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## Contents

### Turkic Languages, Volume 19, 2015, Number 1

Editorial note by Lars Johanson ..... 1

#### Obituary

Igor V. Kormushin & Irina V. Kul'ganek & Dmitrij M. Nasilov & Irina A.  
Nevskaya: In memoriam Sergej Grigor'evič Kljaštornyj (1928–2014) ..... 3

#### Articles

Delio V. Proverbio: An Old Turkic text in Tibetan script: A case of  
hyperphonetic transcription? ..... 8

Éva Á. Csató & Aynur Abish: Relators of comparison in Karaim and in Kazakh  
as spoken in China ..... 40

Astrid Menz: The Gagauz female marker *-(y)ka* ..... 53

Ahmatjan Tash & Jingyu Zhang: Psych verbs in Uyghur ..... 63

Birsel Karakoç: Predicational and sentential positions of interrogative clitics  
in Turkic ..... 85

Sema Aslan Demir: Two particles modifying questions in Turkmen:  
*-Ay* and *-KA* ..... 102

İbrahim Ahmet Aydemir: Interrogative structures in Tuvan ..... 113

Bayarma Khabtagaeva: Compounds of Turkic origin in Yeniseian ..... 128

#### Report

Mehmet-Ali Akıncı: Report on *The 17th International Conference on Turkish  
Linguistics*, September 3–5, 2014, Rouen, France ..... 147

# Compounds of Turkic origin in Yeniseian

## Bayarma Khabtagaeva

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The paper deals with Yeniseian compounds of Turkic origin. The predominant noun word-formation technique in Yeniseian is compounding. Morphological strategies (e.g. assimilated amalgamations, hybrid words, appearance of the so-called “half-affixes” or “semi-suffixes”) characterizing compounds of Turkic origin in Yeniseian languages are discussed.

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## Introduction

This paper deals with compounds of Turkic origin in Yeniseian languages.<sup>1</sup> It is important to study this topic because research on loanwords in Yeniseian is scarce and compounding of non-Yeniseian elements has not been investigated at all. Turkic nouns and adjectives constitute the largest group of loanwords, making their study particularly interesting.

In Yeniseian, morphologically complex noun stems are mainly built through root compounding. Although suffixal derivation is atypical for Yeniseian, there are a few productive derivational suffixes as well.

Werner’s comparative dictionary of Yeniseian languages (2002) and his Yeniseian materials (2005) served as the main source of material for this study, as these works include the complete body of lexical material of Yeniseian languages published until now. Another source of my work was Vajda and Werner’s etymological dictionary of Yeniseian languages, which is still in preparation.

## Compounds in Yeniseian

The Yeniseian lexicon can be divided into three main morphosyntactic classes: nouns, modifiers and verbs.

1 I wish to express my gratitude to the Hungarian Eötvös State Fellowship and the Campus Hungary Fellowship for providing me with the opportunity to carry out research at the Center for East Asian Studies, Western Washington University, USA, and study historical Yeniseian linguistics there under the supervision of Edward Vajda from April to June, 2012, and in March, 2014. This study would not have been possible without his teaching and guidance; therefore, I would also like to express my sincerest gratitude to him.

Nouns are morphologically of three types. In Ket, many basic nouns are non-derived monosyllabic words such as *ke't* ‘person’, *ā'm* ‘mother’, *tī'k* ‘snow’, *sē's* ‘river’, etc. As mentioned above, suffixal derivation is atypical in Yeniseian, but a small number of derivational morphemes also occur in Ket. The most important one is the frequently used nominalizer in *-s*, which forms nouns from other parts of speech. The third morphological type of nouns includes root compounds. There is no reduplication in either inflection or derivation. In terms of their morphosyntax, Yeniseian languages are strongly synthetic, but their stem-building processes are based primarily on root compounding rather than affixation (Vajda 2015: 510).

### Root compounds

The dominant noun-forming technique of Yeniseian is compounding. Yeniseian nominal compounds usually consist of two elements referred to as the determiner and the semantic head. The most common structure is the compounding of a head with a determiner that is a noun itself. Adjectival and verbal roots may also function as determiners in nominal compounds (for details and more examples, see Georg 2007: 125).

#### Noun + Noun

*isal* ‘fish soup’ ← *īs* ‘fish’ + *āl* ‘soup’

*kūbkuł* ‘mustache’ ← *kūb* ‘front end’ + *kūł* ‘beard’

*mámul* ‘milk’ ← *ma'm* ‘breast’ + *ūł* ‘water’

#### Adjective + Noun

*kibonj* ‘body, corpse’ ← *ki'* ‘new’ + *bōŋ* ‘dead person’

#### Verb + Noun

*qiked* ‘merchant’ ← *qi* ‘to sell’ + *ke'd* ‘human’

*tāŋsel* ‘leading reindeer’ ← *tāŋ* ‘to pull’ + *səl* ‘reindeer’, etc.

### Genitive-linked compounds

The second type of Yeniseian nominal compounds is characterized by the presence of the petrified genitive *-d-* between the constituents (Georg 2007: 126–127). Vajda (2015: 511) calls it the lexicalized possessive construction.

*ba'ŋ* ‘earth’ + *i'l* ‘spirit’ → *bāŋdil* ‘earth spirit’

*békin* ‘hand’ + *taqol* ‘ring’ → *békinntaqol* ‘bracelet’

*bə'n* ‘duck’ + *hīs* ‘tail’ → *bəndis* ‘duck-tail’

*daan* ‘grass’ + *ūł* ‘handle’ → *dāndul* ‘blade of grass’; etc.

According to Georg, the presence or absence of this marker may be indicative of the relative age of the formation. The compounds with genitive link are possibly younger (Georg 2007: 126).

### Suffixal derivation

Derived noun stems contain nominal affixes originating from noun roots (for details and more examples, see Vajda 2015: 510–511; Georg 2007: 129–134).

The Ket suffix *-kit*, originating from the Yeniseian word *kλ'd* ‘offspring’, derives nouns denoting immature trees, fish, or animals: *bεskit* ‘baby rabbit’ ← *bε's* ‘rabbit’, *quḍgit* ‘immature pike’ ← *quḍ* ‘pike (fish)’, *u:lgit* ‘aspen sapling’ ← *u:l* ‘aspen’.

The Ket suffix *-aj* meaning ‘container’: *dáqaj* ‘eagle’s nest’ ← *dàq* ‘eagle’, *qámnaj* ‘quiver’ ← *qámn* ‘arrows’.

The Ket singulative suffix *-dis*, originating from the Yeniseian word *dē's* ‘eye’, derives count nouns denoting a small, individuated portion of a larger pourable mass: *imdis* ‘single pine nut’ ← *ī'm* ‘pine nuts’, *qondis* ‘glass bead’ ← *qō'n* ‘beads’; etc.

There is no consensus on how to denote a transitional category between compounded roots and derivational affixes. Werner and Vajda call them “half-affixes” (Werner 1997: 50–54, Vajda 2015: 511), while Georg calls them “semi-suffixes” or “heads in compounds” (2007: 129).

### Compounds of Turkic origin in Yeniseian

In the collected material, compounds of Turkic origin were only found in Arin, Kott and Assan. I faced some problems during the research, since there are no grammatical descriptions of Arin and Assan. Only short word lists are available in Werner’s publications (2002, 2005). Nevertheless, we have some more information on Kott. There is a detailed grammar and a small Kott dictionary written by Castrén (1858) and Werner (1990).

Here, I present 28 compounds of Turkic origin in Yeniseian, which show the influence of Turkic-speaking peoples on Yeniseian. These loanwords can play a role in determining chronology of borrowing.

Yeniseian compounds of Turkic origin follow the Yeniseian structure; they consist of a determiner and a semantic head.

