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## Metathesis in Yeniseian loanwords of Altaic origin\*

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**Abstract:** The metathesis is the typical phonetic feature in Yeniseian. Usually it happened with labial and velar consonants. The paper presents some Altaic loanwords, where the different types of metathesis occurred and tries to find out the phonetic rules.

**Keywords:** Yeniseian, Altaic loanwords, metathesis, etymology

**Özet:** Metatez, Yenisey dillerinde tipik fonetik bir özelliktir. Genellikle dudak ve damak ünsüzleriyle meydana gelir. Bu yazıda bazı Altay dillerinde metatezin meydana gelen farklı türleri ve fonetik kuralları ortaya konmaya çalışılacaktır.

**Anahtar sözcükler:** Yenisey dilleri, Altay dilleri alıntıları, metatez, köken bilgisi

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The topic of my current research is the exploration of Altaic elements in the Yeniseian languages<sup>1</sup>. Most loanwords in Yeniseian from Altaic languages are nouns and adjectives. Usually they changed according to typically Yeniseian phonetic features such as amalgamation, syncope, metathesis, aphaeresis, or absence of synharmony<sup>2</sup>. The paper presents 12 different Yeniseian words of Altaic origin, where various types of metathesis occurred.

The main source of my research was the Comparative Dictionary of Yeniseian languages by Werner (Werner 2002) and his Yeniseian materials (Werner 2005). In these works we can find all of the lexical material of Yeniseian languages, published until now. Another source of my work was the Etymological Dictionary of Yeniseian languages by Vajda and Werner, which is currently in a preparatory stage (Vajda & Werner: in preparation).

### **Metathesis in Yeniseian**

The metathesis is a sporadic phonetic feature in Yeniseian. Vajda in his paper (2013) on the examples of nominal and verbal morphology explained this specific distinction in Modern Ket. Usually it happens in the words with labial consonants and nasal consonant -ŋ-, which found as plural agreement in adjectival modifiers or redundant plural agreement suffixes in a subset of verbs, e.g.

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<sup>1</sup> The Yeniseian languages belong in the Paleo-Siberian language group. The Yeniseian languages have been proposed as connected with the Sino-Tibetan, Burushaski (Karasuk) and Caucasian language families. Recently Vajda presented hypothesis that the Yeniseian languages display genealogical connections with the Na-Dené languages of North America (Vajda 2010), but this question remains open. According to the most recent works on historical linguistics by Starostin (1982), Georg (2007: 16-20), Vajda & Werner (in preparation), Vajda (personal communication) the Yeniseian languages are divided into at least three sub-branches: Ket-Yugh, Arin-Pumpokol, Assan-Kott, with Arin either connected with Pumpokol or Ket-Yugh or representing a fourth sub-branch. Today the Yeniseian language family is represented only by the three surviving dialects of Ket.

<sup>2</sup> The Yeniseian languages are characterized by highly complicated grammatical features, which are absent in Altaic and Uralic languages (Georg 2008). For example, there is a class division between masculine animate, feminine animate, and inanimate or neuter (Georg 2007: 88-91). There is a highly elaborated verbal morphology (e.g. see: Vajda & Zinn 2004; Georg 2007). One of the important distinguishing features is the existence of four monosyllabic tones (Vajda 2000; Georg 2007: 47-67) and the absence of vowel harmony.

Ket *dabatomnet* < Yeniseian \*da-ba-t-on-wet ‘she understood him’;

Ket *daatpines* < Yeniseian \*da-a-t-in-wes ‘she drew him’, etc.

In another paper Vajda explains how metathesis has affected the Ket and Yugh verb template. Through comparison with Kott, where the metathesis did not occur, it seems that it can be viewed as evidence of innovation in Ket (For details see Vajda in press: 26-35).

In the preparing *Etymological Dictionary of Yeniseian languages* (Vajda & Werner: in preparation) I found some examples, where metathesis happened, e.g.

