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Permeating etymology – remarks on Permic etymology¹

This article discusses five Permic words or groups of words including **kirim* ‘handful, bunch’, **kun* ‘ash, lye’, **liä* ‘sand’, **mir-* ‘to do forcefully; exert effort’, and **vij* ‘strength, might’. The words typically have an existing etymology, which in most cases is a Uralic comparison. This traditional proposition is rejected and a new etymological proposal is made.

The Permic languages have only rarely been the starting point or the focus of etymological studies and have often been viewed with a certain “anything goes” approach towards their historical phonology, which is probably partly the result of viewing all historical phonology through the lens of Finnic and “outsourcing” all irregularities to other branches, partly because Permic historical phonology, especially the vowel reconstruction, is fairly complex and somewhat controversial. This article tries to remedy earlier ills by taking the Permic languages as the starting point, by paying closer attention to phonological regularity, and by taking the latest advancements in Uralic historical phonology into consideration. Methodologically, the most noteworthy aspect is the combining of historical phonology with derivational morphology to detect petrified derivatives. Given the eroding nature of the sound changes affecting the Permic languages, this type of combination is not only etymologically fruitful but a methodological necessity.

1. Introduction

In this article, the etymologies of the Permic words **kirim* ‘handful, bunch’, **kun* ‘ash, lye’, **liä* ‘sand’, **mir-* ‘to do forcefully; exert effort’, and **vij* ‘strength, might’ are discussed. The frame of reference for Proto-Uralic historical phonology follows that outlined in Aikio (2022). The Uralic lexical stock existing in Permic and the historical phonology derived from it, including the Proto-Permic reconstructions, are for the most part congruent to that found in Metsäranta (2020). This article presupposes that the reader is already familiar with the methodological practices and principles of etymology.

Essentially, etymology runs on parallels, be they phonological, semantic, derivational, or pertaining to other aspects of linguistics or linguistic history, although obviously there are marked differences between different types of parallels. Arguments that lack clear parallels are always less credible than ones for which an ample amount of parallels exist. In Uralic etymology, the regularity of phonological development often relies on quite a small number of examples. As a result some phonological developments are quite open to interpretation, and even singular novel counterexamples or additions can have a noticeable impact. There is not always a clear boundary between

1. I wish to thank two anonymous peer reviewers for their useful comments.

historical phonology and derivation, especially when dealing with petrified derivations that have been produced by derivational processes that are no longer productive. It could perhaps be argued that petrified historical derivations belong more firmly to the realm of historical phonology than morphology, because often the derivational process itself can only be uncovered by applying the appropriate sound changes. This is especially true for the Permic languages, where sound changes have had a major eroding effect on the original Proto-Uralic word forms.

2. Etymologies

The etymological entries all follow more or less the same pattern. First, I will introduce the word in question. All but one of the words have an existing etymology. I do not find the previously proposed etymologies accurate mostly because they are phonologically irregular or because they are semantically too unspecified. After critically examining the old etymologies, I then propose a new alternative etymology, which typically starts with a phonological treatment of the word or words in question and proceeds from there to derivation and semantics. The ratio in which phonology, semantics, and derivation are discussed varies from etymology to etymology. There is no overarching motive behind the selection of these particular words. The entries are organized according to their Proto-Permic reconstructions.

2.1. **kjirj* ‘handful, bunch’

Komi *kjirj* ‘рука; подпись’, dial. (Izh, Ud) ‘горсть’, P *kjirj* ‘горсть, пясть’, J *korəm* ‘горсть (горсть сыпучего, горсть конопля, льна при дерганье)’ (KESKJ: 154) ~ Udm *kjirj* ‘горсть’, also ‘пук, пучок, клоч’, e.g. *етӥн кырым* ‘пучок льна’ (URS: 380) (< PP **kjirj*) has traditionally been compared to words in other Uralic languages of the Volga region, i.e. MdM *kurmâs* ‘пук, горсть’ and MariM H *kormăž* ‘горсть’ (< PМа **kormăž*) (KESKJ: 154; UEW: 677). Also Hungarian *köröm* ‘Nagel’ has sometimes been mentioned as an uncertain cognate in connection with the aforementioned words, but this is more likely to be a reflex of PU **künčə* ‘(finger)nail’ (Aikio 2018: 80–81).

Although the words are similar-looking phonologically, the vowel correspondences between them are irregular. Only the Permic **kjirj* could, in its vocalism, regularly reflect the Finno-Permic form **kurmz* reconstructed by the UEW. An earlier **u* does not regularly yield Mordvin *u* or Mari *o*, instead together they could theoretically reflect an earlier **karmăć(ə)*. Another peculiar aspect is that there is no trace of the palatal affricate – analyzed as a derivational suffix – in the Permic languages, which further casts doubt on the validity of the traditional etymology. It is therefore reasonable to pursue other avenues in an attempt to etymologize the Permic word.

One should also note that it is not known how the cluster **rm* behaves in Permic, since none of the inherited Uralic words reconstructed with the cluster have reflexes

in Permic. We do have a few examples of **rn* clusters in early Indo-Iranian and later Iranian loanwords, however. In the older layer, we find that epenthesis (anaptyxis) has taken place, e.g. Proto-Uralic/Early Proto-Permic **ta/erna* ‘grass’ (← PII/PI **tyna-* ‘grass, blade of grass, herb’) > PP **turin* > Udm *turin* ~ KomiZ *turun*, (Izh) *turin*, (VychU) *turin* (KESKJ: 287; Holopainen 2019: 273–274) and Early Proto-Permic **warna* ‘wool’ (← PII/PI **HwrnaH* ‘wool’) > PP **vurin* > KomiZ *vurun*, (Izh) *vurin*, J *vurón* (Holopainen 2019: 298–299; Metsäranta 2020: 160–162). By the time Late Proto-Permic came into contact with Iranian languages, epenthesis seems to have already happened on the Permic side, given that the newer layer has not been affected by it, although admittedly this conclusion relies on a singular example that could probably very well be explained by syncope as well: Late Proto-Permic **varnäs* > Komi (Lu Le) *varneš* ‘годовалая овечка’, i.e. ‘one-year-old lamb’ ← Iranian **warnā-*, cf. Middle Persian *warrag* ‘lamb, ram’ (KESKJ: 70; Holopainen 2019: 384; Metsäranta 2020: 193–199). Curiously, the cluster **rñ* seems to not have been affected by epenthesis at any point, e.g. ? PU **čarña* ‘talk’ > PP **šorñi* > KomiZ J *šorñi* ‘talk, discussion’ (UED: 105–106), Late Proto-Permic **zarñi* ‘gold’ ← Iranian **zaranja*, cf. Ossetic *zærin* (Metsäranta 2020: 195), although perhaps the forms in Permic have actually emerged through metathesis from earlier PP **šorin* and **zarin*. This would at least make PP **zarñi* fit the form of the Iranian loan original better. I also have a hard time believing that the *-i* in *šorñi* reflects PU **-a* in any straightforward manner. Rather, I suspect that that the words with **rñ* have undergone the same epenthesis as **rn* clusters, which has been obscured by later developments, i.e. fronting and metathesis (PU **čarña* > **šorin* > **šorñi* > Late Proto-Permic **šorñi*). For the etymological proposal I am about to make, however, this discussion is somewhat tangential, as I am not arguing that PP **kiriñ* must reflect an earlier **rm* cluster.

In addition to PU **u* and **ü*, Permic **i* can – in positions before a sonorant – also reflect PU **ä-ə*, e.g. PU **kärkə* ‘woodpecker’ > PP **kijr*, PU **kälə* ‘tongue’ > PP **kijl* (Aikio 2012: 24). Interestingly, there is a phonologically matching stem **kärə-* ‘to wrap, bind, thread’ reconstructed for Proto-Uralic (Aikio 2002: 18–20) that could regularly produce PP **kijr-*. In Permic, the verb is otherwise reflected by an old derivative, cf. PU **kär-tä-* ‘to bind’ > PP **kärt-* > Komi *kert-* ~ Udm *kertti-*, where the second syllable **-ä* has triggered an altogether different vowel development from PU **ä-ə*. The PU stem survives mostly as different derivatives also more generally. The most notable for our purposes are MdE *kerme* ‘bunch, bundle’ and M *kärmä*, which are deverbal **-mA* derivatives reflecting PU **kär-mä* (Aikio 2015: 36). The consonant-stem derivation PU **kär-mä* underlying the Mordvinic derivatives is not suitable for Permic since, as we have seen, **-ä* stems behave differently to **ə*-stems in Permic and PU **kärmä* would have rather yielded PP ***kariñ*. A parallel derivative of the same stem could still very well be a possibility, as the word in Permic could easily be regarded as a deverbal **-mA* derivative and there is at least some semantic overlap between the Permic and Mordvinic words, i.e. ‘bunch, bundle’, although the semantic relationship does require some scrutiny.

Analyzing the word as a deverbal derivative is a possibility, as there are several other derivations with the same derivative suffix and a recognizable base verb. At least the following deverbal **-im²* derivatives are comparable:

- PP **kužim* (> Udm *kužim* ‘power, strength’) ← PP **kuž-* (> Komi *kuž-* ‘to be able’) < PU **ke/oča-* ‘to be able’;
- PP **ordim* ‘wattle, fence; forest path’ (> Komi *ordim* ‘тропинка, лесная дорога; просека’ ~ Udm *urdim* ‘плетень; частокол; запруда для ловли рыба, учуг’) ← PP **ord-* ‘to put up, erect’ (> Komi *ord-* ‘поставить стоя, стоймя’ ~ Udm *urdj-* ‘поставить, ставить стоймя (на попа); привалить’);
- Komi *kevtim* ‘бредень’ ← Komi *kevt-* ‘ловить бреднем (рыбу)’ ~ Udm *kaltj-* ‘ловить бреднем (неводом)’ < PP **kält-* ‘to fish with a net’ ← PU **kälä-* ‘to wade’;
- Udm *kurtčim* ‘закуска’ ← Udm *kurtčj-* ‘укусить, откусить, закусить, etc.’ ~ Komi *kurččj-* ‘укусить, откусить; закусить (губу)’;
- Komi *oktim* ‘ein selbstfangendes Angelgerät’ ← Komi *okti-* ‘(eine Falle od. ein Fangeisen) aufstellen’ < PP **okti-* ‘to set a trap’ < PU **ekta-* ‘to hang’.

These are formally parallel cases to **kirim*. There is however no way of accurately determining the relative chronology of their formation. In the case of Udmurt *kužim* ‘power, strength’, it seems likely that the derivational process predates modern Udmurt, as the base verb – still found in Komi – no longer exists in the language. In the case of **ordim*, we seem to be dealing with a common Proto-Permic derivation based on the fact that the same derivative is found in both Komi and Udmurt. All the other derivations can either predate or postdate Proto-Permic. Phonologically, Proto-Permic **kirim* could reflect either a vowel-stem derivative PU **kärə-mä* (largely depending on the chronology of sound changes, see the discussion in Section 2.5) or a later derivative, as the PU **kärə-* stem would have regularly yielded PP **kir-*.