- (1) Kott *ekačāčik* ‘wax’ (Werner 2002/1: 229) ← Turkic *ağaç čuk*  
 < *ağaç* ‘tree’: cf. Old Turkic *ığaç* ‘tree; wood (generally), a piece of wood’; NE<sup>S</sup> YeniseyT: Khakas *ağas*; Sagai *ağis*; Koibal *ağas* ~ *ağis*; Kyzyl *ağas* ~ *āğas*; Shor *agaš*;

AltayT: Altay *ağas̄*; Tuba *ağas̄* ~ *ağas̄* ~ *āč*; Qumanda *agač* ~ *agaš*; Quu *agač* ~ *agaš* ~ *agiš*; Teleut *agaš*; SayanT: Tuvan *īyaš*; Tofan *neš*; ChulymT *agač* ~ *ağac* ~ *āč*; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *ağac* ~ *ağac*; NW<sup>S</sup> Kirgiz *jīgač*; Fu-yü *ağas̄* ~ *agiš*; Kazak *ağas̄*; SE Yellow Uyghur *yīğas̄*  
 + *čuk* ‘resin’ ← Yeniseian: cf. Old Turkic –; NE<sup>S</sup> YeniseyT: Khakas *čux*; Sagai *čuj*; Kyzyl *šux*; Shor *čuj*; AltayT: –; SayanT: Tuvan *čuk*; Tofan *čuj*; ChulymT –; NE<sup>N</sup> –; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz –; Fu-yü –; SE Yellow Uyghur –.

The Kott compound *ekačacik* ‘wax’ consists of the Turkic words *ağac* ‘tree’ and *čuk* ‘resin’. According to the phonetic changes, it seems that the Kott word is a compound of two different loanwords. The first part *ekača* was possibly borrowed from Altay Turkic or Chulym Turkic, where the word form *ağac* can be found. The second part of the Kott word *čik* is problematic; it probably belongs to the category of “re-borrowings”. The etymology of the Turkic word is unknown; it is only present in Yenisey Turkic and Sayan Turkic languages (Räsänen VEWT 119; Rassadin 1971: 198; Stachowski 1997: 230). Vajda (personal communication) suggests that the Turkic root originates from an earlier Yeniseian borrowing into the South Siberian Turkic languages, probably from an Old Kott-Assan source.

- (2) Assan *šarijag* ‘butter’ (Werner 2002/2: 437) ← Turkic *sari yag*: cf. AltayT: Altay *sari yū*; SayanT: Tofan *sariğ-čag* ‘butter’  
 < *sari* < *sariğ* ‘yellow’: cf. Old Turkic *sariğ*; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin, Shor *sariğ*; Kyzyl *sari γ*; AltayT: Altay; Tuba *sari*; Qumanda *sari* ~ *sari*; Quu *sari* ~ *sari*; Teleut *sari* ‘yellow; light bay (colour of horse)’; SayanT: Tuvan *sariğ* ‘yellow; light bay (colour of horse); white (colour of skin); light (colour of hair)’; Tofan *sariğ*; ChulymT *sariğ*; NE<sup>N</sup> Yakut *arağas*<sup>2</sup> ‘yellow, yellowish, straw-coloured, golden (of colour)’, cf. *ariü* ‘butter’; Dolgan *ariü* ‘butter’; NW<sup>N</sup> Siberian Tatar *sari*; NW<sup>S</sup> Kirgiz *sari* ‘yellow, red-haired, light-brown’; Fu-yü *sarih*; Kazak *sari*; SE Yellow Uyghur *sariğ*  
 + *yag* < *yāğ* ‘grease, fat, oil’: cf. Old Turkic *yāğ*; NE<sup>S</sup> YeniseyT: Khakas *čag*; Sagai, Koibal *čag*; Kachin *yīg*; Shor *čag*; AltayT: Altay *d’u* ‘fat’, *d’ū* ‘suet’; Tuba *d’ū*; Qumanda *d’u* ‘fat, butter’, *d’īg* ‘fat, grease’; Quu *yīg* ‘fat, grease’; Teleut *yū* ‘grease’; SayanT: Tuvan; Tofan *čag* ‘fat’; ChulymT *čag* ‘butter, fat’; NE<sup>N</sup> Yakut *sia* ‘fat, grease’; Dolgan *hīa*; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *žak-* ‘to grease’; Fu-yü –; Kazak *jaq-* ‘to grease’; SE Yellow Uyghur *yag* ‘butter’.

The Assan compound *šarijag* ‘butter’ is a borrowing from the Turkic words *sariğ* ‘yellow’ and *yāğ* ‘grease, fat, oil’. The source of borrowing is not clear, however. The first part of the Assan compound represents an early period of borrowing due to the Assan regular change of *s-* to *š-*. The second part of the compound *jag* with initial *j-* cannot determine the source of borrowing; it only implies that it was a Siberian Turkic variety where the initial \**y-* was still intact.

- 2 < \**sariğ* + *Xš*. Turkic NN/Adj, which was added to color names; see Erdal (1991: 102).

Most of the compounds belong to the category of loanwords with a clear source of borrowing. As an example, see the next two Arin compounds *karananuk* ‘bilberry’ and *tegentestek* ‘raspberry’. The first was clearly borrowed from Yenisey Turkic, whereas the second was borrowed from Altay Turkic:

- (3) Arin *karananuk* ‘bilberry’ (Werner 2002/1: 411) ← Turkic *kara nonağ* ‘bilberry’  
 < *qara* ‘black’: cf. Old Turkic *qara*; NE<sup>S</sup> YeniseyT: Khakas *xara*; Sagai, Koibal, Kachin *qara*; Kyzyl *χara*; Shor *qara*; AltayT: Altay; Tuba; Qumanda; Quu; Teleut *qara*; SayanT: Tuvan; Tofan *qara*; ChulymT *qara*; NE<sup>N</sup> Yakut *xara*; Dolgan *kara* ~ *xara*; NW<sup>N</sup> Siberian Tatar *qara*; NW<sup>S</sup> Kirgiz *kara*; Fu-yü *gar*; Kazak *qara*; SE Yellow Uyghur *qara*.  
 + *nonağ* ‘bilberry’ < (?) \**yomaq* < \**yumaq*;<sup>3</sup> cf. (?) Old Turkic *yumaq* ~ *yumğaq* ‘a spherical or globular object’ < \**yum-*;<sup>4</sup> NE<sup>S</sup> YeniseyT: Khakas *nonağ* ~ *noññix* ‘bilberry’; Sagai *nonağ* ‘bilberry’; Shor *nongam* ‘bilberry’, cf. *nonam* ~ *ninim* ‘blueberry’ (R); AltayT: Altay –; Quu *nunum* ‘bilberry’; SayanT: –; ChulymT –; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz –; Fu-yü –; Kazak –; SE Yellow Uyghur *džoma* ~ *džomaq* ‘edible plant’.

The Arin word was obviously borrowed from Yenisey Turkic. The second constituent of the compound, *nonağ*, shows a phonetic feature of Khakas where the regular change of Common Turkic initial *y-* to *n-* can be observed. This feature is typical for words with nasal consonants<sup>5</sup> (Johanson 1998: 106).

- (4) Arin *tegentestek* ‘raspberry’ (Werner 2002/2: 257) ← Turkic *tegen d'estek*  
 < *tegen* ‘thorn’ < *tikän* < \**tik-* ‘to insert; to insert (in the ground), to sew (insert a needle)’ -*GAn* {Turkic VN, see Erdal 1991: 385}; cf. Old Turkic *tikän* ~ *tikänäk*,<sup>6</sup> NE<sup>S</sup> YeniseyT: Khakas *tigenek* ‘bot. dog rose, blackthorn; thorn’, cf. *tigen* ‘fir’; Sagai, Koibal, Kachin *tigän* ‘spruce, fir’; Shor *tigen* ‘fir’; AltayT: Altay *tegenek* ‘dog rose; thorn’, cf. *tegen* ~ *tēgen* ‘fir’; Tuba *tegen* ~ *tegenek* ‘thorn’; Qumanda *tigenek* ‘bot. hip’; Quu *tegenek* ‘bot. hip’, cf. *tigen* ‘fir’; Teleut *tegenek* ‘bot. hip, dog rose’; SayanT: Tuvan *ten* ‘thorn, needle’; Tofan *te'h'en* ‘thorn; hip, raspberry’; ChulymT *tigän* ‘hip’; NE<sup>N</sup> Yakut *tik-* ‘to sew; to sting’; Dolgan *tik-* ‘to sew’; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *tiken* ‘thorn; splinter’, *tikenek* ‘prickle, thorn’; Fu-yü *dik-* ‘to put up, sew’; Kazak *tiken* ‘splinter, thorn’; SE Yellow Uyghur *tiken* ‘chaparral plant’.