With labial -*p*- and velar -*k*- consonants:

Ket *qopqun* ~ *qoqpun* ‘cuckoo bird’ (onomat.);

Central Ket, Northern Ket *dápqul* ‘heap’ (cf. Southern Ket *dáqpul*; Yugh *d'áχpul*) < Yeniseian \*d'*aq* ‘put down’ + \**pəl* ‘accumulation’;

Southern Ket *qapqat* ~ *qaqpət* ~ *qaqpat* ‘inf. to enter (a dwelling)’ < Yeniseian \**qapə* ‘inside’ (cf. Yugh *χā·p*, Ket *qā·* ‘home, at home’) + \**qod'* ‘walk’;

Central Ket, Northern Ket *sápqul* ‘heel’ (cf. Southern Ket *saqpul*, Yugh *sáχpul*) < Yeniseian \**sax* ‘base’ + \**bū·l* ‘foot, leg’;

Central Ket, Northern Ket *tópqul* ‘snow piled on a branch’ (cf. Southern Ket *tóqpul*, Yugh *tóχpul*) < Yeniseian \**tʰi·k* ‘fallen snow’ + \**pəl* ‘accumulation’;

With labial -*p*-/-*m*-, velar -*k*- and liquid -*l*-:

Ket *qolap*, Yugh *χolap* ‘half, side’ < Yeniseian \**qop* ‘flat surface’ + \**al* ‘half’;

Ket, Yugh *bʒlba* ‘mushroom < Yeniseian \**ba?*ŋ ‘earth’ + \**pəl* ‘growth’;

Pumpokol *kómulsi* ‘green’ < Yeniseian \**qəl* ‘bile’ + \**wes* ‘like’ + \**əŋ* {adj. suff.} + \**si* {nominalizer};

Yugh *ugl* ~ *ugel* ‘postp. (located) near’ (cf. Ket *ulga* ~ *ulka*) < Yeniseian \**ul* ‘near’ + \**kej* (loc. suff.); etc.

### Metathesis in Altaic loanwords

Most Kott, Arin and Assan loanwords are borrowed from Siberian Turkic<sup>3</sup>, while the Ket loanwords are of Ewenki (Northern Tungusic) origin. The Yugh loanwords were borrowed from Siberian Turkic and Tungusic also.

The Altaic loanwords, where metathesis occurred, are divided into three groups: the loanwords (a) with original initial nasal consonants, (b) with plosive unvoiced consonants and the loanwords (c) with nasal consonants.

**(a) Metathesis in loanwords with original initial nasal consonants:**

There are two loanwords with original initial *n*- and *ŋ*- consonants, where metathesis occurred. In both cases it happened with velar -*k*- consonant. It can be explained by the absence of *n*-/*ŋ*- nasal consonants in initial position in Yeniseian<sup>4</sup>, e.g.

(1) Arin *qonda* ~ *xonta* ‘bridle, rein’ (Werner 2002/2: 103) ← Turkic *nokta* ‘halter’ ← Mongolic *noqto* ‘halter’:

cf. YeniseyT: Khakas *noxta*; Shor, Sagai, Koibal, Kachin *noqta*, cf. Kachin *nuqta*; AltayT: Altay *noqto*; Quu *notko*; Teleut *noqto*; SayanT: Tuvan - ; Tofan *noqta*; ChulymT - ; Yakut - ; Siberian Tatar *nuqta*; Kirgiz *nokto*; Fu-yü *lohti*; Kazak *noqta*; Yellow Uyghur *loqta* ~ *loxta* ← Mongolic *noqto* ‘halter’: cf. Middle Mongolic: Muq. *noxta*; Literary Mongolian *noqto*; Modern Mongolic: Buryat *nogto*; Khalkha *nogt*; Oyrat dial. *nogtā* ~ *noktā* ~ *nogt* ~ *noxt* ~ *nokt* (For etymology and borrowings see Räsänen VEWT 354b; Doerfer TMEN 1: 517-518; ESTJa 2003: 99; Nugteren 2011: 461).

The etymology of the Arin word is unknown. Probably it was borrowed from Altay or Yenisey Turkic dialects in the form of *nokta*

<sup>3</sup> Of the Turkic languages, only Siberian Turkic had direct linguistic contacts with Yeniseian. It seems that two layers may be distinguished: Yenisey Turkic (Khakas language with its dialects Sagai, Koibal, Kachin, Kyzyl and Shor) and Altay Turkic (the northern subgroup: Qumanda, Quu and Tuba kiži dialects, and the southern subgroup: Literary Altay, Teleut dialect). Rare similarities may be observed with Sayan Turkic, Chulym and Yakut languages.

