Reconstructed and constructed morphology

Can language planning turn back the wheel of time?

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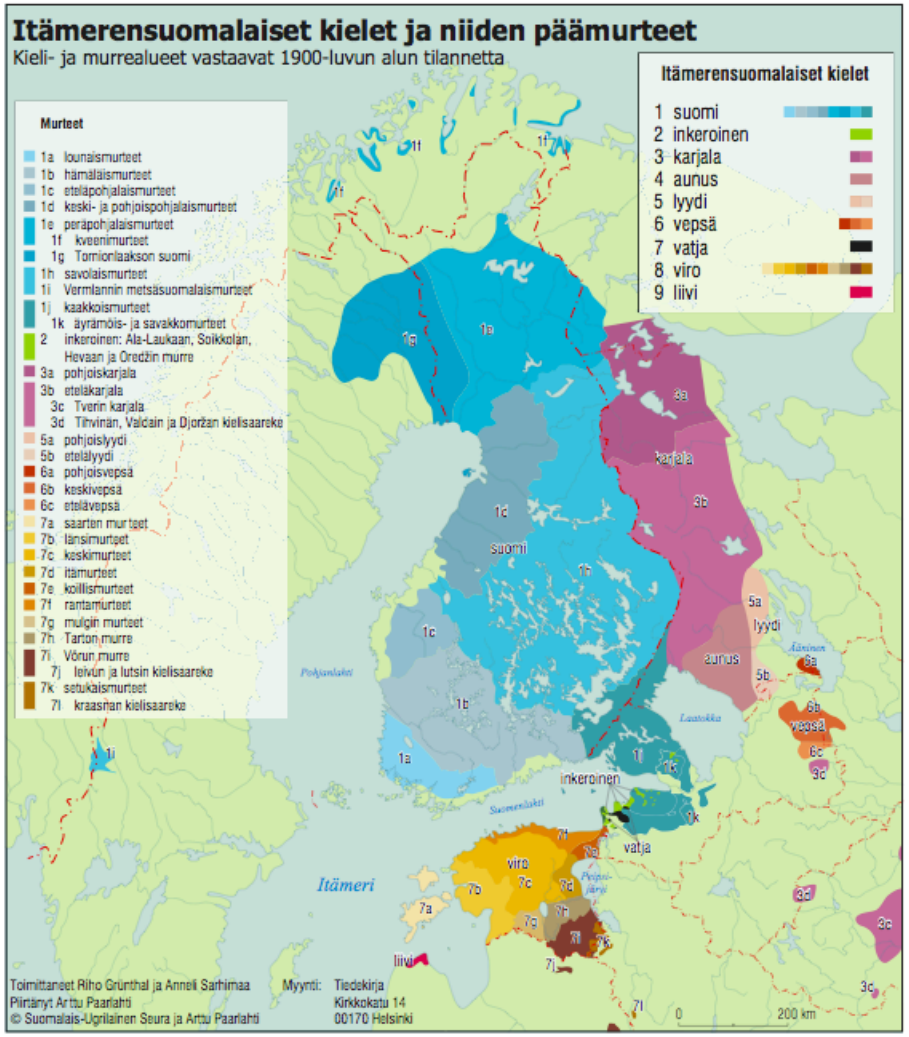
“Every language has a particular ‘feel’, a characteristic cut to its jib, that stems from phonological properties shared by the words in the language.” (Fortson 2004: 70)

“Let me repeat it once again: Language is a tool, language is a machine. Therefore we should not look at it with the eyes of a scientist who is only interested in stating and explaining phenomena, but also with the eyes of an industrialist, an engineer, a technician, who attempts to change and to use phenomena in his own interests.” (Aavik 1924: 9, my translation)

The Finnic languages: a sandbox for language comparison and language planning



The Finnic languages

- Broad spectrum of sociolinguistic situations, different dominant and contact languages
  - Nation-state languages: Finnish and (North) Estonian
  - Traditional minority languages: Karelian, Veps, Ingrian, Votic, Livonian
  - “Rising” minority languages: Meänkieli (“Tornedal Finnish”), Kven (“Finnmark Finnish”); South Estonian

The map shows the situation before World War I.