- 3 The etymology of this Turkic word is unknown. Räsänen (VEWT 354b) quoted Yenisey Turkic data, but did not provide etymology. The word probably can be connected with Old Turkic *yumaq* ~ *yumğaq* ‘a spherical or globular object’ (Clauson 936a).  
 4 Cf. Old Turkic *yumur* ‘something round, globular, coiled’, *yumurtğa* ‘egg’, *yumuş* ‘circulating, an errand’, *yumuz* ‘round, globular’ (Clauson 934a).  
 5 E.g. Old Turkic *yan-* ‘to turn back’ ~ Khakas, Shor *nan-*; cf. Tofan *nān-*; Fu-yü *nan-*; Old Turkic *yağmur* ‘rain’ ~ Khakas *nañmür*; cf. Fu-yü *namür*; Old Turkic *yañi* ‘new’ ~ Khakas *nā*; Shor *nā* ~ *nā*; cf. Tofan *nā*; Fu-yü *nā*; etc.  
 6 < *tikän* +*AK* {Turkic diminutive; see Erdal 1991: 40}.

+ *d'estek* < *čestek* < *yestek* 'berry'<sup>7</sup>: cf. Old Turkic –; NE<sup>S</sup> YeniseyT: Khakas *čistek* 'berry'; Koibal *yestäk* 'a berry which is similar in form with strawberry, raspberry, blackberry, etc.'; Shor *čestek* 'berry'; AltayT: Altay *d'estek* ~ *tistek* 'berry'; SayanT: –; ChulymT *yestäk* ~ *čästäkäi* 'wild strawberry'; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz –; Fu-yü –; Kazak –; SE Yellow Uyghur –.

The source of borrowing of the Arin compound word *tegentestek* 'raspberry' is clear. Both parts of the compound were borrowed from Altay Turkic. In comparison to other Siberian Turkic forms, Altay *tegen* is used without the diminutive suffix and has a voiced *VgV* in intervocalic position. In the second part of the compound *testek* < *d'estek*, the borrowing from Altay Turkic reflects the changing of Turkic initial *y-* to *d'*<sup>8</sup> (Johanson 1998: 97). It is important to mention that the Arin word was probably borrowed from an Altay Turkic dialect. In literary Altay, 'raspberry' is *agaš d'estek* 'tree berry'.

### Genitive-linked compounds

Some borrowed compounds were derived in line with the Yeniseian structure, where a genitive marker is used between the two elements. Turkic languages display a similar structure in which the first element is normally marked by the genitive, and the second one by a third person possessive, e.g. Altay *d'er-dij üst-i* {land-GEN surface-POSS3SG} 'land surface'; *at-tij bel-i* {horse-GEN back-POSS3SG} 'horse back'; Khakas *inek-tij süd-i* {cow-GEN milk-POSS3SG} 'cow milk'; but *xakas til-i* {Khaskas.NOM language-POSS3SG} 'Khakas language' (Baskakov 1947: 297; Baskakov & Grekul 1975: 282).

The source of borrowing of the following Arin data is not clear. A corresponding compound does not exist in Turkic. Yenisey Turkic and Altay Turkic use the Russian loanword *неделя* for 'week'.

- (5) Arin *kemenenčak* 'week' (Werner 2002/1: 422) ← Turkic *kemineŋ čak* < *kemineŋ* < *kem* 'measurement' + *(X)niŋ* {Turkic Genitive, see Tenišev 1988: 67} ← Mongolic *kem* 'measure; size, proportion; limits; measure of time, term': cf. Old Turkic –; NE<sup>S</sup> YeniseyT: Khakas *kem* 'measurement'; AltayT: Altay *kem* 'time, period; measurement'; Qumanda *kemner* {+snAr Turkic Plural} 'measurement'; Quu *kem* 'measurement, period'; Teleut *kem* 'measurement'; SayanT: Tuvan *xemče-* 'to measure' (← Mongolic *kemji-*); Tofan *hem* 'measurement, size, weight'; ChulymT –; NE<sup>N</sup> Yakut *kem* 'unit of measure; limit; measure of time, term'; Dolgan *käm* 'time, season'; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz –; Fu-yü –; Kazak –; SE Yellow Uyghur ← Mongolic *kem*: LM *kem*; ModMo: Buryat *xem*; Khalkha *xem*; Oyrat dial. *kem*.

7 The etymology of this Turkic word is unknown; it can only be found in Yenisey and Altay Turkic languages (see SIGTJa 2001: 121–122).

8 E.g. Old Turkic *yōq* 'having nothing' ~ Altay Turkic *d'ok*; Old Turkic *yogun* 'thick' ~ Altay Turkic *d'on*; Old Turkic *yēr* 'ground' ~ Altay Turkic *d'er*, etc.

+ *čak* ‘time, a point in time, a period of time’ ← Mongolic *čay* ‘time, period, season, age; time as general situation or set of circumstances; tense (*gram.*); hour; clock, watch; weather, climate’: cf. Old Turkic *čāg*; NE<sup>S</sup> YeniseyT: Khakas *sax* ‘particle just, exactly’,<sup>9</sup> Sagai, Koibal *sā*; Kachin, Shor *šak* ‘time’; AltayT: Altay *čak* ‘age, time’; Tuba *čak* ‘measurement, time, period’; Quu *čak* ‘time, period’; Teleut *čak* ‘time’; SayanT: Tuvan *šag* ‘time, period’, cf. *šak* ‘hour, time; clock’; Tofan *šag* ‘time, period’; ChulymT –; NE<sup>N</sup> Yakut *sax* ‘time’; Dolgan *haga* ‘size’, cf. *hagīna* ‘while’; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *čak* ‘time; period’; Fu-yü *šah* ‘time’; Kazak *šaq* ‘time, period’; SE Yellow Uyghur *čag* ‘time’ ← Mongolic *čay* ‘time, period’: MMO: MNT, HY; Muq. *čaq*; LM *čay*; ModMo: Buryat *sag*; Khalkha *cag*; Kalmuck *tsag*.

### 5. “Half-affixes” of Turkic origin

There is another group of Yeniseian compounds in which the Turkic loanword appears as a “half-affix”. For instance, the Turkic word *berke* ‘strong, stable’ appears in Arin compound words as a half-affix meaning ‘big, great, very’: Arin *berke* ~ *berek* ~ *birka* ‘big, great; very’ (Werner 2002, 1: 121) ← Turkic *berke* ‘very, strong’ ← Mongolic *berke* ‘difficult, hard; complicated, serious; skilful, competent, fit’ ← Turkic *bärk* ‘firm, stable, solid’.

cf. NE<sup>S</sup> YeniseyT: -; AltayT: Quu *perge* ‘clever’; SayanT: Tuvan *berge* ‘difficult, hard’; ChulymT –; NE<sup>N</sup> Yakut<sup>10</sup> *berke* ‘adverb very, extremely, strongly; fine’; Dolgan *bärkä* ~ *bärgä* ‘adj. strong; adv. very’; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> –; SE – ← Mongolic *berke* ‘difficult, hard; burdensome, troublesome; complicated, serious; difficulty, hardship; trouble; skilful, competent, fit’: cf. MiddleMo: MNT *berke*; Ibn-Muh. *berke*; Muq. *bürke*; HY *berke*; LM *berke*; ModMo: Buryat *berxe*; Khalkha *berx*; Kalmuck *berkä* ← Turkic *bärk* ‘firm, stable, solid’: cf. Old Turkic *bärk*; NE<sup>S</sup> YeniseyT: Khakas *pirik*; AltayT: –; SayanT: Tuvan *bert*,<sup>11</sup> Tofan *be<sup>c</sup>rt*; ChulymT *pērek*; NE<sup>N</sup> Yakut *bert*; Dolgan *bär* ~ *bärt*; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *berk*; Fu-yü –; Kazak *berik*; SE Yellow Uyghur *perik* ~ *perk* ‘big, important’, cf. *perik* ‘strong’.

