

Article

Are the oldest Hydronyms of the Ob and Yenisei Riverbasins of Yeniseian or Uralic Origin ?

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Abstract: The hydrographic basins of the Ob and Yenisei rivers in western Siberia reveal a vast complex of hydronyms older than the Russian presence. Several authors, among whom the geographers Duljzon and Maloletko, have ascribed it to the Yeniseian family, whose sole living language is now Ket. According to this hypothesis specialists of Yeniseian like Vajda or Werner infer an autochthonous origin for the Yeniseian family in this area. I propose an alternative which ascribes to Uralic and especially to Ugric and Samoyedic a significant share of this corpus of hydronyms and the origin of the hydronymic formatives.

Keywords: Uralic, Ugric, Yeniseian, Siberia, Hydronym.

The article deals with the issue of the oldest layers of hydronyms in the Ob and Yenisei riverbasins. Several authors have ascribed to the Yeniseian family the original creation of these hydronyms. After a presentation of the Yeniseian family and a description of this hypothesis the paper examines the possibility that Uralic languages also took part in the process of formation of this large hydronymic complex which spreads over an area much larger than the places where Yeniseian languages are historically attested.

1. *The Yeniseian linguistic family*

This linguistic family comprises six languages. Five are now extinct: Yugh, Kot, Arin, Pumpokol and Assan, but they could nevertheless be described in a more or less satisfactory way during the 18th and 19th centuries and even during the 20th for Yugh. An extensive survey of historical sources is published in Vajda (2001) and Werner (2005). Only one Yeniseian language: Ket is still spoken by some 200 people, for the most part over 50 years old. The current Ket population numbers 1100 people inhabiting the middle course of the eponymic Yenisei river. The 1989 Russian census indicated that about half the Kets still spoke their language but according to Anderson (2004:12) this number is overestimated. Vajda (2008:1) counts 200 speakers. The other groups lived slightly to the south upstream from the Kets if the river is taken as a reference. As described in Anderson (2004:9) former speakers were gradually assimilated either to the Russians or to other Siberian groups during the 17-19th centuries. Assans fused with Ewenkis, then Arins and Baikots with Khakas Turks, and later on Kots were russianized in the 1840s. An excellent description of Kot as spoken by the last speakers is due to the famous Finnish linguist: M. A. Castrén (1858). The northernmost group is the only one to preserve its precarious identity to this day. The Yeniseian family is sometimes also called (Yenisei) Ostyak. This term of Tatar origin according to Vajda (2001:XII)¹ is a bit vague and also applies to a Uralic people of the Ugric subbranch: Khanty or Ostyak, spoken in the tributaries of the Ob river. Vajda (2001:XI) mentions that three schools teach in native Ket thanks to the creation of a cyrillic graphic norm and to the composition of manuals by the linguist Werner. This pedagogical program was successfully validated by the Russian administrative services in 1988. The future of Ket remains

¹ The suggestion of a Tatar origin already exists in the works of Pallas (1788) or Levesque (1783). Collinder (1960:13) tried to defend a Uralic origin but this does not seem acceptable.

rather delicate in the long run. The next two generations are critical for the perennity of this last representative of the family. The word *Ket* derives from *ke't* 'man' in Ket but it can be noted that the auto-ethnonym is *Ostəyan*, that is to say 'Ostyak' or *kəndeng* 'light man'. Vajda (2001:XII) indicates that *ostəyan* is mostly used when speaking with non Ket people.

From a typological point of view these languages display numerous unusual features when compared to their Siberian neighbors. They have three grammatical genders: masculine, feminine and neuter. Hundreds of miles around no other language displays this feature but Russian. As underlined in Vajda (2001:XV) Yeniseian languages do not have (any trace of) vocalic harmony, which makes them very different from the surrounding Uralo-Altai languages. Another point is the massive use of prefixes in verb morphology, especially in Ket. Other Siberian languages massively resort to suffixes, be they Uralic, Turkic, Mongolian or Tungusic. This explains that they are generally considered isolates with no established relationship with other families. In all cases look-alike words are more probably loanwords than cognates. As indicated in Vajda (2008:1): "It is no exaggeration to say that the position of Ket in Inner Eurasia has up until now remained as enigmatic as that of Basque in Europe, Zuni in the American Southwest, or Burushaski in South Asia." Frequent hypotheses are a relationship with North-west Caucasian and / or Sino-tibetan (Cf. Starostin 1994) or with Athapaskan and Na-Dene (Cf. Vajda 2008). For the time being none has gained full acceptance even if Vajda's hypothesis seems to have more academic momentum than its rivals. It has received support from Comrie and some other major linguists. The conclusions of the present article would rather favor the other hypothesis of a relationship with Caucasian.

