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Localization of Finno-Ugric ancestral home[1].

As has been noted in several research works, the problem of localizing Finno-Ugric ancestral home is comparable to localizing Indo-European ancestral home. There exist various opinions on almost all questions dealing with the place and time of existence of Finno-Ugric ancestral home.

First of all, there is no consensus on the time of break-up of proto-Finno-Ugric. In the beginning of the article (Kallio 2006) there is a table listing the dates for break-up of proto-Uralic and its descendant proto-families, as proposed by different researchers who have been working with these questions for more than 50 years. Most opinions coincide in that the break-up of the Proto-Finno-Ugric (PFU) unity took place between 3000 BC and 2000 BC, where the majority of the researchers agreed on the date 2500 BC. Meanwhile, several recent publications on this question (Kallio 2006; Parpola 2012) suggest a hypothesis that the break-up of PFU happened in 1900 BC, and that it correlates with the break-up of Seima-Turbino culture. Moreover, in (Chernykh 1992) the author notes that this culture was connected with Indo-European tribes. Thus, at present we don't have a unified opinion neither on the time of break-up of Finno-Ugric unity, nor on its attribution to a certain archaeological culture.

Secondly, the question of contacts between Finno-Ugric and other tribes, which is also very important for verifying the hypotheses about Proto-Finno-Ugric ancestral home, is yet unresolved. Two opposite opinions compete. In the works (Koivulehto 1991, 1999) and his followers the authors suppose that numerous words similar both phonetically and semantically in Finno-Ugric and Indo-European languages are borrowings. But in (Helimski 2001) this hypothesis was criticized; following V.M. Illich-Svitych, E.A. Helimski states that these words should be traced back to Proto-Nostratic, and that they also have reflexes in Altaic, Dravidian, and Kartvelian languages. Besides, the words in question mainly belong to the basic fundamental vocabulary, which is relatively stable and less susceptible to borrowing.

Due to the uncertainty about the time of the Finno-Ugric unity break-up and its contacts with other languages, the localization of the ancestral home also becomes problematic.

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In the present article we would like to discuss this problem on the base of full and careful etymological analysis of Finno-Ugric flora and fauna names and comparison of these data with the paleobiological data.

It is traditionally agreed, that Finno-Ugric unity disintegrated in the second half of 3rd millennium BC, due to ecological factors. One of the first and still valid pieces of evidence about the localization of ancestral home is the existence of common words for 'honey' and 'bee' in Finno-Ugric languages. It means that proto-Finno-Ugrian people were acquainted with honey and bees, and, therefore, they lived near honey bee habitats.

However, as was shown by P.Veres (cf. Veres 1984-85), the newest results in paleobotanics and other related fields prove that the "linguistic paleontology" in Finland and Hungary was wrong in defining the eastern border of deciduary forest and wild honey bee distribution.

Since this was the main argument in determining the eastern border of the original Finno-Ugric territory, we can say, that the conclusion, made by the researchers was wrong. New works in paleobotanics by N.A. Khotinsky and his students: V.S. Volkova and V.A. Belova prove that the spread of deciduary forest did not stop on the western, European slope of the Ural Mountains, as it was supposed earlier (Khotinsky 1977).

Of course, only one criterion would not give a reliable localization. Therefore, more evidence on other animals and plants was needed.

The existence of common Finno-Ugric word for hedgehog also speaks in favor of European ancestral home. Earlier, it was considered that hedgehogs do not live to the east of Ural Mountains. The northern border of its distribution area goes along the 61 parallel. In 1950s E.Molnar demonstrated that extrapolating modern-time boundaries of animal distribution areas into earlier times is not correct. This was a valid objection, scholars in Finland and, independently, in Hungary, proposed to localize the ancient habitat of Uralic peoples in the region from Baltic sea to Ural Mountains.

The views of E.Itkonen, P.Ariste, A.Joki and other Finnish and Estonian scholars could have arisen from the idea of R.Indreko about Finno-Ugric origin of the people with Mesolithic fishing and hunting culture – Kunda, who lived on the territory of today Estonia. Besides that, the above mentioned scholars could base their conclusions on the works of H.Moora, L.Janits and K.Vilkuna, who believed that Finno-Ugric people could inhabit the Baltic territory as early as several thousand years BC.

Due to these conclusions, the scholars assumed the continuity of Finno-Ugric presence in the Baltic territory, starting from the Mesolithic times. On the other hand, the above mentioned scholars tried to account for the results of linguistic paleontology, to coordinate the archaeological data with the theory of Finno-Ugric localization between Volga and Ural

Mountains. They came up with the idea of localizing Uralic (Finno-Ugric) ancestral home along a broad stripe from Baltic sea to Ural Mountains.

Meanwhile, in the recent decades the theory that the Finno-Ugric ancestral home was spread from Ural Mountains to the Baltic Sea was supported and developed in the works (Sammallahti 1995; Wiik 2002), since the new dating of FU unity break-up strengthens the arguments in favor of this theory. In the article (Salminen 2001: 391) you can find a critical analysis of the hypothesis. In his opinion it seems "truly hubristic because early cultural boundaries need not have corresponded to linguistic boundaries any more than they do in historical times, for instance in Siberia, and because a language can spread through diffusion as well as migration".

In the aforecited works the localization of the ancestral home is, to a large extent, based on the hypotheses of archaeologists. But, as far as we can see on the example of the above mentioned discrepancies in attribution of Seima-Turbino culture to the speakers of Finno-Ugric or Iranian languages, not always the correlation between culture and language is reliable. Therefore, it seems useful to us to study the linguistic reconstruction and to compare it with paleobiological data.

The fact that this method also has its drawbacks has been repeatedly noted in different research works, cf., for example, (Mallory 1989, Kallio 2006). The meanings of the reflexes of the same word can undergo identical changes independently, due to the emergence of a certain object, after the break-up of the linguistic unity. Such cases can not serve to prove that the object was known to the speakers of the proto-language.

We think that to overcome these difficulties in localizing the ancestral home, it is very important to conduct integrated research and complex reconstruction of whole semantic fields of the lexis, because the existence of several words indicating the same geographic range or time period appears to be a more reliable proof.

Besides that, we should remember the importance of the step-by-step reconstruction. Reconstructing Finno-Ugric or proto-Uralic ancestral homes, we shouldn't neglect the descendant proto-families and their systems of semantic fields, since such research would significantly increase the reliability of correlation between linguistic and paleobiological data.

At present, there exist several publications that present the results of reconstruction of objects important to Finno-Ugric culture. First of all, we should mention the article (Häkkinen 2004), which is based on UEW and embraces literally all areas of life of the Proto-Finno-Ugric speakers. The article (Napoljskih 1997) is less exhaustive than (Häkkinen 2004), but it attempts to compare linguistic reconstruction and paleobiological data in order to more precisely localize proto-Finno-Ugric ancestral home.

