
Phonologically motivated lexical repair strategies are conservative

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conditions on allomorph selection

- prosodic constraints (e.g. hiatus avoidance, syllable count)
- phonologically conditioned lexical allomorphy
- lexically conditioned repair strategies (e.g. vowel deletion vs. consonant insertion)
- lexical conservatism

phonologically conditioned lexical allomorphy

phonological selection of phonologically unrelated/unnatural/highly dissimilar allomorphs (e.g., Nevins 2011, Paster 2006, Scheer 2016, Smith 2015)

prosodic & segmental conditioning (Turkana, Dimmendaal 1983)

abstract nouns derived from intrans verb of state

monosyllabic root C (C) V C	-isi	a- kwan -isi	'brightness'
polysyllabic root $C_{\alpha} V_{\gamma} C_{\alpha} V_{\gamma} C_{\beta}$	-u	a- wowok -u	'lightness'
polysyllabic root $C V_{\gamma} C V_{\gamma} C_{\alpha}$	$-V_{\gamma} C_{\alpha}$	a- narab -ab	'roughness'

lexically conditioned repair

pattern is specific to a particular set of lexical items/affixes

- segmental (Finnish, Pater 2010): *[ai] if [i] is PL

a → o	/tavara a +i+ssa/	[tavar o issa]	'thing-PL-INE'
a → ∅	/jumala a +i+ssa/	[jumal i ssa]	'God-PL-INE'
a → o~∅	/itara a +i+ssa/	[itar o issa] ~ [itar i ssa]	'stingy-PL-INE'
no change	/anta a +isi/	[ant a isi]	'give-COND'

- prosodic (English 2ry stress, Pater 2000): *CLASH

<i>sègmént</i>	<i>sègmentátion</i>	<i>àugmént</i>	<i>àugmèntátion</i>
<i>infórm</i>	<i>informátion</i>	<i>impórt</i>	<i>impòrtátion</i>

lexical conservatism (LC)

- Steriade (1999): unlisted (novel) form *will* make use of a listed allomorph (remote base) available in a form within the paradigm rather than the compositional source (local base) if by this a reduction in markedness is achieved

L I S T E D		N O V E L	
local base	remote base		
<i>rémedy</i>	<i>remédial</i>	<i>remédiable</i>	markedness motivation: NOLAPSE
<i>párody</i>	* <i>paród-</i>	* <i>paródiable</i> (<i>párodiable</i>)	violated when no remote base

- Breiss (2021, 2023): LC is probabilistic: *will* make use of → *can* make use of with some likelihood

cómpensate %*compénsatory* *compénsable* ~ *cómpensable*
(*compénsable* is more probable than *cómpensable* if *compénsatory* is known by speaker)

prosodically conditioned allomorph selection: INTR in Hu

syllable-count: allomorph-specific prosodic conditioning in adjective-to-INTRansitive-verb derivation:*

monosyllabic stem: -ul~ül (“L allomorph”)

tág ‘wide’ ~ *tág-ul* ‘-INTR; become wide’

kék ‘blue’ ~ *kék-ül*

sűk ‘tight’ ~ *sűk-ül*

polysyllabic stem: -od~ed~öd- (“D allomorph”)

komoj ‘serious’ ~ *komoj-od(-ik)* ‘-INTR(-NDF.3SG)’

fehér ‘white’ ~ *fehér-ed(-ik)*

tömör ‘thick’ ~ *tömör-öd(-ik)*

this suffixation is not fully productive (as is usual in derivation):

ross ‘bad’ ~ **ross-ul*

kiš ‘small’ ~ **kiš-ül*

hamiš ‘false’ ~ **hamiš-od(-ik)*

irid ‘envious’ ~ **irid-ed(-ik)*

* disregarding some minor narrow-scope generalizations and idiosyncratic forms

general markedness constraint on suffixation: NOHIATUS

hiatus is not tolerated \Rightarrow problem with vowel-final stems; two possible repairs:

1. **deletion** of stem-final vowel (initial vowel is stable in *-ul~ül* & *-ed~öd~od-*)

