KJ, KD and BO only. Due to its being a localized borrowing, there is no reason to reconstruct a PY form, and if there were, PY *oŋkə would be a better fit in this case. The basic Yukaghir forms (actually carrying *-nə-, an intransitive verbal marker; Nikolaeva 2006: 82) retain the basic meaning of 'to eat < to graze', while the transitive marker (-š-) of some forms has expectedly changed its meaning from 'to eat' to 'to feed'.

> New Borrowing
>
> Proto-Tungusic *kuŋge 'clothes' (EDAL 719) > Ewenki kuŋgu 'clothes' and Ewen köŋgeke 'clothes' (TMS 1: 433), borrowed as: PY *qoŋoj > TD xoŋoi 'trousers'.

This is another localized borrowing from Tungusic into TD only, where the original meaning 'clothes' has been semantically narrowed down to mean 'trousers' only (unless the meaning was erroneously recorded); in essence 'a generic item group' has come to mean an 'a specialized subgroup of an item group'. I surmise that such semantic changes may be not at all uncommon with borrowings, for example through: 'a generic building material', borrowed as 'specific build from that material'. Borrowings of the reverse semantic change are also known to exist (i.e. 'specific product' > 'generic material'), for example: Yellow Uighur jorim 'caftan' (i.e. a specific item fashioned from a material), finds itself as a borrowing with Kott urum 'cloth' (a generic material group), and Tofan turʲej 'shin guards' (specific item), finds itself as a borrowing with Kott tarei~tarêi 'rough cloth' (generic item group) (Timonina 2004: 141–142); as kindly pointed out by an anonymous reviewer, this latter may have originated in another Turkic word, namely täri 'the skin, hide (of a human being or animal), leather'.

The change of *-u- > *-o- is typical of *older borrowings* (Nikolaeva 2006: 149, Piispanen 2013b: 134), while the change of *k- > *q- occurred due to the rules of synharmonism with back vowels in Yukaghir. The voiced cluster *-ŋg- is phonologically invalid in Yukaghir, and hence would have become *-ŋk- (> TY -γ-); how-

ever, only the bare, monosyllabic root was borrowed and then suffixed in Yukaghi-
ric, i.e. *kuŋ-u-j > *qoŋoj.

New Borrowing

Proto-Tungusic *gul- 'to blaze; to set fire; (bon)fire; hearth' (EDAL 554) > Ewenki *gul-*
'to blaze'; Ewen *gul-* 'to set fire' (TMS 1: 169), borrowed as: PY *qa:l'ə > TY *qaal'e-*
'to get burnt', TK *qaal'e-*, TY *qaal'es-* 'to fry', TK *qa:l'es-* 'to roast meat until it be-
comes charred', TY *qaal'idere* 'coal', TK *qaal'edere*, *qal'idere*, TY *qaal'e* 'partly
burnt place'.

The long, isolated vowel of the Yukaghir root is strongly indicative of this being a
borrowing, and, again, the change of *-u- > *-o- is typically seen with older bor-
rowings. The phonology is expectedly *gul- > *kule- (devoicing) > *qo:lə—(syn-
harmonism and prosodic adjustment) > *qa:l'ə—(uvularization and palatalization).
Semantically, 'to blaze' means 'to burn fiercely or brightly', which is well reflected
by all the Yukaghir forms. I note that the Tungusic root may also be connected to
suspiciously similar Mongolic forms, i.e. Middle Mongol *qal* 'fire', Buryat *gal*
'fire', etc., but the comparison is problematic on both phonological and semantic
viewpoints.

New Borrowing

Proto-Mongolic *boγo- 'slave, servant' (EDAL 366) > Written Mongolian *boγol~boγul*,
Middle Mongolian *bo'ol* (borrowed into Ewenki *bol* 'slave'), *b[a]wān*, *bawa*, *bual*;
Khalkha *bōl* 'slave'; *būrǯ* 'slave in the second generation'; Buryat *bōl*, *bogōl*; Kalmuck
bōl; Ordos *bōl* (KW 53, TMN 1 212). Also: Ewenki *boγī-*; *bō-kān* (< *boγo-kān)
'slave' (from Proto-Tungusic *bogī- 'to bear a bastard; to suffer miscarriage') (TMS 1:
87, 90; EDAL 366), borrowed from Ewenki *bol* 'slave' as (PY *po: >) KY *po:* 'orphan,
widow(er); worker, slave', KJ *po*; KD *po:ŋo-*; SD *po*; B *poad'* (?<*poónd-) '+ servant';
ME *poo*, *nont-* [rect. *pont-*] '+ servant'; MK *póc*; ?TD *pai-kode*, *pai-xamul* 'servant'.