V.V. Napol'skih in his work (Napol'skih 1997) analyzes the localization of animal habitats as well as distribution of plants, the words for which are reconstructed for proto-Finno-Ugric language, in order to verify the localization of Finno-Ugric ancestral home.

He concludes, that proto-Finno-Ugric ecological range in the 3rd millennium BC should be defined as largely coinciding with the western and southern (south-western) parts of proto-Uralic ecological range (central Ural, central and southern Trans-Urals, southwestern part of Western Siberia) with possible inclusion of some areas to the west of Ural Mountains – first of all, the basins of Kama and upper Vychegda.

Let's take a look at the arguments of V.V. Napol'skikh.

He writes that for FU several more (in comparison with PU) names for taiga trees are reconstructed (fir, silver fir, Siberian pine):

FU **nakrV* 'cedar nut / cedar cone' UEW, 298, FU **nɥ\ɔ* 'silver fir', UEW, 302, FU **Sala* 'elm', UEW, 458

The word **nine* 'bast', as noted by Napol'skikh is reconstructed only for FP language, and should not be projected into FU level, as he suggested in Napol'skikh 1997.

Based on the reconstruction of tree names, Napol'skikh concludes, quite naturally, that the trees with names reconstructed for FU protolanguage could be found in western Siberia as well as to the west of Ural Mountains.

V.V. Napolskikh points out that we have for FU several more (than for PU) words for animals, birds and fish, which could help determine the localization of FU ecological range: FU **maj(a)*- 'beaver', UEW, 264, 697; FU **sije-le* 'hedgehog', UEW, 478.

Since XIX cent. uralists use the "arguments of beaver and hedgehog" to argue for European localization of FU ancestral home. Meanwhile, hedgehog and beaver were known in western Siberia (river Vasyugan basin, for example) as epibiotic animals relatively recently – their presence there during the warmer period in Atlanticum is even more probable.

We fully agree with Napol'skikh's arguments and his conclusion that commonly accepted etymologies do not allow to determine the exact localization of FU ancestral home.

However, both articles: (Napoljskih 1997; Häkkinen 2004) are based on etymologies from (UEW), although it's been already 30 years since it was published, and a number of other extensive dictionaries on individual languages of the family have appeared. Step by step analysis of animal names in these dictionaries allowed us to propose a number of new etymologies, that might be useful for verifying the localization of the Finno-Ugric ancestral home.

In the following text, when working with well-known etymologies, we adhere to the reconstruction from (UEW). In (Janhunen 1981; Sammallahti 1988) this reconstruction system was substantially elaborated, but, since many etymologies of animal names present in (UEW)

weren't included in the latter works, although they seem rather reliable to us, we decided to stick to (UEW) reconstruction.

We have undertaken a major analysis of the full corpus of names for trees, animals, birds, and fish in modern Uralic languages. We propose several new etymologies and corrections to traditional etymologies which, as we will show, help to narrow the range of FU ancestral home localizations.

Many names of trees, animals, birds and plants have reliable reconstructions on the FU level.

I. Names of FU trees

FU trees: **so/a/ęksV* ‘cedar' (UEW, 445), **ku/ose* ‘fir' (UEW, 222), **ńulka* ‘silverfir' (UEW 327), **näŋV* ‘larch' (UEW 302), **paje* ‘willow’ (UEW 349), **pVćV* ‘willow' (UEW, 367), **pojV* ‘asp' (UEW, 391), **kojwa* ‘birch' (UEW, 169), **kućV* ‘birch' (UEW, 211), **śala* ‘elm' (UEW, 458), **pićla* ‘rowan’ (UEW, 376).

FU *śala ‘elm’, UEW, 458

fin. *salava, salaja,* (? *halava*, *halaja*) 'sallow, brittle willow'; mord. *śeĺej*, *śeĺeŋ* (E), *śäĺi* (M) ‘elm’, мар. *šol* (КВ), *šolo* (U B) ‘elm’; **mans. *solp-jiw* (LU), *sol'p-jū* (P), *sōl'p-jiw* (K) ‘bast, linden, honeysuckle’, МК, 521b[2];** hung. *szil* ‘elm’.

We have included Mansi *solp-jiw* (LU), *sol'p-jū* (P), *sōl'p-jiw* (K) ‘bast, linden, honeysuckle’. This comparison is phonetically good. Such semantic shift does not seem strange to us, neither does the fact, that Finnish *salava* means ‘sallow, brittle willow’, since elms do not grow on Finnish and Mansi territories.

The authors of UEW note that this word is very similar to I.-E. forms: lat. *salix,* O.-H.-Germ. *sal(a)ha* 'sallow'. They explain the *h-* in Finnish as a result of analogy with *halea* ‘light, greyish’. This explanation seems very dubious. The semantic analogy between ‘sallow’ and ‘light, greyish’ looks odd, and would hardly be obvious enough for the speakers to create a phonetic analogy.

The vocalism in Mordvinian is somewhat obscure. The authors of UEW suppose that FU **a* > mord. E *e,* M *ä* under the influence of the anlaut *ś-*. However, there are no other examples In the UEW, with doubtless FU **a* and mord. E *e,* M *ä* correspondence.

Conclusion.

The comparison of the distribution areas for different trees, which were known to FU speakers gives two different possibilities for localizing FU ancestral home – to the west of Ural Mountains or in the southern part of Western Siberia (cf. Derevja i kustarniki SSSR 1966, 1987).

[2] With bold script are marked such etymologies, which were supposed by us.

II. Finno-Ugric faunistic names.

The analysis of faunistic names allows us to specify this localization. We have reliable reconstructions for the following FU lexemes:

FU animals: **uče* ‘sheep’ (UEW, 541), **śɨrta* ‘deer’ (UEW, 464), **poča* ‘deer’ (UEW, 387), **repä* ‘fox’ (UEW, 423), **ńukśe* ‘sable’ (UEW, 326), **lujV* ‘marten’ (UEW, 252), **ńoma* ‘hare’ (UEW, 322), **śije-le* ‘hedgehog’ (UEW, 478), **šiŋe-re* ‘mouse’ (UEW 500), **lepa* ‘bat’

PU * *śɨrta* ‘deer’, 464

mord. *śarda* (E M), *śardo* (E) 'elk' (E:Gor M:P E:An M:Prol M:Sind), ‘deer’ (E:Večk M:Prol), ‘reindeer’ (E:Mar), ‘the Great Bear’ (E:Mar M:Petr), Paasonen, 2091; мар. *šarδə̑* (KB), *šorδo* (U B) 'elk'; Khan. V, Vj, Trj, J *surtɨ*, Kaz *sŭrtĭ*; Mans. KU, LO, SO *surti* ‘one year old deer calf’; nenez. *siraj* (O) 'one year old cow', **enez. *sire* ‘one year old female reindeer’, Helimski 2007 (2); ngan. *c'upaˀку* ‘ female reindeer’, Helimski ngan. cardindex.**

We propose to include in this etymology the comparison with Enets and Nganasan. E.A.Helimski noted, that, as far as he knew, the Selkup word *sjaera* 'Cervus tarandus', included by the authors of UEW is not recorded in the existing dictionaries of Selkup language.

