
Either templatic or harmonic

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two subsystems of Hungarian morphology

- **concatenative (typologically agglutinative)**
 - “input oriented”: stem + suffix
 - morphophonological processes: V/C-epenthesis, V-deletion, V harmony etc.
- **templatic (syllable counting)**
 - “output oriented”: the number of the syllables of the suffixed form is fixed
 - types: 2-syllable, 3-syllable or minimally-3-syllable templates

concatenative morphology

- concatenation without truncation (epenthetic V/C underlined)

kék 'blue', *kék-šég* '-NOMZ', *kék-ečke* '-DIM', *kék-et* '-ACC', *kék-ít* '-VRBZ_{tr}', *kék-ül* '-VRBZ_{intr}'
tanu 'witness', *tanu-šág*, *tanu-čka*, *tanu-t*, *tanu-šít*

- concatenation with truncation of stem-final V

barna 'brown', *barna-šág*, *barná-čka*, *barná-t*, ***barn**-ít*, ***barn**-ul*

- concatenation with truncation of stem-internal last V

šarok 'corner', ***šark**-očka*, ***šark**-ot*, ***šark**-ít*

⇒ *only the last vowel of the stem may be truncated.*

templatic morphology: diminutives

2-syllable template: with (potential) truncation

- *šün-i* 'hedgehog'; *gazd<a>-i* 'owner', *šüt<eméň>-i* 'pastry', *čok<oládé>-i*
- *nó-ci* 'woman'; *ru<ha>-ci* 'dress', *fö<ldrajz>-ci* 'geography'
- *láň-ka* 'girl'; *Ter<éz>-ka* 'Theresa', *cer<uza>-ka* 'pencil'
- *sán-kó* 'sledge', %*šün-kó* *tet<ováláš>-kó* 'tattoo', *fes<ültšég>-kó* 'tension'
- *teš<tvér>-ó* 'sibling', *tel<efon>-ó*, *bic<ikli>-ó* 'bicycle'
- *d'eng<e>-uš* 'weak', %*Tünd<e>uš/üš* 'name', *pel<enka>-uš* 'diaper', *E<dit>-cu*
- *pör<költ>-es* 'stew', *pál<inka>-es* 'brandy', *alk<oholišta>-es* 'alcoholic'
- *kal<auz>-ler* 'conductor', *jobb<oš>-er* 'right-wing', *komm<uništa>-er*

templatic morphology: frequentatives & others

2- or minimally-3-syllable templates: no truncation

- **frequentatives**

- root selection (2-syll.): *dug-**doš*** 'hide-', *lop-**kod*** 'steal-', *sab-**dal*** 'cut-'; *jár-**kál*** 'walk-'
- augmentation (≥3-syll.): *ápol-**gat*** 'nurse-', *arasol-**gat*** 'loop-', *tol-**ogat*** 'push-'

- **intransitive verb**-forming markers, two lexical allomorphs:

- 2-syllable template: *tág-**ul*** 'wide-', *új-**ul*** 'new-', *ritk<a>-**ul*** 'rare-'
- ≥3-syllable template: *gazdag-**od**-(ik)* 'rich-', *világoš-**od**-(ik)* 'clear-'

- **deverbal noun**-forming markers, V-augmentation:

- ≥3-syll. template: *talál* 'find', *talál-**máň*** 'invention'; *ad* 'give', *ad-**omáň*** 'donation'
- ≥3-syll. template: *étkez-* 'eat', *étkez-**de*** 'canteen'; *moš* 'wash', *moš-**oda*** 'laundry'