- low: *barna* 'brown' ~ *barn-ul* *sapora* 'prolific' ~ *sapor-od(-ik)*

- mid: *fakó* 'pale' ~ *fak-ul* –

- high: *laššú* 'slow' ~ *lašš-ul* *somorú* 'sad' ~ *somor-od(-ik)*

2. **insertion** of consonant(s)

- *v* *bő* 'large' ~ *bő-v-ül* –

- *š* *fá* 'tree' ~ *fá-š-ul* *forró* 'hot' ~ *forró-š-od(-ik)*, *karčú* 'slim' ~ *karčú-š-od(-ik)*

- *bb* *jó* 'good' ~ *jo-bb-ul* *olčó* 'cheap' ~ *olčó-bb-od(-ik)*, *laššú* ~ *laššú-bb-od(-ik)*

lexically specific repair: deletion vs insertion

- repair & prosodic constraint (syllable-count) \Rightarrow suffix alternant
- repair seems to be stem-specific: is it completely unpredictable?

		<i>-ul~ül</i>	<i>-od~ed~öd-</i>	REPAIRS:
<i>fakó</i> 'pale'	deletion	<i>fak-ul</i>	* <i>fak-od(-ik)</i>	
	insertion	* <i>fakó-š-ul</i>	?? <i>fakó-š-od(-ik)</i>	← insertion is marginal
<i>sigorú</i> 'strict'	deletion	* <i>sigor-ul</i>	<i>sigor-od(-ik)</i>	
	insertion	* <i>sigorú-š-ul</i>	?? <i>sigorú-š-od(-ik)</i>	← insertion is marginal
<i>karčú</i> 'thin'	deletion	* <i>karč-ul</i>	* <i>karč-od(-ik)</i>	
	insertion	* <i>karčú-š-ul</i>	<i>karčú-š-od(-ik)</i>	← no deletion at all
	PROSODIC CONSTRAINT:	stem too long	stem too short	

predictability: paradigm-based view

1. prediction based on *conservatism*: a specific repair in a form containing an intransitive verbal suffix (INTR) is only possible if it occurs elsewhere in a **designated form** in the paradigm (here: the form containing the transitive verbal suffix (TR) provides the remote base)
2. an INTR form with a specific repair does not necessarily occur even if the appropriate remote base does exist, but the availability of a remote base **increases** the probability of an INTR form with the corresponding repair
3. there may be more than one type of remote base: this may result in more than one INTR form (vacillation) or one significantly more probable than the other

truncation in INTR form & truncated remote base

1. **frequent** pattern: truncation in INTR is only possible if the truncated stem occurs in TR form of the paradigm: both TR & INTR forms exist (>50 stems)

- *barna* *barn-ul* ← *barn-ít*‘-TR; make it brown’
- *fakó* *fak-ul* ← *fak-ít*
- *laššú* *lašš-ul* ← *lašš-ít*,
- *sapora* *sapor-od-ik* ← *sapor-ít*
- *somorú* *somor-od-ik* ← *somor-ít*

2. **rare** pattern: truncated INTR form does not necessarily occur when truncated TR form does: only TR forms exist (6 stems)

- *šúrú, köňňú* **šúr-ül, köňň-ül* ↔ *šúr-ít, köňň-ít*
- *apró* **apr-ul* ↔ *apr-ít*
- *tele* **tel-ül* ↔ *tel-ít*
- *homorú* **homor-odik* ↔ *homor-ít*

patterns of truncation

before TR (-ít)	before INTR (-ul~ül, -od~ed~öd-)	
	truncation	no truncation
truncation	<i>lašš<ú>-ít ; lašš<ú>-ul</i> <i>somor<ú>-ít ; somor<ú>-od-</i>	<i>šůr<ů>-ít ; šůrů-š-öd-</i> <i>köňň<ů>-ít ; köňň<ů>-ebb-ed-*</i>
no truncation	not attested	<i>karčú-š-ít ; karčú-š-od-</i> <i>hoss<ú>-abb-ít ; hoss<ú>-abb-od-*</i>

conservative patterns (shaded cells) are frequent, nonconservative ones are unattested or rare

