

Nova Turco-Samoiedica

The present paper focuses on the lexical contact between Turkic and Samoyedic and discusses nine new possible Turkic loanwords in Proto-Samoiedic and eight new possible Samoyedic loanwords in Turkic. The introduction offers a modest bibliography of the scattered studies on the subject. Two of the new Turkic loanwords in Proto-Samoiedic suggest that they reached the recipient language through the mediation of Yeniseian languages.

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I. State of the art

The mutual contact between Samoyedic and Turkic has been the subject of many studies, and the aspect of lexical borrowing has been widely discussed. With no claim of exhaustiveness, the following sources concerning this subject may be cited: Ramstedt (1912), Paasonen (1912/1913–1916/1917), Donner (1924), Ligeti (1926–1932), Németh (1930: 118–119), Toivonen (1933: 102), Sinor (1947; 1980), Terent'ev (1976; 1982; 1983; 1989), Janhunen (1977), Filippova (1980b), Róna-Tas (1980; 1988: 743–746), Ligeti (1986: 495–497), Helimski (1995), Helimski & Stachowski (1995), Dybo & Normanskaja (2016: 50–51), and Piispanen (2018).

The most recent and most comprehensive work on this topic is Terent'ev (1999), albeit not without shortcomings. It contains many etymologies in both directions of borrowing, but they are not thought out well on the Turkic side. Furthermore, some comparisons are based on irregular sound correspondences. Likewise, Dybo (2007: 135–154) extensively dealt with the

words borrowed between Proto-Samoyedic (PS), individual Samoyedic languages, and Turkic. Dybo (2014: 10–11) reproduced data from earlier sources without adding anything new.

Joki (1952) examined the Turkic borrowings in the Sayan Samoyedic languages. Filippova (1974; 1980a; 1986a; 1986b), Tamás (1975), and Tenišev (1977) dealt with the Turkic loanwords in Selkup. Janhunen (1989) and Helimski (1991; 1998) focused on interaction between Mator and Turkic. Helimski (1986; 1992–1993; 1997), Blažek (2016), as well as Ünal (2022a: §8, §9, §11, §14) present some additional Turkic etymologies for Samoyedic words.

In the present study, I will investigate nine new possible Turkic loanwords in Proto-Samoyedic, three new possible Proto-Samoyedic loanwords in Proto-Turkic (PT), three new possible Old Selkup loanwords, and a new possible Old Mator loanword in Common Turkic. One of the earliest linguistic contacts of Turkic known to date was with Samoyedic. The Turkic loanwords in Proto-Samoyedic, which can be dated to the Proto-Bulgar and Proto-Common Turkic stages, are particularly important for better understanding the phonology of prehistoric Turkic. I hope that further research into Turco-Samoyedic linguistic contact will shed light on the history of the cultural interaction of these and other peoples.

2. Newly identified loanwords

2.1. Turkic → Proto-Samoyedic

PS *jojs ‘fat’

PS *jojs [jōs] ‘Fett’ [fat, grease] (SW 46) (> Enets *d'u*, *jū*, *jō*, Selkup *tēc /t'os/* [1879], *čōs*)¹ < Early Samoyedic *ōs ← Yeniseian *tōs* ← Common Turkic (CT) *üz* ‘fat’ (ED 278–279); cf. Kitāb al-idrāk li-lisān al-atrāk *öz* (read *üz*) ‘yemek kaynarken üzerine çıkan yağ’ [fat that rises while food is boiled] (Caferoğlu 1931: 66), Turkmen dial. үзмән (< **üz+män?*) ‘naxar adı – nazvanie bljuda’ [name of a dish] (TDGDS 179), Turkish dial. *üzlük* ‘topraktan yapılmış, ufak, kulpsuz çömlek’ [small, handleless earthen pot] (DS 4085), *özlük* ‘topraktan yapılmış su kabı, bardak; küçük çömlek’ [earthenware bowl, glass; small pot] (DS 3372), *özük* ‘içi sırlı, küçük, yağ çömleği’ [small, glazed oil pot] (DS 3373).

1. Bear in mind that these and other linguistic materials for the individual Samoyedic languages given below are not meant to be exhaustive but representative.

The Proto-Samoyedic form has no Uralic etymology. I think that it may have been borrowed indirectly from CT *üz* ‘fat’. The intermediary language apparently lacked front labial vowels and the voiced dental sibilant. This language may be identified as one of the Yeniseian languages. Yeniseian *tōs* can be connected to Ket. *so : s^o’ō* ‘aus Fischdärmen gekochtes Fett’ [fat cooked from fish intestines] (Donner 1955: 83) if a metathesis is assumed to have occurred. For the final consonant clusters in Proto-Samoyedic, Wagner-Nagy (2004: 93n.) rightly pointed out that “phonologisch sollen sie als die Sequenz Vokal + Halbksonant betrachtet werden, phonetisch könnten sie aber als Diphthonge oder sogar Langvokale ausgesprochen werden”.