Estonian as an often-mentioned example of moving away from original agglutinativity

- Loss of separative exponence:
  - Erosion of suffixes in case inflection leads to complex morphophonological stem and suffix alternations
- Loss of synthesis:
  - Loss of person marking on nouns (possessive suffixes), on the negative auxiliary and in morphologically marked moods

Some case forms of *käsi* 'hand', *pesa* 'nest', *suur* 'big' and *hein* 'hay' (Ehala 2009: 36)

NOM	*käsi*	*pesa*	*suur*	*hein*
GEN	*käe*	*pesa*	*suure*	*heina*
PART	*kät-t*	*pesa*	*suur-t*	*heina*
ILL	*kätte*	*pessa*	*suur-de*	*heina*
GEN PL	*kät-te*	*pesa-de*	*suur-te*	*hein-te*
PART PL	*käsi*	*pesi*	*suuri*	*heinu*

cf. Late Proto-Finnic

**käsi (< *käti)*	**pesä*	**suuri*	**heinä*
**kääe-n*	**pesä-n*	**suure-n*	**heinä-n*
**kät-tä*	**pesä-ðä*	**suur-ta*	**heinä-ðä*
**käte-hen*	**pesä-hän*	**suure-hen*	**heinä-hän*
**kät-ten*	**pesä-ðen*	**suur-ten*	**heinä-ðen*
**käs-i-ðä*	**pes-i-ðä*	**suur-i-ða*	**hein-i-ðä*

… and the popular historical understanding of this

§ 1. Die Ehstnische Sprache ist eine Tochter der Finnischen, denn diese verhält sich zu jener, wie das Ursprüngliche zum Abgeleiteten. Viele grammatische Formen, welche im Ehstnischen unregelmäßig und räthselhaft erscheinen, lassen sich nur aus dem Finnischen deuten, und als verstümmelte Überreste regelmäßiger Flexionen nachweisen; und eine lange Reihe Ehstnischer Wörter, deren Wurzel oder Grundbedeutung verloren gegangen ist, findet ihre genügende Erklärung nur in dem reichen Finnischen Sprachschatze. Es ist daher unmöglich, ohne Kenntniß der Finnischen Sprache die Ehstnische zu ergründen, und auf befriedigende Weise grammatisch oder lexikalisch zu bearbeiten. Wer das Finnische nicht lernen will, kann das Ehstnische nicht lehren.

Eduard Ahrens, *Grammatik der Ehstnischen Sprache Revalschen Dialektes.* Reval, 1853.

… also from the Finnish perspective

… that on the coasts, where foreign languages are often spoken and where in olden times settlers from foreign nations have arrived, the Finnish language is more broken and crushed than in the central and northern parts of Finland […] In contrast, the language of our country starting from the Hamina region, along the coast until north of the town of Pori, is worse, because in these coastal regions the last letters of the words are dropped, just like in Estonian, from where this habit may have come to the coasts of Finland in olden times, together with settlers. It was a great loss for the Finnish language that the first Finnish books were written in this wretched language of the coastal Finns, […]
(Reinhold von Becker in *Turun Wiikko-Sanomat,* 15 January 1820; my translation)

Estonian vs. Finnish: (reductive) changes lead to fusion, cumulative/multiple exponence and analyticity

Estonian

idu ‘sprout’ : GEN *eo*

mure ‘sorrow’ : GEN *mure*

mure ‘crumbly’ : GEN *mureda*

ma ei tea, sa ei tea ‘I don’t know, you don’t know’

ta *poo-s* *enda* *üles*
s/he hang-PST self.GEN up
‘s/he hanged her/himself’

pärast sinu tule-ku-t ‘after you came’