Although deriving PP **kirim* ultimately from PU **kärə-* ‘to wrap, bind, thread’ is both phonologically and derivationally feasible, the semantic match is less clear. It is relatively common for words meaning a collection of things such as ‘bundle’, ‘sheaf’, or ‘bouquet’ to be derivatives of a verb meaning ‘to bind, tie’, e.g. PGmc **bunda-* ‘binding’ (> Old Saxon *gi-bund* ‘bundle’, German *Bund* ‘league; bundle’) ← **bindan-* ‘to bind’ (Kroonen 2013: 64; 84), Fi *sitoma* ‘(grain, flax) sheaf’ ← *sitoa* ‘to bind’, Polish *wiązka* ‘bundle, bunch, cluster’, *wiązanka* ‘bouquet’ ← *wiązać* ‘to tie, bind’. This semantic development is mirrored by at least two parallel derivations

2. This is probably in essence the same derivational suffix as the productive deverbal nominalizer Udm *-em*, *-m* and Komi *-em*, e.g. Udm *kulem* ‘death’, Komi *kulem* ‘id.’.

of PU **kārā-*, namely the aforementioned MdE *kerme* ‘bunch, bundle’ ~ M *kärmä* < PU **kärmä* and MsSo *kwārek* ‘Bündel, Bund’ < PMs **k^wārēk* (< ? PU **kārakkä*). In Udmurt, we also find the meaning ‘bunch, bundle’, ‘пук, пучок, клоч’, e.g. *emün kyrym* ‘пучок льна’. If this is indeed the primary meaning and the Permic languages later went through a semantic shift from ‘bunch, bundle’ to ‘handful’, there is not much of a semantic difference to explain. The problem is that ‘handful’ could have also easily developed a polysemous secondary meaning ‘bunch, bundle’. Both diachronic and synchronic polysemy between a collection of things – ‘bundle’, ‘sheaf’, etc. – and ‘handful’ is fairly common, e.g. Fi *pivo* ‘flache od. hohle Hand; Handvoll; Garbe Hanf od. Flachs’, Lat *manu/ip(u)lus* ‘handful, bundle, unit’. It seems that ‘handful’ is the primary meaning in these cases and that bundles of different sorts and sizes arise through metonymy. Why this should be the case is beautifully illustrated by the following examples from Finnish dialects:

- *Rukihit silottih aina yks kouraus yhteh sitomaa, mut kolme pualikaast (= kourusta) oli siit kauraa* ‘One handful of rye was always bound into a bundle, but one bundle of oats was three handfuls.’ Sippola (SMS: s.v. *kouraus*)
- *[Lyhteisiin pantiin] kaks kouravusta ja kolome, minkäläene? ol se lätettaja.* ‘Depending on the one doing the binding, two or three handfuls made a sheaf.’ Jämsä (SMS: s.v. *kouraus*)
- *[Pellavaa] otetti noin kourallissi aiv vaa kerrallas ja, ja sire ympäri.* ‘You would take around a handful (of flax) at a time and bind it.’ Perniö (SMS: s.v. *kourallinen*)
- *Jokkut leikkaa niin suuren kouruuksen että tulee siikko, lyhde.* ‘Some people cut such large handfuls that they are enough for a sheaf by themselves.’ Hämeenkyrö (SMS: s.v. *kouruus*)

In an agricultural setting, a single handful (e.g. of flax, rye) often constituted the amount to be bound together into a bundle or a sheaf. Some sheaves were bigger, but even then they were often measured in handfuls. According to the examples above, three handfuls of oats for instance constituted a sheaf and one handful of rye was bound to a bundle.

Even if the direction from ‘handful’ to ‘bunch, bundle’ is more common, the reverse direction appears possible as well. Depending on how the semantic development is ultimately interpreted, a parallel can be found in Balto-Slavic. The word for ‘handful’ in Slavic, PSI **grstь* > Bulgarian *грѣст*, Macedonian *грѣст* ‘горсть, пригоршня’, SCr *gr̥st* ‘горсть, кисть руки’, Slovenian *gr̥st* ‘горсть’, Czech *hrst* ‘горсть’ (→ *hrstva* ‘горсть, охапка, сноп’), Slovak *hrst’* ‘горсть’, ‘снопик, пучок (злаковых, конопли, льну и. т. п.)’, Upper Sorbian *horšć* ‘горсть, кучка’, Slovincian *gãrc* ‘горсть, небольшое количество’, Ukrainian *горстка* ‘пучок стеблей

(конопли, льна из 4-5 жмень)', Belarusian dial. *горсьць* 'горсть', *гьрсьця* 'связка, пучок очищенного льну из 20 горстей' (ESSJa VII: 212–213) has a cognate in Latvian *gūrste* 'bundle of flax' < Balto-Slavic **gursti-* (Derksen 2008: 199). Balto-Slavic **gursti-* is probably etymologically connected with the verb PSI **gьrtati* 'to rake together', a durative-iterative on a lost verb ***gьrsti* with a similar meaning (ESSJa VII: 213–214). Reflexes of PSI **gьrtati* include SCr *грѣтати* 'сгребать', Ru dial. *гортать* 'сгребать, загребать что-либо', 'складывать (материю, платье, холст)', Ukrainian *гортати* 'листья'. A parallel derivative with a wide distribution in Slavic is PSI **gьrtŋti* 'to rake together' > Macedonian *грне* 'собирать, копить имущество; обнять', SCr *грнути* 'сгребать, собирать', 'идти, двигаться (большой массой)', Slovenian *grniti* 'сгребать, собирать', 'идти гурьбой', Czech *hrnouti* 'сыпать, отгребать, подгребать', Polish *garnąć* 'прижимать, обнимать; (стар.) сгребать, загребать, собирать', Ru dial. *горнуть* 'граблями, вилами, лопатой собирать в кучу (сено, солому)', Ukrainian *горнути* 'пригребать, придвигать, загребать; обнимать', Belarusian *гарнуць* 'грести, воротить; привлекать' (ESSJa VII: 214–215). Considering that the verbs mostly mean 'to rake together; to gather (in a pile)', it is reasonable to assume that the meaning found in the Latvian cognate, i.e. 'bundle of flax', is the more ancient one and the meaning 'handful' has emerged later in Slavic. If this interpretation of the development is correct, this Balto-Slavic group of words would provide a close semantic parallel for the semantic development that we find in Permic, namely 'bunch, bundle' > 'handful', which is the only disputable part of the semantic development, as it was already established that 'bunch, bundle' could easily be a derivative of a verb meaning 'to bind' or the like.

There exists a verbal correlate of PP **kijim* in Udmurt *kijm̄i*³ 'пожать, жать; схватить, поймать' (URS: 378). This has been borrowed into Mari as an hitherto unetymologized verb: MariC *kârtme-*, E Vo *kj̄rme-*, Up *kârtme-*, NW *kârme-*, W *kârme-* 'mit den Händen fassen, ergreifen, anfassen; die Hände nach etw. ausstrecken' (TschWb: 323) < PМа **kirme-*. There are other examples of Permic or rather Udmurt *i* being substituted with PМа **ĩ*, e.g. Udm *pižirt-* 'ausdrücken, auspressen' → PМа **pičare-* 'drücken, pressen, klemmen, quetschen, platt drücken (zusammen, fest)' (Bereczki 1992: 106). The Mari dialectal forms with an epenthetic *-t-* are most likely secondary and probably somewhat analogous to an epenthesis that has taken place in other *rN* clusters already in Proto-Mari, e.g. M *šertñe*, H *šärtñi* < PМа **sertñə/i* 'a species of willow' < PU **särñä* 'ash, willow', M *mörtñö*, H *mörtñi* <

3. As pointed out to me by one of the anonymous peer reviewers, the Proto-Permic form has also been reconstructed as **kijm*, with **kijim* presumably emerging as a result of epenthesis between two voiced consonants in Proto-Permic (Geisler 2005: 96–102). This Proto-Permic epenthesis would seem to explain the variation in stems between nominal *kijim* and verbal *kijm̄i*, with the latter representing the more original state of affairs. I am not entirely convinced that we need to postulate a Proto-Permic epenthesis to account for examples like Udm *kijim* and *kijm̄i*, partly because loanword evidence speaks against wholesale epenthesis taking place in the later stages of Proto-Permic, e.g. the aforementioned Late Proto-Permic **varnäs* > Komi (Lu Le) *varnes* 'годовая овецка', i.e. 'one-year-old lamb' ← Iranian **warnā-*, partly because at least in some cases secondary syncope has clearly taken place, e.g. Udm dial. *vedun*, *vedon* 'Zauberer, Hexenmeister' (← Russian (obsolete) *ведун*) → *vedna-* 'verderben (durch Zauberei)' (WotjWsch: 312).

PMa **mürtñə/i* ‘roe’ ← PMa **mür* < PU **merja* ‘berry’. “T-epenthesis” seems to only take place in words with front vowels at the Proto-Mari level, cf. M *korno*, H *kornə* < PMa **kornə* ‘way, road’, M *pormo*, H *parmə* < PMa **pərmə* ‘gadfly’, E (Malmyzh) M *šurno*, H *šurnə* < PMa **šurnə* ‘cereal’. Besides the vowels and the epenthesis, the loan etymology hardly needs any further elaboration.

2.2. **kun* ‘ash, lye’

Komi (VychU Vym Izh Lu VychL Pech Skr SysC Ud) *kunva* ‘щелок’, i.e. ‘lye’ (SSKZD: 179) is clearly a compound where the latter part is *va* ‘water’ owing to the fact that lye was traditionally made by dissolving ashes in water. The same compound is also found in Komi Jažva *kunva* ‘щелок’ (Lytkin 1961: 136). Alongside *kunva* also the plain *kun* with the same meaning exists in Komi dialects (SysU Izh Le VychL). Udora dialect *kun sov* ‘пересоленный’, *sola kun* ‘id.’ (*sov* ‘salt’), KomiJ *kun* ‘пересоленный (например, суп)’, and Udmurt *kuna-* ‘прогоркнуть’, *kunam* ‘прогорклый’, *kunam vej* ‘прогорклое масло’ (URS: 352) could also belong to the same group of words phonologically, although semantically the comparison is not as obvious.

Komi *kun(va)* ‘lye’ has been compared to Saami, e.g. SaaN *gutna*, An *kunnâ*, Sk *kunn* (< PS **kune* ‘ash’), as well as to Mari, e.g. E C NW W *kon* ‘lye, ash lye’ (< PMa **kon*), *kon-wüt* ‘lye, lye water’ (*wüt* ‘water’) (UEW: 672). These words reconstructed as **kone* (UEW: **konə* (**kunə*)) have a loan etymology according to which they were borrowed from an Indo-European source – IE **koni-* – reflected in Ancient Greek *κόνις* ‘Staub, Asche’ (Koivulehto 1999: 7; 2001: 246). The Greek word has an ablauted cognate in Latin *cinis* < IE **keni-*, which in turn is thought to have been borrowed as Pre-PS **keni* > PS **keŋe* > SaaN *gatna* ‘scurf; lichen on stones’ (Sammallahti 1999: 78; 2001: 399). The vowel in PS **kune* does not match completely, something which is taken to be indicative of borrowing (Koivulehto 2001: 246). It is true that there is a mismatch in vocalism between the reconstructed **kone* and PS **kune*. As the regular reflex of **kone* one would rather expect to find PS ***kuone*. Proto-Saami **u* corresponds in some cases to Finnic long **uu* and there is some evidence to suggest that PS **u* ~ PF **uu* reflects an earlier sequence of a vowel and a glide, PU **uw* (Aikio 2012: 242–243). There is considerable variation between the vowel correspondences outside of Saami and Finnic, which means that one cannot invariably reconstruct PU **uw* for PS **u* and that there is not one, but several sources for it. To account for PS **u*, the underlying word is sometimes reconstructed as PU **kuwnə* (Aikio 2013: 13).