The reason for the prothesis of the onset **j*- is convincingly explained by Helimski & Stachowski (1995: 42–43). The authors argued that the onset Samoyedic **j*- in closed syllables must be prosthetic “as there are only very few stems with an initial **ü*- and **ö*- reconstructable for Proto-Sam[oyedic].” They suggested in conclusion the following change within Samoyedic: Early Samoyedic **ür* > Proto-Samoyedic **jür* ‘fat (noun)’.

If PS **jojs* ‘fat’ is indeed a borrowing from Turkic *üz* ‘fat’ as argued above, it would mean that **jür* ‘Fett’ [fat, grease] (SW 50) and **jojs* ‘id’ are hitherto unidentified doublets in Samoyedic. The former must have entered Samoyedic directly from Proto-Bulgar Turkic (PBT) **üR(V)* whereas the latter came from Common Turkic **üz* via Yeniseian.

PS **jujtâ-* ‘dream’

PS **jujtâ-* ‘träumen’ [dream] (SW 48) ← PT **üdi-* ‘sleep’ > CT *üdi-* (Khalaj *üdi-*) ‘sleep’ (ED 42–43).²

The Proto-Samoyedic form has no Uralic etymology. Two Turkic words with long onset vowels entered Samoyedic with prosthetic **j*, see PS **jür* ‘Fett’ [fat, grease] (SW 50) ← PBT **üR(V)* = CT *üz* ‘fat’ (ED 278–279) (Helimski & Stachowski 1995: 42–43) and PS **jer* ‘Mitte’ [center, middle] (SW 43–44) ← PBT **öRä* ‘center’ > Chuvash *var* ~ *vara* ‘seredina, serdcevina;

2. Against the consensus, Chuvash *śivär-* ‘sleep’ can hardly be a cognate of CT *üdi-*. The latter would be expected to yield **vär(ä)-* or a similar form in Chuvash. I am of the opinion that Chuvash *śivär-* is related to CT *yavri-* ‘be(come) weak’ (ED 879). The correspondence between these two forms is perfectly regular and the semantic change is understandable.

koren' (v zaprjažke)’ [middle, core; root (in a harness)] (ÈSČJa I 99–100) = CT *őz* (Turkmen *őz*, Khalaj *i̥ež*, Yakut *üös*) ‘spirit, self, the interior part of an organism’ (ED 278); cf. Common Mongolic (CM) **öre* ‘(pit of the) stomach’ (Nugteren 2011: 475) (see Piispanen 2018: 368 for further details). The second **j* in the Proto-Samoyedic form may be seen as a substitution for the long vowel in the Proto-Turkic form.

A semantic change from ‘sleep’ to ‘dream’ or polysemy thereof is attested in many languages. To name just a few, Latin *somnus* ‘sleep’ > *somniāre* ‘dream, daydream’, Sanskrit *svápna-* ‘sleep, dream’, and Tamil *kāṇavu* ‘dream, sleep’ can be mentioned.

PS **kät* ‘face, forehead, front’

PS **kät* [kat] ‘Gesicht’ [face] (Helimski 1997: §475; SW 65) (> MTK *kāt* ~ **kāʔn* ‘Stirn, Gesicht’ [forehead, face], Selkup *rátyn* ‘before, facing, in the presence of’ [1879], *kāt* ‘Vorderseite, Stirn’ [front, forehead]) ← PT **kat* ~ **kit* > CT (mainly Oghuz) *kat* ~ *kit* ‘at, near, beside, in presence of’ (ED 593; Boeschoten 2022: 241–242).

The Proto-Samoyedic form has no Uralic etymology. In my opinion, PS **kät* was borrowed from PT **kat* ~ **kit*, which mostly occurs with possessive and locative suffixes in Oghuz languages and signifies ‘in presence of (a superior)’. This word cannot be identified with CT *kat* ‘layer’ and must be treated as a different lexeme. In her index to an 14th-century Old Ottoman mathnawi, Şan (2022: 212) rightly distinguished both lemmas: *kat* (I) ‘nezd, yan, huzur’ [near, side, presence] and *kat* (II) ‘tabakalar veya sıralar hâlinde bulunan şeylerin her bir tabakası’ [each layer of things that are in layers or rows]. CT *kat* ~ *kit* lives on in Turkish dial. *kit* ‘kat, yan, ön’ [presence, side, front], *kit* ‘yön, yakın’ [direction, vicinity] (DS 2846). The primary meaning of the word can be assumed to be ‘front (side)’. The donor form likely was **kit*, because PS **ä/á/ [a]* corresponds to Turkic **/i/* in some cases such as PS **pā* ‘Holz, Baum, Wald’ [wood, tree, forest] (Helimski 1997: §267), which, in my view, was borrowed from PT **pi̥~pā* > CT *hi̥* ‘vegetation, bush, tree’ (ED 1; Ünal 2022a: 53).