after you.GEN come-AN-PART

Finnish

itu : idu-n

murhe^{x} : *murhee-n* (< **mureh: murehe-n)*

murea : *murea-n* (< **mureða: mureða-n)*

(minä) e-n tiedä, (sinä) e-t tiedä

hän hirttä-yty-i
s/he hang-REFL-PST

(sinu-n) tul-tu-a-si

you-GEN come-PTCP.PST-PART-POSS.2SG

The making of Estonian

- Many reductive changes characteristic of today's Estonian can be dated between the 13th and the 17th century:
  - Numerous Estonian toponyms recorded in *Liber Census Daniae* (early 13th century) still display vowel harmony, retained unstressed vowels *(Usikylæ* "new village" > *Uusküla*) or the genitive *-n (Mei-n-tacuse > Mäetaguse* "the hill's backside")
  - Inflection of negative auxiliary sporadically present in the oldest texts: Wanradt & Koell (1535) *emme wöy* 'we cannot' (today: *me ei võ*i)
- General typological drift, macro-areal developments, or specifically (Low) German influence?

Language planning

- In connection with the national awakening (starting) in the 19th century, both Finnish and Estonian experienced an intensive language planning, with various innovations especially in the lexicon but also in the morphology
- Central goals:
  - reconciling dialects (especially Eastern and Western Finnish)
  - purism, replacing (alleged) Swedish/German influences with forms perceived as more authentic (whereby Estonian in particular borrowed extensively from Finnish!)

The Cycle Hypothesis

The classical cycle hypothesis of morphological typology

- From agglutinative to fusional (compare Finnish with Estonian)
- From fusional to isolating (compare German with English)
- From isolating to agglutinative
- However:
  - examples of the contrary abound (and have been known and explicitly described already long ago, *pace* Igartua 2015)
  - agglutinative morphology is sometimes described as particularly stable
  - agglutination can be a product of the comparative reconstruction method

Do holistic “macrotypes” such as “agglutinative” even exist?

- The famous 19th-century classification of languages into agglutinative, fusional and isolating has, despite numerous problems and shortcomings in its original design, been popular until our days – especially in a diachronic perspective.
  - “Apart from variation and invariance across languages, diachrony is another source of relevant evidence (...): what changes in concert, in one language or several, may do it for a reason.” (Plank 1998: 224)
  - “Today most historical linguists would probably accept some version of a typological cycle, from isolation via agglutination to flection and back to isolation, but limited of course to individual structures and not applied to entire languages.” (Bynon 2004: 1228, cited in Igartua 2015: 677)

Do “macrotypes” such as “agglutinative” even exist?

- The traditional classification is questioned and deconstructed
  - “agglutination” comprises *synthesis* (morphemes per word) and *non-cumulation/separative exponence* (one meaning – one morpheme) as well as *segmentability* or *invariance* of morphemes
  - continua rather than discrete classes, mixtures rather than “pure” forms;
  - danger of circular reasoning: how strongly are the classical “agglutinative” features based on what we know about Uralic and “Altaic” languages?
  - “word”, “morpheme” and “meaning” cannot be unequivocally defined
- Yet popular with laypeople – as a holistic term conveying our intuitions about language...
- ... including laypeople’s vulgar-Whorfian positive or negative evaluations of languages and their characteristics (also reflecting, as *gesunkenes Kulturgut,* earlier ideas of academic mainstream scholars)

Is the agglutinative type particularly stable?

- For example, in Permic (Komi, Udmurt) and Hungarian, reductive changes have eroded many central suffixes, but a highly agglutinative inflectional morphology has been recreated by reanalysis and grammaticalization, e.g.
  - plural: Komi *-jas,* Udmurt *-(j)os* from a noun (cognate with Fi. *jäsen* 'member'?), Hungarian *-k,* replacing PU **-t* used in synthetic and segmentable structures, e.g. Komi кань-яс-ӧй-кӧд cat-PL-POSS.1SG-COM 'with my cats'
  - accusative: Komi *-ös* (-ӧs), Udmurt *-ez;* Hungarian *-t* replacing PU **-m*
    (see e.g. Bartens 2000; Kiss & Pusztai 2018)

Morphological typology in reconstruction

- The distorting effect of the comparative method (Korhonen 1974, Chafe 1959): alternations completely levelled cannot be retrieved, therefore reconstructions tend to display increasingly invariant, segmentable morphemes and separative exponence
- Speculations about Pre-Proto-Uralic (cf. “today’s morphology is yesterday’s syntax”) as fusional
  - Korhonen (1996 [1981]: 197–198 > Igartua 2015: 694–695) interprets the numerous homonymous morphemes reconstructed for PU (e.g. **-k* for lative, plural, imperative, connegative, deverbal noun) as indications of fusionality; however, these may be an artefact of (Fennocentric?) reconstruction (cf. Ylikoski 2016, 2019 on the history of local cases and the “latives”)

What makes the wheel turn?