<sup>4</sup> Cf. another Turkic loanword with original initial *n*-, where a prothetic vowel appeared: Kott *ujo* ‘why?’ ← Turkic *noga* < *nägü* ‘why?’ (< *nä* ‘what?’ + *GU* {NN}): cf. Old Turkic *nägü*; YeniseyT: *noǵa*; AltayT: Altay *neniŋ* (< *ne* ‘what’ + *nIŋ* {AltayT Ablative}); Tuba; Teleut *neniŋ*; SayanT: - ; ChulymT *noǵa*.

'halter'. The lexical meaning of Arin word strengthens the case for Turkic borrowing.

(2) Ket *quŋejas* 'top' (Werner 2002/2: 151) < *quŋeja +s* {Yeniseian nominalizer} ← Tungusic \**ŋeke ojo*<sup>5</sup> 'the top of mountain' < *ŋeke* 'high mountain' + *ojo* 'top of sg.'

< *ŋeke* 'high mountain'

cf. Northern: Ewenki dial. *ŋeke* ~ *gēke* ~ *ŋōke* ~ *ŋēku* 'mountain (high, standing on the bank of a river, lake); coast (high, treeless); outcrop of sandstone'; Lamut - ; Negidal - ; Southern Amuric: - ; Southern Manchuric: - (SSTMJa 1: 667a);

+ *ojo* 'top of sg.':

cf. Northern: Ewenki dial. *ojo* ~ *oja* ~ *oje* 'top of sg.; the upper part of sg.; the top of mountain; the roof; adverb on, above'; Lamut *oj* 'surface of sg.; clothing, dress; cover'; Negidal *ojo* 'surface of sg.'; Southern Amuric: Oroch *oja* ~ *ojo* 'on, above'; Udihe *ojo* 'surface of sg.'; Ulcha *ojo*; Orok *ojo*; Nanai *owoj* 'the upper part of sg.'; Southern Manchuric: Jurchen - ; Manchu *ojlo*; Sibe - (SSTMJa 2: 8-9).

The etymology of the Ket word is unknown. Probably the Ket final *-s* is the Yeniseian nominalizer. I assume the Ket word was borrowed from the Ewenki compound word *ŋeke ojon* 'the top of mountain', where metathesis occurred. Possibly it happened because initial *ŋ-* is not typical for Yeniseian.

### **(b) Metathesis in the loanwords with plosive unvoiced consonants - *p-*, *t-* or *k-*:**

(3) Kott *aktur* 'postp. through' (Werner 2002/1: 77) ← Turkic *ötküre* < *ötgürü* 'through' < *öt-* 'to cross, penetrate into something' -*GXr-* 'to cause to pass through' {Turkic Causative} -*A* {Turkic Converb}:

cf. Old Turkic *ötgürü* 'postp. because of'; YeniseyT: Khakas *ötřire* 'through'; Sagai, Koibal, Kachin *üt-*; Shor *öttire*; AltayT: Altay *ötküre*

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<sup>5</sup> The Tungusic form *ojo* 'top of sg.' correctly has to use with +*n* {Ewenki Poss. sg3} in compound word.

‘through, by, past’; Tuba *ötküre* ‘through’; Qumanda *ötküre*; Quu *ötire* ~ *ötrö* ~ *ötüre*; Teleut *ötküre*; SayanT: Tuvan *öttür* ‘through; all, the whole of’; Tofan *ötkürtü* ‘through’; ChulymT - ; Yakut *ötörü* ‘through’; Dolgan - ; Siberian Tatar - ; Kirgiz *ötkör-* ‘to conduct; to make pass’; Fu-yü - ; Kazak *ötker-* ‘to let pass’; Yellow Uyghur - (For etymology see Räsänen VEWT 376a; Rassadin 1971: 215; Clauson ED 52b, 54a; ESTJa 1974: 554-555).

The Kott word has clear Turkic etymology. The Turkic postposition derived from verb *öt-* ‘to cross, penetrate into something’ with Causative and Converb suffixes (For details of derivation see Erdal 1991: 751, 756; 2004: 333-335).

There are different phonetical changes in Kott form. Because of the absence synharmony in Yeniseian, it disappeared in Kott. As in some cases, the final Turkic vowel is dropped in Kott, e.g.

Kott *aibič* ~ *aipiš* ‘old man’ ← Turkic \**aybiči*: AltayT *aybiči* ‘fellow countryman’;

Kott *kantʰēx* ~ *kantʰēg* ‘halter’ ← Turkic \**kand’aga* (← Mongolic): YeniseyT: Shor *xanjiča* ‘straps of a saddle’; AltayT *kand’aga*:

Kott *kep* ~ *qep* ~ *xep* ~ *xēp* ‘boat’ ← Turkic \**kebe* < \**kämi*: YeniseyT *kime* ~ *kemä* ~ *kebe* ‘boat’; AltayT *keme* ~ *kebe* (~ Old Turkic *kämi* ‘ship or boat’), etc.