The Mongolic borrowing into Yukaghiric likely occurred through Pre-Ewenki as an
intermediary language, where *bol > *pol > *po:* can be assumed. The meaning
'slave' is semantically derived from 'bastard, illegal child' < 'to bear a bastard; to
suffer miscarriage'.

New Borrowing

Proto-Tungusic *xuŋke- ~*kuŋke- 'to bow' (EDAL 822) > Ewenki *uŋkē-* 'to bow'
(TMS 2: 278–279), borrowed as: PY qonqə- > TY *qonγaγaj-* 'to bow', TJ *qoŋad'a-*, TY
qonγačeń- 'to bend forward', TK *qonγaγaj-* 'to bow', *qonγad'i-* 'to bow'.

This is a Pre-Ewenki borrowing into Tundra Yukaghir. The vocalism of *-u- > *-o-
is typical of older borrowings, while the change of *-k- > *-q- is expected with back
vowels in Yukaghir. The semantics are identical and require no further analysis.

This is likely a fairly recent borrowing, where the irregular change of *-ŋk- > *-nk- must have occurred with the borrowing given the various Yukaghir forms.

New Borrowing
Proto-Tungusic *sāma 'sign' (EDAL 1207) > Ewenki *sāma* 'sign', Ewen *ham* 'sign' (TMS 2: 60–61), borrowed as: PY *samur > TY *samur* 'vestige of a wound, scar; mark; split', TY *-ramur* 'threads of a seam'.

This is another Pre-Ewenki or Pre-Ewen borrowing (before the change of *s- > Ewen *h-*) into Tundra Yukaghir only. The phonological development was probably: *sāma (prosodically invalid in Yukaghir) > *sam- (prosodically valid root) > PY *sam-u-r (suffixed root with epenthetic *-u-*). Notably, the cluster *sam- would not and did not undergo sibilant alternation or deletion just as per previously described rules, but rather has been retained as expected (Piispanen 2015). Semantically, a "scar, mark" or "split" are all visible signs, as is the "thread of a seam".

New Borrowing
Proto-Mongolic *min-či-~*men-te- (EDAL 928)~*minti- 'to become red'[13] > Written Mongolian *minči-*, Khalkha *minčij-*, Buryat *menti-*, Kalmuck *minč-* (KW 263), borrowed as: (PY *minčə~*minćə >) KJ *mid'enit* 'bloody'; RS *mižo*; BO *-ménže, -mińže*; KL *miža*.

This appears to be a rare Mongol borrowing into Old Yukaghir with excellent phonological overlap and acceptable semantics. Ramstedt suggested that the Mongol forms are Sanskrit borrowings through *minta < Tib. *mendi* < Sanskrit *mendhī* 'Lawsonia alba; wird zum Rotfärben der Nägel verwendet', but this seems rather improbable. Curiously, there are also the somewhat similar Proto-Tungusic *muŋsi 'red (as blood); clot of blood' > Ewenki *munŋi* 'red as blood'; Ewen *munsъ* 'clot of blood' (TMS 1 556), and the relationship, if any, to the roots presented above is unclear.

New Borrowing
Proto-Tungusic *dulu- 'quite, peaceful, easy' (EDAL 1379) > Evenki *dulu-mkūn* 'quiet, peaceful, easy'; Ewen *dulъm* (TMS 1: 223) borrowed as: (PY *tol- >) TY *toluol-* 'calm, slow', *toluomu-* 'to become calm'.

This is another Tungusic borrowing specifically into TY, and there is therefore no need to reconstruct a PY form. Devoicing is expected in Yukaghir, and the change

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13 While the Proto-Mongolic form is reconstructed as *minči-~*mente-, for example in the EDAL, I argue that the various and numerous Mongolic forms instead suggest *minti-; the vowel *e* in Buryat *menti-* is the outcome of a regular phonetic change, cmp. Literary Mongolian *bisi* 'not' > Buryat *beše*, Literary Mongolian *biy-e* 'body' > Buryat *beye*, etc.

of *-u- > *-o- is typical of *older* borrowings (Nikolaeva 2006: 149, Piispanen 2013b: 134). In TY *-l* (< PY *-l) is a nominal derivational suffix (Nikolaeva 2006: 81). Thus, the following can be assumed *dulu- > *tulu- > *tolu-/*tolo- > *toluol-*, etc. Semantically, 'quiet' and 'peaceful' equate to 'calm'. The Yukaghir meaning 'slow' is secondary. In a completely similar fashion Ewenki *čeru:me* 'quiet, calm' (TMS 2: 422) is borrowed into Kolyma Yukagir and its dialects as: KY *čörö:-* 'quiet; slow', *čörumu-* 'to calm down (of the wind)', etc. (noted in Nikolaeva 2006: 142).