- Internal reasons: Reductive sound changes (accompanying grammaticalization!) lead to
  - agglutination of previous free-standing morphs
  - loss of transparency/segmentability, cumulation of exponence
  - loss of bound morphs (motivating reanalysis)
- External reasons – typological change connected with language contact:
  - imperfect learning (by adult outsiders)
  - koineization
  - language planning: foreign models

Typological change through imperfect learning?

- Old Literary Estonian (the “Old Estonian church language”), from the Reformation to the 19th century, was written by German speakers
  - Old Literary Estonian shows blatantly un-Finnic morphosyntactic features such as symmetric negation or postpositions instead of local cases
  - Ross (2019) compares the history of Literary Estonian with the reappropriation (“pirating”, Errington 2008) of East African or Austronesian languages codified by colonial overlords.
- However, the typologically relevant changes in Estonian mostly took place already before Reformation. From those times, we have no direct evidence of imperfect learning of Estonian by (Low) German speakers or its impact on the language of Estonian speakers.

Typological change through koineization?

- Koineization (dialect admixture leading to the genesis of a new dialect) may involve simplification ("phonologically and lexically simple features are more often adopted than complex ones", Kerswill and Williams 2000: 84)
- Standard Estonian is based on the literary tradition of the Tallinn language and still heavily rests on the central dialects of North Estonian – was there a koineized urban variety underlying the written tradition?

Typological change by language planning?

- Estonian and Finnish language planners have often idolized "European" compactness and "efficiency", which may mean fusion (cumulative exponence) in morphology
- Johannes Aavik about Estonian:
  - "[The Estonian sentence is] in itself too dragged-out, lazy, lacking energy, therefore we must not disregard any measure which could make up for this deficiency, even a little, making the sentence shorter and more energic. In general, one of the main goals of language reform should be a certain elegant and energic compactness. And in order to achieve this elegant and energic compactness, we must, to the utmost, cultivate the replacing of compound verbs with verbs derived from one root or possibly also from different roots." [Aavik 1924: 79, my translation]

The essentialist-aesthetic goals of language planning according to Aavik

- Imagine a lady, not quite young any more – some 27 or 28 years –, her delicate, aristocratic features indicating developed intelligence, sensitive emotionality, but her face already having a slightly fatigued, languishing expression, a type whose breeding has required centuries of intensive cultural life. To this, add elegant attire, pleasing with its refined and aristocratic simplicity. Is not a lady like this charming and desirable? She has reached the age of succulent maturity, a taste so exquisitely delicious like a perfectly ripened fruit. This lady is what the French language is like.
  (From Johannes Aavik's letter to his friend H. Rattur, 1906; my translation)

19th-century ideals for language planning?

- Humboldt: agglutinative languages are less “developed” than fusional ones

  “Auf der zweiten großen Stufe des Fortschreitens weicht die stoffartige Bedeutung dem formalen Gebrauch, und es entstehen daraus grammatische Beugungen und Wörter grammatischer, also formaler Bedeutung. Aber die Form wird nur da angedeutet, wo sie durch einen einzelnen, im Sinn der Rede liegenden Umstand, gleichsam materiell, nicht wo sie durch die Ideenverknüpfung formal gefordert wird. Der Plural wird wohl als Vielheit, aber der Singular nicht gerade als Einzelnes, sondern nur als der Begriff überhaupt gedacht, Verbum und Nomen fallen zusammen, wo nicht gerade Person oder Zeit auszudrücken ist; die Grammatik waltet noch nicht in der Sprache, sondern tritt nur im Fall des Bedürfnisses auf.” (Humboldt 1820)

  Examples from Hungarian:

  a ház nagy – a háza-k nagyo-k ‘the house (is) big – the houses (are) big-PL’

  a ház áll – a háza-k áll-nak ‘the house stands – the houses stand-3PL’

