

Proto-Uralic derivational morphology and the problem of affix homonymy

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Research problem

- The overarching project (funded by Kone Foundation) [Metsäranta, Kuokkala, Pystynen]: reconstruction of derivational morphology in Proto-Uralic and its development into the daughter languages
- Affix homonymy: are reconstructed suffixes with many functions really the one and the same suffix, or should different but homonymous suffixes be reconstructed?
- Also, is the homonymy only apparent? > Problems with reconstruction ("*rV" = *ri ~ *rA ~ etc.?)
- Are some posited suffixes homonymous with non-suffixal root elements?

Research problem

- Case studies:
 - PU *-rV suffixes; denominal, deverbal; problems with reconstruction
 - *-ksV suffixes in Finnic + Uralic background
 - *-i suffixes in Finnic + examples not of Uralic background

Background

- Uralic diachronic word formation an understudied topic (see Holopainen, Kuokkala, Metsäranta & Rauhala 2020 for an overview)
 - The last monograph-level presentations of Proto-Uralic derivational morphology are Györke (1934), Lehtisalo (1936)
- Rédei (1975) ≈ the authoritative position of the *Uralisches Etymologisches Wörterbuch* (UEW, 1988): almost any consonant can function as a suffix; no need to reconstruct function; same suffixes as both denominal and deverbal
- Connected to problems of Uralic etymology and historical phonology (see Metsäranta 2020: 14–18)

Background

- Rédei 1975: 94
"Nach dem ersten und wichtigsten Kriterium sind diejenigen PU/PFU-Etymologien als gebildete Formen aufzufassen, die sich auf eine aus drei Silben bestehende Grundform zurückführen lassen. Bekanntlich waren die lexikalischen oder freien Morpheme der PU- und PFU-Grundsprache (die sog. Begriffswörter) zweisilbig. Ihr struktureller Aufbau war: *VCV*, *CVCV*, *VCCV*, *CVCCV*. Die Struktur der gebildeten Wörter war : *VCV* + *CV* (seltener : *VCV* + *C*) usw."
- : 99
"In der Grundsprache haben wir aber nicht mit siebzehn, sondern mit viel mehr Ableitungssuffixen zu rechnen. Die aus demselben konsonantischen + vokalischen Element bestehenden Suffixmorpheme konnten nämlich — im Prinzip — in vier verschiedenen Funktionen auftreten : als denominale Nominal- und Verbalsuffixe, sowie deverbale Nominal- und Verbalsuffixe. Wenn wir noch die Pronominalsuffixe, ferner die aus geminierten Explosiven bestehenden Suffixe (**-pp₃*, **-tt₃*, **-kk₃*) und die Suffixkombinationen (**-mp₃*, **-nt₃*, **-ŋk₃*, **-ńć₃*, **-sk₃*, **-št₃* usw.) hinzunehmen, kann der Ableitungssuffixbestand der Grundsprache zahlenmäßig um 100 gewesen sein."

*-rV suffixes

- Reconstructed for PU: Lehtisalo 1936, Györke 1934, Kövesi 1965, UEW etc.
- Not included in the recent overview by Aikio (2022)
- Problems
 - Function?
 - Many etymologies in the UEW allegedly involving this suffix are problematic etymologies
 - Opaque etymologies (eg, *šinjiri 'mouse'): cannot be analyzed as derivatives in Proto-Uralic
 - Words ending in both *-ri and *-rA are lumped under the same suffix

*-rV: problems with etymological evidence

- In addition to opaque etymologies, many alleged Uralic (Ugric, Finno-Ugric, Finno-Permic) etymologies ending in *-rV in the material of earlier etymological dictionaries (MSzFE, UEW) are erroneous reconstructions; relying on this kind of etymological material leads to skewed view on Proto-Uralic derivational morphology
- Examples of untenable etymologies (irregular phonology, no evidence of derivation):
- Proto-Ugric *jVkkVrV 'root' (Hungarian *gyökér*, South Mansi *jükār*)
- Proto-Finno-Permic *soptVrV 'blackcurrant' (Mari *šaptâr*, Komi *seter*)
- Proto-Finno-Ugric *čikVrV 'grave' (~ Hu. *sír*, Mari *šüγär*)

Roots ending in *-rV

- Several examples have no explicit evidence for any segmentation, proposed by Rédei (1975) to be derivatives only due to trisyllabicity
 - *ämV-rV- 'to scoop' (?? ~ *amma- 'to scoop')
 - *oćtV-rV 'whip' (loanword(s?) << Indo-Iranian)
 - *śomV-rV 'sad'
 - *šij̥i-ri 'mouse'
- While most Proto-Uralic roots are bisyllabic, there is *a priori* no reason to entirely exclude the possibility of longer roots (as noted e.g. by Helimski 1992); e.g. loaning may introduce such cases

Roots ending in *-rV

- There may be a reason for trisyllabic roots to often end in *-rV: several examples can be found of roots of the shape *CVCiRV, while a corresponding bisyllabic root shape **CVCRV generally did not occur.
 - No cluster **Nr possible, but *šinjiri, also *keņjiri 'bend'
 - No cluster **NI possible, but *küńili 'tear', *mińili 'heaven'
 - No cluster **Nn possible, but *kămini 'palm'
- Currently no reason to assume either pre-PU epenthesis **šinjri > *šinjiri or any pre-PU vowel losses in other roots such as **kajiwa- > *kajwa- 'to dig', but a complementary distribution seems apparent.