Let us next examine how well the Mari and Permic match both the traditional reconstruction found in the UEW **konə* (**kunə*) and the one Saami points to, i.e. **kuwnə*. We can exclude PU **konə*, as that would regularly yield PP ***kən* > KomiZ ***kon*, J ***kun* (Metsäranta 2020: 102–130) and does not especially well match the Mari, either, although the expected result is less clear. PU **o* is only preserved as PMa **o* in positions before a velar nasal **-ŋ-*. One would expect PU **konə* to yield PMa ***kân* (which seems to be conditioned by the following nasal) or alternatively

*****kun***. PU **kona* would regularly yield PP **kun* > Komi *kun*, but this does not match the Proto-Mari **kon*, where one would expect to find reflexes similar to the previously discussed development. Neither PU **konə* nor **kona* would explain the vowel in Saami. If the Saami, Mari, and Permic words reflected PU **kunɜ*, then one would expect PS **o*, PMa **ũ*, and PP **i* in the first-syllable, none of which provide a match, so this assumption only moves us further away. There does not exist an exact parallel for the vowel correspondence we find between Saami, Mari, and Permic. The closest parallel case seems to be PS **kulɛ-*, PMa **kola-*, PP **kil-* < PU **kuwlə-* ‘to hear’, that matches the Saami and Mari vowels, and even the Komi *u* could be reconciled, as there are cases of PP **i* yielding *u* after *k-*, e.g. Komi *kuž* (~ Udm *kiž*) < PP **kiž* < PU **kunćə* ‘urine; to urinate’, Komi *kul'-mi-* < PP **kil-* < PU **kuðə-* ‘to spawn’, Komi *kuñ-* (~ Udm *kiñ-*) < PP **kiñ-* < PU **kuña-* ‘to close one’s eyes’, Komi *kus-* (~ Udm *kisj-*) < PP **kjs-* < PU **kupsa-* ‘to extinguish’. This interpretation is impossible, however, if we regard Komi *kun(va)* to be cognate with Udm *kuna-*, in which case the Komi word must reflect PP **u*, which is not a regular reflex of PU **u*.

On the surface, PS **kulɛ-* ~ PMa **kola-* < PU **kuwlə-* ‘to hear’ seems to provide a parallel for PS **kunɛ* ~ PMa **kon* < PU **kuwnə*. It would be premature to consider the development **uw* > **o* in Mari to be regular on the basis of these two examples. The reason for this is that a similar development has occurred in PU **tulə-* ‘to come’ > PMa **tola-* > E W *tola-*, which based on its cognate in Finnic, PF **tulɛ-*, cannot reflect an earlier vowel + glide sequence but simply short PU **u*, the regular reflex of which is Proto-Mari reduced **ũ*. PMa **kola-* and **tola-* are thought to exemplify an Öffnungstendenz of PFU **u* that took place before *-l-*, *-m-*, *-ŋ-*, and *-r-* (Bereczki 1994: 98–99).

It is unfathomable to me how the rules for this “tendency” were formulated. First of all, among the examples provided there is not a single instance of **-m-* or **-ŋ-*. Besides **kola-* and **tola-*, the evidence consists of PMa **korməž* ‘fist’, **kornə* ‘road’, **molə* ‘other’, **pokte-* ‘to pursue, chase, drive’, and **ũla-* ‘to be’. Of these examples, **pokte-* is clearly just an erroneous etymology (in addition to having *-kt-* rather than any of the consonants that supposedly trigger the lowering!) and the Mari word goes back to PU **pak-ta-* ‘to pursue’ (Aikio 2015: 55; Metsäranta 2020: 122). PMa **ũla-* is not a case of Öffnung of PU **u*, either, as the word clearly originally had **o*, cf. PU **wolə-* (UEW: 580), on top of not even having an *o* in Mari. I have discussed PMa **korməž* in Section 2.1 of this article. As I do not believe that the Mari word is in fact cognate with PP **kiriŋ*, there is actually no real reason to think that **korməž* reflects an earlier **u*. Mari E *korno*, W *kornə* ‘Weg, Streifen (im Zeug)’ < PMa **kornə* is compared to Fi *kuurna*, *kurna* ‘Rinne, Rille; Furche; Stellbottig, rinnenförmige Seihe beim Bierbrauen’, Est *kurn* ‘Seihe, Filtrum’, and Hung (dial.) *horny* ‘Nut, Kerbe der Schindel (wo die Kante der anderen Schindel hineingefügt wird)’, *hornyol-* ‘kerben, falzen, nuten, kannelieren, riefen, rillen, rippen’ (UEW: 216). Here the proposed cognates do at least point unequivocally to an earlier PU **u*. It is still an altogether different question how convincing the comparison is as a whole. It is simply assumed that in Mari, a semantic shift from ‘Kerbe, Furche’ to ‘Weg’ has taken place. It is

worth pointing out that the few words with a **rN* cluster of any sort of antiquity in Uralic languages are mostly loanwords, e.g. PU **ta/erna* ‘grass’ > Fi *taarna* ~ Udm *turjn*, Komi *turun* ← cf. OI *tr̥na-* ‘Grass’ (UEW: 792). Quite a few words reflecting PU **-ur(C)-* can also be reconstructed for Proto-Mari that show the expected PMA **ũ* with no sign of lowering, e.g. PMA **kūra-* ‘to plow’ (< PU **kurə/a-* ‘to groove’), **kūr̥măćak* (< PU **kurmăćă* ‘woodcock’) (Aikio 2013: 13), **kūrək* ‘hill, mountain’ (< PU **kurə* ‘steep hillside; cleft’) (Saarikivi 2007: 338–340; Aikio 2013: 13), PMA **pūr̥yăž* (< PU **purkă* ‘blizzard’) (Aikio *ibid.*) etc. Lastly, MariE *molo*, W *molô* ‘ein andere, der andere’ < PMA **molə* is compared to a whole host of pronouns including Fi *muu* ‘(ein) anderer’ and Udmurt *mïd*, Komi *mëd*, Hung *más* (UEW: 281–282) that do not all agree with PU **u* and also exhibit some opaque suffixal elements. A cognate relationship between these words is thus suspect.

After examining the evidence in support of the Öffnungstendenz, it becomes quite clear that there is not much of a tendency to speak of, although PMA **kola-* and **tola-* still remain as possible examples of lowering. Instead of simply the lateral triggering the lowering (which can hardly be the case, because there are numerous counterexamples, most notably the homonymous case of PU **tulə* ‘fire’ > PMA **tül*), it is possible that the condition was actually more specific. The expected regular development of PU **u-ə* in verbs would yield PMA ***kūla-* and ***tūla-*. There is actually only one singular example of an **a*-stem verb of the shape **(C)ūla-* reconstructable for Proto-Mari and that is PMA **ūla-* ‘to be’ < PU **wolə-*, which has been brought on by the regular development of PU **o* into PMA **ũ* adjacent to labial consonants (Aikio 2014a: 157). The only relevant example is therefore of secondary origin. The lowering, PU **Cu(w⁴)lə-* > PMA **Cola-*, should perhaps not be treated as a tendency or an irregular development, but rather as the regular development since there are actually only examples of the lowering in PMA **a*-stem⁵ verbs. If it is indeed the case that the lowering happened only in verbs, that also leaves Mari **kon* ‘ash, lye’ without a phonological parallel.

Together Mari **kon* and PP **kun* could also reflect first-syllable PU **a*. The stem vowel cannot be determined based on Mari and Permic evidence alone. The fact that the words can reflect an earlier **a* does open the possibility that the Mari and Permic words are cognates with Selkup **kūənə* ‘Asche’ > KeM *kuənet* (3s), KMM *kūənəmdə* (acc 3s), Pa. *kvēn* ‘пепел’, TyM *kūəñəl* ‘aska (adj.) (Parallelwort zu *šiməl*)’ (SlkWB: 292). Selkup **uə* is the regular reflex of PSam **ā*, e.g. PSlk **kūələ* < PS **kālā* (< PU **kala* ‘fish’). Selkup *k-* (*q-*) also regularly reflects PSam **k-* (< PU **k-*) (Mikola 2004: 86), e.g. PSlk **kūələ* ‘fish’ and PSlk **kūən-* ‘to go’ (< PSam **kān-* < PU **kanə-*). Based on PSlk **kūənə* ‘ash’, it is thus possible to reconstruct the underlying PSam

4. The preconsonantal glide in PU **kuwlə-* in all likelihood disappeared early enough in Mari to be essentially irrelevant for our purposes.

5. I would not go as far as to say that it was the second-syllable PMA **-a* that triggered the lowering – reconstructing the PMA verbs according to their conjugation is after all a reconstructional convention – but there might be a correlation or a even a causal link between these two things, i.e. the lowering and the stem type, at some point in the development of Mari from Proto-Uralic.

word as **kãná/ã*, which in turn can regularly reflect PU **kana/ə*, forms also compatible with the Mari and Permic words. The Proto-Samoyedic word for ‘ash’ seems to have been **kimä*, which has a wide distribution and is also found in Selkup (SW: 70). This in itself does not render impossible the idea that an old Uralic word has survived in Selkup dialects despite having for the most part been replaced already in the Proto-Samoyedic period.

If we indeed prefer to reconstruct, based on the Mari, Permic, and Selkup, PU **kana/ə*, then I would be remiss if I did not at least mention Finnish *kuona* ‘Schlacke; Roheisen; Schmutz’ and Karelian *kuona*. These Finnic words have been connected with the Saami, Mari, and Komi words in the past, but this idea is dismissed in SSA without further details. Proto-Uralic **kanə* would regularly yield PF **kooni*: *koone*–through Lehtinen’s law (for details of this sound change see Pystynen 2018). Obviously the stem vowel does not match, but we perhaps find a somewhat similar case of a word that has seemingly undergone Lehtinen’s law with an unexpected **a*-stem (with some further derivations muddying the waters) in PF **poola*⁶ ‘lingonberry’ > Fi *puola*, *puolain*, *puolukka*, *puolakka*, Kar *puola*, *puolukka*, *puolaine*, Veps *bol*, *bolāne*, Vo *pōl(l)az*, *poolēķes*, Est *pohl*, dial. *pool(as)*, *poolgas*, *puhulgas*, Liv *būolgəz*, *būolgən*, which are thought to have cognates in Komi *puv(j)* ‘lingonberry’ and MsE (Konda) *pol*, W *pul*, N *pil* ‘berry’ (SSA 2: 430). Also some other words such as Fi *suomi*: *suome*- and *suoma-lainen* show oscillation between **ə*- and *a*-stems.

The examples are inconclusive, which is not to say there could not be singular instances of words sliding from one stem type to another in Finnic and elsewhere. It is at least hard to excuse simply ignoring *kuona* from the discussion, when we have a group of words that exhibit phonological inconsistencies to begin with. Perhaps the only way out of this game of musical chairs is just to adhere to regularity and see where that gets us, which to me seems to be accepting a cognate relationship between the Mari, Permic, and Selkup words that at least show regular vowel correspondences between them, and can all be derived from PU **kana/ə*. The pertinence of PS **kunę* and PF **kooni* to the Mari, Permic, and Selkup words must unfortunately be left unresolved for the time being.