New Borrowing

Proto-Tungusic *siru- 'to glide, to roll, to rotate' (TMS 2: 96–97, 430, EDAL 1299) > Ewenki *sirun-mī* 'to slide, to slip', *sirunkēkīt* 'runner, skid, sled', *sirunkēt-mī* 'to skate', *sirunkēčivur* 'skates', etc. (Vasilevič 1958: 358) (& Ewen *hirun-* 'to slide'), borrowed as: (PY *syrqa: >) TY *sirγaa* 'roughly made sledge', *sirγaadie* 'sledge'.

This is another Ewenki (or Pre-Ewen) borrowing into TY, and thus there is no need to reconstruct a PY root. The bare root, monosyllabilized, was borrowed, and suffixed with a nominal derivational suffix. As stated several times in Nikolaeva's dictionary, Yukaghir *-q- is quite likely a suffix: i.e. rendering the change 'to slide' > 'sledge'. The root contains an initial proto-sibilant, *s- —which could have been deleted, lateralized or retained—but according to the rules outlined elsewhere (Piispanen 2015: 237), it would indeed have been retained in a front-voweled environment, as in this borrowing. The borrowing is likely to be *very recent*. This is another instance of sledge terminology borrowing into Yukaghiric from the Tungusic languages, like with TY *lalime* 'sledge' and TD *orod'e-nime* 'sledge, lit. reindeer's house' above.

New Borrowing

Proto-Turkic *siŋ- 'to sink, to submerge' (EDT 833–834, ESTJ 7, EDAL 1295) > Yakut *iŋ-* 'to sink', borrowed as: PY *suŋq- > TY *suusej-* 'to throw; to turn down, to bring down, to take down'; TK *susej-*, *rusej-*, TJ *shushei-*, *shushai-*, TY *suŋd'ii-*, *suŋrii-* 'to throw (in various directions); to splash (INTR)'; TK *suŋdi-*, *suŋri-*; TJ *shuŋdiji-* '+ to walk', TY *suusiej-* 'to put off; to take off'; *suŋaa* 'bow-string'; *mes-suusej-* 'to throw oneself, to rush', TJ *shugurei-* 'to throw', TK *jarqe-ruŋri*: 'ladle for ice'.

This appears to be a borrowing from Pre-Yakut *siŋ- 'to sink' (> Yakut *iŋ-* 'to sink') into Tundra Yukaghir and its dialects only. In Yukaghir, *-q- is a likely derivational suffix, as noted numerous times in Nikolaeva's dictionary. The first-syllable long vowel in some Yukaghir forms is the result of phonological contraction: *suŋk-sə- > *suγsə- > su:sə-. In Yukaghir, PY *-sə- (or rather, I argue: PY *-śə- > TY -sə-, KY -šə-), is a transitive verbal suffix (Nikolaeva 2006: 83). The root-initial proto-sibilant *s- was regularly lost in Yakut, but only when phonologically conditioned in Yukaghir; the cluster *-ŋq-, after apparent suffixation and with a back vowel, how-

ever, blocked sibilant deletion in this case (Piispanen 2015) and so the Tungusic origin remains clear. Semantically, the function 'to sink (TR)' means 'to lower down, to bring down', and so the correlation with this borrowing is sound. In Yukaghir, secondary and tertiary semantic developments can also be found, which is very common with many different Yukaghir roots.

8. Structured semantic fields

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

> b. animal kingdom (i.e. fauna): reindeer (Tungusic)
>
> c. plant kingdom (i.e. flora): pasture, grass food (Tungusic)
>
> d. nature, natural phenomena and natural places: to cry; to howl (Turkic)
>
> e. types of work and tools: saddle straps (Turkic), arrow (Turkic), sword, sable (Tungusic), arrow/spear (Tungusic), sledge (Tungusic)
>
> h. clothing: clothes (Tungusic)
>
> i. social life and kinship terms: slave; servant (Mongolian), name (Tungusic), sign (Tungusic)
>
> j. tribal or population names: badger (Mongolian)
>
> m. elementary phenomena, actions and perceptions: to mix; to add; to tie to (Turkic), to jump up (Turkic), to become red (Mongolian), concave, cavity (Tungusic), to burn (Tungusic), to burn, to kindle (Tungusic), to blaze; to set fire; (bon)fire; hearth (Tungusic), to bow (Tungusic), calm (Tungusic), to inform (Mongolic through Tungusic), to sink (Tungusic)

The following categories had no representatives among the borrowings: a. body parts of humans and animals, f. trade, g. habitation, k. health, illness and death, l. religion, n. other.