Mans. SO *surti* ‘one year old deer calf’ is probably borrowed from Khanty. In UEW the form **śarta* is reconstructed. However, taking into account the Samoyed **i*, which could develop only from PU **ɨ*, **i*, the form **śɨrta* should be reconstructed.

The inclusion of Samoyed data into this etymology, allows to reconstruct the PU meaning ‘deer’, which has been preserved in distant groups of Uralic languages, Samoyed languages, Khanty and Mordvinian.

FU ****lepa* **‘bat’

fin. *lepakko* ‘bat’, SSA II, 64; Häkkinen 2004: 594 khan. *lāpə* (Kr) ‘bat, a kind of owl’, DEWOs, 848.

According to SSA II, 64 and DEWOs, 848 the Finnish and Khanty words don’t have an etymology. The comparison that we propose has regular phonetic and semantic correspondences. In Hakulinen 1953, 135 fin. *–kko* is treated as an adnominal diminutive suffix.

Comparison of these forms with Komi *лэбны*, Udm. *лобыны* ‘to fly’ (Lytkin, Guljaev 1970: 165) is impossible, since Perm forms indicate PFU **-pp-* in the inlaut, while Finnish and Khanty forms indicate PFU **-p-*. Correlation of first and second syllable vowels **e-a*, although not very frequent in PFU, is recorded for words with reliable etymologies, for example: **aśe-* ‘to put, place, lay; put up a tent’, UEW: 18; **aśke* (~ *-lV*), **aćke* (~ *-lV*) ‘step’, UEW: 19; **kačke* ‘bitter’, UEW: 113 and so far.

FU birds: ******sara* 'hen', **warV* 'crow' (UEW, 559), **päćkV* 'swallow' (UEW, 358), **ćikV* 'swallow', **kVśV* 'duck' (UEW, 111), **śoδka* 'duck' (UEW, 482), **kVrta* 'duck' (UEW, 150), **wajće* 'duck' (UEW 552), **lakla* 'brant(goose)', **tokta* 'diver' (UEW, 530), **(j)üpV* 'owl' (UEW, 98), **tarV-kV* 'crane' (UEW, 513), **ćVlćV* 'sandpiper' (UEW 50), **čVr(p)V* 'seagull', **kaja(-ka)* 'seagull' (UEW, 117), **kärV* 'woodpecker' (UEW, 230).

FU ****sara* 'hen'**

морд. ***saras*** **(E),** ***saraz*** **(M) 'hen', Paasonen, 1952; hung.** ***szárcsa*** **'hen', EWUng, 1396.**

The existing etymologies of Mordvinian and Hungarian words do not seem to be satisfactory. Ryabov, 30 suposes that mord. *saras* (E), *saraz* (M) 'hen' is a borrowing from pers. *sarak* 'starling'. According to EWUng**,** 1396 hung. *szárcsa* 'hen' derives from *szár* 'yellow'.

FU ****ćikV* 'swallow', Lytkin, Guljaev 1970, 305**

komi *ćikɨ* 'swallow', Lytkin, Guljaev 1970, 305, mar. B. *цыгак* 'swallow', Vasiljev 1991, 383, M. *чыгаш* 'swallow'; khan. DN *ćəkəjəm*, KoP *cəkəj-imə*, Ni *śăkəj-ĭmə* 'swallow', DEWOs, 1500; mans. T *čäkəjəχ*, K P *śäkəjäχ*, LM *śäkäjiχ*, N *śakajiχ* 'swallow'.

This comparison was proposed in Lytkin, Guljaev 1970, 305 and for unclear reasons wasn't included in UEW and DEWOs. Presumably, **i* should be reconstructed in the first syllable, as it is the only regular source of proto-Mari. **ĭ*. The data in other languages do not contradict this hypothesis.

PU ****śoδka* 'duck', UEW, 482**

fin. *sotka* 'Tauchente; Fuligula'; est. *so~tkas* (gen. *so~tka*) 'гоголь', dial. *sotka, satka* 'Tauchente, Fuligula marila', Mдger 1983, 7; saam. **ćōδkē*, Lehtiranta 2001, 172: N *čoađ'ge -đg-* 'golden-eye; Glaucion clangula', L *tjår'hkē* 'Schellente, Klingelente; Clangula glaucion, Fuligula clangula', Kld *ťšuəδgkE*, Not *ťšŭDgkE* 'Tauchente, Schellente, Glaucion clangula'; морд. E *śulgo*, *śulga*, M *ćulga* 'irgendein Wasservogel, der gut taucht; Fuligula clangula, Colymbus arcticus'; mar. KB *ala-šoe* 'bunte Ente', B *śue* 'Gänsejäger; Mergus merganser'; udm. G *śuḷ̂* 'Taucher'; komi *śul(t)-ćež* 'Ente', Lu *śulka* 'Ente', P *śul-ćež* 'Schellente; Glaucion clangula'; khan. V O *saj*, DN *soj* 'Anas clangula' (> selk. *sai* 'Mergus merganser'); mans. T *sɛ̄ĺ*, KU SO *sāĺ*, P *sē̮ĺ* 'гоголь; Fuligula clangula'; **selk. Ob.ch, Tym** ***сок,га*****, Ob.s, Ob.ch, El., Tym.** ***сог,а*** **'соксун, утка-кряква', Bykonya 2005, 212; Taz.** ***soqa*** **'утка-широконоска (соксýн)', Helimski 2007(1).**

UEW reconstructs FU **śoδka* 'duck'. Among all the etymologies in UEW the inlaut cluster **δk* is reconstructed only in this etymology, and its reflexes in Samoyed languages are unknown. However, general reasoning (PU **δ* is often dropped in Samoyed languages; cf. PU **nejδe* 'girl,

daughter' > PS **ne*, UEW, 302) allows us to suppose that PU **δk* > PS **k*. Based on this speculation we propose to include into this etymology Ob.ch, Tym *сок,га*, Ob.s, Ob.ch, El., Tym. *сог,а* 'соксун, утка-кряква', Bykonya 2005, 212; Taz. *soqa* 'утка-широконоска (соксу́н)', Helimski 2007(1).

FU ****lakla* **'brant(goose) ', SSA, II, 41

fin. *lakla* 'Wildgans, Löffelente'; est. *lagle* 'казарка'; khan. VT *la̮ɣ-*: V VT *la̮ɣ-lont* 'казарка', DEWOs, 815.