6. The reconstruction of PF **poola* is made uncertain by South Estonian cognates, e.g. *paluk(as)* and *palohk* that point to PF **a* and it has been suggested that PF **poola* might in fact be an innovation, at least in terms of first syllable vowel quantity (Koponen 1991: 142–145). The matter has hardly been settled. South Estonian *a* can be interpreted to show influence from *palo* ‘a type of conifer forest’ (where lingonberry typically grows), as already suggested by Koponen. A derivational process is also known to block Lehtinen’s law from operating, e.g. EPF **mälə* ‘mind’ (→ Est *mälestama* ‘to remember’, *mälu* ‘memory’) > MPF **meeli* > LPF **meeli* > Fi *mieli*, Est *meel* etc. (O’Rourke 2016). Perhaps the South Estonian words simply represent derivations formed prior to Lehtinen’s law being operational and the rest of Finnic represents derivations formed afterwards. Komi *puv(j)* could easily just reflect PU **palə* (itself in some kind of obscured derivational relationship with PU **pala* ‘piece of food?’). The vowel correspondences between the Mansi dialects are peculiar, the only comparable case I have been able to locate is MsE (KondL) *pon-*, W (P etc.) *pun-*, N (LozU So) *pin-* ‘setzen, stellen, legen’ (WogWb: 605). Most Mansi dialects point to PMs **u* in both ‘berry’ and ‘to set’, and this vowel in most cases reflects Pre-Mansi **u*, e.g. PU **puna* ‘hair’ > PMs **pun*. Perhaps the North Mansi vowel has arisen through irregular illabialization in both cases. Given that Mansi **u* is a common substitution for Komi *u* (Rédei 1970: 38–40), we might also be dealing with a Komi loanword in Mansi.

2.3. **lja* ‘sand’

Komi *lja* ‘sand’ is cognate with Udmurt *luo* ‘sand’ (KESKJ: 163). The word form in Udmurt dialects is invariably the same. In Komi dialects also epenthetic forms (VychL) *lija* and (VychU) *liya* occur (SSKZD: 217). In older etymological sources, the Permic words are usually considered to belong together with Fi *liiva* ‘breiartige Masse, Schleim; Moor, Schlamm’, Est *liiva* ‘Sand, Kies’, and KhKaz *ļõwĩ* ‘Schlamm (in Sümpfen auf dem Seeboden, am Ufer); eine nicht begehbbare Sumpffläche in der Quellengegend kleiner Bäche’ (KESKJ: 163; UEW: 250). The Proto-Uralic form has traditionally been reconstructed as **liwa*. The choice to reconstruct **liwa* based on this proposed cognate set is baffling, as it forces one to assume that the Udmurt, Komi, and Khanty forms arose through sporadic labialization and it does not even offer an explanation for the long *ii* in Finnic, a fact simply left unexplained by the aforementioned sources. There is no convincing reason to assume *a priori* that labialization has taken place in Permic and Khanty. One could equally justifiably assume that the Finnic forms underwent illabialization. It would actually be more parsimonious to assume this scenario to have taken place. This is not an avenue that I will be following in this article, but rather just a larger point to be aware of, namely that the Uralic historical phonology of yesteryear is often riddled with this kind of underlying assumption that the Finnic languages must always somehow be the most archaic, resulting in the perceived phonological irregularity of other Uralic branches such as Permic.

It is quite clear that we are not dealing with an actual cognate set. The Finnic words have long had rival Germanic and Baltic loan etymologies, either of which better accounts for the phonological form, cf. PGmc **slīwa-* > ON *sly* ‘schleimige Wasserpflanzen’, Swedish dial. *sly* ‘sumpfiges mit Gestrüpp oder Zwergbirken bewachsenes Gelände’, (Finland) ‘Schleim im Meer oder im See’ (LägLoS II: 207) vs. Latvian *glīve*, *-a* ‘grüner Schleim auf dem Wasser, Schleim, Schlamm’, Lithuanian *glývas* (SSA 2: 75–76). The Germanic and Baltic etymologies are mentioned in UEW, but otherwise ignored. If we remove the Finnic words from the equation, only Permic and Khanty remain. It has been pointed out that **l* is a recent addition to the phonological system of Khanty and does not reflect PU **l*, which regularly yields Proto-Khanty **l* > dial. *l, t, j*, etc. (Kulonen 1988: 288). Thus, there is no phonological basis to consider the Permic and Khanty words cognate. For an inherited word, the distribution in Permic and Northern Khanty alone would make the etymology very dubious, given that Khanty in any case has a large number of Komi loanwords (Toivonen 1956). These arguments have not apparently been found convincing enough and even some etymological sources from this millennium still repeat the idea that the Permic word reflects an earlier **liwa* (Csúcs 2005: 354). As no new arguments have been presented to defend a cognate relationship between these words, the old counterarguments suffice to debunk it. Even if the Finnic, Permic, and Khanty words are not cognates, they could still be etymologically connected in another way, for instance via borrowing. Incidentally, the Permic words have been considered loanwords from

Finnic (Saarikivi 2006: 36; 2018: 319) and the Khanty word in turn has been regarded as a relatively recent loanword from Komi (Pystynen 2020: 74–75). There is a lot to unpack with all the different loan etymologies.

Let us start the unpacking with Finnish *liiva* and its cognates in Finnic. According to the view advanced in SSA, there might be two different homonymous *liiva* words in Finnish. The first *liiva*¹ is a set of words comprised of Fi (locally in Häme) *liiva* ‘hieno hiekka, liete, muta / Sand, Schlamm’ ~ Vo *liiva* ~ Est *liiv* (: *liiva*) ‘sand’ (SSA 2: 75–76). The second *liiva*² is reflected by Fi *liiva* (fairly common esp. in Northern Finland) ‘Schleim; Seetang; etw. zu Brei Gekochtes od. Verfaultes’ and Ludic *liiv* ‘Wassergas, Strandpflanze; grüner Schleim auf der Wasseroberfläche; zähe Schicht auf saurer Milch’. The dialectal dictionary of Finnish *Suomen murteiden sanakirja* (SMS) also thinks that there are two homonymous *liiva* words, but divides them semantically into two a bit differently from SSA. In SMS one can find two lemmas: *liiva*¹ 1. ‘lima, kina; kuola’, 2. ‘lieju, liete’, 3. ‘levä’, 4. ‘liivana = murskana, muusina, tohjona’ and *liiva*² ‘(hieno) hiekka; hietikko’. The most noteworthy distinction in the semantic treatment of the words, is that in SSA ‘liete, muta’, i.e. ‘silt, sludge, mud’ is thought to belong together with ‘sand’, whereas SMS considers ‘sand’ its own separate entry. Some clarity can be provided if we look at *liiva*² as per SMS in its context.

The word *liiva* ‘sandy beach’ found in Finnish dialects spoken on the islands in the Gulf of Finland (Seiskari, Suursaari, Tytärsaari) has already been considered a probable Estonian loanword (SSA 2: 75–76). It is however rather likely that *liiva*² in Finnish dialects represents an Estonian loan in its totality. The following arguments can be made in favor of it being an Estonian loanword. The distribution of the word *liiva*² ‘sand’ does not extend far beyond the islands and the coastal areas of Gulf of Finland, as it is only found on the coast of Ingria and Kymenlaakso (Kallivere, Kymi, Pyhtää) and a few places in Southwestern Häme (Asikkala, Hollola) (SMS: s.v. *liiva*²). There are known Estonian loanwords in Finnish dialects that exhibit a distributional pattern similar to this, cf. Fi dial. *aatti, aitti* ‘thank you’ ← Est *aitäh* ‘thank you’ (Björklöf 2018: 3) found on the islands (Lavansaari), coast of Ingria, Kymenlaakso, the Karelian Isthmus (Kallivere, Kymi, Vahviala, Vehkalahti), and in a few places further inland (Elimäki, Lapinjärvi, Sippola, and Valkeala) (SMS: s.v. *aatti, aitti*); or Fi dial. *hatru* ‘*Fucus vesiculosus*, a type of alga’ (Kymi, Suursaari, Tytärsaari, Vehkalahti) ← Est *hatr* (: *hatru*) ‘pruunvetikas’ (Björklöf 2018: 2; EMS: s.v. *adru*; SMS: s.v. *hauru*). The Finnish–Estonian contacts were maritime in nature and many of the loanwords are semantically tied to the sea and seafaring. Based on its distribution in Finnish dialects combined with the maritime semantics, it is hard to think that Finnish *liiva*² ‘sand’ could be anything other than an Estonian loanword transmitted by the so-called *seprakauppa*.

Once we entangle *liiva*² from the cognate set, we are left with Northern Finnic (Finnish, Ludic) *liiva* that refers mostly to ‘slime’ and ‘mud’ and Southern Finnic (Votic, Estonian) *liiva* that means ‘sand’. It is difficult to determine conclusively whether we are dealing with a single word or two different words. There is no pressing reason to think that the Northern and Southern Finnic words could not be cognate.

It would be tempting to assume that the meaning ‘sand’ in Southern Finnic developed secondarily from ‘silt, mud’ through a semantic change observed, for example, in Ludic and Veps, where the word meaning ‘sand’, Ludic *liete* ‘hiekkä’, Veps *lete* ‘hiekkä, liete, rantahiekkä’ has emerged (judging by its cognates elsewhere in Finnic, cf. Fi *liete* ‘veden kuljettama hieno hiekkä, lieju; vesijättömaa’, Kar *liete* ‘hieno rantahiekkä, matala hiekkaranta; liejukko, mutapohja’, Vo *leete* ‘(kova) rantahiekkä’, Est *leede* ‘hiekkaranta, -särkkä’, Liv *līedōg* ‘kosteä, valkea ajohiekkä’ < PF **leētek*) from a meaning that mostly refers to watery sand and sediment. Although this is a possible scenario for the semantic development in Ludic and Veps, the situation is complicated by the fact that we do not really know what exactly the Proto-Finnic word for ‘sand’ was. Proto-Finnic **leētek* might actually be our best candidate for ‘sand’, in which case there was no noteworthy change in meaning. All the modern Finnic words for ‘sand’ are markedly more narrow in their distribution, e.g. Fi (mostly Eastern dialects) *hiekkä*, (mostly Western dialects) *hieta*, Kar *hieta*, or are otherwise clearly semantic innovations, e.g. Liv *jōugō* ‘sand’ (< PF **hiu(k)ka* ‘(sand) particle’ > Fi *hiukka, hiuka, hiu(k)e* ‘Sandkorn, Stückchen; Partikel; Sandboden, Sand’, Est *juuk*, EstS (Mulgi/Tartu) *iuk* for them to be considered contenders for PF ‘sand’. Both the Germanic and Baltic loan etymologies do, in any case, necessitate a semantic change ‘slime, mud’ > ‘sand’ in order to make sense, so it may very well be that PF **liiva* has come to mean ‘sand’ only secondarily in Southern Finnic, while the original meaning was closer to what we find in Northern Finnic today.