The majority of the borrowings pertain to *technological terms*, *social life* and *elementary actions*. The same was also true for borrowings from the same sources into Yukaghiric presented elsewhere (Piispanen 2013b). This would speak for a situation of intimate tribal contacts where bi-, tri- or multilingualism was the norm from around 1500 BP with the arrival of Tungusic people, and where hunting techniques were shared and inter-tribal marriages were commonplace.

9. A few notes on earlier suggested borrowings

As a concluding remark on Tungusic and Turkic borrowings into Yukaghiric, I wish to give some attention to KY *basmak* 'quite, entirely' (> KY *basmak-kebej-* 'to leave; to get out of hand') and KY *bolləqənə* 'completely', both of which have been mentioned as being very likely, but unidentified borrowings (Nikolaeva 2006: 116 & 119, respectively, Piispanen 2013b: 134).

I now believe that the first part, *bas*, may be the Yakut word for 'head', which also is the basis for Dolgan words *bastāk* 'Kopf habend', *bastyŋ* 'the best; excellent' and *bastaky* 'the first; the front' (Stachowski 1993: 54). Semantically, the *head thing* is the *first thing* or the *main thing,* so to speak; cf. also Turkish *baş* 'head' > *başlıca* 'mainly'; cf. Swedish *huvud* 'head' > *huvudsak* 'main point, lit. head thing', *huvudsakligen* 'mainly'. So *mainly* or *primarily*—which is fairly close to *entirely*—can be derived from *head*, and therefore I believe KY *basmak* 'entirely' may be a Yakut borrowing with unclear suffixation pattern.

As for KY *bolləqənə* 'completely', it would be surprising if this is not borrowed—along with another suffix—from Yakut *buolla* 'as for', which was also borrowed into Ewen *boolla* 'as for' and Učur Ewenki *boolla* 'as for' (Malchukov 2006). *-qənə* may be foreign, but could alternatively be a native Yukaghir suffix, here initiating a semantic shift; cf. KY *-gənə* 'suffix for locative or different-subject converb' (< PY *γənə) *(*Nikolaeva 2006: 80).

10. More possible borrowings of reindeer terminology

New Borrowing

Proto-Chukchee-Koryak (PCK) *qora-ŋa 'domesticated reindeer; witch (in compounds)' > Chukchi *qorá-ŋə* 'domesticated reindeer', Koryak *qoja-ŋa* 'domesticated reindeer', Palan *qora-ŋa* 'domesticated reindeer', Alutor *qura-ŋa* 'domesticated reindeer', etc., borrowed as: (PY *qoroj >) KY *qoroj* 'two-year old male reindeer'?

Yukaghir has borrowed numerous terms related to reindeer breeding, traveling by reindeer, etc., and two further suggestions are discussed here. The first pertains to a possible rare borrowing from Chukchi. In typical fashion, Yukaghir would only have borrowed a short stem and then suffixed it (in this case *-j*). The ending could have been palatalized, producing KY *qoroj (< *qora-j)*, a word having no known cognates elsewhere in Yukaghir. Other known borrowing from Chukchi (of which there are but a few) related to *reindeers* include: Chukchi *sawsi* 'reindeer breeder', borrowed as: TY *čaačaa* 'a reindeer-breeding Chukchi tribe' (noted in Nikolaeva 2006: 121), and Chukchi *əlwəlu* 'wild reindeer', borrowed as: KD *ilbe* 'domestic reindeer, *ilbied'i* 'Yakut'; TY *ilwiiče* 'pastor', *ilwii-* 'to graze', etc. (noted in Nikolaeva 2006: 173).

There are also Yup'ik words of noteworthy similarity and meaning: Sirenik *qúrŋəχ, qurə'łəχ*, Chaplino *qujŋīq*, Naukan *qújŋiq*, Chugach *χɐna įq*, Central Alaskan Yupik *quzŋiq, qujŋiq*, Nunivak *qunniq*, all of which also mean 'domesticated reindeer' (Comparative Eskimo Dictionary 322), and these could arguably also be early borrowings from Proto-Chukchee-Kamchatkan; this should be the direction of borrowing because to the best of my knowledge the final *-ŋa* is a singulative suffix found in Proto-Chukchi.