There are two Arin examples with this half-affix, borrowed from the same Turkic compound word *berke tura* ‘big, great town’:

- (6) Arin *belkertura* ‘empire’ (Werner 2002/1: 121)
- (7) Arin *berketura* ‘city, town’ (Werner 2002/1: 121)  
 < Arin *berke* ‘big, great’

9 Cf. *sagam* adverb ‘now, in this moment’.

10 Yakut → Tungusic: Ewenki dial. *berke* ‘agile, nimble; energetic; bold, brave; very, very much’ (SSTMJa 1: 127a).

11 < \**bärk*. The change *-rk-* > *-rt-* is regular in Tuvan, e.g. Old Turkic *börk* ‘cap’ > Tuvan *bört*; Old Turkic *qorq-* ‘to fear, be afraid of’ > Tuvan *kort-*.

+ Turkic *tura* ‘town, village’: + *tura* ‘town, village’;<sup>12</sup> cf. Old Turkic *tura* ‘something to shelter behind’; NE<sup>S</sup> YeniseyT: Khakas *tura* ‘house; town’, cf. ‘fort, village; building; room’; Sagai, Koibal, Kachin *tura* ‘house, building, city’; Shor *tura* ‘town’; AltayT: Altay *tura* ‘house, building; town’; Tuba; Qumanda; Quu; Teleut *tura* ‘house’; SayanT: –; ChulymT *tura* ‘town’; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *tora* ‘town’; NW<sup>S</sup> Kirgiz *turak* (< *tura* + AK {Turkic NN/Diminutive}) ‘residence, dwelling’; Fu-yü –; Kazak *turaq* ‘residence; site’; SE Yellow Uyghur –.

(8) Arin *berkitak* ‘mountain’ (Werner 2002/1: 122)

< Arin *berke* ‘big, great’ + Turkic *tāg* ‘mountain’

+ *tag* ‘mountain’: cf. Old Turkic *tāg*; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin; Kyzyl; Shor *tag*; AltayT: Altay; Tuba; Teleut *tū*; Qumanda; Quu *tag*; SayanT: Tuvan; Tofan *dağ*; ChulymT *tag*; NE<sup>N</sup> Yakut; Dolgan *tīa* ‘land; forest, tundra’; NW<sup>N</sup> Siberian Tatar *tau*; NW<sup>S</sup> Kirgiz *tō*; Fu-yü *dah*; Kazak *taǵ*; SE Yellow Uyghur *tag*.

(9) Arin *berkuštukdu* ‘strong’

< Arin *berke* ‘very’

+ *kuštuk* (← Turkic \**küčtüg* ‘strong’) + *tu* {Yeniseian NN/Adj., see Georg 2007: 141}; + *küčtüg* ‘strong, powerful’

< \**küč* ‘strength, power’ + *LXG* {Turkic NN/Adj., see Erdal 1991: 121}: cf. Old Turkic *küčlüg*; NE<sup>S</sup> YeniseyT: Khakas *küštüg* < *küs*; Sagai, Koibal *küs*; Kachin *küš*; Kyzyl *kuš*; Shor *küštüg* < *küš*; AltayT: Altay; Tuba; Qumanda; Quu *küč*; Teleut *küčtü* < *küč*; SayanT: Tuvan; Tofan *küš*; ChulymT *küč*; NE<sup>N</sup> Yakut; Dolgan *kūs*; NW<sup>N</sup> Siberian Tatar *köc*; NW<sup>S</sup> Kirgiz *küč*; Fu-yü *güštih*; Kazak *küš*; SE Yellow Uyghur *kuš*.

The Turkic word also appears in native Yeniseian words as a “half-affix”, e.g. Arin *berek argidu* ‘pleasant’; *berek sopa* ‘salty’ (cf. *sopa* ‘sour, bitter’), *berekšetü* ‘I love’, *berekisper<sup>1</sup>a* ‘I feel’, etc. (see Werner 2002/1: 121–122).

Another Yeniseian half-affix of Turkic origin is *öy* ‘step-’, which derives Arin compound words of kinship terminology:

Arin *oj-* ‘step-’ (Werner 2002/1: 32, 33) ← Turkic *öy* < *ögey*: cf. Old Turkic *ögey* ‘related through one parent only, step-(father, etc.)’; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin; Shor *öy*; AltayT: Altay *öy* ~ *öy*; Qumanda *öy*; Teleut *öy*; SayanT: –; ChulymT –; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *ögöy*; Fu-yü –; Kazak *ögey*; SE Yellow Uyghur –.

There are three words indicating marital relations borrowed from Siberian Turkic. The first Arin word *ojče* ‘stepmother’ was clearly borrowed from Yenisey Turkic,

12 According to Radloff (R 3: 1446), the authors of ESTJa (1980: 301) and Räsänen (VEWT 500ab), the Turkic word *tura* ‘house, town’ derived from the verb *tur-* ‘to stand; to stand upright; to stand still’. The Turkic word was borrowed into Mongolic languages, cf. LM *tur-a* ‘fortress, city, town’; ModMo: Buryat *tura*; Khalkha *tur*.

while the other two appear with the Yeniseian words *akel* ‘son’ and *akel’a* ‘daughter’ with the Yeniseian feminine suffix.

(10) Arin *ojče* ‘stepmother’ (Werner 2002/2: 32)

< Arin *oj* ‘step-’ + Turkic *ije* ‘mother’: cf. YeniseyT: Khakas *ōy ije*; Sagai, Koibal, Kachin *ūy ijā* ‘stepmother’:<sup>13</sup>

+ *ije* < \**eče* ‘mother’: cf. Old Turkic *eče* ‘one’s mother’s younger sister; one’s own elder sister’; NE<sup>S</sup> YeniseyT: Khakas *ije* ‘mother’; Sagai *ijā*; Koibal, Kachin *ijā*; Shor *ūjā* ‘grandmother from father’s side’; AltayT: Altay *ed’e* ‘aunt; elder sister’, cf. *ači* ‘father’s younger brother’; Tuba *ed’e* ‘aunt; elder sister; mother’; Qumanda *ed’e* ‘aunt, elder sister’; Quu *edže* ~ *eže* ‘elder sister, sister’; Teleut *eye* ‘aunt, elder sister’; SayanT: Tuvan *ača* ‘father’; Tofan *aja* ‘father’, cf. *i’he* ‘mother’; ChulymT *ēcä* ‘mother’; NE<sup>N</sup> Yakut *iye* ‘mother’, cf. *ehe* ‘grandfather; bear’; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *eže* ‘elder sister’; Fu-yü *ije* ~ *iji* ‘mother, elder sister’; Kazak *āze* ‘grandmother’; SE Yellow Uyghur *ača* ‘father; stepfather’.

The Arin compound word was possibly borrowed from Yenisey Turkic. In Altay Turkic, we have another compound *ōy ene* ‘stepmother’.

(11) Arin *ojakelbala* ‘stepson’ (Werner 2002/2: 32)

< Arin *oj* ‘step-’ + Arin *akel* ‘son’ + Turkic *bala* ‘child’: cf. YeniseyT: Khakas *ōy pala*; Shor, Sagai, Koibal, Kachin *ūy pala* ~ *ōy pala*; AltayT: Altay, Teleut *ōy pala* ‘stepchild’

+ *bala* ‘child, son, boy’: cf. Old Turkic *bala*; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin *pala*; Kyzyl *pāla*; Shor *pala*; AltayT: Altay *bala*; Tuba *pala* ‘child, son’; Qumanda *pala* ~ *bala* ‘child, boy’; Quu *pala* ‘child’; Teleut *pala*; SayanT: –; ChulymT *pala* ‘son’; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *pala*; NW<sup>S</sup> Kirgiz *bala* ‘child, son, grandson’; Fu-yü *bala* ‘child’; Kazak *bala* ‘child, boy’; SE Yellow Uyghur *mīla* ‘baby’.

(12) Arin *ojakel’a* ‘stepdaughter’ (Werner 2002/2: 33)

< Arin *oj* ‘step-’ + Yeniseian *akel’a* ‘daughter’ < *akel* + *a* (Yeniseian feminine suffix).