diminutives and harmony



concatenative vs. templatic diminutives and harmony

concatenative DIM

-ka~ke, -čka~čke

Teréz-ke, Teréz-ečke, Ter-i-ke, Ter-uš-ka

Péter-ke, Péter-ečke, Pet-i-ke, Pet'-uš-ka

Ferenc-ke, Fer-i-ke, Fe-có-ka

Borbálá-čka, Bor-iš-ka

Károj-ka, Kar-či-ka, Kar-es-ka/-ke

Józef-ka/-ke, Józ-i-ka

templatic DIM

-(k/c/č)a, -(k/c/č)ó, -u(š), -(c/č)i, -es, -er

Ter-ka, Ter-a, Ter-uš, Te-ca, Ter-i, Ter-či

Pet'-ka, Pet'-a, Pet'-uš, Pet-i

Fer-kó, Fer-ó, Fe-có, Fer-i

Bor-ka, Bor-ča, Bor-i, Bor-iš

Kar-či, Kar-es

Józ-ka, Józ-i

2-syllable frequentative template and harmony

frequentatives: V harmony or phonologically motivated gaps (*front+back)

back

- *dug* 'hide', *dug-**doš***
- *lop* 'steal', *lop-**kod***
- *sab* 'tailor' *sab-**dal***
- *jár* 'walk', *jár-**kál***
- *dob* 'throw', *dob-**ál***

front round

- *lök* 'push', *lök-**döš***
- *döf* 'stab', *döf-**köd***
- *tör* 'break', *tör-**del***
- *-*kél*
- *-*él*

front unrounded

- *tép* 'pluck', *tép-**deš***
- *číp* 'pinch', *číp-**ked***
- *lép* 'step', *lép-**del***
- *-*kél*
- *-*él*

(minimally-)3-syllable FREQ template and harmony

frequentative: linking vowel (σ_{STEM} -**o/e/ö**- σ_{SUFFIX}) or augment

back

ápol 'tend', *ápol-gat*

tol 'push', *tol-o-gat*

rak 'put', *rak-oš-gat*

front

jelent 'report', *jelent-get*

önt 'pour', *önt-ö-get*; *int* 'wave', *int-e-get*

frequentative: augments (σ_{STEM} -**σ**_{AUGMENT} - σ_{SUFFIX})

back

salad 'run', *salad-gál*

šír 'cry', *šír-do-gál*

húz 'pull', *huz-i-gál*

front

kereš 'search', *kereš-gél*

nő 'grow', *nő-dö-gél*; *él* 'live', *él-de-gél*

deadjectival verb-forming suffixes

stem	transitive	intransitive
	concatenative	=2-syllable / ≥3-syllable template
új 'new' sūk 'tight'	új- ít , sūk- ít	új- ul , sūk- ül
lašš ú 'slow', köňň ú 'easy'	lašš- ít , köňň- ít	lašš- ul , %köňň- ül
fak ó 'pale', ferd e 'skew'	fak- ít , ferd- ít	fak- ul , ferd- ül
magaš 'tall', erőš 'strong'	magaš- ít , erőš- ít	magaš- od- , erőš- öd-
somor ú 'sad', kešer ú 'bitter'	somor- ít , kešer- ít	somor- od- , kešer- ed-
sapor a 'prolific', feket e 'black'	sapor- ít , feket- ít	sapor- od- , feket- ed-

⇒ **intransitive suffix alternants select the stems (covert definiteness)**

deverbal noun-forming suffixes

verbal stem

áll 'stand', sáll 'lodge'
sel 'cut', lel 'find'
köt 'tie', šüt 'bake'

kiad 'publish', távír 'telex'
rendez 'arrange', kedvez
'prefer', kifőz 'cook'

concatenative

áll-**váň** 'stand, stage'
sel-**věň** 'segment'
köt-**věň** 'stand, stage'

kiad-**váň** 'publication'
rendez-**věň** 'programme'

templatic

≥3-syllable

áll-**omáň** 'substance'
lel-**eměň** 'finding'
šüt-**eměň** 'cake'

kiad-**máň** 'estreat'
kedvez-**měň** 'preference'

=3-syllable

sáll-**oda** 'hotel'
%fešt-**öde** 'dyer'
šüt-**öde** 'bakery'

távír-**da** 'telegraph
office'
kifőz-**de** 'canteen'