2. The issue of the origin of Yeniseian peoples

Several features of Kets, both linguistic or anthropological, are fairly enigmatic. Vajda (2001:XVI) suggests that the Yeniseian peoples originate in the Altai and Sayan mountains and expanded from there *ca.* 2000 years ago, at a time when it was probably in the vicinity of Proto-Samoyed people. He cites several Ket legends which hint at ancient migrations toward the north across the taiga in the quest for a secure living place. They narrate that Yeniseians crossed high mountains to escape a people called *Tystad*. Vajda considers that these are the Sayan mountains along the Chinese border. As for the *Tystad* they may be a component of the Hunnic confederation. Later on Yeniseians moved further north to escape another aggressive group called *Kiliki*. This may well be Kirghiz people. Afterward it seems that Ket people have been able to avoid the turmoil and disturbances caused by unruly steppe nomads.

The study of ancient toponyms is supposed to confirm the theory of a Yeniseian homeland in the southern area. Most river names in south-western Siberia are allegedly of Yeniseian origin: "Yeniseic languages must have been once spoken over an extensive area in western and central Siberia in Tomsk oblast or Xakasia [Khakasia], etc., or, more likely, the known Yeniseic language groups, and probably also some unknown ones, once occupied these areas. Evidence of this comes from the far-flung and extensive Yeniseic hydronyms, Keto-Yughic, Arinic, Kottic, Assanic and Pumpokolic; see also Werner (1996:3-4) for maps of the Yeniseic languages in historic times and the extent of Yeniseic hydronymics in central and western Siberia." (Anderson 2001:9). This point is the main focus of the article.

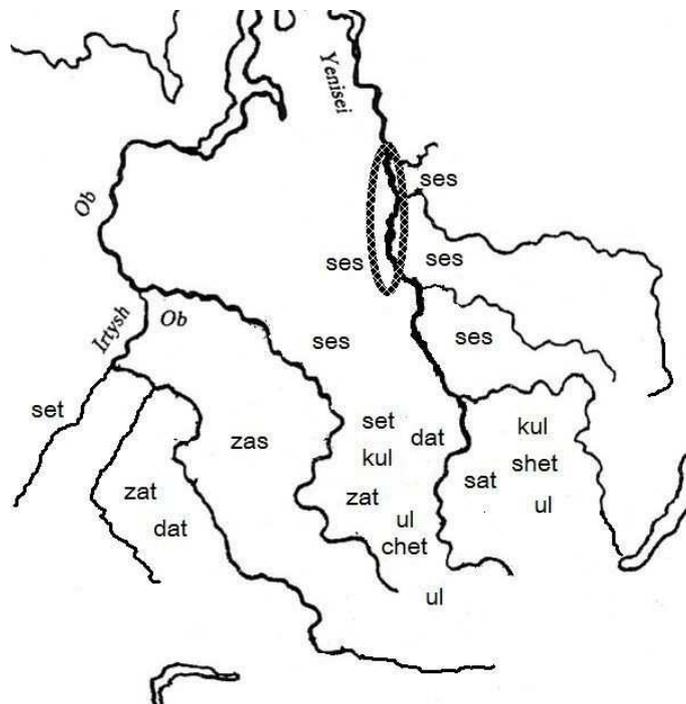
Another peculiarity is Ket clothing which seems to be an adapted garment better suited for warm weathers. As they moved northward new patches were added to insulate the body from extreme cold. Their sartorial traditions are different from those of other Siberians.

In my opinion these features tend to show that Yeniseian peoples are not an autochthonous component of Siberia peopling. But if we should follow the analysis proposed by Vajda and Werner (1996) for the hydronyms present in that area, they are responsible for the oldest layer of toponyms, which de facto makes them native to the Ob and Yenisei riverbasins. This theory was first proposed by Duljzon (1960:9). This is the approach I will discuss and challenge in the article.