It is important to note that the half-affixes of Turkic origin follow the original Turkic order. The half-affix of Turkic origin is in the first syllable, whereas the Yeniseian half-affix is in the second syllable. Compare some Ket words such as *ámmas* ‘stepmother’, *húnnas* ‘stepdaughter’ and *óbnas* ‘stepfather’ with the Yeniseian half-affix \**pas*, which denotes the non-consanguineous relationship.

## 7. Amalgamations

A special group includes assimilated amalgamations.

13 The Turkic compound word was borrowed to Samoyedic as well. See Kamas *ugeija* ‘stepmother’ < *ija* ~ *ijä* ~ *ja* ‘mother’ (Joki 1952: 250; 136–137).

- (13) Kott *tôteäš* ~ *toteš*, Assan *toteš* ‘Siberian fir (*lat.* *Abies sibirica*)’ (Werner 2002/2: 280) ← Turkic *tüt ağas*, cf. YeniseyT: Khakas *tüt ağas*; Kyzyl *tüt ağas* ‘larch’ < *tüt* ‘larch (*lat.* *Pinus Larix*)’: cf. Old Turkic *tüt*; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin; Kyzyl; Shor *tüt*; AltayT: Altay; Qumanda; Quu; Teleut *tüt*; SayanT: Tuvan *düt*; Tofan *tüt*; ChulymT *tüt*; NE<sup>N</sup> Yakut; Dolgan *tüt*; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz –; <sup>14</sup> SE Yellow Uyghur –  
+ *ağas* ‘tree’: cf. Old Turkic *ığaç*; NE<sup>S</sup> YeniseyT: Khakas *ağas*; Sagai *ağis*; Koibal *ağas* ~ *ağis*; Kyzyl *ağas* ~ *ığaš*; Shor *ağas*; AltayT: Altay *ağas*; Tuba *ağas* ~ *ağas* ~ *āč*; Qumanda *ağac* ~ *ağas*; Quu *ağac* ~ *ağas* ~ *ağis*; Teleut *ağas*; SayanT: Tuvan *ıyaš*; Tofan *heš*; ChulymT *ağac* ~ *ağac* ~ *āč*; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *ağac* ~ *ağac*; NW<sup>S</sup> Kirgiz *jığaç*; Fu-yü *ağas* ~ *ağis*; Kazak *ağas*; SE Yellow Uyghur *yığaš*.

Kott *tôteäš* ‘Siberian fir’ possibly originates from the Turkic compound *tüt ağas* ‘larch’. In the second part of the Yeniseian word *eäš*, the Turkic consonant *-ğ-* was dropped and then this influenced the first part of the compound, which was pitched.

- (14) Kott *kalači* ‘eagle’ (Werner 2002/1: 405) ← Turkic *qal lačün*  
< *qal* ‘strong’: cf. Old Turkic *qal* ‘wild, savage, mad’; NE<sup>S</sup> YeniseyT: Khakas *xal* ‘desperate, fearless, impenetrable; unresponsive; inexperienced’; Sagai *xal* ‘powerful, brave’; cf. Sagai, Kachin *kal*; Kyzyl *qal* ‘strong’; Shor *qal* ‘insensitive, cruel’; AltayT: Altay *kal* ‘daring’; Teleut *qal* ‘coarse’; SayanT –; ChulymT –; NE<sup>N</sup> –; NW<sup>N</sup> Siberian Tatar *qal* ‘stupid, blunt’; NW<sup>S</sup> –; SE Yellow Uyghur –  
+ *lačün* ‘falcon’<sup>15</sup>: cf. Old Turkic *lāčün*; NE<sup>S</sup> YeniseyT: Khakas *ilačün*; Sagai *lačün*; Shor *lačün*; AltayT: Quu *lačün*; SayanT: Tuvan –; <sup>16</sup> ChulymT –; NE<sup>N</sup> –; NW<sup>N</sup> Siberian Tatar *ilacün* ‘kite’; NW<sup>S</sup> Kirgiz *ilāčün*; Fu-yü –; Kazak *lašin*; SE Yellow Uyghur –.
- (15) Kott *tátien* ‘hill’ (Werner 2002/2: 245) ← Turkic *tā tōŋ*  
< *tag* ‘mountain’: cf. Old Turkic *tāğ*; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin; Kyzyl; Shor *tag*; AltayT: Altay; Tuba; Teleut *tū*; Qumanda; Quu *tag*; SayanT: Tuvan; Tofan *dag*; ChulymT *tag*; NE<sup>N</sup> Yakut; Dolgan *tia* ‘land; forest, tundra’; NW<sup>N</sup> Siberian Tatar *tau*; NW<sup>S</sup> Kirgiz *tō*; Fu-yü *dah*; Kazak *taū*; SE Yellow Uyghur *tag*  
+ *tōŋ* ‘hill’: cf. Old Turkic –; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin *tōŋ* ‘hill’; Kyzyl *tök*; Shor *tōŋ* ‘mound’; AltayT: Altay; Teleut *tōŋ* ‘mound, hill, elevation’; Tuba *tōŋ* ‘hill’; Qumanda *tōn* ‘mound, hill, elevation; stump’; Quu *tōŋ* ‘hill’; SayanT: Tuvan;

14 Kirgiz *tüt* ~ *tut* ‘tut (*derevo i jagoda*)’, Kazak *tut* ‘tutovoe derevo, tutovnik’, which belong to another Turkic word of Persian origin (for details see SIGTJa 2001: 136).

15 The Turkic word is of unknown origin (see Doerfer TMEN 4: 11–14; Räsänen VEWT 313b; Clauson 763b; SIGTJa 2001: 170). According to Clauson (763b), it is of Tocharian origin. From Turkic the word was borrowed to Mongolic, cf. MMo: Precl.Mo. *načün* ‘falcon’; LM *načün*; ModMo: Khalkha *načün*; Buryat *našan*; Kalmuck *natšn*.

16 Tuvan *načün* ‘falcon’ (title given to a wrestler who wins) ← Mongolic (Khabtagaeva 2009: 63).

Tofan *döŋ* ‘hummock; hill’; ChulymT *töŋ* ‘hill’; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *tüŋ* ‘elevation, small hill’; NW<sup>S</sup> Kirgiz *döŋ* ‘elevation, hill’; Fu-yü –; Kazak *döŋ* ‘mound, hill, elevation’; SE Yellow Uyghur –;

The etymology of the Kott word *tátien* ‘hill’ is unclear. I assume that it originates from a combination of the Turkic words *tağ* ‘mountain’ and *töŋ* ‘hill’. It is clear that the first element is a borrowing of a Turkic word with a long vowel, while the Turkic vowel *-ö-* was changed to diphthong *-ie-* in Yeniseian.

### Hybrid compounds

The next group consists of hybrid words, where one part is of Turkic origin and the other of Yeniseian origin:

- (16) Kott *ânar* ~ *anar* ‘hip, loin’ (Werner 2002/1: 34)

< *an* (← Turkic) + Yeniseian *ar* ‘bone’ (Vajda & Werner: in preparation): Yeniseian *an* ← Turkic *han* < *yân* ‘the hip; the side, flank of the body or in other contexts’: cf. Old Turkic *yân*; NE<sup>S</sup> YeniseyT: Khakas *nan* ‘upper thigh, side’; Sagai *čan* ~ *nan* ‘side’; Shor *čan* ‘side’; AltayT: Altay; Tuba *d’an* ‘side’; Qumanda *d’an* ~ *yan* ‘side’; Quu *ňan* ‘thigh, side’; Teleut *yan* ‘side’; SayanT: Tuvan *čan* ‘neighbourhood’; Tofan *ňan* ‘*anat*. upper thigh, side; jamb; near’; ChulymT *yaŋ* ~ *čaj* ‘side’; NE<sup>N</sup> –; NW<sup>N</sup> –; NW<sup>S</sup> Kirgiz *jan* ‘side’; Fu-yü –; Kazak *žan* ‘side; near’; SE Yellow Uyghur *yan* ‘side’.