Morphologically it is a postposition in Kott as in the Turkic languages.

(4) Kott *häteäy* ‘so’ (Werner 2002/1: 307) ← Turkic \**tekenej* ‘in vain, for no particular reason’ (cf. Altay) < *täkin* ‘in vain’ +*nAŋ* {Turkic Ablative}:

cf. Old Turkic *täkin* ~ *täküñ* ‘in vain’ (DTS); YeniseyT: Khakas *tikke* ‘in vain, for no particular reason’ < *tik* ‘free, gratuitous’; Shor *tegen* ‘in vain’; AltayT: Altay *teginəj* *tegin* ‘in vein, for no reason’ < *tegin* ‘simple, ordinary, just’; Tuba *tegin* ‘simple, peaceful’; Qumanda *tegin* ‘simple, usually’; Quu *tegin* ‘for no reason, free’; Teleut *täginäŋ* *tägin* ‘without cause’ < *tägin* ‘in vain’; SayanT: - ; ChulymT - ; Yakut - ; Dolgan - ;

Siberian Tatar *tigen* ‘free’; Kirgiz *tegin* ‘free; in vain, for nothing’; Fu-yü - ; Kazak *tekke* ‘free; in vain’; Yellow Uyghur – (For etymology see Räsänen VEWT 470a; Clauson ED 475ab).

The etymology of the Kott word is unknown. Probably it was borrowed from Altay Turkic *teginej* with Ablative case suffix from Turkic adverb *täkin* ~ *täküin* ‘in vain’. Possibly the initial *h*- consonant was changed from Turkic velar unvoiced consonant *k*-, which is peculiar for some Kott loanwords, e.g.

Kott *hîta* ‘nettles, hemp’ ← Turkic \**kiden*: YeniseyT: *kiden* ~ *kedän*; AltayT *keden* (← Arabic);

Kott *holanka* ‘weasel’ ← Turkic \**kolanak*: YeniseyT: *xolanax* ~ *qolnaq*; AltayT -;

Kott *hôptal* ~ *hôptal* ‘saddle cloth; carpet’ ← Turkic \**kaptal*: YeniseyT - ; AltayT *qaptal* ‘side (of horse)’ (← Mongolic); etc.

Furthermore, earlier Yeniseian *k*- typically became *h*- in Kott-Assan, e.g. Ket *ke't* ‘person’, cf. Kott *het* (Vajda: personal communication).

The intervocalic Turkic *-n-* disappeared due to final consonant *-ŋ*.

(5) Yugh *χutɔl* ‘territory of a wild animal’ (Werner 2002/2: 399) ← Northern Tungusic: Ewenki *tukala* ‘earth, ground, land’:

cf. Northern: Ewenki dial. *tukala* ~ *tokalā* ~ *tōkalā* ~ *tukalā* ‘earth, soil, clay; dust and ashes; sand’; Lamut *tuqel* ~ *toql'a* ~ *tuql'a* ~ *tuqal* ~ *tuqol* ~ *tuqul* ‘trash, dirt’; Negidal *toxola* ~ *tokola* ‘trash, dirt, dust; earth, ground’; Southern Amuric: Oroch *tuala* ‘clay’; Udihe *tukeæ* ‘clay’; Ulcha *tuaqsa* ‘clay’; Orok - ; Nanai *toxala* ~ *toqala* ‘earth, ground; clay’; Southern Manchuric: - (SSTMJa 2: 207).

The etymology of the Yugh word is unknown. Probably it was borrowed from Ewenki dialectal *tukala*, where metathesis occurred. The lexical meaning strengthens the possible case for borrowing. The change from initial *k*- > *χ*- is typical for some loanwords in Yugh, e.g.