The base of PT **kat* ~ **kit* may be hidden in the hapax legomenon *qa-* (in *udu qa-*) ‘advance’ (?), which occurs in the *Dīwān Luyāt at-Turk*, folio 547 (Dankoff & Kelly 1982–1985/II: 270); cf. Middle Korean *ká-* ‘go’.

PS **kupt-* ~ **kopt-* ‘kind of metal’

PS **kupt-* ~ **kopt-* (better **kumte*?) ‘kakoj-to metall’ [some kind of metal] (Terent'ev 1999: 192; see also Paasonen 1912/1913–1915/1916: §332; Toivonen 1933: 102; Joki 1952: 209–210; Janhunen 1977: 125; Helimski 1982: 121–122) ← Yeniseian *†kumtV* ← PT **k_iümät₂V* or **k_iümüt₂V* ‘silver’ > CT *kümüš* (Yakut *kömüs*) ‘silver’ (ED 723–724), Chuvash *kémél* ‘serebro’ [silver] (ÈSČJa I 273) (see also Rybatzki 1994: 211–212; Antonov & Jacques 2011).

Some scholars have linked the Samoyedic words to CT *kümüš* ‘silver’ and argued for a change of š > t in Pre-Proto-Samoyedic. This can hardly be true since Proto-Samoyedic had only contact with Proto-Bulgar Turkic at this earliest stage. PS **jer* ‘Mitte’ [center, middle], **jür* ‘hundert’ [hundred], **jür* ‘Fett’ [fat], **ki* ‘Zobel’ [sable], *mär* ‘Drüse’ [gland] (SW 43–44, 50, 69, 87), **kę* ‘winter’ [winter] (Helimski 1997: §522), and **puro* ‘(wolf-)gray’ (Róna-Tas 1980: 380; 1988: 744) are clear borrowings from Proto-Bulgar Turkic. Their respective cognates in Common Turkic are *ōz* ‘core, center’, *yūz* ‘100’, *üz* ‘fat’, *kīš* ‘sable’, *bāz* ‘gland, swelling’, *kīš* ‘winter’, and *bōz* ‘gray’.

The similarity between PS **kupt-* ~ **kopt-* and PT **k_iümät₂V* (or **k_iümüt₂V*) is conspicuous.³ However, there are serious vowel and consonant problems which speak against a direct borrowing. The Proto-Turkic form would be expected to give ***küpç-* or ***kəpç-* in Proto-Samoyedic since PT */ü/ and */t₂/ entered Proto-Samoyedic as */ü/ and */c/, respectively, cf. PT **pit₂ă-* ~ **püt₂ă-* ‘scrape, plane (wood), rub’ (> CT **hiš-* ~ **hüš-*) → PS **pică-* ~ **pucă-* ‘scheren’ [shave] (Ünal 2022a: 25–28). Although, as indicated by Joki (1952: 209–210) and Rybatzki (1994: 211), back-vocalic variants of CT *kümüš* are attested, they are all late (see Fischer 1995: 79). Only the involvement of an intermediary language lacking front vowels and dental affricates could explain this borrowing. The Yeniseian languages, in general, fit this description. If this assumption is correct, PT **k_iümät₂ă* entered Yeniseian as **kumte* and this form, in turn, was borrowed into Proto-Samoyedic as **kumte*. This scenario also supports the reconstruction of the Proto-Turkic phoneme */t₂/.

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3. See Ünal (2022a; 2022b) for the reconstruction of PT */t₂/ as the source of CT /š/ and Chuvash /l/.
 4. The Turkic word is usually assumed to be of Chinese or Sino-Tibetan origin. Another possible but tentative etymology would be Pre-Proto-Turkic **künpată*

PS *pät- ~ *pät₃- ‘put into the pot’

PS *pät- ~ *pät₃- (~ *pätā-) ‘in den Topf legen’ [put into the pot] (SW 118)
 ← PT *piđā- > PT *piđ-k₂ăt₂ă > CT *hidiš ~ hidīš (DLT idīš ~ iđiš, KB
 iđiš ~ iđiš, Kazakh idis, Tuvan idiš, Khalaj hidīš) ‘cup, vessel’ (ED 72;
 ÈSTJa I 328–329).