*-rV suffixes

Evidence from daughter languages (methodology: is this enough to reconstruct something to PU?)

- Finnic adjective suffix *-rA* (*-ro*; nominalizer *-re'*) (Hakulinen 1979)
- Saami: recurring suffixal *r* only on sound-symbolic *-rd-* verbs (*hulardit* 'make growling or humming sound', *vizardit* 'chirp, twitter')
- Mordvin: productive adjective suffix *-RA*, opaque nouns (Maticsák 2015)
- Mari: debated evidence, different *r*-suffixes with unclear connections to Finnic *rA* etc. (such as collective suffix *-er*); opaque (Pre-Mari) derivatives, *užar* 'green' < (?)
**wišara* (Bereczki 2002: 181)
- Mansi, Permic: only opaque etymologies ending in *-r*, not a productive derivational suffix anymore (Riese 2001; Csúcs 2005); allegedly productive in Khanty according to Sauer (1967) but the evidence is controversial
- Hungarian *-r* (?), *-rú* adjectivizers: *homorú*, *szomorú* (Bartha 1958)
- Samoyedic: a number of unproductive nouns in *-*r*; a verb suffix *-*rA-* was compared with other languages' material (Lehtisalo 1936), but it rather continues PU *-*tA-* (Zhivlov 2023: 150)

*-rV suffixes

Adjective suffix *-rA in Proto-Uralic?

- Cf. Adjectivizers with *r-* in Finnic (eg, *-ra* in *avara* 'open'), Mordvin, Hungarian
- Denominal **koji* 'man' > **kojira* 'male; männlich' (UEW: 166–167, 168–169) > Fi *koira* 'dog (< *male dog)', Komi *kjr* 'male dog', East Khanty *kar* 'male animal', Hu *here* 'testicle' etc.
- Other (plausible) *-rA* etymologies less clear
- ?? **küńä* > **küńärä* 'elbow' > Fi *kyynärä* etc. (different derivatives in Ugric, eg Hu *könyök*)

Deverbal? (no good solidly PU examples)

- **ćoma-* 'be thirsty, sad' > ? **ćomara* 'thirsty' > Md *śumord'e-*, Hu *szomorú* (later parallel formations?)
- Cf. **kuma* 'face down' > Fi *kumara*, Hu *homorú*



*-rV suffixes

Derivatives in *-ri?

- As noted earlier, most PU words ending in *-ri are opaque = cannot be considered derivatives with the means of reconstructed PU derivational morphology
- A possible example: *itäri 'clear' (> East Khanty *etər*, North Mansi *ätər*, Tundra Nenets *ŋəd'er* 'clearing (in forest)') << *itä- 'become visible' ? (Aikio: UED draft)
- Based on Ob-Ugric, also a reconstruction *itärä would be possible, however
- The Ob-Ugric word has also been considered a loan from Iranian (Alanic) *(w)idra- 'clear'; semantically and phonologically plausible explanation

*-rV-verbs?

Verbs in *-rV-?

- Very few examples > difficult to claim anything beyond speculation; no unambiguous examples where both a derived verb and the base is attested
- ? *puća- 'squeeze' (?? > adjective *puća-ra > causative) *pućar-ta-
- Problems with phonology (clusters in reflexes such as Mari *puńće-*, Komi *pićki-*); the derivational relationship dubious, further research needed
- For other verbs, no base known; *ämärV- ? (relationship to *amma- has been suggested but cannot be proved)

*-rV suffixes: Current summary

- The identity of proposed *-rV suffixes remains on weak basis
- Functions are difficult to positively identify for Proto-Uralic, partly even for individual branches
- It often remains open to question if any particular lexeme can be even segmented as containing a suffix
- Is there hope for improving this situation?

Methodology: paths forward

- The reconstruction of derivational morphology in a "deep" proto-language such as Proto-Uralic will benefit from general understanding of historical morphology
- In the following, we briefly present two case studies on suffix homonymy in the Finnic languages and the lessons they suggest

Finnic *-ksV: synchronic homonymy, historical polysemy and/or homonymy?