Yugh *χoj* ‘thick’ (*said of liquids*) ← Turkic \**qoyu*: YeniseyT: *xoyīg* ~ *qoyīg* ~ *qoyug*; AltayT: *qoyu*;

Yugh *χan* ‘prince’ ← Turkic \**qān* < *qağan*: YeniseyT: *xan* ~ *xān* ~ *qan* ~ *qān*; AltayT: *qān*;

Yugh *χálčaxan* ~ *χálčakj* ‘verb to tickle’ < \**χálčax* -*n* {Yeniseian infinitive} ← Turkic \**qılčiq*: YeniseyT *xilčix* ~ *qıljīq* ‘tickling’; AltayT: Altay *qičiq* ~ *qılčiq*, etc.

(6) Kott *iptak* ‘bread’<sup>6</sup> (Werner 2002/1: 386) ← Turkic *itpäk* < *ätmäk* ‘bread’<sup>7</sup>:

cf. Old Turkic *ätmäk* ~ *ötmäk*; YeniseyT: Khakas *ipek*; Sagai, Koibal, Kachin *itpäk*; Kyzyl *ippeγ* ~ *ippeg* ~ *ippekχ*; Shor *ipek*; Altay *ötpök*; Qumanda *iytpek*; Quu *itpek*; Teleut *ötpök*; SayanT: - ; ChulymT *itwäk* ~ *itpäk*; Yakut - ; Siberian Tatar *itmäk* ~ *üptöök*; Kirgiz - ; Fu-yü - ; Yellow Uyghur - (For etymology see Clauson ED 60a; ESTJa 1974: 254; SIGTJa 1997: 469).

The Kott word has a clear Turkic etymology. Because of the absence of synharmony in Yeniseian, the Turkic front vowels changed to back in Kott.

(7) Kott *tarup* ~ *tarûp* ‘chamois leather’ (Werner 2002/2: 243) ← Turkic \**tup tere*: cf. Altay *tup tere* ‘tanned leather’:

< *tup* ‘tanned leather’ ← Russian *dub* ‘oak, oakwood’<sup>8</sup>:

cf. Old Turkic - ; YeniseyT: Sagai, Koibal *tūp* ‘the leather for tanning’; Kyzyl - ; AltayT: Altay *tup* [*tere*] ‘tanned leather (used for shaman’s drum)’; Quu *tupta-* (< \**tup* +*tA-* {Turkic NV, see Erdal 1991: 455}) ‘to tan leather’; Teleut *tupta-*; SayanT: - ; ChulymT - ; Yakut - ; Siberian Tatar *tup* ‘dried bark of willow (*used for tanning of leather*)’; Kirgiz - ; Fu-yü - ; Kazak - ; Yellow Uyghur -;

+ *täri* ‘the skin, hide (*of a human being or animal*)’:

<sup>6</sup> Cf. other Yeniseian forms without metathesis: Kott *itpák* ~ *itpak*; Arin *itp'ák* ~ *itpák* ~ *itpek*; Assan *itpák* ‘bread’.

<sup>7</sup> Turkic → Samoyedic: Kamas *ippäk* ~ *itpak* ~ *itpök* ‘bread’ (Joki 1952: 138, 141).

<sup>8</sup> Cf. *дубильная кожа* ‘tannic skin, tanned leather’ (Fasmer 1: 547-548).

cf. Old Turkic *täri*; YeniseyT: Khakas *tēr* ~ *tēri* ~ *tire*; Shor *tärä*; Sagai, Koibal *ter* ~ *terä*; AltayT: Altay *tere*; Tuba *tere* ~ *ter*; Qumanda; Quu *tere*; Teleut *tärä*; SayanT: Tuvan -; Tofan *te<sup>c</sup>rhi* ‘straps of saddle’; ChulymT *tärä*; Yakut; Dolgan *tirī*; Siberian Tatar *tärä*; Kirgiz *teri*; Fu-yü *dir*; Kazak *teri*; Yellow Uyghur *ter* ~ *terä* ~ *tere* ~ *teri*.

The etymology of the Kott word is unknown. Probably the Kott word was borrowed from Altay Turkic compound word *tup tere* ‘tanned leather’. The lexical meaning supports the case for borrowing.