3. The hydronymic corpus of the Ob and Yenisei riverbasins

Several authors have begun to study the ancient hydronyms before Russians came and modified them. Prominent are Duljzon, in the 1960ies, and Maloletko, more recently, who are geographers rather than linguists. A number of these hydronyms have been russianified during the 20th century and can be found only on the oldest maps. Maloletko of the State University of Tomsk collected all items ending with some typical formatives: *ses, s'es', čes, sis, sas, zas, sat, šet, čet, tat*, and also: *koks, kang, igai, ul, kul*.

These endings are supposed to identify the hydronyms created by Yeniseian peoples. The word for 'river' is indeed the following: Ket *s'e:s'*, Yugh *ses*, Kot *še:t*, Arin *sat* 'river (fluvius)', Pumpokol *tataŋ* 'river (fluvius)', 'brook (amnis)'.² These words are coherent and a word can be reconstructed for PY (Sg) *¹ses, (Pl) *⁴sas (Cf. Vajda 2008:30). Yeniseian, and especially Ket, has "tones" but this somewhat debatable issue can be ignored in the present discussion. *Koks* is the word for 'brook', whereas *ul, kul* (< PY *xur) is synonymous of *¹ses. *Kang* is more a nomadizing way and *igai* is present in the same zone as *¹ses but it cannot be explained by any known Yeniseian language.



Location of typically Yeniseian hydronyms

The corpus of hydronyms was first published in Maloletko (2002) and appears in Tome 3 of Werner's (2005) etymological dictionary. It provides the basis on which Werner and Vajda posit a large area of Yeniseian first-settlers. In that hypothesis the different items are linked with the following languages:

- *sas, zes, zas, šeš* reminiscent of Ket and Yugh,
- *čet, šet* reminiscent of Kot,
- *set* reminiscent of Arin,
- *tat, tet, dat* reminiscent of Pumpokol.

Only the items listed by Duljzon and Maloletko which can be entirely accounted for with Yeniseian vocabulary are shown on the map. The area inhabited by present-day Kets is also indicated. To these

² Some of the ancient glossaries are in Latin.

items can be added look-alike forms with no direct link with a known Yeniseian language which Duljzon and Maloletko have nevertheless ascribed to this family:

- *tes, tas, teš, tiš, tyš*,
- *lat, let*.

These formatives are not represented on the map and are found mostly in the Ob and Irtysh riverbasin in the western part of the map. Examples of apparently Yeniseian hydronyms out of the Yenisei riverbasin are:

- *Isset*, a tributary of the Tobol : ‘fish river’,
- *Bajanzas*, a tributary of the Irtysh : ‘limnodrome³ river’ ,
- *Balanzas*, a tributary of the Irtysh : ‘wild cherrytree river’.

Both the ending and the stem can be explained with Yeniseian words. These items cannot be explained with Uralic languages, especially because they have voiced initials. The existence of these items out of the Yenisei riverbasin complicates the scenario of a Yeniseian expansion out of a homeland located close to the Baikal lake. It can also be noted that the corpus includes instances like *satka* in the Oka riverbasin to the west of Ural mountains. But such an item cannot be ascribed to the Yeniseian family with any certainty as it does not have a stem but only a look-alike ending. It may just be a chance coincidence. Maloletko who seems to accept the hypothesis of a close relationship between Yeniseian and North-Caucasic proposed by the Russian school integrates these hydronyms in a scenario of migration coming from the Caucasus.