In (SSA II, 41) Saam. L *lāful* 'keräkurmitsa' is also viewed as a reflex of the same etymon. However, A.Aikio justly points out that the Saam form phonetically cannot be a reflex of FU **lakla*.

PU ****čVr(p)V* **'seagull'

komi Vym. ***čarka*** **'вид перелетной водяной птицы, напоминающей чайку', SSKZD, 105; hung.** ***sirály*** **'seagull, EWUng, 1332; nenez.** ***ma̮рбяв*** **'птица из породы чаек', Tereshenko 1965, 633, 637 (> enez.** ***tarp'au*** **' маленькая птица типа чайки, чайка-мартышка', Helimski 2007 (2); khan. O** ***ta̮r'pew*** **'самый маленький вид крачек', DEWOs, 1478; rus. dial.** ***марбей*** **'птица буревестник', Anikin 1997, 557).**

In the proposed etymology the most reliable is the comparison of Komi and Hungarian forms. The etymology in EWUng, 1332, where the authors derive the word *sirály* 'seagull' from *sir-* 'to cry' with an adnominal suffix *-ály* looks semantically less reliable than the comparison with the Komi word. (There is no etymology for Komi Vym *čarka* 'a kind of migratory aquatic bird, resembling a seagull' in Lytkin, Guljaev 1970).

The comparison with Nenets *мӑрбяв* 'a kind of gull', Tereschenko 1965, 633, 637, which has become the source for the borrowing in the neighboring languages (Enets, Khanty, dial. Rus.) is more problematic. According to the Salminen's dictionary (Salminen 1998) there is an adnominal suffix *-яв*, but not *-бяв* in Nenets. Therefore, the source for the Nenets word should have been **tərp-*.

If we compare this proto-form with Komi and Hungarian words, we should reconstruct PU **čVrpV* 'seagull'. The problem with this comparison is in the supposed reflexes of the inlaut cluster **-rp-*. Indeed, for Komi **-rp-* > *-r-*, but in Hungarian**-rp-* > *-rv-*, dial. *-r-*. However, we have only three instances of FU **-rp-* in Hungarian, one of which has variations in the dialects *-rv-*//*-r-*: FU **arpa* 'irgendein Wahrsagungs-, Zaubermittel', UEW, 16 > hung. *orvos* (dial. *óros*, *órvas*, *órvos*, *urus*) 'Arzt; dial. Arznei; Zauberer, Hexenmeister', the development of **-rp-* > hung. *-r-* doesn't seem very reliable. In Komi we should suppose the suffix –k-, which is rather

frequent, cf., for example, *aj* 'father, grandfather' (Peč., P, PO), *ajka* (S, P, PO) 'Vater des Mannes, Gatte' (UEW: 609).

The vocalic reconstruction in this etymology is also unclear. Theoretically, the reflexes of the first syllable vowel could ascend to PU **ü,* but we have to allow other possibilities as well, taking into account the lack of information on first syllable vowel reflexes in Hungarian and Samoyed (also in Perm languages in the "palatal position", cf. Normanskaya 2009).

Note that this etymology does not include Mari M. *čarlan*, E. *tarĺák* 'seagull', probably borrowed from chuv. *čarlan*, *čarlak* 'seagull, heron' < tat. *ак-чарлак* 'seagull', tel. *čarlaak* 'seagull', turkm. *čarlaG* 'seagull', Fedotov 1996, II, 392. Phonetically and semantically the Mari radical could ascend to the PU stem, but the existence of identical word-formative suffix in Chuvash and Mari speaks against separating these two words. Chuvash *čarlan*, *čarlak* 'seagull, heron', was probably borrowed from Tatar. But the possibility of Uralic source for borrowing is excluded, since they have a firm Turkic etymology (cf. turkm. *čarlaG* 'seagull'). In view of these facts we prefer to separate mar. M *čarlan*, E *tarĺák* 'seagull' from PU **čVr(p)V* 'seagull'.

FU **kärV* 'woodpecker', 230,

fin. *kärki* 'woodpecker', SSA, I, 476; **Häkkinen 2004: 541**; saam. *kerats*, *keratje* 'Schwarzspecht', L *kieratj* 'id. od. der grosse Buntspecht; Dendrocopus maior', Not *k□reh‰* 'ein Vogel (mit schriller Stimme)'; **mord. M:P *ќärґä* 'black woodpecker', Paasonen, 669**; **mar. U *keryə* , B *keryе***; komi P *kịr* 'Specht', V P *śęd-kịr* 'Schwarzspecht' (> khan. Kaz. *kăr* 'Schwarzspecht', mans. KM *kə̈rkə̈rēk*, *karkarēkə*, SO *kar* 'Specht'); khan. V *kėrəm* 'Specht, Schwarzspecht', DN *kėrəp* 'Kleinspecht', Ni. *ka□rəp* 'Schwarzspecht' ?; mans. KU *kə̄rəp*.

We think that the following two etymologies from UEW should be combined: FU **kErV* 'woodpecker', UEW, 230 and FP **kärke* 'woodpecker', UEW, 652. In this case we have to postulate the suffix **-k-* for Finnish, Mordvinian and Mari forms. On the material of UEW etymologies we can see that **-k-* is one of the most frequent suffixes for the protolanguage: PU **piδe* (~ *-kə̈*) 'high, long', UEW, 377; FP **kurV*(*-ka*) 'hill, rise', UEW, 677 etc.

The relationship between this etymology and PU **karV* 'woodpecker': Khanty V *kă̈jərkị*, Trj *kə̈jarŋị*, Kr *χă̈χraj*, O *χă̈ŋra* 'Specht' (> Mans. N *hohra*, *hoŋhra* 'red-headed woodpecker'); Mans. T *karkāj*, KU *χōrχəj*, P *korkəj*, SO *χɔ̄ŋχra*, N *χå̊rχėj*; hung. *harkály* (dial. *harakáj*, *harka*, *harkáca*, *harkány*, *hörkaj*) is not completely clear. The origin of *-j-* in Khanty is unknown; it cannot be derived from PUg **karV* 'woodpecker'. May be a borrowing from Khanty to Nenets?

FU fishes: **ončV* ‘white salmon’ (UEW 339), **koj(a)ma* ‘salmon’, **mEktV* ‘dace’ (UEW, 295), **kiśkV* ‘blay’, **śäkä* ‘burbot’ (UEW, 469), **jekV* ‘perch’ (UEW, 96), **totke* ‘tench’ (UEW 532).