(8) Assan *esrolokon* ‘drunk’ (Werner 1: 268) < \**eserekli* +(X)*ŋ* {Yeniseian NN/Adj.} ← Turkic<sup>9</sup> \**äsäriklig* ‘intoxicated, drunk’ < *äsär-* ‘to get drunk’ -(X)*K* {Turkic VN/Adj.} +*IHK* {Turkic NN/Adj.}:

cf. Old Turkic *äsür-* ‘to be or become drunk, intoxicated’; YeniseyT: Khakas *izřik*; Sagai, Koibal, Kachin *ezirkig*; Kyzyl *ězirkž*; Shor *äzirkig*; AltayT: Altay *ezirik*; Tuba *ezirik*; Qumanda *ezir-*; Quu *ezirkig*; Teleut *ezirik*; SayanT: Tuvan *ezirik*; Tofan *e<sup>c</sup>sřik*; ChulymT *ězerek*; Yakut *itirik*; Dolgan *itiriktā-*<sup>10</sup>; Siberian Tatar *izerek*; Kirgiz *esirik* ‘stupid’; Fu-yü *izir-*; Kazak *esirkitk*; Yellow Uyghur *isər-* ~ *eser-* (For etymology see Räsänen VEWT 50b; Clauson ED 251a; ESTJa 1974: 309-310).

The etymology of Assan word is clear. It seems that it was borrowed from one Siberian Turkic variety, where the form *äsäriklig* was present. The Turkic form was derived with two productive Adjective suffixes -(X)*K* and +*IHK* (For details on functions see Erdal 1991: 228; 121-131), furthermore, the Assan form additionally had the Yeniseian Adjective suffix +(X)*ŋ*.

Here metathesis also may have happened due to the final nasal consonant *-n* in Assan form.

### (c) Metathesis in the loanwords with nasal consonants *-m-*, *-n-* or *-ŋ-*:

<sup>9</sup> Turkic → Samoyedic: Kamas *ězirek* ~ *izirek*; Motor *isir* ‘intoxicated, drunk’ (Joki 1952: 129, 140).

<sup>10</sup> Cf. Yakut *itirikitē-* (< \**äsärikta-* < \**äsär-*(X)*K+lA-*) ‘to get drunk’.

- (9) Kott *hanpen* ‘pray, prayer’<sup>11</sup> (Werner 2002/1: 299) < \**kanman-* < \**kamna-n* {Yeniseian infinitive<sup>12</sup>} ← Turkic \**qamna-* ‘to make magic’ < *qām* ‘shaman, sorcerer, soothsayer, magician’ +*IA-* {Turkic NV, see Erdal 1991: 429}:

cf. Old Turkic *qamla-*; YeniseyT: Khakas *xamna-* ‘to make shamanic ritual’; Sagai, Koibal, Kachin *qamna-*; Kyzyl *χamna-*; Shor *qamna-*; AltayT: Altay *qamda-*; Tuba *kamna-*; Qumanda *kamda-*; Quu *kamna-*; Teleut *qamda-*; SayanT: Tuvan *xamna-*; Tofan *hamna-*; ChulymT *qamna-*; Yakut dial. *xamnā-*; Dolgan *kamnā-*; Siberian Tatar *qamay-* ‘to predict, foretell’; Kirgiz - ; Fu-yü *gam*; Yellow Uyghur *qamna-* (For etymology see Räsänen VEWT 228a; Clauson ED 625a, 628a; Doerfer TMEN 3: 402-406; ESTJa 1997: 240-241).

Probably the Kott word was borrowed from the Turkic verbal form *qamna-* ‘to make shamanic ritual’, which was derived from the Turkic noun *qām* ‘shaman, sorcerer, soothsayer, magician’ with productive Denominal Verbum suffix +*IA-* (For details on functions see Erdal 1991: 429). Besides the assuming Yeniseian infinitive suffix *-n* in final position, through the metathesis *-mn-* > \**-nm-*, further the *-np-* changing happened.

- (10) Kott *tokmaxon* ‘locust, grasshopper’ (Werner 2002/2: 272) ← Turkic *tomanok* ‘mosquito’ < \**toman* +AK {Turkic Diminutive}:

cf. Old Turkic - ; YeniseyT: Khakas *tubanax* ‘mosquito’; Sagai *toban* ~ *tobanak*, Sagai, Koibal, Kachin *tobiñ* ‘sand fly’; Shor *tobanaq* ‘midge’; AltayT: Altay *tomonok* ‘mosquito, midge’; Tuba *tomonok* ‘mosquito’; Qumanda *tomonok* ‘mosquito’; Quu *tobanak* ~ *tobonok* ‘mosquito, midge’; Teleut *tomonoq* ‘mosquito’; SayanT: - ; ChulymT - ; Yakut - ; Dolgan - ; Siberian Tatar *tomalaq* ‘midge’; Kirgiz - ; Fu-yü - ; Yellow Uyghur - (For etymology see Räsänen VEWT 487b).