⇒ **templatic NOMZ suffixes are repaired by a V-augment that partially harmonizes: only in backness, not in rounding: o~e or o~ö instead of o~e~ö**

typical properties of the two subsystems

	syllable count	disharmony
● concatenative patterns	no	no
● templatic patterns		
○ nominal (DIM)	yes	yes
○ verbal (FREQ, VRBZ _{intr} , NOMZ)	yes	no

what causes the difference of nominal and verbal templatic patterns?

repairs of the two subsystems

	syllable count	disharmony
concatenative patterns	n/a	harmonize
templatic patterns		
• nominal (several DIMs)	truncate	no repair / gap?harmonize
• verbal		
○ FREQ (-gAt)	V-augment	harmonize: back & round
○ FREQ (several)	σ-augment / gap	harmonize: back & round / gap
○ VRBZ_{intr} (-Ul, -Od-)	gap (V-deletion)	harmonize: back & round
○ NOMZ (-dA, -mÁñ)	V-augment	harmonize: only backness

what causes the difference of nominal and verbal repair mechanisms?

disharmony in nominals and verbs

nominal forms

{back ; neutral}:

- high *i/í* frequent in root/suffix
- mid *é* frequent in root/suffix
- low *e* frequent in root, **rare** in sfx. (-er, -es)

{back ; other front}:

- *ü* or *ö* **rare** (e.g. *šofőr*, *öt-kor*)

verbal forms

(exc. verbs derived from disharmonic nominals)

occur in root/suffix

rare (e.g. *alél*, *-nék*)

rare (e.g. *murdel*, *tend-ál*, *čekk?ol*)

very rare (occur only in familiarized loan verbs, e.g. *gründ?ol*, *fecc?öl*)

verbal forms obey much stricter harmonic requirements

different behaviour of verbs and nominals

	truncation (in suffixation)	disharmony (in roots and suffixed forms)
• nominals	possible	possible
• verbs	banned	practically banned
repairs for templates/harmony:	<i>augment/V-deletion</i> <i>(covert) gap</i>	<i>harmony</i> <i>(covert) gap</i>

repair mechanisms in detail

	templaticity	harmonic alternation
● agglutinative patterns		
○ harmonic V (many)	no	yes
○ neutral V (-ig, -ért etc.)	no	no (no disharmony)
○ non-neutral V (-kor, -ál)	no	no (disharmony)
● templatic nominal (DIM)		
○ neutral: $\sigma + -i; -ci; -\check{c}i$ etc.	yes (truncation)	no (no disharmony)
○ non-neutral: $\sigma + -ka; -k\acute{o}; -u\check{s}; -es$ etc.	yes (truncation)	no (disharmony)
● templatic verbal FREQ		
○ harmonic: $\sigma\sigma + -gat\sim get; g\acute{a}l\sim g\acute{e}l$	yes (augment)	yes
○ harmonic: $\sigma + kod\sim ked\sim k\ddot{o}d$ etc.	yes (covert gap)	yes
○ non-neutral: $\sigma + -k\acute{a}l; -\acute{a}l$	yes (covert gap)	no (covert gap)
● templatic verbal other (VRBZ, NOMZ)		
○ harmonic: $\sigma + -ul\sim \ddot{u}l; \sigma\sigma + -od\sim ed\sim \ddot{o}d-$	yes (covert gap)	yes
○ harmonic*: $\sigma\sigma + -da\sim de; m\acute{a}n\sim m\acute{e}n$	yes (covert gap)	yes (only in backness)

different behaviour of verbs and nominals

the verbal templatic subsystem is subject to stricter well-formedness constraints, which are satisfied in two ways

1. repairs borrowed from the concatenative subsystem (**augmentation** and/or **V-deletion** and/or **vowel harmony**)
2. **gap** (defectivity)

neither is necessary in the nominal templatic subsystem

INTEGRITY (no truncation)

HARMONY (no disharmony)

concatenative



A diagram consisting of three concentric ovals. The outermost oval is solid and labeled 'INTEGRITY (no truncation)'. The middle oval is also solid and labeled 'HARMONY (no disharmony)'. The innermost oval is dashed and labeled 'concatenative'.