FU ****koj(a)ma* **‘salmon’

fin. ***kojama*** **‘grosser männlicher Lachs, grosser Fisch’; saam. N** ***goadjin*****, I** ***kuáijim*** **‘grosser männlicher Lachs’, SSA, I, 386; Aikio 2009, 252**; **kom.** ***kǫm*** **‘grayling’ (Lytkin, Guljaev 1970: 131); mans. N** ***kōm*** **‘salmon’, (МК: 218).**

SSA proposes a borrowing from Finnish to Saami, but, as was reasonably noted in (Aikio 2009, 252), representation of this word in northern Saami dialects speaks in favor of original status of this word in Saami. Aikio, on the contrary proposes a borrowing from Saami to Finnish. However, since phonetic correspondences in Saami and Finnish forms are regular, the borrowing hypothesis is not necessary. We have proposed the comparison with Mansi name for 'salmon'. In this etymology the inlaut group **-j(V)m-*, is reconstructed, it loses the *-j-* in Mansi, which is quite regular, cf. FU **kojmV* (**koj(e)-mV*) ‘Mann, Mensch’, 168 > mans. T *kom*, KU *ꙗom*, P *kum*, SO *χum* ‘Mann', P *kį̈m* ‘Ehemann', KU *χoməj-*, P *kį̈məj-* ‘sich verheiraten'.

The fact that in Mansi we see *k-* in the anlaut instead of *x-* needs a separate comment.

Let's try to interpret it, taking into account that our knowledge of the system of FU phoneme reflexes in Mansi is rather limited.

Often FU **o* in the position before **j* gives front vowel reflexes in Mansi (and Khanty, and Perm languages):

PU **koje* / **koja* ‘Motte, Wurm’ > Mansi *kij* (TJ), *käj* (TČ) ‘Motte’ (UEW: 167),

ПУ **pojka* ‘Sohn’ > Mansi *püw* (TJ KU P), *piɣ* (So) ‘Sohn, Knabe; Junges’ (UEW: 390) etc. According to Honti, the standard reflex of Proto-Mansi **-ŭ̆-* is в So или N *-o-*, before which **k-* doesn't change into *χ-*. For example:

Proto-Mansi. **kŭ̆j* > (N) *koj-* ‘verfolgen’ (Honti 1982: 223).

PMansi **kŭ̆šəm* (~ *-ä*) > (N) *kosəm* (Honti 1982: 223) etc.

We also propose to add to this etymology the comparison with kom. *kǫm* ‘grayling’. In (Lytkin, Guljaev 1970: 131) this word is compared with Udm. *kį̈nį̈* ‘nerfling’. However, this comparison is controversial among researchers, since it has unusual vocalic correspondences, and the reflexation of PFU **-ŋ-* as Komi *-m* and Udm. *-n* is rare and attested only in Komi *pum* – Udmurt *pon* ‘end’. Sebestyen has compared the Udmurt forms directly with Fin. *keno* (Lönnr) ‘trout’ (Sebestyén 1935: 48). Phonetically, it seems more valid.

FU ****kiśkV* **‘blay’, 161

fin. *kiiski* (gen. *kiisken*, *kiiskin*) ‘Kaulbarsch, Parca minor l. cernua, Acerina cernua’; est. *kiisk* (gen. *kiisa*) ‘ruff’; mord**. (E:Bug) *kośkata* ‘a kind of fish, blay ’;** hung. *kisz*, *kịsz*, *k□sz* 'blay', EWUng, 859.

We propose to add to this etymology the comparison with mord. E:Bug *koskata* ‘a kind of fish, blay’. The consonantal correspondence in this etymology is ideal. As was noted in the work of E. Itkonen (Itkonen 1946), there are quite a few examples on fin. *ii* ¬ mord. *o* vowel reflexes for **a*-bases. For instance: FW **čiŋa* ‘foam’, UEW, 621 > fin. *hiiva* 'Hefe'; mord. E *čov*, *čoŋ*, M *čov* 'foam'.

This etymology shouldn't get confused with PFU **kećä* ‘a kind of fish’ (UEW: 141) and Rus. *гычь* Pinezh., Arkh., Shegren (СРНГ 7: 253) < Komi *gi̮ć* (S) 'Karausche; Cyprinus Carassius' < PFU **kećä* ‘a kind of fish’ (UEW: 141).

PU **jekV* ‘perch’, 96

udm. S G *juš*, Uf *d̮uš* ‘perch’ ?; komi SP *jokị̄š*, SO *jokuš* ‘perch; Perca fluviatilis’; khan. V *jöɣ*, DN Kaz *jew* ‘perch’; mans. **KO P VN *jäɣt*, LU *jeɣt* ‘чебак, Rutilus rutilus lacustris’, Honti 1982, 141, enez. W *d’êha* (*-i*), *dígge* ‘perch’, Anikin, Helimski 2007, 116; *d'eks* ‘perch’, Katzschmann, Pusztay 1978, 50.**

In UEW the Nenets *nʹiχɨ̄* (T), *nɨ́̄χɔku* (Nj.) is included in this etymology, it does not correspond to other Finno-Ugric forms phonetically: PU **j-* > PS **j-* > ненец. *j-*. In the monograph Anikin, Helimski 2007, 116 the authors note the similarity between Nenets T *nʹiχɨ̄*, Nj *nɨ́̄χɔku*, Enets W *d’êha* (*-i*), *dígge* ‘perch’ and Evenki *nʹēkē* 'perch', but the direction of borrowing is not specified; the authors point out that the relationship between Enets and Nenets words is unclear.

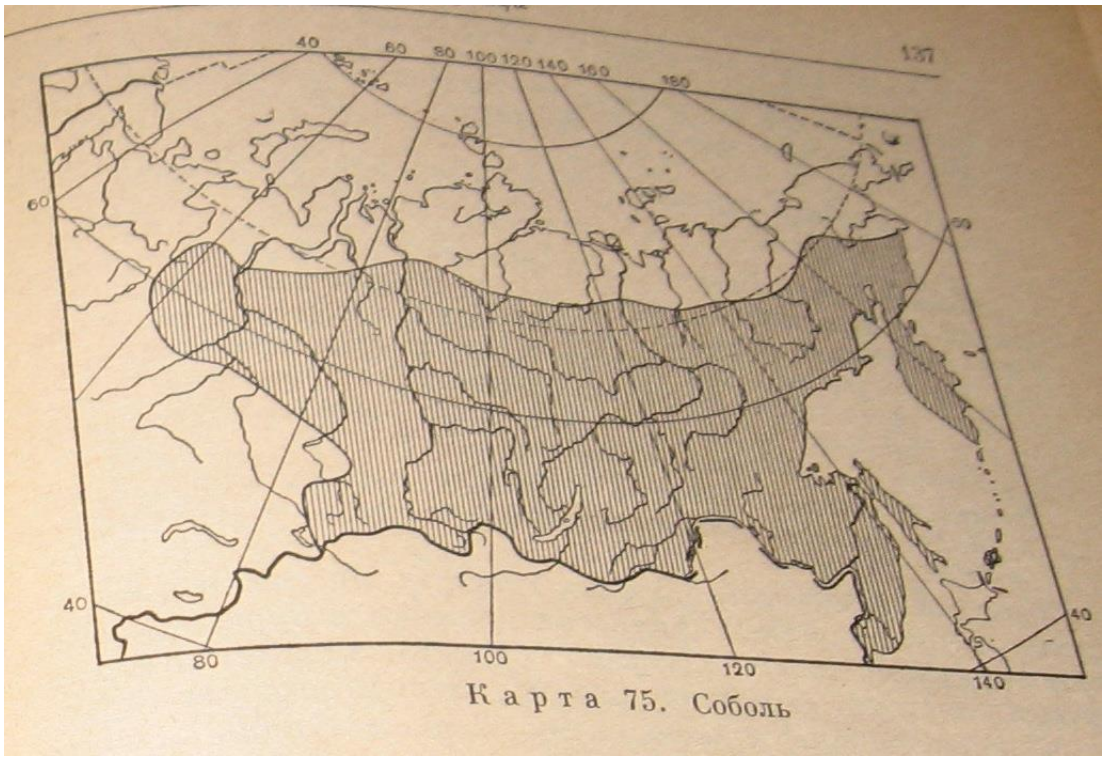
We think that the following relationship between the words is likely. Enets W *d’êha* (*-i*), *dígge* ‘perch’ flawlessly corresponds with FU **jekV* ‘perch’, both phonetically and semantically. We should note, however, that the reconstruction of the FU proto-form **jekV* ‘perch’ is not very reliable.