Semantically, it is difficult to explain the borrowing, but it can be compared to the situation of other known borrowings: TU *cur-, *cir- 'three-year old wild deer', borrowed as: PY *čurqə > TY *čurɣa* 'two-year old female reindeer', *curɣan-purewre* 'three-year old female reindeer, lit. above two-year-old female reindeer'; Ewenki *melele*, *me:lan* 'elk calf, small tundra reindeer', borrowed as: PY *mejl'inc'ə > KY *mejl'id'ə* 'one-year old reindeer or elk'; Ewen *ke:nde* 'draught reindeer of the Chukchi or Koryak breed', borrowed as: PY *qunde: > TY *qundietege* 'draught reindeer more than six years old'; Ewen *kuńa:-* 'to gallop (of a reindeer, a horse)', borrowed as: PY *quńe > TY *quńe* 'two-year old male reindeer' (Piispanen 2015b: 241, summarizing lexicon from Nikolaeva 2006). In all of these, the age of the reindeer has either changed or been otherwise oddly specified when borrowed into Yukaghir, and it could similarly have occurred with the borrowing suggested here. Given the very sparse information at hand, however, this borrowing candidate (which would add to those summarized in Piispanen 2015b) remains tentative at best.

> New Borrowing
> Proto-Yup'ik *qimuɣ- > Central Alaskan Yup'ik *qimuɣ-* 'to pull vigorously (of dog)', Sirenik *qəmpɨɬəɣáχta* 'driver of a dogsled', Chaplino *qimúxsaq~kimúxsiq* 'dog sledge', *qimúkaq* 'trained (dog or reindeer)', Naukan *qimúxsiq* 'dog team', *qimúxtāqā* 'to train dogs to pull a sledge', borrowed as: (PY *kemuɣo:r >) TY *kemuguor* 'whim (of a reindeer); a reindeer in folklore'?

The second suggestion constitutes another possible local borrowing of reindeer terminology (and so PY reconstruction is not necessary), which could have entered Yukaghir from the east precisely through long-distance reindeer herding and travel prior to the 20th century. Reindeer herders (Russians, Chukchi, Ewen, Yukaghirs, Koryak and Yup'ik) indeed used to roam over very large areas and used Chukchi as a *lingua franca* until the beginning of the 20th century (Krupnik 1993).

Thus, in theory, a rare borrowing could have occurred, for example, from Yup'ik into TY, likely through storytelling, given the nature of this word.

The phonological correspondence is surprisingly accurate. The final *-r* in the Yukaghir word is most likely a suffix, as is also encountered in numerous other words. The (Central Alaskan) Yup'ik root has cognates in Sirenik, Chaplino, Naukan, Koniag, Nunivak, and seemingly also among the Inupik languages, all meaning *dog sledge*, *dog*, *to pull*, etc. (Comparative Eskimo Dictionary 305–306), although the best semantic and phonological fit is with Central Alaskan Yup'ik *qimuɣ-*, as outlined above. The donor language in this case would, of course, not have been Central Alaskan Yup'ik, but rather a genetically related language in the Russian Far East (such as Naukan, Chaplino, Sirenik, etc.).

Semantically, 'pull vigorously (of a pulling animal)' could well equate to 'have a whim'. The pulling animal in the original folklore tale from further east could well have been a *dog*, but became a *reindeer* among Yukaghirs and others upon borrowing, since they themselves used *reindeer* as pulling animals instead.

Given that there have been a few other suggested borrowings from Proto-Eskimo or a descendant language into Yukaghir, a Yup'ik borrowing is within the realm of possibility, particularly when it pertains to reindeer terminology, and through folklore. After all, given the extreme cultural importance of reindeer husbandry and economy, at least with some of the far northeastern Siberian populations, such as the Chukchi and the Koryak (for example: King 2002), such vocabulary can be expected to be borrowed between populations engaged in such practices.

In a similar vein it has been suggested that there are Eskimo borrowings in the North Tungusic languages, which suggests that the Eskimo languages were widespread in Asia earlier than previously believed (Vovin 2015: 94). Those borrowings were tentatively dated to between the first millennium B.C. and the early second millennium A.D. (Vovin 2015: 94), and in the case of the two borrowings suggested in this paper, they could seemingly be even later, given their very limited spread within Yukaghiric. Given this information, it appears to me as if more Eskimo borrowings are to be found the North Tungusic languages, the Yukaghiric languages and probably also in (Pre-)Yakut (> Dolgan).