* note that truncation does not occur *before* the INTR suffix in these forms

verbal and non-verbal remote bases and truncation

stem types		VERBAL		NON-VERBAL	
		INTR	TR	ADVZ	CMPR
non-verbal truncation also (rare)	laššú, ifjú (2)	lašš-ul, ifj-ul	lašš-ít, ifj-ít	lašš-an, ifj-an	lašš-abb, ifj-abb
	köňňú (1)	—	köňň-ít	köňň-en	köňň-ebb
	hossú, sörňú (2)	—	—	hoss-an, sörň-en	hoss-abb, sörň-ebb
only verbal truncations (frequent)	somorú, kešerű (5)	somor-od-, kešer-ed-	somor-ít, kešer-ít	—	—
	sapora (1)	sapor-od-	sapor-ít		
	fakó (1)	fak-ul	fak-ít		
	tista, sürke (>50)	tist-ul, sürk-ül	tist-ít, sürk-ít		
only TR verbal truncation (rare)	homorú, sűrű (2)	—	homor-ít, sűr-ít	—	—
	apró (1)		apr-ít		
	tarka, tele (3)		tark-ít, tel-ít		
no truncation (frequent)	karčú, ízű (productive)	—	—	—	—
	bordó, meddő (prod.)				
	fura, büske (>100)				

verbal and non-verbal remote bases and truncation

stem types wrt. truncation			VERBAL		NON-VERBAL	
			INTR	TR	ADVZ	CMPR
1. non-verbal truncations also	a. TR & INTR	2	+	+	+	+
	b. only TR	1	-	+	+	+
	c. no	2	-	-	+	+
2. only TR & INTR truncations		>50	+	+	-	-
3. only TR truncation		6	-	+	-	-
4. no truncation		>100	-	-	-	-

**verbal and non-verbal truncations are independent:
the same three types occur with (1a-c) and without (2-4) non-verbal truncation**

truncation

- verbal and non-verbal truncations are *independent*: non-verbal truncated form is normally **not** the remote base for INTR form
- TR form acts as a *remote base*: truncated INTR forms & TR forms are correlated, a truncated TR form makes the occurrence of a truncated INTR form *highly probable* (measured in type frequency, although there is a weak pattern of paradigms with a truncated TR form and no truncated INTR form)
- **thus** the bias for truncation cannot be attributed to a stem alone (either by UR or lexically indexed constraints) since suffixes and stems *co-determine* the possibility of truncation: the same stem can have truncated and untruncated alternants in the same paradigm affix specifically

insertion

the **remote base** of the INTR form is the TR form: inserted consonant(s) in INTR must appear in TR, too (note that the TR form is the remote base in all cases, i.e., for consonant-final stems, too)

- “augment” = stem of the remote base is bound
 - v: *bǒ-v-ül* ← *bǒ-v-ít*, cf. **bǒv*
 - š: *karčú-š-od-ik* ← *karčú-š-ít*, cf. **karčúš*
- morpheme = stem of the remote base is free
 - š‘ADJZ’: *bordó-š-od-ik* ← *bordó-š-ít*, cf. *bordó-š*‘claret-ish’
 - bb‘CMPR’: *olčó-bb-od(-ik)* ← *olčó-bb-ít*, cf. *olčó-bb*‘cheap-CMPR’

(note that in verbalized forms ‘make/become X’ and ‘make/become X-ish/X-CMPR’ are semantically identical)

summary of potential remote bases

patterns		target	remote base	potential non-verbal remote bases	
		INTR	TR	free	bound
1a	V-truncation	<u>lašš</u> -ul	← <u>lašš</u> -ít	–	(←) <u>lašš</u> -abb, <u>lašš</u> -an
1b		<u>fak</u> -ul	← <u>fak</u> -ít		–
2	v-insertion	<u>bő-v</u> ül	← <u>bő-v</u> -ít	–	← <u>bő-v</u> -ebb, <u>bő-v</u> -en
3a	š-insertion	<u>bordó-š</u> -od-	← <u>bordó-š</u> -ít	← <u>bordó-š</u> ‘ish’	–
3b		<u>karčú-š</u> -od-	← <u>karčú-š</u> -ít	–	–
4a	bb-insertion	<u>olčó-bb</u> -od-	← <u>olčó-bb</u> -ít	← <u>olčó-bb</u> ‘CMPR’	–