As was observed in Zhivlov 2005, the correspondence of Khanty inlaut consonants *ɣ* (V) ~ *w* (DN Kaz) comes from proto-Khanty **w* (in the case of proto-Khanty **ɣ*, it would give *ų* in DN and Kaz). Probably for this reason the authors of UEW and DEWOs put a question mark next to Khanty form in this etymology. However, taking into account the identical semantics, we tend to consider the traditional idea of PU **-k-* > Khanty *ɣ* /*w*, (cf. Collinder 1960).

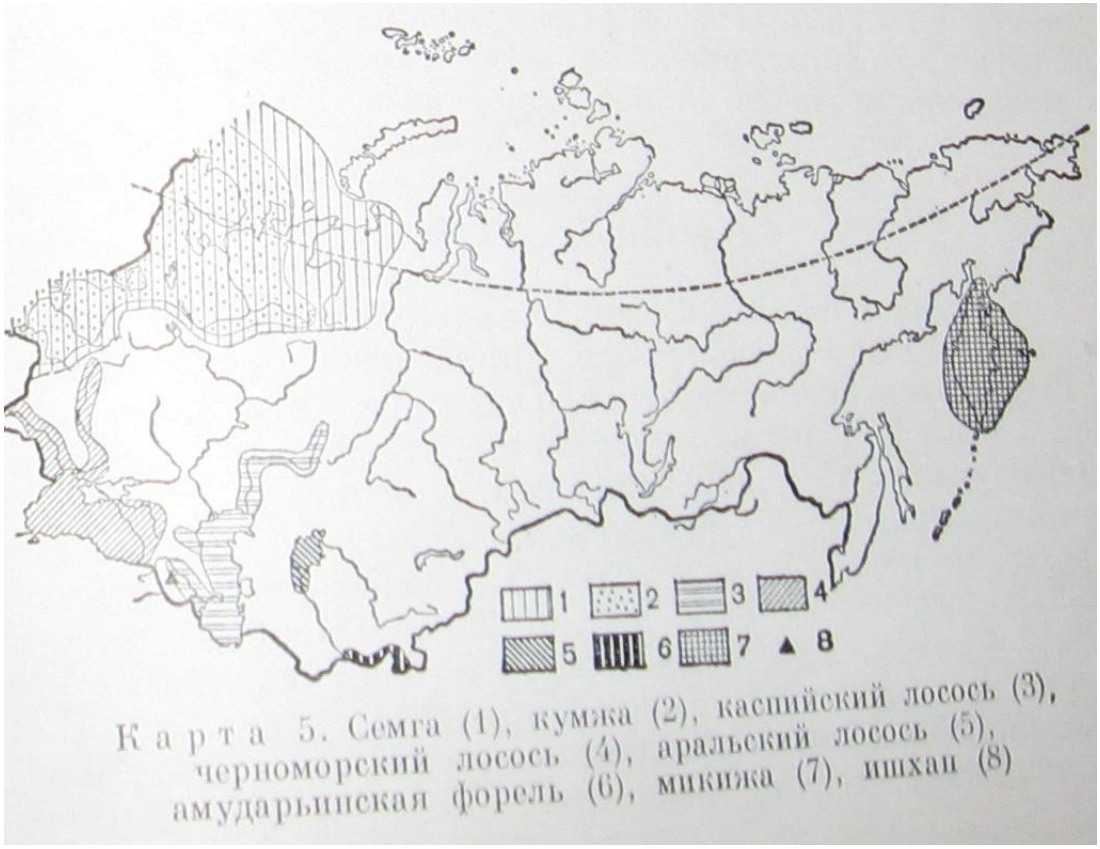
The Enets form, being the reflex of PU **jekV* ‘perch’ could be borrowed into Evenki *n□k□* ‘perch’, which does not have a Tungus-Manchu etymology according to TMS I, 651. The Evenki word, in its turn could have been borrowed into Nenets. This scenario would explain the

similarity between Nenets *nʲiχɨ̄* (T), *nʲɨ̄χɔku* (Nj.) and Enets W *ďêha* (-*i*), *dígge* ‘perch’, though the forms lack regular phonetic correspondences.

It turns out that the overlapping of modern species distribution areas (they almost coincide with the distribution in Holocene) for ‘sable’ **ńukśe*, ‘Salmo salar, salmon’ **koj(a)ma*, and ‘blay’ **kiśkV* give a very specific localization for Finno-Ugric ancestral home.



Карта 75. Соболь



Карта 5. Семга (1), кумжа (2), каспийский лосось (3), черноморский лосось (4), аральский лосось (5), амударьинская форель (6), микижа (7), ишхан (8)

Blay is present only in the European part of Eurasia in the rivers of the Azov, Baltic and Black sea basins, the northern part of Caspian sea and western coast of White sea basins.

Finno-Ugric people must have occupied the territory which included the distribution area of Salmo salar and blay, as well as the distribution area for sable. The Finno-Ugric ancestral home should have included upper Pechora and Northern Ural Mountains in the northwest (the distribution area of Salmo salar and blay has hardly changed since Holocene) and in the southeast – the northern part of South Cis-Ural region (Предуралье), where the western border of sable distribution area in Holocene is drawn according to the latest results in paleobiology (Gasilin 2009).