11. Abbreviations of the linguistic resources

B = Materials of Billings 1787.
BO = Materials of Boensing 1781.
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).
KY = Modern Kolyma Yukaghir.
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).
RS = Materials of Rajskij and Stubendorf presented by Schiefner (1871a).
MU = Ust'-Janskoe materials of Mueller/Lindenau 1741.
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).
TY = Modern Tundra Yukaghir.
W = Early materials of Witsen in 1692. All the older materials are fully described and referenced in Nikolaeva (2006).

12. References

Anderson, Gregory D. S. 1998. Historical aspects of Yakut (Saxa) phonology. *Turkic Languages* 2, 3–32.

Anderson, Gregory, D. S. 2004. The languages of Central Siberia—Introduction and overview. In: Vajda, Edward, J. (ed.) *Languages and prehistory of Central Siberia.* (Current Issues in Linguistic Theory 262.) Amsterdam & Philadelphia: John Benjamins. 1–123.

Collinder, Björn 1965. *Hat das Uralische Verwandte? Eine sprachvergleichende Untersuchung.* (Uppsala Universitets Årsskrift 1.) Uppsala: Uppsala University. 109–180.

Comparative Eskimo Dictionary = Fortescue, M., Jacobson, S. & Kaplan, L. 1994. *Comparative Eskimo dictionary. With Aleut cognates.* (Alaska Native Language Center Research Paper 9.) University of Alaska Press.

Doerfer, Gerhard 1985. *Mongolo-Tungusica.* Wiesbaden: Harrassowitz.

Dolgikh, Boris O. 1960. *Rodovoj i plemennoj sostav narodov Sibiri v XVII v.* [Tribes and tribal compositions of the peoples in Siberia in the seventeenth century]. Moskva: Izdatel'stvo Akademii Nauk SSSR.

EDAL = Starostin, Sergei & Dybo, Anna & Mudrak, Oleg 2003. *An etymological dictionary of Altaic languages.* Leiden: Brill.

EDT = Clauson, Gerard Sir 1972. *Etymological dictionary of prethirteenth century Turkish.* Oxford: Clarendon.

ESRD = Anikin, Aleksandr 2000. *Ėtymologičeskij slovar' russkix dialektov Sibiri* [An etymological dictionary of the Siberian dialects of Russian]. Moskva & Novosibirsk: Nauka.

ESTJ = Sevortjan, Ervand Vladimirovič 1974–2000. *Ėtimologičeskij slovar' tjurskix jazykov* [An etymological dictionary of Turkic languages]. Moscow.

Fedotov = Fedotov, Mikhail Romanovič 1996. *Ėtimologičeskij slovar' čuvašskogo jazyka* [An etymological dictionary of the Chuvash language]. Čeboksary: Čuvašskij Gosudarstvennyj Inst. Gumanitarnych Nauk.

Golden, Peter B. 1992. *An introduction to the history of the Turkic peoples. Ethnogenesis and state-formation in medieval and early modern Eurasia and the Middle East.* (Turcologica 9.) Wiesbaden: Harrassowitz.

Helimski, Eugene & Stachowski, Marek 1995. Turco-samoiedica. *Folia Orientalia* 33, 39–52.

JLTT = Martin, Samuel Elmo 1987. *The Japanese language through time.* New Haven-London: Yale University Press.

Jochelson, Woldemar 1898. Obrazcy materialov po jukagiskomu jazyku i fol'kloru, sobrannye v Jakutskoj ekspedicii [Samples of materials for studying Yukaghir language and folklore collected during the Yakut expedition], *Izvestija Imperatorskoj Akademii Nauk* 8, 151–177.

Jochelson, Woldemar 1900. *Materialy pojukagirskomu jazyku i fol'kloru* 1. [Materials for studying Yukaghir language and folklore]. St Petersburg.

Jochelson, Woldemar 1926. *The Yukaghir and the Yukaghirized Tungus.* (Memoires of the American Museum of Natural History 9.) New York: G.E. Stechert American Agents.

Karaphet, T. M. & Sukernik, R. I. & Osipova, L. P. & Simchenko, Y. B. 1981. Blood groups, serum proteins, and red cell enzymes in the Nganasans (Tavghi). Reindeer hunters from Taimir Peninsula. *American Journal of Physical Anthropology* 56, 139–145.