It is claimed that the Permic word **lija* must be considered a loanword on phonotactic grounds (Saarikivi 2018: 319). Although it is true that PP **lija* cannot reflect any Pre-Proto-Permic form directly, there is nothing to stop us from analyzing the word as a Proto-Permic derivative. A parallel case for this analysis can be found in Komi *kī-a* ‘Röte am Himmel’ from PP **kī*, which does not exist as an independent lexeme but can also be found as the second component of PP **as-kī* ‘tomorrow’ > Udm dial. *aski*, Komi *aski* (Metsäranta 2023: 272–275) < PU **kajə*⁷ ‘dawn’; for additional examples of adjective derivations lexicalized as nouns see Metsäranta (2020: 128).

For due diligence, the recent claims about the Proto-Permic reconstruction of the word need to be addressed. Traditionally, the word has been reconstructed to Proto-Permic as **lija*. To account for the seemingly irregular labial vowel *u* in Udmurt *luo*, it has been suggested that in Proto-Permic there was still a medial *-w-* between the vowels that first resulted in the labialization of PP **i* to **u*, which in turn triggered the labialization of **-a* to *-o*, i.e. PP **liwa* > **luwa* > **lua* > Udm *luo* (Pystynen 2020: 74–75). This idea and reconstruction are certainly tempting, as they would

7. This has been traditionally reconstructed as **kojə* (**koje*) (UEW: 167). There is no need to reconstruct **o* based on Finnic alone, since the *o* could have been brought about by Lehtinen’s law, EPF **a* > PF **oo* (Pystynen 2022) with expected shortening later of the long vowel before *i* (< **ji*), cf. EPF **wajə* ‘butter, grease’ > MPF **wooji* > **vooi* > LPF **voi* (Kallio 2007: 241). PU **kajə* has an **a-*stem verbal correlate **kaja-* ‘to dawn’, and a similar pattern is observed between other noun and verb pairs as well, e.g. **ipsə* ‘smell’ ~ **ipsä-* ‘to smell’, **aŋə* ‘hole, opening’ ~ **aŋa-* ‘to open’. It has been suggested by Pystynen (2022) that the verb was derived from the noun. This may or may not be the case, but the pattern itself is reoccurring.

simultaneously seem to provide an explanation for the labialization in Udmurt and for the epenthetic *v* found in Vychegda Komi *l̥iva*, as well as for the *w* in Kazym Khanty *l̥ow̥i*, which is thought to have been borrowed from Komi (ibid.).

I have a differing opinion about the phonological development, however. First of all, there is no need to reconstruct a medial **-w-* for Proto-Permic or a labial vowel for any protoform of Udmurt in order to account for the labialization of **-a* to *-o*. This is because second-syllable **-a* has been labialized anyway in many productive derivational suffixes and, more crucially, labialization has occurred in the adjectival suffix PP **-a*, e.g. Komi *musa* ‘lieb’, Udm *muso* ‘lieb, hold, angenehm’ (< **musa* ← PP **mus* ‘liver’). I also do not subscribe to the idea that PP **-a* > *-o* in Udmurt only occurred after first-syllable *o* and *u* (Csúcs 2005: 92–93) as in the example above. There are plenty of examples to the contrary, e.g. Udm *medo* ‘Lohnarbeiter, Tagelöhner’ ← *med* ‘Lohn, Tagelohn, Bezahlung’ (WotjWsch: 157), *pel’o* ‘Uhu (*Strix bubo*)’ ← *pel’* ‘Ohr’ (WotjWsch: 191), *tjlo* ‘kaskimetsä, kaskelle kasvanut metsä, auf durch Abbrennen urbar gemachtem Land (= Schwendland) gewachsener Wald’ ← *tjl* ‘Feuer’ (WotjWsch: 261). The same sound change has also occurred in Volga Bulgarian/Chuvash and Russian loanwords ending in **-a*, e.g. Udm *ulmo* ‘apple’ ← Volga Bulgarian/Proto-Chuvash **olma* ‘id.’, Udm *kuso* ‘scythe’ ← Ru *коса* ‘id.’. I think that the *u* in Udmurt *luo* is simply the result of labial assimilation. Labial assimilation on the Pre-Proto-Udmurt level (PP **l̥iwa* > **luwa* > **lua*) or on the Udmurt level (Proto-Udmurt **l̥io* > Udm *luo*) are at least equally *ad hoc* as assumptions.

As already said, the epenthetic *v* in Komi Vychegda *l̥iva* is used as another piece of evidence for postulating a medial **-w-* in Proto-Permic (Pystynen 2020: 74–75). There are a few reasons why I do not agree with this assessment, either. It should be noted that *l̥iva* is specifically an Upper Vychegda form, while in Lower Vychegda we find a form with a different epenthetic consonant, namely VychL *l̥ija* (SSKZD: 217). The form *l̥iva* is also not confined to Upper Vychegda like older lexical sources such as SSKZD suggest, but rather it is – according to some newer lexical sources – also found in Pechora and Syktyvkar (SDKJ) (perhaps due to dialectal borrowing). The occurrence of different epenthetic consonants in different Komi-Zyrian dialects already points to the secondary nature of this development. It seems doubtful to me that we could instead be dealing with a Proto-Permic relict that somehow survived in these specific Komi dialectal forms. We find *-v-* in Upper Vychegda also in words where it is very difficult to see as anything other than a hiatus filler:

- KomiZ (Vym Izh Lu Le VychL Pech Skr SysC) *kja* ‘заря’, (VychU) *k̥iva* (SSKZD: 184);
- KomiZ (SysU Lu Le VychL Skr SysC Ud) *kjan*, (VychU) *k̥ivan*, (Vym Izh) *k̥ijan* ‘то, что предназначено для тканья, плетения, вязания; уток; ткацкий, вязальный’ (← *k̥i-* ‘ткать, вязать, плести’) (SSKZD: 184);
- KomiZ (SysU Vym Lu Le Pech Skr SysC) *g̥jer* ‘иней, изморозь’, (VychU) *g̥iver* (SSKZD: 94).

Epenthesis of *v* in vowel sequences is perhaps more prominent and consistent in Upper Vychegda, but in a labial context it can often be found in a larger area, e.g. Komi (VychL Skr Ud) *juav-* ‘спросить’, (SysU SysC) *jual-*, (VychU) *juvav-*, *juvoo-*, (Lu Le Pech SysC VychU) *juval-* (SSKZD: 449). It should be noted that there is variation within Upper Vychegda itself depending on what village exactly the forms were collected from, e.g. (VychU: Mordino) *šjav-* ‘урчать’ vs. (VychU: Bogorodsk) *šjivaš-* ‘подать голос, отозваться’ (← *šj* ‘звук, голос, тон’) (SSKZD: 439). Overall, the emerging picture is not one of regularly reflecting a Proto-Permic segment, but rather one of later secondary epenthesis that has taken place dialectally in different conditions with differing results. Upper Vychegda *liya* cannot be taken as evidence for PP **liwa*. For these reasons, I still prefer the traditional Proto-Permic reconstruction **lija*.

Next, we will turn to the proposed loan etymology between Komi and Khanty. There are a few reasons why the word should be regarded as a relatively late loanword. Firstly, the substitution Kaz *ǝ*, O *ǝ* ← Komi *i* is not the most typical and only occurs in a few other seemingly late loanwords (Toivonen 1956: 138), e.g. Kaz *šǝlla* ‘Windbruch’ ← Komi *šjla* ‘morscher Baum; Windbruch’ (ibid.: 100). Secondly, as already mentioned the distribution in Khanty is very narrow, as the word is only found in Kazym Khanty *lǝwǝ* ‘mud’ and perhaps also as the first component of the compound O *lǝw-nij* ‘ide (*Leuciscus idus*)’ (Pystynen 2020: 75). Around 39% of Komi loanwords (139 words) are found exclusively in Northern Khanty, so the distributional pattern is by no means conclusive (Toivonen 1956: 159–161), but it is quite a strong indicator that the word is a relatively recent loanword. It is often difficult to pinpoint from which specific Komi dialect the words have been borrowed. Toivonen remarks that that it would often be natural to assume that some of the later Komi loanwords would have been borrowed from Northern Komi dialects such as Izhma, Pechora, and Udora, but often the words lack any distinguishing phonological or semantic properties to tell them apart from other Komi dialects. I do not find it necessary to reconstruct a medial **-w-* in PP **lija* based on Khanty evidence, since we find epenthetic forms in some modern Northern Komi dialects as well, cf. Pech *liya* that could very well represent the loan original, and especially since the first-syllable vowel substitution and distribution already point to a relatively recent loanword in Khanty.

There exists a word in Mansi that has not previously been mentioned in the etymological literature, but which in all likelihood is etymologically connected with the Khanty word, namely KondM *lǝw*, KondU *lǝw*, So *liwi* ‘Lache (Kond); Schlamm, Schlick (auf dem Seegrund) (So)’ (WogWb: 404) < PMs **liwǝ*. Similarly, to Khanty *lǝwǝ* ‘mud’, a Komi origin is perceivable. The vowel substitution, i.e. Ms **i* ← Komi *i*, is not the most typical, but not without its parallels either (Rédei 1970: 44), e.g. MsKondL KondM *pǝskǝn*, KondU *pǝskǝn* ‘Flinte’ ← Komi *bičkan* ‘Brecheisen’ (← *bički-* ‘stechen, hineinstopfen, bohren usw.’) (ibid.: 138). The same Komi word has been also borrowed into Khanty, cf. KhKaz *pǝškan*, O *pǝškǝn* ‘Gewehr’ (~ V *pečkǝn*, Vj *pǝčkǝn*) (Toivonen 1956: 58). Interestingly this word exhibits exactly the same vowel-substitution pattern as Kaz *lǝwǝ*. The peculiar semantics, ‘Flinte; Gewehr’ ~ ‘Brecheisen’, between the Khanty and Komi words is thought to be due to secondary

influence from Russian *пушка* ‘cannon’ (DeWoS: 1098). In Mansi, the semantics of *pəskən* could have been influenced by P *piškəl'*, VagN VagS *piškl'*, LozU *pisál'*, So *pisál'* ‘Flinte’ (← Komi (V VychU, Sys, Ud) *piščal'*, (P) *pišal'* ← Ru *пищаль* ‘Art Flinte’ (Rédei 1970: 138)). Some contamination seems to have happened, as some of the Mansi dialects have an otherwise unmotivated internal *-k-*. The two words, P *piškəl'*, KondL KondM *pəskən*, are distributionally complementary in Mansi dialects, which does make the contamination explanation less appealing, however. The Khanty second-syllable *-ĩ* as a substitution for Komi *-a* is exceptional (Pystynen 2020: 75), and the same is true for the second-syllable *-i* observed in So *liwi* (Rédei 1970: 49). There is presently no explanation for this peculiar second-syllable substitution, but otherwise, Mansi **liwĩ* can be a Komi loan from a similar Komi epenthetic dialectal form as Khanty.

To sum up, it is quite probable that the meaning ‘sand’ we find in Southern Finnic languages reflecting PF **liiva* is a secondary development, which does not necessarily exclude the possibility of Permic **lija* being a Finnic loanword. However, it does beg the question of how this seemingly secondary development made its way to Proto-Permic several thousand kilometers away and how this tracks chronologically. I must also underline that there is nothing in the Proto-Permic form **lija* to necessarily suggest that it needs to have been borrowed from Proto-Finnic **liiva* ‘mud, silt’. The structural argument is invalid, as this type of structure could have arisen in Proto-Permic without any outside influence as a result of derivation. The recently suggested PP reconstruction **liwa* – also heavily based on the assumption that the Finnic loan etymology is correct – relies on evidence that can be interpreted in ways which do not require a medial **-w-* to be reconstructed for Proto-Permic, at least in this particular case.