Bachura in his dissertation (Bachura 2006) gives a detailed analysis of big mammals inhabiting the western slope of northern Ural Mountains in Holocene (8000-2500 years ago): red squirrel (Sciurus vulgaris), **beaver (Castor fiber)[3],** wolf (Canis lupus), arctic fox (Alopex lagopus), **red fox (Vulpes vulpes), brown bear (Ursus arctos), marten (Martes), glutten (Gulo gulo),** mink (Mustela lutreola), greater weasel (Mustela erminea), least weasel (Mustela nivalis), otter (Lutra lutra), northern lynx (Felis lynx), elk (Alces alces), **reindeer (Rangifer tarandus)**.

In the work Plasteeva, Kosincev 2006 there is a list of large Cis-Ural mammals in Holocene: red squirrel (Sciurus vulgaris), **beaver (Castor fiber),** wolf (Canis lupus), **red fox (Vulpes vulpes),**

[3] The animal names which are marked with bold script are reconstructed for FU language.

brown bear (Ursus arctos), marten (Martes), glutten (Gulo gulo), badger (Meles meles), otter (Lutra lutra), northern lynx (Felis lynx), wild boar (Sus scrofa), Siberian Roe Deer (Capreolus pygargus), moose (Alces alces), **reindeer (Rangifer tarandus),** (?domesticated) **horse (Equus caballus)**, ox (Bos taurus), **sheep (ovis)**. swine (Sus scrofa domestica), dog (Canis familiaris).

It turns out that all animals with names reconstructed for FU protolanguage inhabited Northern Urals and Cis-Ural region. The only exception is the sable, it is not listed above. However, as we noted before, the data of the latest excavations show that sable could be found in the northern part of South Cis-Ural region (see Gasilin 2009). A number of names for animals which should have inhabited the region have not been preserved in the languages. This might be due to widespread tabooing of game naming.

The fish habitats have barely changed since Holocene. For all the reconstructed fish names, the corresponding kind of fish is found in the rivers of Northern Ural and Cis Ural region.

We do not have accurate data on bird habitats in Holocene, but at the present time all the above mentioned birds inhabit the Ural Mountains.

It is worth mentioning, that localizing the Finno-Ugric ancestral home in the North Ural and northern part of South Cis-Ural region, the analysis of paleobiological finds of large mammals in this region during Holocene, besides offering a fundamentally new and completely verifiable solution to the question important for linguists and for historians, archaeologists, culture scientists as well, gives an answer to a smaller, more specific puzzle of Finno-Ugric studies, it explains the reconstruction of **uče* ‘sheep’ for FU language. This fact did not have an explanation (see Napol’skikh 1997), since Finno-Ugric people did not have sheep-breeding yet, and sheep was not found in the regions where Napol’skikh, following P. Haidu, localized the Finno-Ugric ancestral home.

In the article Plasteeva, Kosincev 2006 it is noted that mountain sheep inhabited the Cis-Ural region in Holocene, now they are extinct in this region. It becomes evident that **uče* had a meaning ‘mountain sheep’, which later transformed to ‘sheep’, as the mountain sheep became extinct.

Abbreviations.

chuv.– Chuvash
dial. – dialect
enez. – Enets
W – forest dialect
est. – Estonian
fin. – Finnish
FP – Finno-Permian
FU – Finno-Ugric
FW – Finno-Wolgaic
gen. – genitive case
hung. – Hungarian
khan. – Khanty
DN – High Demjanka dialect
J – Jugan dialect
Kaz – Kazym dialect
KoP – Konda dialect
Kr – Kransnojarsk dialect
Ni – Nizjam dialect
O – Obdorsk dialect
Trj – Tremjugan dialect
V – Vach dialect
Vj – Vasjugan dialect
VT – Vartovskoje dialect
komi – Komi
Lu – Luza dialect
P – Permjac dialect
Vym – Vym dialect
mans. – Mansi
KM – Middle Konda dialect
KO – Higher Konda dialect
KU – Lower Konda dialect
LM – Middle Lozva dialect
LO – Higher Lozva dialect
LU – Lower Lozva dialect
N – North Mansi dialects
P – Pelymks dialect
SO – Sosva dialect
T – Tavda dialect
VN – Noth Vagil dialect
mar. – Mari
B – Birsk dialect
E – East dialects
KB – Kozmodemjansk dialect
M – Mountain dialect
U – Urzhum dialect
mord. – Mordvinian
E – Erza
E:An – Anajevo dialect
E:Bug –Bugul’min dialect
E:Gor – Maresevo dialect
E:Mar – Maresevo dialect
E:Večk – Vechkanovo dialect
M – Moksha
M:P – Pshenovo dialect
M:Petr – Petrovsk dialect
M:Prol – Prolejka dialect
M:Sind – Zindorovo dialect
I.-E. – Indo-European
lat. – Latin
nenez. – Nenets
T – Tundra dialect
Nj – Njalina dialect
ngan. – Nganasan
O.-H.-Germ. – Old Higher German
ObUg. – ObUgrian
pers. – Persian
PKhan. – Proto-Khanty
PMans. – Proto-Mansi

PS – Proto-Samoyedic
PU – Proto-Uralian
PUg – Proto-Ugrian
rus. – Russian
saam. – Saami
I – Inari dialect
Kld – Kildin dialect
L – Lule dialect
N – Norwegian dialect
Not – Notozero dialect
selk. – Selkup
El – Eloguj dialect
Ob.ch – Ob’ Chulymcup dialect
Ob.s – Ob’ S’us’ugum dialect
Taz – Taz dialect
Tym – Tym dialect
tat. – Tatar
tel. – Teleut
turkm. – Turkmen
udm. – Udmurt
G – Glazov dialect
S – Sarapul dialect

Literature.

Aikio 2009 – Aikio A. The Saami loandwords in Finnish and Karelian (academic disseration) // http://cc.oulu.fi/~anaikio/slw.pdf.

Anikin 1997 – Anikin A.E. Etimologicheskii slovar' russkih dialektov Sibiri: Zaimstvovaniya iz ural'skih, altaiskih i paleoaziatskih yazykov. – Moskva; Novosibirsk: Nauka, 1997.

Anikin, Helimski 2007 – Anikin A.E., Helimski E.A. Samodiisko-tungusskie leksicheskie paralleli. M. 2007.

Bachura 2006 – Bachura O.P. Krupnye mlekopitayushie Severnogo Urala v pozdnem pleistocene i golocene. Avtoreferat dissertacii na soiskanie uchenoi stepeni kandidata biologicheskih nauk. Ekaterinburg, 2006.

Bykonya 2005 – Sel'kupsko-russkii dialektnyi slovar' pod red. V.V.Bykonya. Tomsk, 2005.

Chernykh 1992 – *Chernykh E.N.* Ancient metallurgy in the USSR. Cambridge: University press, 1992.

Collinder 1960 – Collinder B. Comparative Grammar of the Uralic Languages. Stockholm 1960.