4. *Critical assessment*

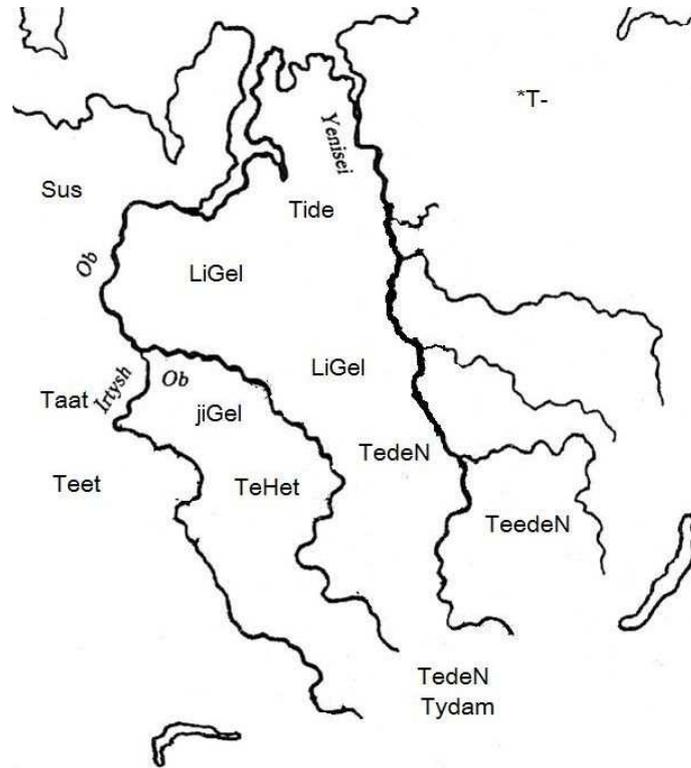
In my opinion the theory described above conflicts with a number of points which need to be developed. A first point is the phonetic structure and geographic distribution of the hydronyms which is strikingly reminiscent of sound correspondences attested in the Ugric branch of Uralic. The sound pattern *s ~ l ~ t* exists in Ostyak dialects. For example, UEW452 *sOsV- ‘[to become wet] naß werden’:

- Komi (Zyrian) *sěz-* ‘[to become wet] feucht werden’
- Khanty (Ostyak) :
 1. Kazym dialect *lol-* ‘[to make wet] feucht, naß machen’
 2. Vakh dialect *lal-, jal-* ‘[to become wet] feucht, naß werden’
 3. Vasjugan dialect *jal-* ‘[to become wet] feucht, naß werden’
 4. Kamin *tat-* ‘[to gush forth (water)] quellen (Wasser)’
- Mansi (Vogul) :
 1. Tavda dialect *tat’-* ‘[to become wet] naß werden’
 2. Konda dialect *tot-* ‘[to become wet] naß werden’
 3. Pelym dialect *tit-* ‘[to become wet] naß werden’
 4. Sosva dialect *tit-* ‘[to become wet] naß werden’

This Uralic proto-lexeme, which can easily get specialized to mean ‘river’, can account for all formatives: *sas, zes, zas, šeš, tat, tet, dat*, and for *set, čet, šet* or *lat, let*, with a mixed phonology (initial #l- but final -t). Several observations can be made: (1) Hydronyms with a phonology reflecting Vasjugan dialect also exist: like *jelok*, a tributary of the Yenisei river, (2) Two out of three hydronyms with initial #l- are precisely located close to Vakh dialect, which has the -l- reflex (3) The items with initial #t- are located in the south, which is coherent with the internal isoglosses of Ostyak and Samoyedic dialects.

³ A kind of sandpiper.

The following lexeme can be used a phonetic reference for the isoglosses : UEW445 *soksV (*saksV, *seksV) ‘[cedar, (black) pine] Zirbelkiefer, Pinus cembra’:



Uralic reflexes of *s in *siks ‘conifer’

- Komi (Zyrian) *sus, sus-pu* ‘[cedar, pine] sibirische Zeder’
- Udmurt (Votyak) *susi-pu* ‘[juniper] Wacholderstrauch’
- Khanty (Ostyak) :
 1. Vakh dialect *liyəl* ‘[black pine] Zirbelkiefer’
 2. Vasjugan dialect *jiyəl* ‘[black pine] Zirbelkiefer’
 3. Demianka dialect *texət* ‘[black pine] Zirbelkiefer’
- Mansi (Vogul) :
 1. Tavda dialect *tɛ:t* ‘[black pine] Zirbelkiefer’
 2. Konda dialect *ta:t* ‘[black pine] Zirbelkiefer’
- North Samoyedic :
 - Nenets (Yurak) dialect *tide?* ‘[black pine] Zirbelkiefer’
 - Enets *tyri, tiddi, tydi?* ‘[black pine] Zirbelkiefer’
- South Samoyedic :
 - Selkup *titeŋ* (Tas), *tėdeŋ* (Ket), *tädäk, tädək, tädäk, tädik* ‘[cedar] Zeder’, *tytyk* (Tas) ‘[black pine] Zirbelkiefer’
 - Kamas *te:dəŋ* ‘[black pine]’ ; Motor *тыдамь* ‘[cedar] кедр’ ; Taigi *tideŋ* ‘[cedar]’