King, Alexander D. 2002. Without deer there is no culture, nothing. *Anthropology and Humanism* 27: 2, 133–164.

Klitschka, Franz 1781. Bachmeistersche Sprachproben. A letter kept at the Manuscripts Department of the State Public Library, St Petersburg (fund 7, № 11, 3 rev. 5).

Krejnovič, Eruxim 1958. *Jukagirskij jazyk* [The Yukaghir language]. Moskva & Leningrad: Nauka.

Krejnovič, Eruxim 1982. *Issledovanija i materialy po jukagirskomu jazyku* [Studies and materials on Yukaghir]. Leningrad: Nauka.

Krupnik, Igor 1993. *Arctic adaptations: Native whalers and reindeer herders of Northern Eurasia*. Dartmouth: University Press of New England.

KW = Ramstedt, Gustaf John 1935. *Kalmückisches Wörterbuch*. Helsinki: Suomalais-Ugrilainen Seura.

Leksika = Tenišev, Ėdxjam Raximovič (ed.) 1997. *Sravnitel'noistoričeskaja grammatika tjurskix jazykov. Leksika* [Comparative historical grammar of the Turkic languages: Lexika]. Moskva: Akademia Nauk.

Lessing, Ferdinand D. 1960. *Mongolian-English dictionary*. Los Angeles & Berkeley: University of California Press.

Malchukov, Andrej L. 2006. Yakut interference in North-Tungusic languages. In: Boeschoten, Hendrik & Johanson, Lars (eds.) *Turkic languages in contact*. (Turcologica 61.) Wiesbaden: Harrassowitz. 122–138.

Maslova, Elena 2003. *A grammar of Kolyma Yukaghir*. Berlin & New York: Mouton de Gruyter.

Mueller, Gerhard Friedrich & Lindenau, Jakob 1741. Portfeli Millera (fund 199, list 2, part 513, № 13, pp. 20-23 rev.). Page 20: Jukagirisch (Kolymskije Yukagiri)—Korjakish—Korjakisch 2—Kurilisch (this deals with MK vocabulary) & (fund 199, list 2, part 513, № 10, pp. 5-8 rev.). Page 5: Lexikon burjatskij, tungusskij, lamutskij. Yukaghiri Ust-Janskoe [The Buriat, Even and Evenki vocabularies. The Yukaghirs from Ust'-Janskoe](this deals with MU vocabulary), both notes are kept at the Russian State Archive of Ancient Acts, Moscow.

Nedjalkov, Igor 1997. *Evenki*. London: Routledge.

Nikolaev, Sergei L. 2015. Toward the reconstruction of Proto-Algonquian-Wakashan 1: Proof of the Algonquian-Wakashan relationship. *Journal of Language Relationship* 13: 1, 23–61.

Nikolaeva, Irina 1988. O sootvestvijax ural'skix afrikat i sibiljantov v jukagirskom jazyke [On the correspondence of Uralic sibilants and affricates in Yukaghir]. *Sovetskoe Finnougrovedenie* 2, 81–89.

Nikolaeva, Irina 1992. Old Yukaghir sources and dialects. *Ural-Altaische Jahrbücher* 11, 200–210.

Nikolaeva, Irina & Vasilij Šalugin 2003. Jukagirsko-russkij i russko-jukagirskij slovar' [A Yukaghir-Russian and Russian-Yukaghir dictionary]. St Petersburg: Drofa.

Nikolaeva, Irina 2006. *A historical dictionary of Yukaghir*. (Trends in Linguistics Documentation 25.) Berlin & New York: Mouton de Gruyter.

Piispanen, Peter Sauli 2013a. The Uralic-Yukaghiric connection revisited: Sound correspondences of geminate clusters. *Suomalais-Ugrilaisen Seuran Aikakauskirja/Journal de la Société Fenno-Ougrienne* 94, 165–197.

Piispanen, Peter Sauli 2013b. Further lexical borrowings from (Pre-)Yakut into the Yukaghiric languages. *Turkic Languages* 17, 115–139.

Piispanen, Peter Sauli 2015a. Evaluating the Uralic -Yukaghiric word-initial, proto-sibilant correspondence rules. *Suomalais-Ugrilaisen Seuran Aikakauskirja/Journal de la Société Fenno-Ougrienne*n95, 237–273.

Piispanen, Peter Sauli 2015b. Extensive borrowing of reindeer terminology in northeastern Siberia. *Turkic Languages* 19, 240–258.

Piispanen, Peter Sauli 2016. A semivowel sound change rule in Yukaghir. *Journal of Historical Linguistics* 6: 2, 247–296.