There are two important recent articles concerning CT *hidiš*. Uçar (2017) pointed out that CT *hidiš* was originally back vocalic. Nugteren (2012: 78), on the other hand, emphasized the irregular retention of intervocalic /d/ in modern Turkic languages and reconstructed forms like *iddiš and *iydiš. In my opinion, the regular change of /d/ > /y/ is obstructed by the following /k₂/.

Dybo & Normanskaja (2016: 48) traced the Proto-Samoyedic verb to Proto-Uralic (PU) *pVšä- ‘žarit’, gotovit” [fry, cook] (UEW 385: *pišä- ‘braten, kochen’ [fry, cook]). If this etymology is correct, the direction of borrowing must be from Proto-Samoyedic to Turkic. However, two facts speak against this assumption. First, PS */p-/ would be expected to enter Turkic as */b-/ (see below). Second, PS */ä/ is a new phoneme which appeared through irregular changes and with new vocabulary (Janhunen 1981: 247). In summary, I consider PS *pät- ~ *pät₃- to be a borrowing from PT *piđā-, which is the basis of CT *hidiš ~ hidīš.⁵

PS *pəsj ‘cleft, female genitalia’

PS *pâsâ ‘Riss’ [cleft] (SW 114), PS *pâsj(-) ‘cunnus’ [vulva] (Helimski 1987: 59), PS *pəsj ‘Spalte, cunnus’ [cleft, vulva] (Helimski 1997: 219) (> Tundra Enets posı, MTK bisigä ~ biskä) ← PBT *pūsū < PT *pūtū > CT hüt (Old Uyghur üt ~ yǖt, Khalaj hīt) ‘hole, aperture’ (ED 36; HWAU 830, 926); cf. Mongolic *pütyügün ‘vagina’ (Krippes 1992: 153).

The Proto-Samoyedic form has no Uralic etymology. In my opinion, PS *pəsj may have been borrowed from a hypothetical Proto-Bulgar Turkic form *pūsū of PT *pūtū. For a weakening of /t/ in Bulgar Turkic, the following examples can be listed:

‘sun-like’ < *kün ‘sun; day’ (> CT *kün* ‘sun; day’, Chuvash *kun* ‘day’) + *pät*₂ă
 ‘identical, equal; similar, resembling’ (> CT *(h)eš ‘companion, comrade; one’s equal’, Chuvash *yïs* ‘quantity, amount; group, collective’ ← Old Tatar); cf. CM
 *adali ‘similar, same, as’ (Nugteren 2011: 265) and CT *adaš* ‘friend, comrade’ (ED 72) for the latter component.

5. This etymology has already been presented by Ünal (2022a: 68).

- (1) CT *tilta-*, Bulgar Turkic (BT) **silta-* ‘make excuses, seek pretexts’; cf. CM **silta-* ‘give an excuse, employ subterfuge’, Even (Arman dialect) *sılık* ‘jazyk’ [tongue, language] (Doerfer & Knüppel 2013: 305).
- (2) CT *tis*, BT **sil* ‘tooth’ (> Chuvash *śał*); cf. CM **sidün* (< **sil.dün* or **sitün*⁶) ‘tooth’ (Nugteren 2011: 494).
- (3) CT *tint(i)-*, BT **sint(i)-* ‘examine’; cf. Written Mongol *sinji-* (< **sindi-*) ‘look over carefully, examine, observe, inspect’ (Lessing 1995: 714).
- (4) CT *tün ~ tün*, BT **süni* ‘night’ (> Chuvash *sěm* ‘dark?’); cf. CM **söni ~ süni* ‘night’ (Nugteren 2011: 504), Kitan 수 夜 [244.059] <*s.uñ*> (< **söni*) ‘night’ (Shimunek 2017: 369).
- (5) CT *täl*, BT **sälä* ‘branch’; cf. CM **salaa* (~ *salasun*) ‘branch; space between fingers’ (< **sala+*) (Nugteren 2011: 481).
- (6) CT *tergi*, BT **sergi* ‘table’; cf. CM **siree* (< **siregi*) ‘table’ (Nugteren 2011: 497).

Benzing (1959: 712) gives a series of comparisons in favor of a change CT /t/ to /s ſ/ in Chuvash. Some of these comparisons have been rightly criticized by Ceylan (1997: 57–58).