It must be emphasized that the lexeme PY *ses ‘river’ is well attested and coherent enough to be reconstructible at the Proto-Yeniseian stage, but the issue of its origin as a loanword from some Uralic language cannot be avoided. It can also be noted that Mansi *šiš* means ‘river’. In order to explain the whole set of hydronyms with the Yeniseian family only, it is necessary to hypothesize unattested languages, a premise that is always unparsimonious and troublesome. On the contrary a Uralic origin provides a direct explanation of all formatives without having to posit hypothetical languages: the internal isoglosses of Uralic and Ostyak naturally account for the shape and the position of the formatives. This is a major point in the present discussion.

Other endings cannot be etymologized with Yeniseian: *tes, tas, teš, tiš, tyš*. But they can be Ugric: UEW845 *θačV ‘[to become wet] naß werden’ :

- Khanty (Ostyak) :
 1. Kazym dialect *lōstə-* ‘[to make wet]’
 2. Vakh dialect *lǎstə-* ‘[to dive, to spill, to make wet]’
 3. Vasjugan dialect *jǎstə-* ‘[to make wet, to spill, to immerge]’
 4. Krasnojarsk dialect *tǎstə-* ‘[to dip into a liquid]’
- Hungarian *áz-* ‘[to become wet] naß werden’

This second lexical basis with the same meaning ‘wet’ as the first can account for other hydronyms which can be handled within the Yeniseian framework. Another hydronymic formative is *ul*. At first sight the identification with Assan *ul* ‘river’ seems compelling. But it can be underlined that here again a Uralic alternative exists: UEW73 *eI’V ‘[humid] feucht, naß’ :

- Mari (Cheremis) *ile* ‘[humid] feucht, naß’
- Komi (Zyrian) *ulj* ‘[humid, fresh, raw] feucht, frisch, roh’
- Mansi (Vogul) *ilj* ‘[humid] naß’

Such an item as *uluul* can be explained as being ‘berry river’ in Ostyak⁴. It must be noted that the Assan work *ul* can be cognate with an Arin word *kul*, as it seems that this is a regular correspondence.

It is therefore quite intriguing that several Uralic proto-lexemes meaning ‘humid, wet’ coincide repeatedly with hydronyms ascribed to the Yeniseian family. Apparently the other Uralic words **loppa*, **ñačkV* and **poča* have not been used as hydronymic formatives. But some items like *usets* with a final affricate have similarities with UEW469 *šäčä ‘[water, flood] Wasser, Ueberschwemmung’:

- Saami (Lapon) *čacce* (N) ‘water; level of water in a river or lake’, *čäicce* (T), *čäicc* (Kld.), *čäihc* (Not.),
- Khanty (Ostyak) *seč* (Vj.) ‘[rise of water level, flood] Steigen, Zunahme des Wassers, Überschwemmung’, *sečəm-* (Vj.) ‘steigen, zunehmen (das Wasser im Sommer)’,
- Nenets (Yurak) *sāda* (O) ‘[pond] Pfütze’.

Here again, unless one resorts to the unparsimonious hypothesis of unattested Yeniseian languages with an ad-hoc development *s > ts, the origin of *usets* can only be Uralic. In my opinion it therefore appears that the premise of a Yeniseian hydronymic *substrate* needs to be seriously revisited or at the very least to be substantially moderated. Duljzon and Maloletko have also listed instances of hydronymic formatives **igai* and **-tym*. *Igai* is only attested in the Vasjugan and Jugan waterbasins (Cf. Werner 2002: III.56). The items seem to be Ugric for the most part, for example: *elle-kulun-igai* ‘the great spawning river’. None of them has a voiced initial consonant. This simple phonetic criterion is a very good marker to detect a possible Yeniseian origin before any etymological analysis. The *-igai* formative can be compared with the suffix *-inga* < **-n-juk-* ‘river’ well attested in the Finno-Saami area. The analysis of the items with *-tym* or *-sym* ending is more difficult as the corpus seems fairly heterogeneous. For example *sisimka* in the Kama waterbasin could mean ‘the seventh’ in Mordvin. The analysis in two segments *si+sim* does not seem acceptable. Moreover most of these items are attested in the Kama river on the other side of Ural mountains. I consider it advisable to avoid positing any Yeniseian influence in this area until a better understanding and agreement about the general picture is reached.