The idea that Permic **lija* is a loanword has dominated the conversation around its etymology to the extent that alternative explanations have not been sought. One thing to note is that there are a plethora of Pre-Proto-Permic forms that could have yielded PP **li-*. All monosyllabic words in Permic reflect earlier disyllabic words, but as there are many PU phonemes that disappear word-internally, there is a smorgasbord of options. This vanished element could have been any of the single stops PU **k*, **p*, or **t*, the dental spirant **-δ-*, the enigmatic **-x-*, or the semivowel **-w-*. There are several options for vowel reconstructions as well, as PP **i* can reflect either PU **u* or **ü*. There is even the possibility of an earlier sequence **-Vjə*, since at least PU **-ajə* or **-ojə* seem to regularly yield PP **i* as well.

Given this phonological preamble, there are noteworthy comparanda in Samoyedic. The word in question is PSam **jāḍ* glossed as ‘Erde, Stelle’ (SW: 36–37), which is found throughout the Samoyedic languages. Reflexes include Ngan *d'üo* ‘песок, порох’, (Castrén) *jua* ‘Sand, Asche’, EnF *d'a* ‘земля (планета); сторона, страна; земля (почва); место, местность’, NenT *ja* ‘земля, суша, материк; берег; земля, почва; земля, рыхлое вещество; место, местность, территория’, Slk **t'ü* ‘Erde, Ton’ (> Tym *t'ü* ‘schwarze Erde’, Ket *t'ü* ‘Lehm, глина’), Kam (Castrén) *t'u*, (Donner) *d'u*, *d'uw*, Koibal *dshu*, Mator *тча* ‘земля’, *джа* ‘место’. Included in this

group of words is also the Proto-Samoyedic derivative **jâê-râ* > Ngan (Popov) *juoru* ‘ocher’, *d’üoru* ‘краска’, En (Castrén) *jâra* (‘auch: Asche’), NenT *jara* ‘песчаный’, Slk **t’ürə* ‘Sandbank’ (> Tym *t’ür* ‘песок, hiekkasärkkä, Sandbank’, Taz *č’ür²*, Ket *t’ür*), Kam (Donner) *d’urá* ‘kleine Steine am Ufer von Seen und Flüssen’, Mat *джяра* ‘коса на реке’.

Phonologically Proto-Samoyedic **jâê* might not, at first glance, appear like a cognate for PP **liä*. Both can however be explained as reflexes of PU **lajə*.⁸ Proto-Uralic initial **l-* has mostly yielded PSam **j-* (Sammallahti 1988: 485). It has been assumed that this change applied only in positions before a labial vowel, e.g. PU **lupsa* ‘dew’ > PSam **jâpta-* and elsewhere **l-* remained a lateral (Michalove 2001). There is clear evidence that labiality was not the governing factor for the change, as there are clear counterexamples to this supposed rule, e.g. PU **lämpə* ‘warm’ > PSam **jämpə* ‘clothing, clothes’. It turns out retention of PU **l-* in Samoyedic only happens when it is followed by PU **e*, e.g. PU **ləntə* ‘lowland’ > PSam **liñtə* > Ngan *liñtə* ‘plain, valley’ (Aikio 2014b: 86). To the best of my knowledge, we have only one potential example of PU **la-* that has survived in Samoyedic: PU **lapta* ‘flat’ > PSam **jâptä* ‘thin’ (Zhivlov 2014: 127). Although the evidence is scarce, it is bolstered by the fact that in Proto-Samoyedic (as per SW’s material) there are ten examples of initial **jâ-*, whereas there is only one example of **lâ-*, which would seem to tip the scales heavily in favor of palatalization of PU **la-* to PSam **jâ-* as suggested also by our singular example. Admittedly, as the etymologies of these ten words are not known beyond Proto-Samoyedic, we cannot know for certain that any of them reflect PU **l-*, and they are in any case probably heterogeneous in origin, i.e. reflecting both earlier **l-* and **j-*.

The vocalism is more straightforward: PU **-ajə* regularly yields the PSam vowel sequence **âê*, e.g. PU **kajə* ‘grass, stalk, awn’ > PSam **kâê* > PSlk *qū* > SlkTaz *qu* ‘stalk, stem, slender object’ ~ PP **ki* > Komi Udm *ki* ‘awn’ (~ PS **kuojə* > SaaN *guodja* ‘seed shell of a sedge’, An *kuojâ* ‘sedge’ ~ MsLozL *kōj* ‘hair (on the head)’ ~ Hung *haj* ‘hair’) (Aikio 2012: 245; 2013: 167). Based on this exact parallel, PSam **jâê* ~ PP **li-a* could thus regularly reflect PU **lajə*.

There is some evidence to suggest that the meaning ‘sand’ is the more ancient. Interestingly, most of the reflexes of PSam **jâê-râ* refer to sand in some capacity. They mean either ‘sand; sandbank’, e.g. SlkTym *t’ür* ‘песок, hiekkasärkkä, Sandbank’, Mat *джяра* ‘коса на реке’, ‘sandy’, e.g. Tundra Nenets *jara* ‘песчаный’ or ‘sand coloring/colored’, e.g. Ngan *d’üoru* ‘ocher’ This becomes a lot easier to explain if the underlying stem at some point meant something along the lines of ‘sand, soil’, at least in

8. The old literary Finnish word *loima* ‘terra arenosa, sandmo, hiekkamaa’ (SSA 2: 87, s.v. *loima*; VKS: s.v. *loima*) could also belong here if analyzed as a derivative. There are plenty of *-ma* derivations denoting topographical and geographical objects, e.g. *kaljama* ‘sheet of ice, slippery ice’ ← *kalja* ‘slippery spot’, *poukama* ‘cove, recess’, *reunama* ‘fringe’ ← *reuna* ‘edge’, *selkämä* ‘open lake (sea), ridge (of a mountain)’ ← *selkä* ‘back’ (Hakulinen 2000: 130–131), thus *loima* ‘sandy soil’ could very well be derived from an unattested **loi* ‘sand’ (the phonological development is as expected, cf. footnote 6 of this article). Unfortunately, the word has not survived to modern times and we have no further knowledge on, for example, what dialect the word form represented.

addition to having a more general meaning ‘earth’. Even if the meaning ‘earth, soil’ is the primary one, the Nganasan cognate shows that ‘sand’ could have easily developed from an earlier ‘earth, soil’. Synchronic polysemy between ‘sand’ and ‘earth, soil’ is also fairly common, with at least 42 examples of colexification found in the world’s languages (CLICS: s.v. SAND). Examples of diachronic polysemy between ‘sand’ and ‘earth’ can be found in Germanic, e.g. ON *aurr* ‘wet clay; mud’, Faeroese *eyrur* ‘coarse sand, gravel’ ~ Old English *ĕar* ‘earth; sea’ (Kroonen 2013: 42), ON *jorfi* ‘sand (bank)’ ~ Old High German *ero* ‘earth’ (ibid.: 119). The exact semantic development and its direction might be hard to determine conclusively, but generally the semantic connection should be transparent enough to not warrant any major objections.

2.4. **mjr*- ‘to do forcefully; exert effort’

Komi *mjrd* is an adjective meaning ‘чрезмерно густой, крепкий, насыщенный; приторный’ (SSKZD: 231). In conjunction with a color the meaning is ‘темно’, i.e. ‘dark’, e.g. *mjrd lež* ‘темно-синий’, i.e. ‘dark blue’. It is clear that this Komi adjective belongs together with Udm *mjr-mjr* ‘сильно, упорно, настойчиво’ as well as Komi *mjrden* ‘насиленно; упорно; с большим трудом’ ~ Udm *mjrdem* ‘кое-как, с трудом’ (KESKJ: 183). This Permic group of words has been etymologically connected to a group of words in Finnic, e.g. Fi *myrtyä* ‘sauer werden, einen Beigeschmack bekommen; böse oder verbittert werden’, *myrkky* ‘Gift’ (Saarikivi 2007: 338). Together the Finnic and Permic group of words are thought to reflect different derivatives of a common Proto-Finno-Ugric word **mürä* ‘strong (of color, food)’.

There are several other notable parallel derivatives on the Permic side that help shed light on the semantic development, and which make a cognate relationship between the Finnic and Permic words unlikely. These parallel derivatives include Komi *mjrd'd'i*- ‘отнимать, отнять, отбирать, отобрать, отбивать, отбить, перебивать, перебить’ ~ J *mörd'd'i*-, *mörd'ji*- ‘отобрать, отнять’ (<PKomi **mjrd-jj*-), Komi *mjršj*- ‘трудиться, стараться, биться’ ~ J *məršj*- ‘работать с напряжением, кряхтеть’ (<PKomi **mjr-šj*-) (SSKZD: 231; Lytkin 1961: 148, 149), Udm *mjrd'ja*- ‘pakottaa (jkta esim. juomaan), tyrkyttää, zwingen (z. B. zum Trinken), aufzwingen, aufnötigen’ (WotjWsch: 162), *mjržj*- ‘ударить, ударять, задеть, задевать, ткнуть, толочь (в ступке)’ (URS: 451), *mjršti*- ‘толкнуть, подтолкнуть, ткнуть’ (URS: 452). What these parallel derivatives show is that it is actually only the Komi adjective *mjrd* (and some further derivations formed on it such as *mjrd-mj*-) that have anything to do with the intensity of color or food specifically, otherwise they denote action done forcefully, violently, and by exerting effort. Komi *mjrd* is in most cases used to denote intensity or “strength” of different substances, e.g. *mjrd čaj* ‘густой, крепкий чай’, *mjrd šir ker* ‘густой (сильный) запах смолы’ (KRS: 411) and can easily be seen as a secondary metaphorical development. The fact that the underlying word referred to doing something with force, effort, or persistence is enforced further, if we take a closer look at Komi *mjrden* ‘насиленно’, ‘упорно’, ‘с большим трудом’ and Udm *mjrdem* ‘кое-как, с трудом’. Based on the fact that dialectal forms in Udmurt

for the most part end in *-n*, e.g. MU M *mirden* (WotjWsch: 162), it is hard to analyze the words as anything other than instrumentals with an adverbial function, cf. the instrumental suffix Udm *-en* and Komi *-en*. This possibly also means that **mird* was originally a noun rather than an adjective.

There seems to be some derivational evidence to think that PP **mir-* was primarily a verb or at the very least a nomen-verbum. First of all, many of the the derivations mentioned above are deverbal, e.g. PKomi **mir-šj-*, formed with the “reflexive” suffix *-šj-* which has a whole host of functions, including passivity, automativity, resultativity, continuativity, and habituality (Bartens 2000: 284–286). Udmurt *miri-št-i-* is formed with a momentative suffix (ibid.: 287–288). The other derivatives are less easily classified into denominal or deverbal, because the suffixes attached can be used as both. It is worth mentioning that although Komi *mird'd'i-* (< PKomi **mird-ji-*) is most likely a denominal derivation, **mird* itself is probably a deverbal derivation, with *-d* being the PU action-noun suffix **-ntA*. The derivational path is very much reminiscent of Komi *lid'd'i-* ‘to count, read’ < PP **lid-ji-* ← PP **lid* ‘number, count’ < PU **lukə-nta* ‘count’ ← PU **lukə-* ‘to count, read’.