PS **pâtä* ‘bile’

PS **pâtä* ‘Galle’ [bile] (SW 115), PS **pötä* ‘želč’ [bile] (Helimski 1993: 130), PS **pøte* ‘Galle’ [bile] (Helimski 1997: 106, 112, 242) ← PT **pōtiă* (~ **pōt₂ă*?) ‘bile’ > CT *höt* (~ *hōš*?) (Tuvan *höt*, Western Yugur *höt*, Yakut *iiös*) ‘bile, gall; the spleen, the gallbladder’ (ED 35–36; Ščerbak 1976: 245; Roos 2000: 404), Chuvash *vat* ‘želč’ [bile] (ÈSČJa I 102).

Since Paasonen (1912/1913–1915/1916: §329), many authors have linked (albeit hesitantly) the Proto-Samoyedic form to Finno-Ugric (FU) **pešä* ‘grün, Kupfer’ [green, copper], which is only represented by Erzya *piže* and Moksha *piža* ‘green; copper, brass; young, little; blue’.⁷ Lehtisalo (1929: 123) etymologized the Mordvinic forms differently and considered them unrelated to the Samoyedic forms. Lehtisalo regarded the second syllable as a derivational suffix and traced the base back to **pi-* ‘young, small’, which may be related to Finnish *pieni* ‘small, little’. Toivonen (1933: 94–95),

6. Ünal (2022a: 41, 68) argued that PM **sidün* < Pre-Proto-Mongolic (PPM) **sitün* was borrowed from Proto-Turkic **sit₂ū* ~ **sit₂ū*.

7. These include Sammallahти (1979: 34), UEW (384–385), and Mikola (2004: 27).

however, criticized the morphological analysis and the Mordvinic semantic change from ‘young, small’ to ‘green’ assumed by Lehtisalo.

I think that PS **pəte* may be a loanword from PT **pōt,ā*. Unfortunately, the word is not attested in Khalaj. The Proto-Turkic onset **p-* is primarily based on the Tuvan dialectal and the Western Yugur data, which may seem unreliable on their own. However, Ottoman and Turkish dialectal *ödek* ~ *ödük* ‘coward’ (TS 3049; DS 3309–3310), a derivative of *öd* (< CT *hōt*) ‘bile’, occurs as *hödek* and *hödük* in several Turkish dialects (DS 2427–2428). My conviction is that this parallelism between Turkish, Tuvan, and Western Yugur establishes **h-* for Common Turkic.

The only remaining problem with this etymology is that the PT */*ö/* is substituted by */*ə/* in Proto-Samoyedic, although the latter is reconstructed as having an */*ö/* (Helimski 2005: 37).

PS **pət³mä* ‘sharp’

PS **pət³mä* ~ **pət³mä* ‘scharf’ [sharp] (SW 115) ← PT **piti-* (?) ‘be sharp’ (derivative **piti-k₂V*) > CT *hiti*± ~ *yiti*± (Old Uyghur *iti* ~ *y(i)ti* ~ *yiti*, Ottoman Turkish *iti* ~ *yiti*, Turkmen *yiti*, Yakut *sitti*, Khalaj *yitti*, *yitdi*, *hittig*) ‘be sharp; sharp’ (ED 886, 889); cf. Proto-Yeniseian **et^hə* ‘scharf, spitz’ [sharp, pointed] (Werner 2002/I: 273).

The Proto-Samoyedic form has no Uralic etymology. Its base may have been borrowed from the Proto-Turkic verb **piti-*, if an onset **p-* can be safely reconstructed for it. The Common Turkic data is controversial. Many forms including Yakut suggest **yiti(g)* ~ **yitti(g)*, whereas some Khalaj dialects exhibit *h-* in forms such as *hitti*, *hittig*, and *hittig* (Doerfer 1987: §497). We know that in some cases the onset *h-* in Khalaj is secondary: *hilān* for CT *yilan* ‘snake’, *hiy-* and *hiyiš-* for CT *yīg-* ‘gather, collect’, *hili-* for CT *yüli-* ‘shave’, *hitük* for CT *yit-ök* ‘lost’, *holyun* for CT *yilgun* ‘tamarisk’ (all Khalaj data from WCh and Doerfer 1987). If *hitti*, *hittig*, and *hittig* represent further cases of secondary *h-* in Khalaj, we must reconstruct *yiti*± ~ *yitti*± for Common Turkic and so the etymology above fails.