Derevja i kustarniki SSSR 1966 – Lapin P.I. (red.) Derevja i kustarniki SSSR. M., 1966.

DEWOs – Steinitz W. Dialektologisches und etymologisches Wörterbuch der ostjakischen Sprache. Berlin, 1966-1991.

EWUng – Etymologisches Wörterbuch des Ungarischen, herausgeben von L.Benkő. Budapest, 1993.

Fedotov 1996 – Fedotov M.R. Etimologicheskii slovar' chuvashskogo yazyka. V 2 tomah. Cheboksary, 1996.

Gasilin 2009 – Gasilin V.V. Fauna krupnyh mlekopitayushih Uralo-Povolzh'ya v golocene. Avtoreferat dissertacii na soiskanie uchenoi stepeni kandidata biologicheskih nauk. Ekaterinburg, 2009.

Häkkinen 2004 – Häkkinen K. Nykysuomen etymologinen sanakirja. Juva: WSOY.Pp. 1633.

Hakulinen 1953 – Hakulinen L. Razvitie i struktura finskogo yazyka. M., 1953.

Helimski 2001 – Helimski E. Early Indo-Uralic linguistic relationships: Real kinship and imagined contacts // Mémoires de la Société Finno-Ougrienne 2001, 242.

Helimski 2007(1) – Selkup dictionary // www.helimski.com

Helimski 2007 (2) – Enez dictionary // www.helimski.com

Helimski ngan. cardindex – Nganasan cards of E.Helimski

Honti 1982 – Honti L. Geschichte des obugrischen Vokalismus der ersten Silbe. Budapest, 1982.

Itkonen 1946 – Itkonen E. Zur Frage nach der Entwicklung des Vokalismus der ersten Silbe in den finnisch-ugrischen Sprachen, insbesondere im Mordwinischen. // FUF 29, 1946.

Jahnunen 1981 – Janhunen J. Uralilaisen kantakielen sanastosta // JSFOu. 1981. Bd. 77. S. 219–274.

Kallio 2006 – Kallio P. “Suomen kantakielten absoluuttista kronologiaa” (*Virittäjä* 1/2006)

Katzschmann, Pusztay 1978 – Katzschmann M., Pusztay J. Jenissej-Samojedisches (Enzisches) Wörterverzeichnis. (Fenno-Ugrica 5). Hamburg, 1978.

Khotinsky 1977 – Khotinsky N.A. Golocen Severnoi Azii. Opyt transkontinental'noi korrelyacii etapov razvitiya rastitel'nosti i klimata. M., 1977.

Koivulehto 1991 – Koivulehto J. Uralische Evidenz für die Laryngaltheorie 1991.

Koivulehto 1999 – Koivulehto J. Indogermanische Laryngale und die finnisch-ugrische Evidenz // Mémoires de la Société Finno-Ougrienne 1999, 237.

Lehtiranta 2001 – Lehtiranta J. Yhteissaamelainen sanasto. Helsinki: Suomalais-Ugrilainen Seura. 2001

Lytkin, Guljaev 1970 – Lytkin V.I., Gulyaev E.I. Kratkii etimologicheskii slovar' komi yazyka. M. 1970.

Mallory 1989 – Mallory J.P. Adams In Search of the Indo-Europeans.

Mäger 1983 – Mäger M. Estonskie nazvaniya ptic. Tallin, 1963.

МК – Munkácsi B., Kalman B. Wogulisches Wörterbuch. Budapest, 1986.

Napol’skih 1997 – Napol’skih V.V. K rekonstrukcii lingvisticheskoi karty Centra Evropeiskoi Rossii v rannem zheleznom veke // Art № 4. Syktyvkar, 2007.

Normanskaja 2009 – Normanskaja Ju. Novyi vzglyad na istoriyu permskogo vokalizma: opisanie razvitiya vokalizma pervogo sloga v komi i udmurtskom yazykah v zavisimosti ot prapermskogo udareniya i glasnogo vtorogo sloga // Uralistika. SPb., 2009.

Paasonen – Paasonen H. Mordwinisches Wörterbuch, I-IV, Helsinki, 1990-1996.

Parpola 2012 – Parpola A. Formation of Indo-European and Uralic (Finno-Ugric) language families in the light of archeology: Revised and integrated ‘total’ correlation // A Linguistic Map of Prehistoric Northern Europe. Helsinki, 2012.

Plasteeva, Kosincev 2006 – Plasteeva N.A., Kosincev P.A. Krupnye mlekopitayushie pozdnego golocena Permskogo Predural'ya // Dinamika sovremennyh ekosistem v golocene. M., 2006.

Salminen 1998 – Salminen T. A morphological dictionary of Tundra Nenets. Suomalais-Ugrilainen Seura. Helsinki, 1998.

Salminen 2001 – Salminen T. The rise of the Finno-Ugric language family // Mémoires de la Société Finno-Ougrienne 2001, 242.

Sammallahti 1988 – Sammallahti P. Historical Phonology of the Uralic Lan-guages // The Uralic Languages: Description, History, and Foreign Influences. Leiden: Brill, 1988. P. 478–554.

Sammallahti 1995 – Sammallahti P. Language and roots. CIFU 8. I: 143-153.

Sebestyén 1935 – Sebestyén I. Az uráli nyelvek régi halnevei // NyK XLIX, 1 – 97.

SSA – Itkonen E., Kulonen U.-M. Suomen sanojen alkuperä. Etymologinen sanakirja 1 – 3. Helsinki: Kotimaisten kielten tutkimuskeskus ja Suomalaisen Kirjallisuuden Seura. 1992 – 1995.

SSKZD – Sravnitel'nyi slovar' komi-zyryanskih dialektov. Syktyvkar, 1961.

Tereshenko 1965 – Tereshenko N. M. Nenecko-russkii slovar'. M., 1965.

TMS – Sravnitel'nyi slovar' tunguso-man'chzhurskih yazykov / Otv. red. V. I. Cincius. T. I-II. L., 1975-1977.

UEW – Rédei, K. Uralisches Etymologisches Wörterbuch. Budapest, 1986 -88.

Vasiljev 1991 – Vasiljev V.M., Savatkova A.A., Uchaev Z.V. Mariisko-russkii slovar'. Joshkar-Ola, 1991.

Veres 1984-85 – Veres P. Finno-ugorskaya prarodina i etnogenez vengerskogo naroda // Acta Ethnographica Acad. Sci. Hung. 1984-1985. 33/1-4.

Wiik 2002 – Wiik K. Eurooppalaisten juuret. Jyväskylä.2002),

Zhivlov 2005 – Zhivlov M.A. Rekonstrukciya praobsko-ugorskogo vokalizma. Avtoreferat dissertacii na soiskanie uchenoi stepeni kandidata filologicheskih nauk. M., 2006.