The first component of Kott *ânar* ~ *anar* ‘hip, loin’ is the Turkic word *yân* meaning ‘the hip; the side, flank of the body or flank in other contexts’. The borrowed Turkic form possibly had an initial *ń-* which sporadically appears in some Siberian Turkic languages due to assimilation to following nasals.<sup>17</sup> The Turkic initial *\*n-* was dropped in the Kott form due to the final *-n* or because of the absence of original initial *ń-* and *n-* in Yeniseian (Starostin 1982: 163). Also, Yeniseian words do not normally begin with a nasal consonant.

- (17) Kott *atuš* ‘gelding’ (Werner 2002/1: 80)

< *at* (← Turkic) ‘horse’ + Yeniseian *uš* ‘horse’ (Werner 2002, 1: 457): Turkic *at* ‘horse, riding horse, gelding’: cf. Old Turkic *at*; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin; Kyzyl; Shor *at*; AltayT: Altay; Tuba; Qumanda; Quu; Teleut *at*; SayanT: Tuvan; Tofan *a<sup>c</sup>t*; ChulymT *at*; NE<sup>N</sup> Yakut; Dolgan *at*; Yakut dial. *at* ‘donkey’; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *at*; Fu-yü *at*; Kazak *at*; SE Yellow Uyghur *at*.

- (18) Kott *tâmukol* ‘tobacco tin’ (Werner 2002/2: 236)

< *tâmuk* ‘tobacco’ (← Turkic) + Yeniseian *ol* ‘container’ (Werner 2002, 2: 48): Turkic *tamki* ‘tobacco’ ← Persian: cf. Old Turkic –; NE<sup>S</sup> YeniseyT: Khakas *tamġi* ~ *tamki* ~ *temki* ~ *tâxpġi*; Sagai *tamqġi* ~ *tâmki*, Koibal, Kachin *tamqġi*; Kyzyl *tâmkki*; Shor *tapqġi*; AltayT: Altay *tamki* ~ *taŋki*, cf. *taŋqū* (R); Quu *tapki*; Teleut *tamqġi*; SayanT: Tuvan

17 On Turkic sound shifts, see Johanson (1998: 106).

*tapki*; Tofan *tamhi* ~ *tamihī*; ChulyumT *tämkä*, cf. *tamqū* ~ *tämki* (R); NE<sup>N</sup> Yakut –;<sup>18</sup> NW<sup>N</sup> Siberian Tatar *tamaq*; NW<sup>S</sup> Kirgiz *tameki*; Fu-yü –; Kazak *temeki*; SE Yellow Uyghur *tamaqī*.

- (19) Kott *pačasulema* ‘sabre’ (Werner 2002/2: 172)

< Yeniseian *pača* ‘big, large’ (Werner 2002/2: 51)

+ *sulema* (← Turkic): Turkic *seleme* ‘sabre, sword’ ← Mongolic *seleme* ‘sabre, sword’ ← Tungusic *seleme* ‘sabre, sword’ < *sele* ‘iron’ + *mA* {NN/Adj.}, see Vasilevič 1958: 769};<sup>19</sup> cf. Old Turkic –; NE<sup>S</sup> YeniseyT: Khakas *selmey* ‘sword, weapon’; AltayT: –; SayanT: Tuvan *seleme* ‘sabre, sword’; Tofan *seleme* ‘sabre’; ChulyumT –; NE<sup>N</sup> –; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *selebe* ‘sabre, sword’; Fu-yü –; Kazak *selebe* ‘large kitchen knife’; SE Yellow Uyghur – ← Mongolic \**seleme*: cf. LM *seleme* ‘sabre, sword’; ModMo: Buryat *helme*; Lower Uda Buryat *helme* ~ *xelme*; Khalkha *selem*; Kalmuck *selm*<sup>ä</sup> ← Tungusic *seleme*: NorthernT: Evenki *selmi* ‘metal weapon’; Solon *selem* ~ *selemen* ‘sabre’; Negidal *seleme* ‘metal’; SouthernT: Manchu *seleme* ~ *selemu* ‘sword’; Ulcha; Oroch *seleme* ‘metal’ (SSTMJa 2: 140).

### Metathesis

In some cases it is very difficult to recognize the source of borrowing or the etymology of a word. Certain Yeniseian words sporadically exhibit metathetic forms, which are a distinctive feature of Yeniseian languages. (For details and examples see Vajda 2013.) I put these words into the category of words with unclear and problematic etymology.

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

< *tup* ‘tanned leather’ ← Russian *dub* ‘oak, oakwood’:<sup>20</sup> cf. Old Turkic –; NE<sup>S</sup> 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: –; ChulyumT –; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *tup* ‘dried bark of willow (used for tanning of leather)’; NW<sup>S</sup> Kirgiz –; Fu-yü –; Kazak –; SE Yellow Uyghur –

+ *tāri* ‘the skin, hide (of a human being or animal)’: cf. Old Turkic *tāri*; NE<sup>S</sup> YeniseyT: Khakas *tēr* ~ *tēri* ~ *tire*; Shor *tārä*; Sagai, Koibal *ter* ~ *terä*; AltayT: Altay *tere*; Tuba *tere* ~ *ter*; Qumanda; Quu *tere*; Teleut *tārä*; SayanT: Tuvan –; Tofan *te<sup>r</sup>hi* ‘straps of saddle’; ChulyumT *tārä*; NE<sup>N</sup> Yakut; Dolgan *tirī*; NW<sup>N</sup> Siberian Tatar *tārä*; NW<sup>S</sup> Kirgiz *teri*; Fu-yü *dir*; Kazak *teri*; SE Yellow Uyghur *ter* ~ *terä* ~ *tere* ~ *terī*.

18 Yakut *tabax* ‘tobacco’ ← Russian.

19 For the etymology of the Tungusic word and its borrowings into other languages, see Räsänen (VEWT 409a), Rassadin (1971: 102), SSTMJa (2: 140), Anikin (2000: 510), SIGTJa (2001: 412–413), Stachowski (2004), Khabtagaeva (2009: 192).

20 Cf. *дубильная кожа* ‘tanned leather’ (Fasmer 1: 547–548).

- (21) Kott *uŋôjaŋ* ‘why’ (Werner 2002/2: 351) ← ? Turkic \**noġa uĉun*: cf. AltayT: Altay, Teleut *neniŋ uĉun*; Khakas *noġa*; Old Turkic *näġü üĉün* ‘why?’  
 < *noġa* < *näġü* ‘why’ < *nä* ‘what?’ + *GU* {NN, see Clauson x1}: cf. Old Turkic *näġü*; NE<sup>S</sup> YeniseyT: Khakas *noġa* ‘why’; Sagai, Koibal, Kachin *noġa* ‘where?’, *noniŋ üjün* ‘why?’; Kyzyl –; Shor *nôġa*; AltayT: Altay *neniŋ* (< *ne* ‘what’ + *nIŋ* {AltayT Ablative}); Tuba; Teleut *neniŋ*; SayanT: –; ChulymT *noġa*; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *ni*; NW<sup>S</sup> Kirgiz *nege*; Fu-yü *n'em* ‘what?’; Kazak *nege*; SE Yellow Uyghur *nege* + *uĉun* ‘because of, for the sake of, for; because, in order to’: cf. Old Turkic *üĉün*; NE<sup>S</sup> YeniseyT: Khakas *üĉün*; Sagai *üjün*; Sagai, Koibal *üzün*; Kyzyl *üzün*; Shor *üĉün*; AltayT: Altay; Tuba; Qumanda; Teleut *uĉun*; Quu *uĉun* ~ *üĉün*; SayanT: Tuvan *užun*; Tofan –; ChulymT *üĉün*; NE<sup>N</sup> Yakut; Dolgan *ihin*; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *üĉün*; Fu-yü –; Kazak *üşin*; SE Yellow Uyghur –.

The etymology of the Kott word is unknown. As a hypothesis, I suggest that Kott *uŋôjaŋ* ‘why’ consists of the words *uŋo* and *ôjaŋ*. The second part is clear; it has developed from Turkic *uĉun* ‘because’. The first part *uŋo* is problematic. It may come from \**nuġo*.