Finnish *myrkky* and *myrtyä* (and a few other interconnected words) have recently been discussed at length, and a Germanic loan etymology has been proposed for the former and an Indo-Iranian loan etymology for the latter (De Smit 2020: 74–86). In the article, any cognate relationship between the Finnic words and Komi *mird* – and between each other for that matter – is met with skepticism and it is remarked that the semantic connection between them is loose. I hope to have demonstrated in the previous paragraphs that this is indeed the case and semantically there is no reason to consider the words cognates. I will not go into detail about the newly proposed etymologies for the Finnic words, as I do not think that they – right or wrong – bear any etymological connection to the Permic group of words.

Proto-Permic **mir-* has some noteworthy comparanda in Finnic and Samoyedic. In Finnic this comparanda consists of Fi *murjoa* ‘ramponieren, bearbeiten, hart anfasen, übel mitspielen’, *murjaantua* ‘kutistua, murtua, särkyä’, *murju* ‘muru, moska, murska’, Ingrian *murjata*, *murjoja* ‘rypistää’, Kar *murjuo* ‘murjoa, runnella, rikkoa, ruhjoa; rutistaa, rypistää’, Vo *murjaunnu* ‘rypistynyt’, (Kukk) *murjob* ‘murjoa, ruhjoa’ (SSA 2: 181). Saami *murjahet* ‘tappaa (et. lintuja ja linnunpoikia)’ is marked as an uncertain cognate by SSA. Considering the first-syllable vowel correspondence Saami *u* ~ Finnic *u*, something which is typical of loanwords (Korhonen 1981: 38), as well as the restricted distribution, the Saami word is more likely to be a Finnic loanword than a cognate. It is also noted in SSA that *murjoa* can belong together with *mura* ‘Schlamm, Torfmoder, kies- und lehmhaltiger Humus, Schutt, Staub’ and *muru* ‘Stückchen, Brocken’ similarly with the semantically close *murska* ‘crushed material’ and *murskata* ‘to crush’. According to SMS, in addition to mauling *murjoa* in Finnish dialects can also mean ‘murtaa (kappale jstak), pilkkoa, murentaa’, which together with *murju* ‘muru, moska, murska’ probably does show semantic influence from *mur-* words, e.g. *mureta* ‘to break (intr.)’, *murtaa* ‘to break (tr.)’, *muru* ‘crumb’, and the like. It should be noted, however, that this does not necessarily mean that the words

are otherwise etymologically connected. There is no reason to think that *murjoa* has anything to do with *mur-* words, as there is no known derivational pattern (descriptive or otherwise) or phonological variation that could connect the two.

Rather *murjoa* can easily be connected, both phonologically and semantically, with PP **mir-*. The second-syllable *-o* in Finnic can be analyzed as a derivative suffix (Hakulinen 2000: 275) and the underlying stem can be identified as PF **murja-*. The one-time existence of PF **murja-* is also confirmed by different parallel derivatives to *murjo-*, e.g. Fi *murjaantua* ‘to shrink, break’, Ingrian *murjata* ‘to wrinkle’, Vo *murjata* ‘kortsutada, мять; välja väänata, nihestada, вывих/ивать -нуть’ (SSA 2: 181; Grünberg et al. 2012: 741). Proto-Permic **j* regularly reflects – among other things – PU **u* and post-consonantal PU **j* disappears in Permic, e.g. PU **ćarja* ‘beam’ > Komi *śor*, Udm *śuri* ‘cross-beam’ (Aikio 2015: 56), so both the Finnic and Permic words can regularly reflect PU **murja-*.

In Samoyedic, there is PSam **mâr-* ‘wegnehmen’ (SW: 87) > Ngan *mâr-* ‘забрать, отнять’ (Kosterkina & Momde & Zhanova 2001: 105), EnF *morsi-* ‘отнять, отобрать, забрать; вырвать’ (Sorokina & Bolina 2001: 244), NenT *mâr-* ‘отнять, отобрать, отбить, захватить (что-л. силой)’ (Tereshchenko 1965). In Samoyedic, the core meaning is ‘to take away’, but the verb also denotes more forceful measures like forcibly ripping something away. There exists a PSam derivation **mârâj* glossed as ‘geizig’ (ibid.), i.e. ‘stingy’, but which often also means ‘greedy’, e.g. NenT *mâro* ‘скупой, жадный’, EnF *toru* ‘жадный, скупой, алчный’. There is no problem in deriving the PSam first syllable **â* from **u-â* (Janhunen 1981: 223–227). PU **u-â* is usually reflected as PSam **â-â*, e.g. PU **muna* ‘egg’ > PSam **mânâ*. In a few cases unexplained secondary reduction of PSam **-â* to **â* has taken place, e.g. PU **kuña-* ‘to close one’s eyes’ > PSam **kânâ-*. The reduction is seen as secondary, because original **-â* stems regularly yield PSam first-syllable **u*, e.g. PU **tulâ* ‘fire’ > PSam **tuj* (ibid.: 233). The consonant stem has no apparent explanation, however, and we also do not have any examples of a PU **-rj-* cluster in Samoyedic, so we do not know exactly what to expect. Perhaps it is not possible to connect the Samoyedic words with Finnic and Permic conclusively. The Gleichsetzung between Finnic **murja-* ‘to maul, handle roughly’ and Permic **mir-* ‘to do forcefully; exert effort’ is, at the very least, phonologically regular and the semantics match better than in the previous proposal that connected the Permic words with Finnic **mürtü-* and **mürkkü-*.

2.5. **vij* ‘strength, might’

According to the view expressed in KESKJ (p. 72) KomiZ P *vin* ‘сила, мощь’, J *vön* can be compared to words reflecting PU **wäkə* ‘strength, power’, if the final *-n* is considered a suffix. Traditionally, PU **wäkə* is thought to be reflected in Permic by Udm (S M) *vi* (stem *vij-*), *joz-vi* ‘die Glieder des Körpers (in ihrer Gesamtheit)’, (S) *kat'-vi* ‘Kraft, Macht’, (S K) ‘Zeit, Zeitabschnitt’, Komi (Sys) *jez-vij* ‘Gliedgelenk’, (Lu) *jez-vi* ‘Gliedstück (im Rohr, Halm)’ (UEW: 563). There is variation especially in Komi dialects between word-final *i* and *i(j)*, cf. (Lu Le Skr SysC) *jezvi*, (SysU VychL

Pech) *jezvij*, (Vym) *jezvi*, (VychU) *jezvi*, *-vij* (SSKZD: 142), which makes determining the PP form of the word quite difficult. At first glance, it seems that although the phonological relationship between *vjn* and *vi*, *vij* is not entirely clear, the word belonging to the same group of words etymologically is not out of the question. It seems that the phonological development and derivational analysis are very much tied together.

Obviously, the comparison hinges on whether or not the final *-n* in *vjn* can be analyzed as a suffix. It certainly is not a known productive suffix, so the only other option is that we are dealing with a petrified derivative. Of the known denominal suffixes in Proto-Uralic, the proprietive suffix *-ŋä* (Aikio 2022: 19) is the only one that could have regularly yielded Komi *-n*, e.g. PU **čäŋə* ‘smoke’ > PP **čij* > Komi *čjn*. Proprietary derivations ultimately reflecting Proto-Uralic **wäkə-ŋä* are also fairly common in Uralic, e.g. Est *vägev*, Fi *väkevä* ‘strong’ ~ MdE *vijev*, E (Atrat) *vijen* ‘stark, kräftig’ ~ KhV Vj *wökŋ*, J *wökŋ*, DN *weyəŋ*, Kaz *wewəŋ* ‘stark, kräftig’ ~ Mst *wewŋ*, KondL *wǝäŋ*, P *wǝäŋ*, LozU So *wāŋŋ* ‘stark, kräftig’, although the proprietive suffix is not otherwise known to exist in the Permic languages. The Komi word is also not an adjective, but this might very well be due to the base word ceasing to have any clear semantic connection with ‘strength’ and the derivational relationship between the reflexes of **wäkə* and **wäkəŋä* becoming obscure already in Pre-Proto-Permic.

The phonological development is complex and open to interpretation. In general, PU **CäKə* (K = single voiceless stop) seems to have yielded monosyllabic PP **Ci*, e.g. PU **kätə* ‘hand’ > PP **ki* > Udm Komi *ki*. The development of PU **wäkə* is not entirely analogous to PP **ki*, since although we do find the “expected” *vi*-forms in both Udmurt and Komi, in Komi dialects we also find *vij*, and this can hardly be explained as secondary. The longer form *vij* actually conforms better to the idea that the eventual development of PU **ä* to Permic *i* can be tied to the general development of PU **ä-ə* to PP **i* before voiced consonants, e.g. **kälə* ‘tongue, language’ > PP **kil*, by assuming the vowel change took place after the single voiceless stops **k*, **p*, and **t* were lenited to either voiced stops or fricatives word-internally (Pystynen 2020: 70–71). In some cases PP **i* was further fronted to *i*. Medial **-k-* and **-t-* are thought to have had a palatalizing effect that resulted in fronting (Normanskaja 2009: footnote 5), but the exact mechanism is hard to pin down. One possibility is that a transitional glide *-j-* was inserted as a hiatus-filler (Pystynen 2020: 71). The whole chain of development could be roughly sketched as follows:

PU **wäkə* > **wäyə* > **wiy* > PP **vij* > PP **vij* > *vi*
 PU **wäkə-ŋä* > **wäyə-ŋä* > **wiyəŋ* > PP **vij* > *vjn*

Komi *vjn* can very well be explained by the same general vowel change PU **ä-ə* > PP **i* before voiced consonants that also produced *-vi*. The latter word was simply subject to subsequent fronting that was conditioned by a following palatal element. This palatal element might have been a hiatus-filling sound, or it could be that medial **-k-* and **-t-* that regularly developed into **j*. In this scenario, the glide would have also first conditioned the fronting of **ij* > **ij* before disappearing in word-final position.

There is not much evidence to suggest such a change word-finally with regards to **vi* and **ki*, but a Proto-Permic word of similar phonological shape, namely PP **pi* ‘boy, son’ > Udm Komi *pi*, does offer some corroborating evidence, as that word incidentally has derivatives that quite clearly point to an earlier palatal glide being present at the time of their formation:

PP **pij* > Udm *pi* ~ KomiZ *pi*, J *íci-pí*, *íci-pij*⁹ ‘husband’s brother’ (Lytkin 1961: 119)

→ PP **pij-al-* ‘to calve’ > Udm (G) *pia-*, (G U M) *pija-* ‘Junge werfen, jungen’ (WotjWsch: 195–196) ~ KomiZ (VychL Skr Ud) *pijav-*, (Lu Le Pech SysC VychU) *pijal-*, (VychU Izh) *pijoo-* ‘рожать, родить (о животных)’ (SSKZD: 287), J *pijál-*, *piál-* ‘родить, принести детеныша (о животных)’ (Lytkin 1961: 163);

→ PKomi **pij-an* (collective/diminutive) > KomiZ (Izh VychL Pech SysC Skr Ud) *pijan* ‘сыновья’, (VychU Skr SysC) *-pijan*, *kañ-pijan* ‘котята’ (SSKZD: 287), J *-pjan*, *zopɹjan* ‘сын, паренёк’ (*zon* ‘сын, парень’), *zerpjan* ‘дождик’ (*zer* ‘дождь’) (Lytkin 1961: 114–115);

→ Udm (G M MU U) *pijos-murt* ‘Mann, männliches Wesen’ (WotjWsch: 195–196).