The “vowel plurals” in Estonian language planning

- The starting point: inherited plural markers NOM.PL *-d (< *-t)*, non-nominative PL *-i-,* innovative GEN.PL *-de/-te* (< PL **-t* + GEN **-n*)
- In North Estonian, the secondary plural marker *-de-* had practically ousted the plural *-i-* or its regular reflexes (e.g. stem vowel *-a + -i- > o(i) > u*); South Estonian largely preserved the **i* plurals
- Vowel plurals were promoted by J. Aavik from the 1910s on, with reference to
  - aesthetic factors (“acoustic ugliness” of *t/d* when repeated)
  - authenticity, originality
  - brevity
  - “Aavik never denied that the decisive impulse for reviving the vowel plural came from Finnish” (Raag 1998: 96)

Cumulative or separative exponence

	vowel ALL.PL	*de*-PL allative	short PART.PL	*sid*-PART.PL
jalg: jala- 'foot'	*jalu-le*	*jalga-de-le*	*jalgu*	*jalga-sid*
siga: sea- 'pig'	*?*seo-le*	*siga-de-le*	*sigu*	*siga-sid*
muna 'egg'	*mune-le*	*muna-de-le*	*mune*	*muna-sid*
osa 'part'	*osi-le*	*osa-de-le*	*osi*	*osa-sid*
mõte 'thought'	*mõtte-i-le*	*mõte-te-le*	*mõtte-i-d*	
kohtunik: kohtuniku- 'judge'	*kohtunike-le*	*kohtunikku-de-le*	*kohtunikke*	*?kohtunikku-sid*
õpetaja 'teacher'	*??õpetaja-i-le*	*õpetaja-te-le*	*õpetaja-i-d*	

In the data of Raag (1998) from 1961 and 1991, 52% of vowel plural instances represent derivatives in *-ja* and *-ik,* 5% are participles (*hiilgava-i-le* 'to the brilliant ones') and 30% are lexicalized adverbial word forms (*sõnu-l* [PL.ADE from *sõna* 'word'] 'in the words of..., according to...').

Reversing the cycle?

Internal motivation (?): from fusion (?) to separative exponence

- Examples of internally motivated (?) “typological backflow” in Finnic, well known and described (see e.g. Rätsep 1981):
  - Estonian: long or *sse* illatives (*pessa* ~ *pesa-sse* ‘into the nest), *sid* plural partitives (originally based on the consonant stems of frequent and productive derivatives in *-ne(n) : -s(e)-,* as in *hobus-i-d* [now analogically *hobuseid*] horse-PL-PART)
  - East Finnish and Karelian: after the weakening of unstressed post-vocal plural *i,* new regular and segmentable plurals in *-loi-* emerge: *tytö-i-lle* girl-PL-ALL ‘to the girls’ >| *tyttö-löi-lle*
  - North Estonian and Southwest Finnish: after the weakening of unstressed post-vocal past-tense *i,* new segmentable past tense forms in *s* emerge: Fi. *sano-i* >| dial. *sano-s* say-PST(.3SG)

Mechanisms of change reversing the cycle (< Igartua 2015)

- Paradigmatic integration of adpositions and particles (Igartua: Old Lithuanian, Tocharian, Marathi, also [speculations about] PIE and PU [!])
  - Estonian: comitative case in *-ga (< kaas < *kansa-)*
- Extension of stem by introducing new suffixes for separate exponence (Igartua: new plural paradigms in Armenian and Ossetian)
  - Estonian: plural marker *-de-* (*maja-de-s* 'in the houses') from GEN.PL *-de (< *-ten* < PL *t* + GEN *n*)
- Reanalysis (affix secretion / emancipation; Igartua: Cappadocian Greek, Russian)
  - Estonian: partitive plural *-sid* (*pesa* 'nest': PART.PL *pesi* ~ *pesa-si[-]d* nest-PART[-]PL)

Increasing synthesis: the superlative in Estonian

- Superlative *-in (< *-ima)* occurs, to varying extents, in Northern Finnic varieties (including Standard Finnish); before the 20th century Estonian only had analytic expressions such as *kõige suurem* “of.all greater”.
- Synthetic “*i* superlative” (*suurim* ‘greatest’) was proposed by Aavik 1915, again basing his arguments on expediency, beauty (avoiding “clumsiness and heaviness”) and historical originality.
- Between 1923 and 1938 (Raag 1998), the synthetic superlative swiftly established itself in written Estonian and has now a firm position, possibly as a stylistically conditioned (more formal?) variant alongside the analytic superlative.