- (22) Kott *ureäk* ‘green’ (Werner 2002/2: 352) ← ? Turkic \**kök arax*  
 < *kök* ‘blue’  
 + *arax*<sup>21</sup> {Khakas Diminutive particle for Adjective forms<sup>22</sup>, see Baskakov & Inkižekova-Grekul 1953: 407}, cf. Khakas *kök-arax* ‘greenish’: < *kök* < *kök* ‘blue, green’: cf. Old Turkic *kök* ‘the sky; sky-coloured, blue, blue-grey’; NE<sup>S</sup> YeniseyT: Khakas *kök* ‘green, blue; grass’; Sagai, Koibal, Kachin; Shor *kök*; Kyzyl *kök*<sup>x</sup>; AltayT: Altay; Tuba; Qumanda; Quu; Teleut *kök*; SayanT: Tuvan; Tofan *kök*; ChulymT *kök*; NE<sup>N</sup> Yakut *küöx*; Dolgan *küöx* ~ *küöx*; NW<sup>N</sup> Siberian Tatar *kük*; NW<sup>S</sup> Kirgiz *kök*; Fu-yü *göh*; Kazak *kök*; SE Yellow Uyghur *kök*.

The etymology of the Kott word is unknown. The Turkic word is semantically close to the Kott word. The Kott word is possibly composed of the shortened form of Turkic *kök* ‘blue, green’ and the Yenisey Turkic diminutive particle *arax*. The palatalization of vowels can be explained by the absence of synharmony in Yeniseian languages. The change may also have happened under the influence of the first constituent. The disappearance of the first syllable *kö-* is problematic. Also, due to metathesis, under the influence of the final consonant *-k*, the initial *k-* may have been dropped and the vowel *-ö-* in the first syllable changed to the diphthong *-eä-*.

- 21 The Khakas particle can possibly be connected with the Old Turkic suffix *+rAk*, which forms relatives and comparatives, e.g. *küĉlügräk* ‘stronger’ < *küĉlüg* ‘strong’ < *küĉ* ‘power’, *küĉsüzräk* ‘weaker’ < *küĉsüz* ‘weak’, *bäkräk* ‘stronger’ < *bäk* ‘lord, master’ etc. (for details see Erdal 1991: 62–64).
- 22 E.g. *xizil-arax* ‘reddish’ < *xizil* ‘red’, *xara-arax* ‘blackish’ < *xara* ‘black’, *siliġ-arax* ‘less beautiful’ < *siliġ* ‘beautiful’, *küĉig-arax* ‘a little smaller, a little less’ < *küĉig* ‘small’.

### Combinations of word classes

From a typological point of view, it is important to mention that the borrowed Turkic compounds follow the Yeniseian structure, which is similar to that of Turkic: Noun + Noun, Adjective + Noun, and Verb + Noun.

(23) Noun + Noun

Arin *ba[g]akulak* ‘mussel’ (Werner 2002/1: 109) ← Turkic *bağa qulaq*, cf. Khakas *pağa xulaği*<sup>23</sup> ‘mussel’

< *bağa* < *baqa* ‘frog’: cf. Old Turkic *baqa*; NE<sup>S</sup> YeniseyT: Khakas; Sagai; Shor *pağa*; AltayT: Altay *baqa*; Tuba; Teleut *paqa*; Qumanda; Quu *baka*; SayanT: Tuvan *paga*; Tofan *bağa*; ChulymT *mağa*; NE<sup>N</sup> Yakut *bağa*; Dolgan –; NW<sup>N</sup> Siberian Tatar *pağa* ~ *mağa* ~ *maqa* ~ *baxa*; NW<sup>S</sup> Kirgiz *baka*; Fu-yü –; Kazak *baqa*; SE Yellow Uyghur *paqa*

+ *qulaq* ‘ear’: cf. Old Turkic *qulaq* ~ *qulqaq*; NE<sup>S</sup> YeniseyT: Khakas *xulax*; Sagai, Koibal, Kachin; Shor *qulaq*; Kyzyl *χulax*; AltayT: Altay; Tuba; Qumanda; Quu; Teleut *qulaq*; SayanT: Tuvan; Tofan *qulaq*; ChulymT *qulaq*; NE<sup>N</sup> Yakut *kulgāx*; Dolgan *kulgā(k)* ~ *kulgak*; NW<sup>N</sup> Siberian Tatar *qulaq*; NW<sup>S</sup> Kirgiz *kulak*; Fu-yü *gulah*; Kazak *qulaq*; SE Yellow Uyghur *qolaq*.

The etymology of the Arin compound *bagakulak* ‘mussel’ is clear; it is possibly a borrowing from Yenisey Turkic, cf. Khakas *pağa xulaği*. However, the semantic change from ‘ear of frog’ to ‘mussel’ is interesting.

(24) Adjective + Noun

Arin *karasek* ‘fly’ (Werner 2002/1: 411) ← Turkic *qara sēk*, cf. YeniseyT: Khakas *xara sēk*; Sagai Koibal, Kachin *qara sāk* ‘fly’:

< *qara* ‘black’: cf. Old Turkic *qara*; NE<sup>S</sup> YeniseyT: Khakas *xara*; Sagai, Koibal, Kachin; Shor *qara*; Kyzyl *χara*; AltayT: Altay; Tuba; Qumanda; Quu; Teleut *qara*; SayanT: Tuvan; Tofan *qara*; ChulymT *qara*; NE<sup>N</sup> Yakut *xara*; Dolgan *kara* ~ *xara*; NW<sup>N</sup> Siberian Tatar *qara*; NW<sup>S</sup> Kirgiz *kara*; Fu-yü *gar*; Kazak *qara*; SE Yellow Uyghur *qara*

+ *sēk* ‘fly’ < *siŋek* ‘a buzzing insect’ < \**siŋ*<sup>24</sup> + *AK* {Turkic Diminutive, see Erdal 1991: 40}: cf. Old Turkic *siŋäk*; NE<sup>S</sup> YeniseyT: Khakas *sēk* ‘fly’; Sagai, Koibal, Kachin *sāk*; Shor *sēk* ‘mosquito’; AltayT: Altay *sēk* ‘gadfly’, cf. *sek* ‘mosquito’; Qumanda *sēk* ‘mosquito’; Quu *sek* ~ *sēk* ‘mosquito, midge’, cf. *sāk* ‘sandfly’ (R); SayanT: Tuvan; Tofan *sēk* ‘fly’; ChulymT *sēk* ‘mosquito’, cf. *kara sēk* ‘midge’; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz –; Fu-yü *sīh* ‘fly’; Kazak –; SE Yellow Uyghur *siŋgek* ‘insect in cattle’.

(25) Verb + Noun

Kott *taripan* ‘field’ (Werner 2005: 117)

23 The Khakas form *xulaği* is used according to Turkic rules with possessive marker of 3rd person +(s)X.

24 The base of the word is of onomatopoeic origin.

< Turkic *tari-* ‘to cultivate ground’ + Yeniseian *baŋ* ‘earth, ground’ (Vajda & Werner: in preparation): < *tari-* ‘to cultivate ground’: cf. Old Turkic *tari-*; NE<sup>S</sup> YeniseyT: Khakas *tari-*; Sagai, Koibal, Kachin *tara-*; AltayT: Altay *tari-*; Quu *tara-*; Teleut *tari-*; SayanT: Tuvan; Tofan *tari-*; ChulymT *tara-*; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz *tari-*; Fu-yü *dari-* ‘to plant’; Kazak *tari* ‘millet’; SE Yellow Uyghur *tari-* ~ *taru-*.

The last word of this category is a hybrid. The Kott word *taripan* ‘field’ consists of the Turkic verb *tari-* ‘to cultivate soil’ and the Yeniseian noun *baŋ* ‘earth, ground, soil’.