PS **poā* ‘year’

PS **poāj* ‘Jahr’ [year] (SW 127), PS **pōā* ‘Jahr’ [year] (Katz 1987: 343), PS **poo* or **pua* ‘Jahr’ [year] (Helimski 1997: 239) (> Tundra Nenets *po* ~ *pō*, Forest Nenets *pou* ~ *pō*, *pōn* ‘always’, Selkup *po*) ← PT **pō* ‘time’ (> OT *ok* ~ *ook*) → PPM **po.n* > CM **hon* (plural **hod*) ‘(the duration

of a) year' (Nugteren 2011: 359), Kitan (畠, 頗) *po, 𢂑·po· *po 'time (時)' (Shimunek 2007: 88–89; Wu & Róna-Tas 2019: 72) → Jurchenic *pon 'time, season' > Jurchen *fon* 'time' (Kiyose 1977: 101), Manchu *fon* 'time, season' (Norman 2013: 118), Xibe *fon* [fɔn] '時, occasion' (Yamamoto 1969: §2649), *fon* 'Zeit' [time] (Kałużyński 1977: 168).

The Proto-Samoyedic form has no Uralic etymology. It strongly resembles PPM *po.n 'year, time'. This resemblance has already been noted by Krippes (1992: 141). However, direct contact between Proto-Samoyedic and Mongolic cannot be proven. PT *pō 'time' can be reconstructed as a bridge between Samoyedic and Mongolic. PT *pō 'time' has yielded CT *hō+k (perhaps originally) *‘a short duration of time’, (later) ‘opportunity, interruption’, which is attested in the Kül Tegin inscription (East 2–3), Bilge Qaghan inscription (East 4) *oks(u)z* ‘with no interruption’ (Erdal 2004: 345), and Old Uyghur *ok* ~ *ook* (‘günstige) Gelegenheit, Zeit; Zwischenraum’ [(favorable) occasion, time; interval] (HWAU 505).⁸ West Old Turkic *üd+äk* > *üd+äy, the base of which is cognate with CT üd ‘times’ and which itself entered Hungarian as *idő* ‘time, weather’ (TLH 437–439), is similar in formation.

I am in favor of the reconstruction PS *pōə. Evidently, Turkic long vowels entered Samoyedic as “V + schwa” in some cases: PS *t^lāj̪ (*t^lāj) ‘branch’ (> Mator (Spasskij) *taj* ‘branch’, Karagas *taàschita* ‘leaf’) ← PT *tāl ‘branch’ (Helimski 1992–1993: 103).⁹

2.2. Proto-Samoyedic → Proto-Turkic

PT *bilčū- ‘ripen’

PS *pi- ‘(durch Kochen) reifen’ [ripen (by cooking)] (SW 123–124) (< PU *peji-) → PT *bii- > PT *bi-lčū- > CT *bis-* ~ *biš-* (*biša* ~ *bišu*) ‘come to maturity, ripen’ (ED 376–377), Chuvash *piś-* ‘svarivat’sja; ispeč’sja; kalit’sja’ [boil, bake, heat up], etc. (ÈSČJa I 435–436).

Although Terent'ev (1999: 190) considered the Proto-Samoyedic verb a loanword from Turkic, he also noted that the former has cognates in Finno-Ugric and the latter in Altaic without giving further specifics.

8. Old Turkic *üd+üš* ‘a period of 24 hours’ from *üd* ‘time’ is a similar derivation.

9. This etymology has been doubted by Janhunen (1989: 8).

The Proto-Samoyedic form indeed has clear Finno-Ugric cognates and a Uralic etymology in PU **peji-* ‘cook’ (Aikio 2022: 24).¹⁰

If the Proto-Turkic **bilčü-* is a reciprocal/cooperative form as assumed, its base **bii-* may have been borrowed from Proto-Samoyedic or an earlier stage. The reciprocal/cooperative suffix -(X)š- has /U/ as the aorist and converb vowel. We find *bışū* in the *Dašakarmapathāvadānamālā* at o3525 (Wilkens 2016/I: 400). In that case, *bış-a* and *bış-ar* are secondary. It remains unclear why the Samoyedic front vowel entered Turkic as a back vowel.

PT **kälä-* ‘speak’

PS **keðj* ‘Zunge’ [tongue] (SW 66)¹¹ < Pre-Proto-Samoyedic (PPS) **keðl'* (< PU **käli* ‘tongue’) → PT **käl* ‘tongue’ > **käl+ä-* > PT **kälä-* ‘speak’ > CT *käläči* ~ *käläčü* ‘talk, conversation’ (ED 716), Chuvash *kala-* ‘govorit’, *skazat*, *rasskazat*” [speak, say, tell], etc. (ÈSCJa I 214–215); cf. CM **kelen*¹² ‘tongue; speech, language’, CM **kele-* (< **kelele-*) ‘speak’ (Nugteren 2011: 409–410).