5. *The issue of loanwords in Yeniseian languages*

The possibility that the PY word **ses* ‘river’ may be a Uralic loanword raises the general issue of borrowings in Yeniseian, a point that needs to be more closely investigated. For the time being

⁴ Cf. UEW343 for the word ‘berry’ **osa*.

specialists of the Yeniseian family tend to consider that the number of loanwords is very low, even though there exists some signs of areal influence on the grammar, which sounds a bit paradoxical. “Except for obvious, recent borrowings from Iranian, Samoyedic, Turkic, and (most recently) Russian, Ket vocabulary lacks any demonstrable connection with other North Asian languages.” (Vajda 2001:XV). I tend to think that the number of loanwords is critically underestimated by current specialists. A significant number of lexemes are near transparent Uralic borrowings:

- PY *beʔč ‘snow’ ~ UEW557 *waća ‘wet snow’,
- PY *taʔi ‘winter, cold’, *taʔər ‘to freeze’ ~ UEW516 *tälwä ‘winter’⁵,
- PY *xiže ‘springtime’ ~ UEW656 *kiðe ‘springtime’,
- PY *sere ‘deer’ ~ UEW464 *sʼar(ta): Selkup *sʼära*,
- PY *kuləp ‘ermine’ ~ UEW116: Saami *gaðfe* and Finnish *kärppä*,
- PY *kūsa ‘birch’ ~ UEW211 *ku(n)éV: Ostyak *khus*,
- PY *qoj ‘dry’ ~ UEW196 *kujwa, 223 *koška: Kamas *ko*⁶.

These Uralic words are attested in Saami, which renders nearly impossible the opposite hypothesis that Uralic borrowed Yeniseian words. Besides words which can be suspected of being loanwords often have irregular Plurals in Yeniseian:

- river: Ket (Sg) ¹se:s ~ (Pl) ⁴sahs,
- deer, reindeer: Ket (Sg) ⁴sehl ~ (Pl) ²seʔn⁶,
- larch-tree: Ket (Sg) ²seʔs ~ (Pl) ¹se:j.

The regular Plural is formed with a suffixed nasal *-ŋ* or *-n*. In these borrowed words the Plural is often associated with unpredictable tone and shape changes. There exists in fact a trace of the allogenic origin of the word *ses ‘river’: the Plural of this word is irregular as in more recent loanwords. It can furthermore be noticed that the detectable loanwords: *snow*, *winter*, *springtime*, *reindeer*, *ermine*, *birch* describe basic realia of Siberian life. This definitely supports my own theory that the Yeniseian family is *not* native to north-western Siberia. These loanwords confirm that PY *ses ‘river’ is most probably a Uralic loanword and not an inherited word.

The influence of Uralic and Ugric people on Yeniseian goes beyond Siberian basic realia and involves cultural realities as well. The religion of Yeniseian people includes the belief in several souls whose names and features are demonstrably of Ugric origin. Werner (2006: 47-48) lists the names of these souls. For example in Ket, we have: *ulʼ-bej* (or-*vej*), *at-pej*, *ij*, *koqtij*, *ilʼ*, *honolʼ*, *kontoRilʼ*. Here is what Werner (2006:47) states:

Alle Seelen befinden sich im Menschen, im Herzen oder im Kopf, nur die siebente Seele, die *ulʼ-vej*, befindet sich aussserhalb des Menschen, in seiner Nähe, und dadurch entstehen alle Krankheiten.⁷

This can be compared with what Von Sadovszky (1995:157) writes about Vogul-Mansi theories about human souls:

On the Sosva, [...] men have five is [souls], while women four. [...] A particularly interesting one is the *ūrt*. The *ūrt* does not reside in or around the body like the other souls, but usually travels on its own. [...] The other Vogul peoples also describe a soul with many similar characteristics. It is called the *ort* (IK), *wort* (mK), *wurt* (uK), and *ūrt* (uL, So). It also lives outside the body, and usually portends the death of its possessor when it manifests itself. [...]

⁵ Cf. Kot *tonog* ~ Ostyak *toləγ* ‘winter’. This might be a multiple loanword into Yeniseian languages.