hierarchy of insertion repair: $v > \check{s} > bb$

availability and applicability of insertion are inversely correlated

	occurrence	stem	meaningful	availability	applicability for a given stem
-v-	rare	bound	no	rarely	always (if available)
-š-	frequent	bound or free	no or yes ('-ish')	↓	↑
-bb-	productive	free	yes (CMPR)	always	sometimes (if needed)

patterns/constraints: type, scope & application

pattern/constraint	scope	indexation	type	application
MONOSYLL, POLYSYLL	prosodic	allomorph-specific	markedness	?categorical
NOHIATUS	segmental	?no	markedness	categorical
stable initial-V in INTR	segmental	morpheme-specific	faithfulness	categorical
repair (truncation/insertion)	segmental	conservative	paradigmatic	probabilistic

the stochastic nature of grammar

empirical and theoretical arguments support the view that (at least in this specific phenomenon) the effect of the relevant grammatical constraint is mainly *stochastic* and not categorical

the effect of paradigmatic conservatism is not clear-cut: an existing remote base (TR form) makes the corresponding INTR form probable, but its occurrence is not mandatory (cf. Breiss 2021, 2023)

- marked (rare, marginal) INTR forms show that conservatism exerts pressure to fill empty cells;
e.g. šūr-ít → ?%šūr-ül; šūrű-bb → ?%šūrű-bb-ödik (standard: šūrű-š-öd-ik)
hoss-abb, hoss-an → ?%hoss-ít → ?%hoss-ul (standard: hoss-abb-ít, hoss-abb-od-ik)
- the effect of the repair hierarchy is stochastic: alternative forms can occur with different bases;
e.g. -v- base: jav-ul ← jav-ít & -bb- base: jo-bb-ul ← jo-bb-ít
-bb- base: olčó-bb-odik ← olčó-bb-ít & -s- base: %olčó-š-odik ← %olčó-š-ít

allomorph selection as defectiveness

missing forms with *one* of INTR allomorphs can be considered as **covert defectiveness** (Iverson 1981, Rebrus & Törkenczy 2009)

- **paradigmatic gap** motivated phonologically (prosodically) by number of stem syllables and NOHIATUS
- multiple lexically constrained **repair** strategies can fill the gap: V-deletion and/or C-insertion
- defectiveness and **variation** (esp. overabundance) can co-occur (Rebrus et al. 2023)
- the **grammaticality** status of morphological repair forms can be **uncertain** (intra- and interspeaker dependent, Lukács et al. 2010)
- as generally with paradigm gaps **syntactic repair** is always possible: X+INTR = *become* X (for any adjective X)

paradigmatic system of V-final adjective+INTR forms

stem types			INTR forms		remarks
number of syll.	trunc.	ins.	<i>-ul~ül</i>	<i>-od~ed~öd-</i>	
monosyllabic	-	+	<i>bõ-v-ül</i> <i>ja-v-ul / jo-bb-ul</i>	★	covert gap covert gap+overabundance
		-	★	★	overt gap (e.g. <i>hú</i>)
bisyllabic	+	-	<i>fak<ó>-ul</i>	★	covert gap
	-	+	★	<i>šűrű-š-öd-</i> <i>olčó-bb-od- / olčó-š-od-</i>	covert gap covert gap+overabundance
	+	+	<i>lass<ú>-ul</i>	<i>laššú-bb-od-</i>	overabundance
	-	-	★	★	overt gap (e.g. <i>apró</i>)
>2 syllables	+	-	★	<i>somor-od-</i>	covert gap
	-	+	★	<i>edšerű-š-öd-</i>	covert gap
	+	+	★	<i>sigor-od- / sigorű-š-od-</i>	covert gap+overabundance
	-	-	★	★	overt gap (e.g. <i>dõňörű</i>)

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