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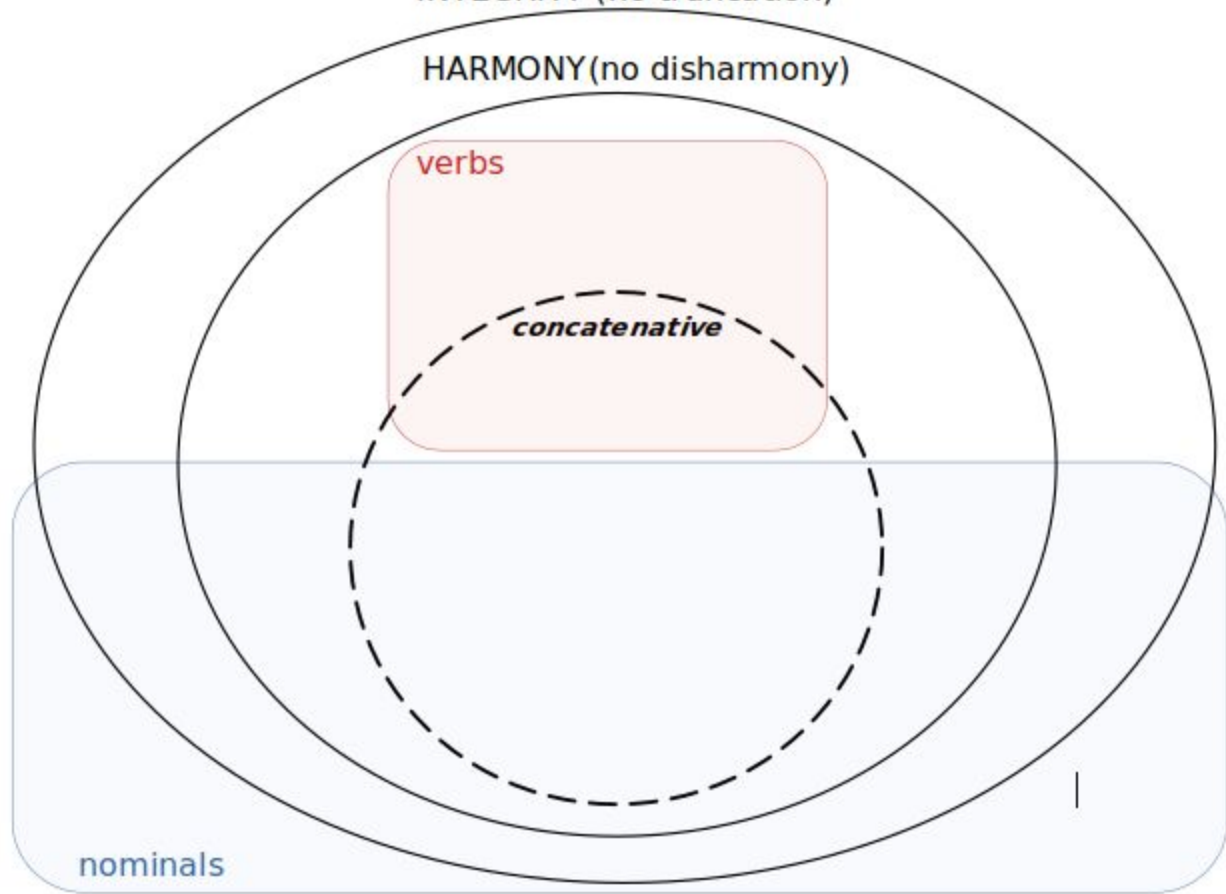
INTEGRITY (no truncation)