PS **keðj* has a perfect Finno-Ugric cognate in **keli* and has been traced back to PU **käli* ‘tongue’ (Aikio 2012: 234). I think that PT **kälä-* is a derivation of **käl* ‘tongue’ and this, in turn, is borrowed from Pre-Proto-Samoyedic **keðl'*, which yielded **keðj* in Proto-Samoyedic. This borrowing also shows that CT š does not go back to a palatal or palatalized **l* (= **l₂*), otherwise we would find **käšä-* in Common Turkic. PPS **l* was simply substituted by */l/ in Proto-Turkic.

PT **sus-* ‘scoop up’

PS **so-js-* ‘schöpfen’ [scoop] (SW 142) (< PS **so-*) → PT **sus-* > CT *sus-* (Turkmen dial. *sus-*) ‘scoop up’ (ED 856; TDGDS 159; HWAU 632), Chuvash *ăs-* ‘čerpat’, *cedit*” [scoop, strain] (ÈSCJa I 89–90).

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10. Alternative or outdated reconstructions are as follows: FU **pejä-* ‘kochen (intr.)’ [cook (intr.)] (Sammallahti 1979: §126), FU ?**pexi-* < PU **pexi-* ‘kypsyä, kiehua’ [cook, boil] (Janhunen 1981: 245), and PU **peje* ‘gotovit’, *kipjatit* [cook, boil] (Dybo & Normanskaja 2016: 48).
 11. Aikio (2012: 245) alternatively reconstructed **käə(j)* ‘tongue’.
 12. CM **kelen* is a derivation of **kele-* ‘speak’. CM **köke-* ‘suck the breast’ > **köken* ‘breast’ (Nugteren 2011: 425) presents a similar formal and semantic formation.

Terent'ev (1999: 192) already compared Turkic *sus-* with PS **so-*, **sos-*, and **sot-*. I think that PT **sus-* can be a loanword from PS **so-js-*, a derivative of PS **so-* ‘schöpfen’ (SW 142). The simplification of /js/ through the elision of /j/ would be natural in Turkic since such a cluster is prohibited. It is also possible that PS **so-js-* was realized with a long vowel as **sōs-*.

2.3. Old Selkup → Common Turkic

CT *kančik* ‘female dog’

PS **wen* ‘Hund’ [dog] (SW 173–174) > Old Selkup **kʷen* (> Selkup /kənaj/ *k'ana·g'* etc. ‘Hund’ [dog], /kənał'a/ ‘ščenok, kleines Hündchen’ [puppy], /kenakka/ [Alatalo 2004: §2043]) → CT **kan* ‘dog’ > CT *kančik* ‘bitch, dog’ (ED 634–635); cf. Proto-Nivkh **ganŋ* ‘dog’ (Fortescue 2016: 65).

CT *kančik* ‘female dog’ is derived from **kan* ‘dog’, which in turn is borrowed from Old Selkup **kʷen*. This also shows that the suffix *+čIk formed feminine nouns. The latter can be compared with the Mongolic feminine suffix *+gčin used for forming names of female animals.

CT *kāt* ‘berry’

PS **wot3* ‘Beere’ [berry] (SW 177) > Old Selkup **kʷota* (> Selkup /kotə/ *kōd*, *kōd̥*, *ko·tt̥* etc. ‘Moorheidelbeere, Vaccinium uliginosum, golubika’ [bog blueberry] [Alatalo 2004: §1917]) → CT **kātā* > *kāt* ‘berry’ (ED 593–594), Old Uyghur *kat* ‘Beere’ (HWAU 342); cf. Written Mongol *qad* ‘an edible wild fruit resembling a small cherry’ (Lessing 1995: 902), Written Mongol *qada(n)* ‘currant, *Ribes altissimum*’ (Lessing 1995: 902).

Terent'ev (1989: 276) traced CT *kāt* to PS **keptu* ‘black currant’, reconstructed as **keptā* by Janhunen (SW 66). Helimski (1995: 80) rightly disputed this etymology.

In my opinion, the older Common Turkic form **kātā* may be a borrowing from Old Selkup **kʷota* or **kōtə*, if /o/ was realized as [ʌ] or similar in some idioms. According to Sammallahти (1979: §212), the Samoyedic word is related to FU **vos3* ‘Beere’ [berry].

CT *karga* ‘crow’

PS **wär-âjâ*(-) ‘Krähe’ [crow] (SW 170) > Old Selkup **kʷärä* (> Selkup /kuärä/ ‘Krähe’ [crow] [Alatalo 2004: §2248]) → CT **kara* > **kara+ga* > CT *karga* ‘crow’ (ED 653).