<sup>11</sup> Cf. Kott *hanpen hit* ‘praying person’.

<sup>12</sup> Yeniseian infinitives are a type of modifier like adjectives, they can be preposed to nouns, e.g. Ket *bagdej ke't* ‘person who drags or is dragged’, cf. *bagd-ej* ‘to pull, drag’ (see Vajda 2015).

The etymology of the Turkic word is unknown. According to Khakas dialects, the word has Diminutive form with suffix +AK (For function see Erdal 1991: 40). Probably in the Kott form metathesis *-n-k* > \**-k-n-* > *-x-n-* in the last syllable and distant assimilation in the first syllable are happened. The Kott loanword belongs to uncertain category due to semantic meaning: if in Kott it means ‘locust, grasshopper’, in Turkic it usually has the meaning ‘mosquito or midge’.

- (11) Arin *teminkur* ‘ore’ (Werner 2002/2: 258) ← Turkic \**temir qan* ‘lit. iron blood → ore’ < *temir* ‘iron’ + *kan* ‘blood’:

< *temir* ‘iron’:

cf. Old Turkic *tämir*; YeniseyT: Khakas *timir*; Sagai, Koibal, Kachin *temir*, Sagai *tebir*; Kyzyl *tēmir*; Shor *tebir*; AltayT: Altay *temir*; Tuba *temir*; Qumanda *temir* ~ *tebir* ~ *debir*; Quu *tebir* ~ *tevir* ~ *temir*; Teleut *temir*; SayanT: Tuvan *demir*; Tofan *demir*; ChulymT *tēmir*; Yakut *timir*; Dolgan *timir*; Siberian Tatar - ; Kirgiz *temir*; Fu-yü *dimir* ~ *dümür*; Kazak *temir*; Yellow Uyghur *temir* ~ *temir* (For etymology see Räsänen VEWT 473a; Doerfer TMEN 2: 1012; Clauson ED 508b; ESTJa 1980: 188-190; SIGTJa 2001: 409).

+ *qan* ‘blood’:

cf. Old Turkic *qān*; YeniseyT: Khakas *xan*; Sagai, Koibal, Kachin *qan*; Kyzyl *χan*; Shor *qan*; AltayT: Altay; Tuba; Qumanda; Quu *kan*; Teleut *qan*; SayanT: Tuvan *xan*; Tofan *qan*; ChulymT *qan*; Yakut *xān*; Dolgan *kān*; Siberian Tatar *qan*; Kirgiz *kan*; Fu-yü *gan*; Kazak *qan*; Yellow Uyghur *qan* (For etymology see Räsänen VEWT 230a; Clauson ED 629b; ESTJa 1997: 251).

The etymology of the Arin word is unknown. Probably it was borrowed from the compound word *temir qan* ‘lit. iron blood’ of Turkic origin. The problematic side of etymology is the absence of compounding in Turkic languages. Most likely, it was derived according to Yeniseian rules, probably by Arin speakers, who were also fluent in the Turkic source dialect (Vajda: personal communication). The Kott word *šur* with meaning ‘ore’ has the main meaning ‘blood’.

- (12)        Yugh *unče* ‘because’ (Werner 2002/2: 347) ← Turkic *üčün*  
 ‘because of, for the sake of, for; because, in order to’:

cf. Old Turkic *üčün*; YeniseyT: Khakas *üčün*; Sagai *üjün*; Sagai, Koibal *üzün*; Kyzyl *üzün*; Shor *üčün*; AltayT: Altay; Tuba; Qumanda *uçun*; Quu *udžun* ~ *uçun* ~ *üzün*; Teleut *uçun*; SayanT: Tuvan *užun*; Tofan - ; ChulymT *üčün*; Yakut; Dolgan *ihiñ*; Siberian Tatar - ; Kirgiz *üčün*; Fuyü - ; Kazak *üšin*; Yellow Uyghur - (For etymology see Räsänen VEWT 169a, 509b; Clauson ED 28b; ESTJa 1974: 642-643).

### Conclusion

Metathesis is an important characteristic feature in the Yeniseian languages. Because it is not typical for Altaic languages, it is important to pay attention to this characteristic property during the research of different loanwords in Yeniseian. According to examined examples the metathesis happened in Altaic loanwords with nasal and plosive consonants, while in original Yeniseian words it usually happened with labial and velar consonants.

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