### Combinations atypical for Yeniseian and Turkic

The regular word order is Adjective + Noun, but there are two compounds where combinations atypical for both Yeniseian and Turkic can be found:

#### (26) Noun + Adjective

Arin *balgaš bore* ‘dirt’ (Werner 2002/1: 99) ← Turkic *balgaš boro*  
 < *balgaš* ‘mud; dirty, dirtiness’<sup>25</sup> < \**balkač* < \**balčiq*; cf. Old Turkic *balčiq*; NE<sup>S</sup> YeniseyT: Khakas *palgas* ~ *palgaš*; Sagai, Koibal *palgas*, cf. Sagai, Koibal, Kachin *palčak*; Kyzyl *palga š*; Shor *palgaš*; AltayT: Altay *balkaš*; Tuba *balgaš*; Qumanda *malgaš* ~ *malgač*; Quu *palgaš*; Teleut *palqaš*; SayanT: Tuvan *malgaš*; Tofan *ba<sup>c</sup>lhaš*; ChulymT *palciq* (R); NE<sup>N</sup> Yakut *čalbak*; Dolgan *čalbak*; NW<sup>N</sup> Siberian Tatar *palcik*; NW<sup>S</sup> Kirgiz *balčiq*; Fu-yü *balgaš*; Kazak *balšiq*; SE Yellow Uyghur –  
 + *boro* ‘grey’<sup>26</sup> ← Mongolic *boro* ← Turkic \**bōrō*  
 < *bōz*: cf. NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal; Shor *pora*; AltayT: Altay *boro*; Tuba *bor(o)* ‘grey (colour of horse)’, cf. *poro* ‘grey’; Qumanda *boro* ‘grey-brown’, cf. *poro* ‘grey’; Quu *boro*; Teleut *poro*; SayanT: Tuvan; Tofan *bora*; ChulymT *pora*; NE<sup>N</sup> Yakut; Dolgan *boroy*; NW<sup>N</sup> Siberian Tatar –; NW<sup>S</sup> Kirgiz –; Fu-yü *bor* ‘violet’ (?); Kazak –; SE Yellow Uyghur – ← Mongolic \**boro* ‘grey’: cf. MMo: MNT, Precl.Mo, HY *boro*; Muq. *bora*; LM *boro* ~ *bora*; ModMo: Buryat *boro*; Khalkha *bor*; Kalmuck *bor<sup>o</sup>* ← Turkic \**borō* < \**bōz*: cf. Old Turkic *bōz* ‘grey’; NE<sup>S</sup> YeniseyT: –; AltayT: Altay –; Tuba *bos* ‘grey’; Qumanda *pos* ‘grey’, cf. *pus* ‘whitish colour of horse’; Quu *pos*; Teleut *pos*; SayanT: Tuvan *bos* ‘gray duck; drake’; Tofan *bos* ‘mallard’; ChulymT –; NE<sup>N</sup> Yakut –; NW<sup>N</sup> Siberian Tatar *büz* ‘white’; NW<sup>S</sup> Kirgiz *boz* ‘light grey’; Fu-yü *bos* ‘grey’; Kazak *boz* ‘earthy-gray; feather grass’; light grey’; SE Yellow Uyghur *poz* ‘reddish colour; white grey’.

#### (27) Arin *kusku kok* ‘raven’ (Werner 2002/1: 455) ← Turkic *kuskun kōk*

< *quzğun* ‘raven’: cf. Old Turkic *quzğun*; NE<sup>S</sup> YeniseyT: Khakas *xusxun*; Sagai, Koibal, Kachin; Shor *qusqun*; AltayT: Altay; Tuba; Qumanda; Quu; Teleut *qusqun*; Sa-

25 Turkic → Samoyedic: Kamas *balyaš* ‘dirt, mud’ (Joki 1952: 81).

26 Turkic → Samoyedic: Kamas *bora* ‘grau’ (Joki 1952: 96).

yanT: Tuvan; Tofan *qusqun*; ChulymT *qusqun*; NE<sup>N</sup> Yakut – ; NW<sup>N</sup> Siberian Tatar – ; NW<sup>S</sup> Kirgiz *kuzgun*; Fu-yü – ; Kazak *quzğın*; SE Yellow Uyghur *quzğun*; + *kök* ‘blue’:<sup>27</sup> cf. Old Turkic *kök* ‘the sky; sky-coloured, blue, blue-grey’; NE<sup>S</sup> YeniseyT: Khakas; Sagai, Koibal, Kachin *kök*; Shor *kök*; Kyzyl *kök*<sup>x</sup>; AltayT: Altay; Tuba; Qumanda; Quu; Teleut *kök*; SayanT: Tuvan; Tofan *kök*; ChulymT *kök*; NE<sup>N</sup> Yakut *küöx*; Dolgan *küök* ~ *küöx*; NW<sup>N</sup> Siberian Tatar *küik*; NW<sup>S</sup> Kirgiz *kök*; Fu-yü *göh*; Kazak *kök*; SE Yellow Uyghur *kök*.

### New etymologies

I have found several words with false etymologies. For instance, according to Werner, the Kott word *koaskir* ‘ram’ has a Yeniseian etymology; i.e. it is compounded from *koi* ‘sheep’ and *askir* ‘stallion’. Note that both of these elements are Turkic loanwords. I assume that Kott *koaskir* ‘ram’ was borrowed from Yenisey Turkic *qoskar*, which is *qoç* ~ *qoçñār* in Old Turkic with the same meaning.

- (28) Kott *koaskir* ‘ram’ (Werner 2002/1: 437) ← Turkic *qosqar*:  
 < \**qoçqar* < *qoçñār* < \**qoçun*<sup>28</sup> + *Gar* {Turkic NN}: cf. Old Turkic *qoç* ~ *qoçñār*; NE<sup>S</sup> YeniseyT:<sup>29</sup> Khakas *xosxar* ‘goat’; AltayT: Altay *koçkor* ‘ram’; Tuba; Quu; Teleut *qoçqor*; SayanT: Tuvan *koškar*; Tofan<sup>30</sup> – ; ChulymT – ; NE<sup>N</sup> Yakut – ; NW<sup>N</sup> Siberian Tatar *qoçqar* ~ *qoçqōr* ~ *qucqar*; NW<sup>S</sup> Kirgiz *koçkor*; Fu-yü – ; Kazak *qoşqar*; SE Yellow Uyghur *qožğar* ~ *qužğar*.

### Conclusions

Among the Turkic languages, only Siberian Turkic has had direct contact with Yeniseian. It seems that two layers can be distinguished: Yenisey Turkic<sup>31</sup> and Altay Turkic.<sup>32</sup> According to phonetic criteria, most of the loanwords belong to the later period of borrowing.

From a morphological point of view, some Turkic loanwords follow the Yeniseian structure (Noun + Noun, Adjective + Noun). The predominant noun formation technique of Yeniseian is compounding. Therefore, the current topic on

27 Turkic → Samoyedic: cf. Koibal *kok* ‘blau, grün’ (Joki 1952: 187).

28 According to Ščerbak (1961: 111) and ESTJa (2000: 89), the Turkic form \**qoçun* has some connection to *qoç*, which is morphologically similar to the Turkic words *qōy* ~ *qōñ* and *qoyun* ‘sheep, ewe’.

29 Cf. Khakas *xuča*, Sagai, Shor *quča* ‘ram’, which is the Mongolic loanword, but ultimately of Turkic origin.

30 Tofan for ‘ram’ uses the compound *asqir hoy* < *asqir* ‘stallion, male’ + *hoy* ‘sheep’, cf. Kott *koaskir* ‘ram’.

31 Yenisey Turkic includes the Khakas language with its dialects Sagai, Koibal, Kachin, Kyzyl and Shor.

32 The Altay Turkic group can be divided into the northern and southern subgroups. The Qumanda, Quu and Tuba kiži dialects belong to the northern subgroup, while Literary Altay or Oyrot belongs to the southern subgroup.

compound loanwords is very important for Yeniseian historical morphology. The main features of the Yeniseian compound words of Turkic origin are as follows:

1. The combinations of different word classes are similar to Yeniseian.
2. The presence of “half-affixes” of Turkic origin, e.g. the half-affix *ōy* ‘step-relative’, indicates that Yeniseian and Turkic-speaking people had marital connections with each other.
3. There are some hybrid compounds, where one element is Turkic, and the other one is Yeniseian.
4. Metathesis, which is a distinctive feature of Yeniseian, affects some Turkic compound words.

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