Stopping the loss of synthesis: The case of the possessive suffixes in Finnish

- Almost all Uralic languages have adnominal person-marking suffixes encoding possessor in the widest possible sense, also subject (or HRA) person of non-finites

  Fi. *tietä-ä-kse-mme* know-INF-TRSL-POSS.1PL ‘as far as we know’
  tul-tu-a-si come-PTCP.PST.PASS-PART-POSS.2SG ‘after you came’

- In most Finnic varieties except (written) Standard Finnish, possessive suffixes are partly or completely obsolete
- In Standard Finnish, possessive suffixes are only used instead or together with pronominal possessors (and therefore fairly redundant)

  (minu-n) auto-ni I-GEN car-POSS.1SG ‘my car’ (~ coll. *mun auto*)
  löysin autoni ‘I found my car’

- Were the possessive suffixes “restored”, or artificially systematicized as “native” equivalents of Swedish possessive pronouns?

Stopping the loss of separative exponence: The negative auxiliary in Standard Finnish

- In some Finnic varieties such as Estonian, the 3SG form of the negative auxiliary *(ei)* has been generalized for all persons.
- Generalized 3SG forms have also occurred in traditional Finnish dialects:
  en *minä taija* *satuja,* *ei* *ollenkaan*
  NEG.1SG I know-CNG fairytale.PL.PART NEG.3SG at.all
  'I don't know any fairytales, not at all'

  ei *minä* *niitä* *muista*
  NEG I they.PART.PL remember.CNG 'I don't remember them'
- The issue of the inflection of the negative auxiliary was discussed in Finnish language planning in the 19th century (Laitinen ; in today's standard language, person agreement is obligatory

The case of derivation

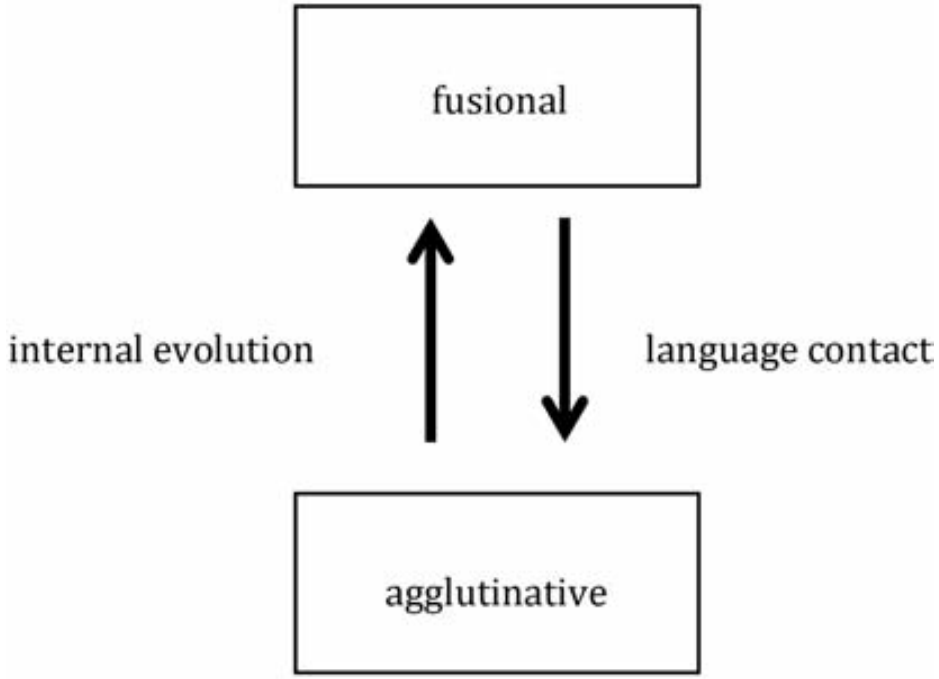
- Estonian has largely lost the productive causative and reflexive verb derivation, otherwise characteristic of almost all Uralic languages.
- From the late 19th century on, Estonian derivation has been developed, regularized and intensified. However, many neologistic derivations are stylistically marked, characteristic of formal or technical language only (Kaplinski 1984: “Estoranto”)...
- ... or associated with foreign influences. Reflexive verbs in *-u-* were first introduced or revived in the early 20th century, also with explicit reference to the model of Finnish; in the late 1980s, they were brought up as an example of Russian influence (Hint 1988).