Erdal (1991: 83) derived CT *karga* from CT *kara* ‘black’. Although this suggestion is possible, the base may have been borrowed from Old Selkup **kʷärä* ‘crow’. An analogy to *kara* ‘black’ cannot be excluded.

2.4. Old Mator → Common Turkic

CT *maŋ±* ‘gait; walk’

PS **weŋkå* ‘Schritt’ [step] (SW 174) > Old Mator **meŋə-* (> Mator (Spasskij) монгалты ‘šag’ [step], мангыля гайтыгымъ ‘stup’ju edu’ [I am going to step]) → CT *maŋ* ‘gait’ (ED 766), CT *maŋ-* ‘walk’ (ED 767).

Helimski (1997: §666) established the Mator word as *meŋgal*(-) (?) ‘Schritt, ? schreiten’ [step, ? stride] and remarked that “der morphologische Bau der Formen bei Spasski kann verschiedentlich interpretiert werden”. Künnap (1995: 117) instead identified -ля in мангыля with the *l*-gerund. If this analysis is correct, the base **meŋə-* may be considered as the source of the Common Turkic *maŋ±*.

2.5. Unidentified relationship

CT *avičga* ~ *abišga* ~ *abušga* ‘old man’

PS **wə́ljs-* ‘Greis, Ehemann’ [old man, husband] (SW 169–170) (> Kamas *bū́že*, *bū́ze*, *bū́že*) → CT **a-vič* or **a-viš* > CT *avičga* ~ *abišga* ~ *abušga* ‘old man, husband’ (ED 6; Boeschoten 2022: 15).

The Samoyedic form has no Uralic etymology. The Turkic word is also of unknown origin (Röhrborn 2017: 54), but its last syllable *-ga* is generally considered a suffix. If this is true, the base **avič* or **aviš* may be a loan-word from an unattested Samoyedic form like **wə́s*, which comes from PS **wə́ljs-*. The Common Turkic onset *a-* turns out to be prosthetic. In front of a foreign /w/, this would be quite expected.

3. Conclusion

I presented above nine new Turkic loanwords in Proto-Samoyedic, three new Proto-Samoyedic loanwords in Proto-Turkic, three new Old Selkup loanwords, and a new Old Mator loanword in Common Turkic. Regarding the lexical borrowing between Turkic and Samoyedic, the following conclusions can be drawn from the newly identified loanwords.

The Turkic loanwords in Proto-Samoyedic preserved the Turkic ancient onset consonant **p-*, which was retained in Proto-Turkic as well as in Proto-Bulgar Turkic and Proto-Common Turkic but later yielded *h-* and finally *?-*. However, these loanwords cannot be assigned to any of these stages or branches with certainty since they lack distinctive consonant features. Only PS **pəsj(-)* may be considered of Bulgar Turkic origin, because the change of *t > s* occurred only in that branch of Turkic.

Two Turkic loanwords entered Samoyedic through Yeniseian. The first of these loanwords, namely PS **jojs* [jōs] ‘fat’, ultimately goes back to CT *ūz* ‘fat’ and exhibits a clear Common Turkic feature. The second one, PS **kumte* ‘kind of metal’, on the other hand, originates from Proto-Turkic **k_iümä̃t₂ă* ‘silver’ (> CT *kümüš*, Chuvash *kämäl*) and supports the reconstruction of the proto-phoneme **/t₂/*. Proto-Yeniseian **kətə* ‘winter’ is similarly traced back to Proto-Turkic **k_iit₂ă* ‘winter’, which yielded CT *kiš* and BT **küł* (> Chuvash *xěl*).

Apart from the Proto-Samoyedic loanwords in Turkic, which cannot be dated and located with certainty, the later borrowings entered Turkic from Southern Samoyedic languages, namely the older stages of Selkup, Mator, and possibly Kamas.

All the above data unequivocally demonstrates the significance of Samoyedic for reconstructing earlier periods of Turkic. The first contact between Samoyedic and Turkic must have occurred near the eastern border of South Western Siberia approximately in the third or second century BCE. This means that the oldest lexical borrowings took place between Pre-Proto-Samoyedic and Proto-Turkic.

Abbreviations

BT	Bulgar Turkic	PBT	Proto-Bulgar Turkic
CM	Common Mongolic	PPM	Pre-Proto-Mongolic
CT	Common Turkic	PPS	Pre-Proto-Samoyedic
dial.	dialectal	PS	Proto-Samoyedic
FU	Finn-Ugric	PT	Proto-Turkic
MTK	Mator-Taigi-Karagas	PU	Proto-Uralic

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