Piispanen, Peter Sauli 2017a. Folklore borrowings in north-eastern Siberia. *Turkic Languages* 20, 257–272.

Piispanen, Peter Sauli 2017b. Some reflections on Late Proto-Yukaghir reconstructions and etymologies, manuscript.

Piispanen, Peter Sauli 2017c. Further lexical borrowings from the Tungusic languages into the Yukaghiric Languages, submitted manuscript.

Piispanen, Peter Sauli 2017d. New Dolgan Etymologies Pt.1, manuscript.

Poppe, Nicholas 1927. Das mongolische Sprachmaterial einer Leidener Handschrift. *Izvestija Akademii Nauk SSSR* [Proceedings of the USSR Academy of Sciences] 21. Series 6, N, 15–17.

Rédei, Károly 1999. Zu den uralisch-jukagirischen Sprachkontakten. *Finnisch-Ugrischen Forschungen* 55, 1–58.

Rozycki, William 1994. *Mongol elements in Manchu*. Bloomington, Indiana: Research Institute for Inner Asian Studies.

Schiefner, Anton 1871a. Beiträge zur Kenntnis der jukagirischen Sprache. *Bulletin de l'Académie Impériale des Sciences* 3: 16. 373–399.

Schiefner, Anton 1871b. Über Baron Gerhard von Maydell's jukagirische Sprachproben. *Mélanges Asiatiques* 6: 5, 600–626 (this deals with M vocabulary).

Spiridonov, Nikolaj 2003. *Jukagirsko-russkij slovar' i évensko-russkij slovar'* [Jukaghir-Russian dictionary and Even-Russian dictionary]. Jakutsk: Yakut State University Publishing House (this deals with SD vocabulary).

Stachowski, Marek 1993. *Dolganischer Wortschatz*, Kraków: Uniwersytet Jagiellónski Kraków.

Tailleur, Olivier 1959. Les uniques données sur l'omok, langue éteinte de la famille youkaghire. *Orbis* 8, 78–108.

Timonina, Lyudmila G. 2004. On distinguishing loanwords from the original Proto-Yeniseic lexicon. In: Vajda, Edward J. (ed.) *Languages and prehistory of Central Siberia.* (Current Issues of Linguistic Theory 262.) Amsterdam & Philadelphia: John Benjamins. 135–142P.

TMN = Doerfer, Gerhard 1963–1967. *Türkische und mongolische Elemente im Neupersischen.* Wiesbaden: Steiner.

TMS 1 = Cincius, Vera Ivanovna 1975. *Sravnitel'nyj slovar' tunguso-man'žurskix jazykov* 1. [Comparative dictionary of the Tungus-Manchu languages 1.] Leningrad: Nauka.

TMS 2 = Cincius, Vera Ivanovna 1977. *Sravnitel'nyj slovar' tunguso-man'žurskix jazykov* 2. [Comparative dictionary of the Tungus-Manchu languages 2]. Leningrad: Nauka.

UEW = Rédei, Károly 1988–1991. *Uralisches etymologisches Wörterbuch.* Budapest: Akadémiai Kiadó.

Vasilevič, Glafira Makar'evna 1958. *Evenkijsko-russkij slovar'* [Ewenki-Russian dictionary]. Moscow: Gosudarstvennoje isdatel'stvo inostrannyx i natsional'nyx slovarej.

VEWT = Räsanen, Martti 1969. *Versuch eines etymologisches Wörterbuchs der Türkspra-chen*. Helsinki: Suomalais-Ugrilainen Seura.

Vovin, Alexander 2015. Eskimo loans in North Tungusic. *Iran and the Caucasus* 19, 87–95.

Willerslev, Rane & Vitebsky, Piers & Alekseyev, Anatoly 2014. Sacrifice as the ideal hunt: A cosmological explanation for the origin of reindeer domestication. *Journal of the Royal Anthropological Institute* 21: 1, 1–23.

Wrangel, Ferdinand von 1841. *Putešestvie po severnym beregatn Sibiri i po Ledovitomu morju, soveršennoe v 1820, 1821, 1822, 1823 i 1824 godax ekspediciju, sostojavšeju pod načal'stvom flota lejtenanta Ferdinanda fon Vrangelja* 1–2. [The trip along the Northern part of Siberia and the Arctic Ocean made in 1820, 1821, 1822, 1823 and 1824 by the expedition directed by Lieutenant Ferdinand von Wrangel]. St Petersburg (this deals with MC & MO vocabulary).