HARMONY (no disharmony)

verbs

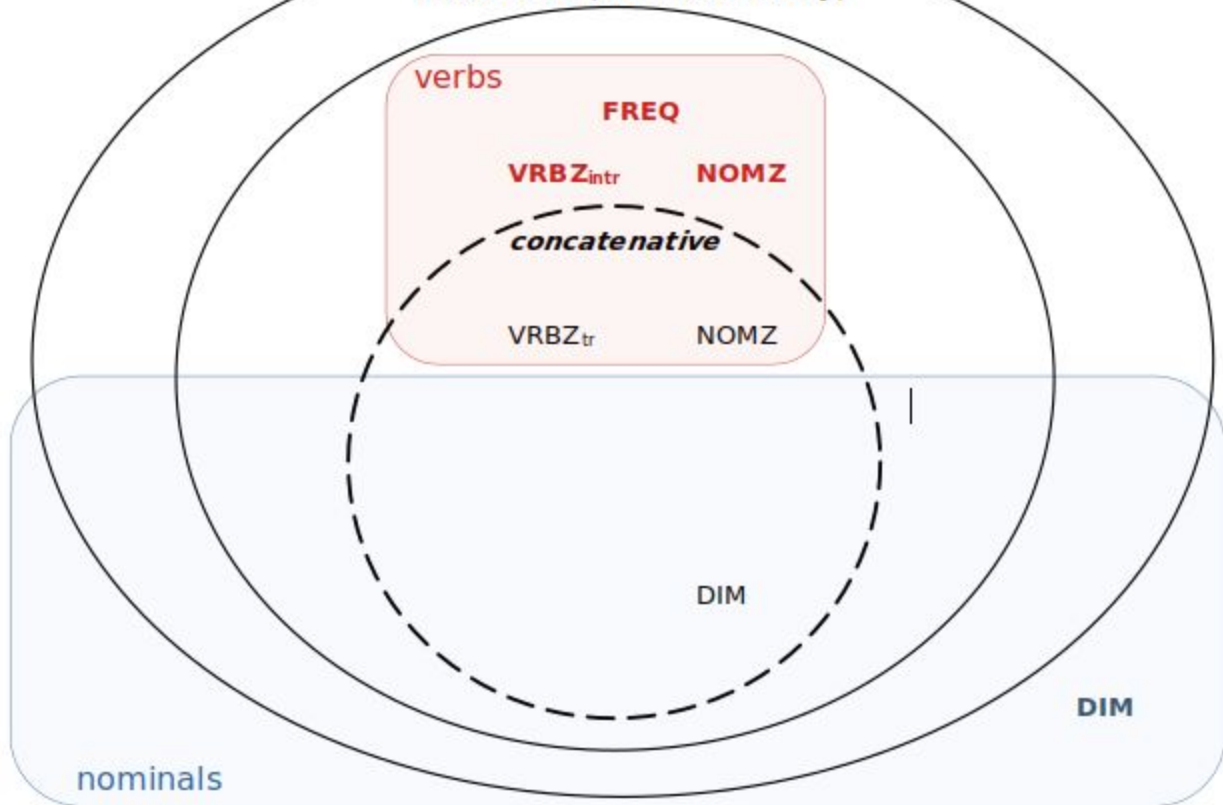
concatenative

nominals



INTEGRITY (no truncation)

HARMONY (no disharmony)



thanks to

- the audience
- the organizers
- NKFIH #139271 (The role of paradigm structure in Hungarian morphology and phonology with typological comparisons)

obsolete harmonizing diminutives (mostly lexicalized)

- *sürke* 'gray', *büske* 'proud', *röpke* 'ephemeral', *fülke* 'niche', *tüşke* 'spike', *söčke* 'grasshopper', *söske* 'flaxen', *d'ürke* 'heel of bread' *čirke* 'chicken', *?kečke* 'goat', *fečke* 'swallow', *cinke* 'tit (bird)', *?čipke* 'lace', *lepke* 'butterfly', *het'ke* 'pert', *ed'ke* 'lonely child' *pit'ke* 'button', *piske* 'gooseberry', *Lenke* 'Helena/Lena', *vérče* 'kestrel'
- *Benkő/kó* 'Benedict', *Benő* 'Benjamin', *kürtő* 'chimney-stack', *?gümő* 'tumor', *Dežő* 'Desiderius', *Gergő*, *Gerő* (<Gergej) 'Gregory', *Pető* (< Péter) 'Peter', *Šebő* (< Šebeštén) 'Sebastian', *Ernő* (< Ernest), *?vesső* 'wand'