V → V:

- 1) Deverbal, frequentative Dx *-ksi-* (Fi. *kuljeksia* 'wander about' < *kulkea* 'go, walk') < *-kse-j- < PU *-kći + -j
- 2) (Southern Finnic) conditional marker *-ksi-* < frequ. Dx (1)

N → N

- 3) Denominal noun Dx *-s* : *-kse-* (Fi. *aidas* : *aidaksen* 'fencing rail' ← *aita* 'fence') < PU *-ksi
- 4) Translative case suffix *-ksi* : *-kse-* (already PU?) < noun Dx *-ksi (3)
(not likely: < lative Cx *-k + lative Cx *-s)

Finnic *-ksV

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N → V

- 5) (Finnish) denominal censive Dx *-ksi-*, *-ksu-/-ksy-*
(Fi. *paheksia* ~ *paheksua* 'consider bad' ← *paha* 'bad')
 - a. ? < transl. Cx *-ksi* (4) [+ verbal Dx *-i-* / reduced verb construction??]
 - b. ? < frequ. Dx *-ksi-* (1)
 - c. ? other origin, ? ~ Saami **-kšę-* (SaaN *uhcášit* 'consider too little')

Finnic *-ksV

- 5) (Finnish) denominal censive Dx *-ksi-*, *-ksu-/-ksy-*
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- a. ? < transl. Cx *-ksi* (4) [+ verbal Dx *-i-* / reduced verb construction??]
 - b. ? < frequ. Dx *-ksi-* (1)
 - c. ? other origin
- Affinity scenario (5)b. is more probable: there are plenty of parallel cases of frequ. Dx > censive Dx already in Finnish dialects (e.g. *kumma-illa* 'consider strange', *pahe-skella* 'consider bad')
 - Semantically empty Aktionsart suffixes (frequentative, momentative) tend to be used as general verbalizers and take on contextually motivated meanings (attached to negative concepts → negative evaluation)

Finnic *-ksV: conclusions

- Even highly similar suffixes can prove to be etymologically distinct
- Multiple alternative etymologies can be presented for a single affix
- Morphosyntactically & semantically similar suffixes (more) likely to be of common descent
- Unexpected developments (e.g. deverbal suffix > denominal suffix) should be backed up with parallels

Finnic *-i: historical homonymy

V → V: 1. Deverbal, iterative Dx -i- < PU *-j-

e.g. Fi. *hyppi-* 'to jump around' ← *hyppää-* 'to jump'

N → V: 2. Denominal, privative / instrumental Dx -i- < PU *-j-

e.g. *kyni-* 'to pluck' ← *kynä* *'feather' (> 'pen'); *muni-* 'to lay eggs' ← *muna* 'egg';
nokki- 'to peck' ← *nokka* 'beak'

N → N: 3. Denominal, diminutive Dx -i < PU *-j

e.g. *peni* 'dog, whelp' < **penä-j*; *näppi* 'fingers' < **näppä-j*

N → A: 4. Combining form in compounds, < diminutive *-i

e.g. *neli-* 'four-, quadruple' ← *neljä* 'four'

Finnic *-i: ...and non-derivation

- The nominal and verbal suffixes can occasionally occur on a common base, yielding distinctive homonymous verb ~ noun stem pairs, otherwise rare in modern Finnish, e.g.
toppe- 'to learn' → oppi- 'to learn, study', oppi 'lesson, education'
paina- 'to push' → paini- 'to wrestle', paini 'wrestling'
- Yet, other such pairs result instead partly via loaning, thanks to *i* as also the paragogic vowel added to consonant-final loanwords:
Swedish *dansa* >> *tanssa-* → tanssi- 'to dance'; Sw. *dans* >> tanssi 'dance'
Sw. *vakta* >> *vahtaa-* → vahti- 'to guard'; Sw. *vakt* >> vahti 'guard'
- Explicitly demonstrates that segmentation as a suffix might be incorrect even with formal and semantic compatibility with a base!

Finnic *-i: lessons

- Vocabulary of uncertain origin in the Uralic languages, not guaranteed to represent Proto-Uralic inheritance but perhaps e.g. loanwords, may have the appearance of a derivative independently of the PU derivational system.
- A clear risk for distorting our understanding of suffixes' original functions;
- and partly even the identification of suffixes themselves, if both a base (e.g. *dans*) and its derivative (*dans-a-*) have been borrowed.

Concluding remarks

- The case studies highlight the problems of affix homonymy in Proto-Uralic and its daughter languages, showing that new research on phonology and etymology is essential in investigating Uralic diachronic derivation
- The picture of PU derivational morphology very different from the descriptions of Györke, Lehtisalo, Rédei, Bakró-Nagy 1990 etc.; the level of reconstruction of the derivational morphology far less advanced, no far-reaching claims can be made without a careful analysis of the etymological evidence
- Critical review of the existing research is needed!

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