Views on change in morphology

Scenarios of typological change

- Typological change as a “natural” process (cf. “drift”), connected with grammaticalization and/or the idea of erosion and re-construction as the driving force of language change:
  - with a holistic view on language “macrotypes”: the Typological Cycle
  - acknowledging the bidirectionality of typological change > giving up the idea of holistic macrotypes?
- Contact-induced change, propelled by bilingualism and imperfect learning?
- Deliberate change?

Igartua (2015: 712) ends up stating that “the structural shift from fusion to agglutination in the domain of inflectional morphology is likely to be a consequence of a particular type of language contact, whereas the traditionally assumed change from agglutination to fusion more heavily relies on internal factors of language development.”



(Igartua 2015: 713)

FIGURE 2. Bidirectional shift between cumulative (fusional) and separative (agglutinative) systems.

Deliberate change?

- Thomason (2001): Contrary to explicit, recurring statements in literature, deliberate changes affecting language structure are possible. However, a deep-going change has to be propagated and implemented, and this requires special circumstances (for example, a small and closely knit community, a particular motivation for the adoption of the innovations, etc.).
- Are there typological restrictions to deliberate change?
  - Of Aavik's suggestions, the vowel plurals (fusion) and the *i* superlative (agglutination) made it to Standard Estonian, whereas the analytic *no* genitive (isolation), the relative-past converb *(lugenue* 'after having read') and the future in *-re-* (*palu-re-n* 'I shall request'; agglutination) are now only known as historical curiosities.

Deliberate change in relation to language contact

Typologically relevant innovations by language planning may

- follow the model of another language
  - Estonian: Finnish-like vowel plurals, *i* superlative, reflexive derivatives
- attempt to prevent or nullify the effect of another language (archaizing purism, mimicking reconstruction)
  - Finnish: standardization of possessive suffixes
- or both – “external” and “internal” motivations are intertwined.

Leave our language alone!

Estonians often take pride in their successful language planning. One of the rare critical voices: Kaplinski (1984, my translation)

> *Order* is one of the main idols of authoritarian thinking, and *Ordnung muss sein* is one of its main slogans. The problem of authoritarian thinking, however, is that it understands *order* in a simplified, mechanistic way, failing to see the more complicated, self-organizing order in nature and in language. Authoritarian thinking does not acknowledge the fact that an order can exist which has not been officially established by anybody, which has emerged and will emerge without Veski, Aavik, VÕK [= the national board for language planning] or ÕS [= the normative dictionary]. (...) To this, I would like to add my strengthening impression: the beginning of our language planning and linguistic disorientation was when linguists began to revert the development of language, preferring historically older forms to more recent, especially analogical ones (...) and even resuscitating half-dead ones (the *i* plural).

Historical / language-typological awareness?

- Not only professional linguists but also lay activists and speakers can and do have intuitions about the relatedness and history of morphosyntactic structures in their language...
- ... and sometimes these intuitions are fairly correct (Finnish vs Estonian; nativization of loanwords!).

What about the cycle hypothesis?

- Despite the practical and heuristic value of the typological cycle, applying it holistically to whole languages may be a hopeless pursuit.
- The same factors (language planning with or without foreign models; reductive changes connected with grammaticalization) can lead both from agglutination to fusion and back.
- Begging further research: developments in minor Finnic languages, where codification and language planning is either non-existent or very recent.

Aitäh, kiitos, danke, thank you!

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