Proto-Permic **pij* ultimately reflects PU **pojka*, so it only provides comparable evidence for the Proto-Permic level of development, but its derivatives suggest that we might want to reconstruct PP **ki* and **vi* as **kij* and **vij* respectively.

One other development that is tangentially related is vowel contraction. It would seem that the secondary glide that arose through the lenition of medial PU **k* and **t* disappeared word-internally and coincided with words that reflect PU **-äjə*, e.g. PU **päjä*-¹⁰ > PP **pi-* > Komi *pu*-¹¹ ‘kochen, sieden’, PU **säjä* ‘Eiter, Fäulnis’ > PP **sj-ś* > PP **si-ś* > Udm (S) *śis* ‘verfault, vermorscht, Fäulnis’ (G) *śis* ‘verfault’ ~ KomiZ P J *śis* ‘verfault’. The word-final development of PU **-äjə* is harder to comment on, as the only somewhat reliable example we have is a direct counterexample to the regularity of the vowel contraction, cf. PU **täjä* ‘Laus’ > Udm *tej* ~ Komi *toj*, J *túj*. However,

9. The first element is probably connected to Komi *íčet* ‘маленький’, which is in any case used with other kinship terms as well, cf. KomiZ *íciñ* ‘тётка (со стороны матери)’, *íciñoñ* ‘молодуха’ (*moñ* ‘сноха, невестка’) ~ Udm *íciñeñ* ‘жена младшего брата’ (KESKJ: 110).

10. Reconstructed in UEW as **peje-*, but some of the cognates clearly point to PU **ä* (Metsäranta 2020: 150–156).

11. Komi *u* is due to labialization, the fact that PP vowel was **j* is confirmed by the derivative *pjm* ‘горячий, жаркий, теплый’, which is either a PP derivation **pi-m* or reflects an even earlier PU **päjä-mä*.

I am not entirely convinced that the PU reconstruction is correct here.¹² Otherwise, the contraction of **-ājə* could mirror the development PU **-ajə* > PP **i*, e.g. PU **kajə* ‘dawn’ > PP **kj-a* > Komi *kja* ‘Röte am Himmel’, PP **as-ki* ‘tomorrow’ > Udm dial. *as-ki*, Komi *as-ki*, (SysU) *as-ki* (Metsäranta 2023: 272–275), PU **kajə* ‘grass, stalk, awn’ > PP **ki* ‘awn’ > Udm Komi *ki*,¹³ PU **lajə* ‘sand, soil’ > PP **li-a* > Udm *luo* ‘sand’, Komi *lja* (see 2.3 for further details). Some have remained skeptical regarding this sound change stating that PU **aj* is regularly reflected as PP **oj*, e.g. PU **aja-* ‘to drive’ > PP **oji-* > Udm *uji-*, Komi *voj-*, PU **kajwa-* ‘to dig; throw’ > PP **koji-* > Udm *kujal-* ‘to throw away’, Komi *koj-* ‘to pour; throw water (on the sauna stove)’ (Pystynen 2020: 69–71). As the more secure examples of **aj* > PP **oj* change are both original **a*-stems, I find no real contradiction here, they simply show that the stem vowel was part of the condition for the contraction. A similar vowel contraction could have affected also the PU sequences **-ojə* and **-ujə* at least in three-syllable words, e.g. PU **kojə-ra* ‘male (of animals)’ > PP **kijr*, PU **pujə-ksə*¹⁴ > PP **pis(k)* ‘eye of a needle’, but this discussion unfortunately falls outside the scope of the present article.

The last thing to consider concerning the analyzability of *vin* as a derivative of PU **wäkə*, is Udm *nod* ‘cleverness, wit, quick-wittedness, perception’ and Komi *ned(-kiv)* ‘riddle’ < PP **näd*, that has been explained as a derivation from PU **näkə-* ‘to see’ (Metsäranta 2020: 137; Aikio 2021: 166–168). The question does arise of how the first-syllable **ä* in PU **näkə-ntä* > PP **näd* has escaped lenition and subsequent raising to **i*, a process that one would expect based on the general development and the etymology I am proposing here. It appears that the development of PU **wäkə-ñä* to PP **vijj* and the development of PU **näkə-ntä* to PP **näd* are two mutually exclusive propositions. It is not entirely out of the realm of possibility that syllable structure had a hand to play in the elision of vowels in non-initial syllables, and this could have taken place at different times. Perhaps the suffixal vowel following a cluster like **-nt(A)* survived long enough to trigger an “ä-umlaut”:

12. It is hard to say what we should reconstruct for Proto-Permic in cases where Udmurt shows *e* and Komi shows *o*. In inherited vocabulary, this vowel combination reflects either PU **i-ä* or **i-a* (which cannot be told apart based on Permic evidence alone) before a palatal consonant, e.g. PU **miñä* ‘daughter-in-law’ > Udm *iči-meñ* ‘daughter-in-law; husband’s younger brother’s wife; sister-in-law’ ~ Komi *moñ* ‘daughter-in-law; sister-in-law; young bride’, PU **kiška-* ‘to rip, tear’ > Udm *kešj-* ~ Komi *koš-*. The Permic cognates Udm *tej* and Komi *toj* could thus reflect PU **tijä* rather than **täjə*. PU **tijä* ‘louse’ is also an entirely possible protoform for PMa **ti* > M *tij*, H *ti* and PS **tikkē* (< PU **tijä-kkä*, analogous to PU **kuwa-kka* ‘long’ > PS **kukkē*). The secondary nature of the vowel in Finnic might also explain the asymmetry of conditions for Lehtinen’s law; **a* > **oo* / *_Rə* (with R being = *m, n, l, r, δ* and *j*) while **ä* is lengthened to **ee* in the same conditions except for before *j* (Pystynen 2018: 60). To my understanding, this conclusion is largely based on LPF **täi*.

13. Alternatively argued to reflect PU **kəpə(w)* along with PF **kəpü* > Finnish *käpy* ‘pine cone’ (Pystynen 2020: 70). I find the comparison semantically too much of a leap to be credible. Arguing that the comparison of PP **ki* ‘awn’ to words meaning ‘sedge’ and ‘stalk’ is also semantically nontrivial might be true, but the difference in degree is significant. Sedges and awns are at least morphologically quite similar grass-related things; the same cannot be said for ‘pine cone’.

14. Cf. НепТ *pu* ‘та часть ножа, скребка и. т.п., которая вставляется в рукоятку, ушко иглы’, EnT *pu* ‘eye of a needle’, Ngan *hijj* ‘id.’, ‘the fixed end of a sledge runner’, SlkTaz *pü*, Ket *pü* ‘eye of a needle’ < PSam **puj* (Helimski 2001: 78–79).

PU **kārə-mä* > **kārə-mä* > **kj̄rə-m* > PP **kj̄r̄i-m*
 PU **pājə-mä* > **pājə-mä* > **pj̄jə-m* > PP **pj̄-m*
 PU **wākə-ŋä* > **wäγə-ŋä* > **wj̄γə-ŋ* > PP **vj̄-ŋ*

PU **näkə-ntä* > **näγə-ntä* > **nj̄γə-ntä* > **nj̄-dä* > PP **nä-d*

This is all obviously conjecture at this point, since the finer points of Permic vowel development continue to elude us and the chronology of sound changes is unclear. I would still maintain that Komi *vjn* is a reflex of Proto-Uralic derivation **wākə-ŋä*, since it can after all be produced following the same regular sound laws we otherwise observe. The counter-evidence itself is also not massive, but rather consists of a singular piece of evidence that could have a different interpretation or could just as easily be false, an unfortunate constant of etymological studies.

Conclusion

I have argued for a different but nevertheless Uralic etymology of **kj̄rim* ‘handful, bunch’, **lja* ‘sand’, and **mj̄r-* ‘to do forcefully; exert effort’. I am of the opinion that **kj̄rim* is a derivative of PU **kārə-* ‘to wrap, bind, thread’ and that it is structurally similar to MdE *kerme* ‘bunch, bundle’ ~ M *kärmä*. For Proto-Permic **lja*, I believe to have been able to identify a cognate in PSam **j̄äð* ‘sand; earth’, and for **mj̄r-* in Finnic **murja-* ‘to maul’. According to the view expressed in this article, PP **kun* ‘ash, lye’ is cognate with Mari **kon* ‘ash, lye’ as thought previously, but as they also have a regular-looking cognate in Selkup **kuəna* ‘ash’, it might be time to reevaluate their relationship to PS **kunę* ‘ash’. In the case of **vj̄ŋ* ‘strength, might’, I argue that it reflects an earlier proprietive adjective PU **wākə-ŋä*. Komi *vjn* belonging together with PU **wākə* is not a novel idea, but the derivational analysis is.

Abbreviations

EnF	Forest Enets	O	Obdorsk
EnT	Tundra Enets	V	Vach
EPF	Early Proto-Finnic	Vj	Vasjugan
Est	Estonian	Komi	
EstS	South Estonian	Izh	Izhma
Fi	Finnish	J	Jažva
IE	Indo-European	Le	Letka
Kam	Kamas	Lu	Luza
Kar	Karelian	P	Permyak
Kh	Khanty	Pech	Pechora
DN	Demyanka	Skr	Syktyvkar
J	Jugan	Sys	Sysola
Kaz	Kazym	SysC	Central Sysola

SysL	Lower Sysola	VagS	South Vagilsk
SysU	Upper Sysola	W	West
VychL	Lower Vycheгда	Ngan	Nganasan
VychU	Upper Vycheгда	NenT	Tundra Nenets
Ud	Udora	ON	Old Norse
Z	Zyrian	PF	Proto-Finnic
Liv	Livonian	PGmc	Proto-Germanic
LPF	Late Proto-Finnic	PI	Proto-Iranian
Mari		PII	Proto-Indo-Iranian
C	Central	PMa	Proto-Mari
E	East Mari	PMs	Proto-Mansi
H	Hill	PP	Proto-Permic
M	Meadow	PS	Proto-Saami
NW	Northwestern	PSam	Proto-Samoyedic
Up	Upsha	PSl	Proto-Slavic
Vo	Volga	PSlk	Proto-Selkup
W	West Mari	PU	Proto-Uralic
Md	Mordvin	Ru	Russian
E	Erzya	Saa	Saami
M	Moksha	An	Anar (Inari) Saami
MPF	Middle Proto-Finnic	N	North Saami
M	Mansi	Sk	Skolt Saami
E	East	SCr	Serbo-Croatian
KondL	Lower Konda	Slk	Selkup
KondM	Middle Konda	Udm	Udmurt
KondU	Upper Konda	G	Glazov
LozL	Lower Lozva	K	Kazan
LozU	Upper Lozva	M	Malmyzh
N	North	MU	Malmyzh-Urzhum
P	Pelymka	S	Sarapul
So	Sosva	U	Ufa
T	Tavda	Vo	Votic
VagN	North Vagilsk		

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