⁶ The irregular Plural with a glottal stop Ket ²seʔn looks like Samoyed Yurak where this morpheme precisely has that morphological value.

⁷ “All the souls are located inside each person, in their heart or head. Only the seventh soul, the *ulʼ-vej*, is located outside the body, in its vicinity, and this feature is the cause of all diseases.”

On the Sosva, the *ūrt* is characterized as a six-legged fox-like creature, that is only rarely seen, but often heard. The *ūrt*, as an omen of death, never appears to or is heard by the person to whom it belongs, [...]

It can hardly be a chance coincidence that the Ket word *ul'-vej* is a compound of *ul'*- and *-vej* 'spirit, wind' where *ul'*- can be compared with Vogul-Mansi words *urt*, *ort*, *wort*, *wurt*, and that this peculiar soul does not reside inside the body but out of it. The word and the conception are obviously borrowed from Vogul-Mansi. It can be noted that the idea that this soul is a six-legged fox-like creature is not attested in Yeniseian but it can be compared with another Ugric legend of a six-legged mythical elk.

Another soul with a straightforward Uralic origin is Ket *il'* which can be compared with UEW 247-248 **lewlə* 'breath, soul'. This word is attested in about all Uralic languages and the Ket word best matches Vogul-Mansi forms: *lili* 'breath, soul', *lilti* 'to breathe', *liltəp* 'air'. One is left to wonder if *at-pej* and *koqtij* do not mean: fifth soul and second soul respectively.

In other words, not only are basic realia of Siberia described with Uralic loanwords but the groundwork of Yeniseian approach of souls is borrowed from Vogul-Mansi. This bears ample testimony to the massive impact of Ugric people, languages and religion on their Yeniseian counterparts.

6. Conclusion

All the previously discussed points can be summarized as follows:

- Yeniseian legends narrate past migrations, possibly across mountains,
- Yeniseian clothing does not seem to be originally adapted to cold weather,
- Yeniseian words for basic realia of Siberia are borrowed from Uralic⁸,
- Yeniseian theories about souls are borrowed from Vogul-Mansi,
- Yeniseian hydronymic formatives are "shared" with (that is: *borrowed from*) Uralic,
- Yeniseian hydronyms can be detected in the Irtysh valley, where no Yeniseian language is historically attested.

It is now interesting to read the last paragraph of Duljzon (1960: 9):

Таким образом, мы приходим к выводу, что в южной части Западной Сибири, топонимов угорского происхождения не имеется. Современная граница проживания угров возникла не в результате их миграции с востока на запад, а наоборот, в результате их продвижения с запада на восток.⁹

It is hard to find neutral words to describe the conclusion reached by Duljzon. This approach which literally erases Ugric from the surface of Siberia to make room for a Yeniseian "substrate" is in my opinion near nonsensical.

Completely opposite conclusions are to be reached: Yeniseian is a huge misnomer, these languages are not at all native in the Yenisei riverbasin, nor are they even native in South-west Siberia. It is indeed possible that Yeniseian is closely related to Caucasian, as Sergej Starostin suggested. This would be coherent with their legends, their clothing and the existence of hydronyms of Yeniseian origin in the south-western part of the Ob riverbasin. Yeniseian people cannot have come from the area around Sayan mountains in a westward expansion. The only explanation that accounts for the Vogul-Mansi lexical and cultural borrowings is that Yeniseian people intruded into south-west Siberia

⁸ I plan to list all potential loanwords from Uralic languages into Yeniseian, but this is not the main focus of the present article.

⁹ "Thus we reach the conclusion that there is no toponyms of Ugric origin in south-western Siberia. The present-day limits of Ugric settlements arose not as a result of their migrations from east to west, but on the contrary as a result of their progression from west to east."

coming from the west. There they met Proto-Ugric people who were already there and borrowed the words which describe the basic realia of Siberian life and folklore. The idea that there exists a Yeniseian hydronymic “substrate” is a fiction. The extremely unusual features of Yeniseian when compared with Uralo-Altai languages, which share an areal tendency toward vowel harmony and suffixal agglutination is due to the intrusive status of this family in Siberia.

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- NB: Verner, G. and Werner, H. are the same Person. Verner is the transcription from Cyrillic of <Вернер> Werner.