INTERPARADIGM CONSERVATISM AND MINIMALITY MOTIVATE PARADIGM GAPS IN HUNGARIAN

Péter Rebrus[H,E] ⟨rebrus@nytud.hu⟩
Péter Szigetvári[E] ⟨szigetvari@elte.hu⟩
Miklós Törkenczy[E,H] ⟨tork@nytud.hu⟩

Eötvös Loránd University, Budapest
HUN-REN Research Centre for Linguistics

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main claims

- morphological concatenation creates phonotactic ill-formedness
- ill-formedness is repaired by the selection of alternative allomorphs (in another theory, by phonological processes like insertion, deletion, assimilation)
- paradigm gaps occur where repair is not available
- repair is not available for paradigmatic reasons (no relevant pattern in the paradigm)
- the relevant pattern may be missing within a paradigm or across other paradigms
- **speakers attempt to repair not illicit forms but defective paradigms**

why are there gaps?

- in **verbal** paradigms,[1] **some** CC-C clusters are illicit, usually the repair is the selection of a VC-final stem allomorph (alternatively put: vowel epenthesis)
  - *botl-ok* 'stumble-NDF.1SG', *botl-ani* '-INF', *botl-ott* '-PST' vs
  - *bot**o**l-d* (**tld*) '-SBJV.DEF.2SG', *bot**o**l-j-ak* (**tlj*) '-SBJV-NDF.1SG', *bot**o**l-hat* (**tlh*) '-POT'
- however, about 70 CC-final stems have no VC-final stem allomorph (inhibit epenthesis)
  - *čukl-ok* 'hiccup-NDF.1SG', *čukl-ani* '-INF', *čukl-ott* '-PST' vs
  - **čuk**(o)**l-j-ak* '-SBJV-NDF.1SG', **čuk**(o)**l-hat* '-POT', **čuk**(o)**l-va* '-ADV.PCP'
- if epenthesis is available as a repair in *botl-*, why is it not in *čukl-*?

[1]**nominal** paradigms have no such gaps: *gejl-hez* 'cloying-ADE' vs **rejl-het* 'be.hidden-POT' (speakers reject or hesitate to accept/produce the asterisked forms, Lukács & al. 2010, Csényi 2020)

relevant stem types and suffix types

stem type	V suffix: eg ‘NDF.1SG’	C/V suffix: eg ‘INF’	C suffix: eg ‘POT’
VC	*ápol-ok*	*ápol-ni*	*ápol-hat*
VC/CC 1	*kotr-ok*	*kotor-ni*	*kotor-hat*
VC/CC 2	*botl-ok*	*botol-ni ~ botl-ani*	*botol-hat*
CC 1	*hord-ok*	*hord-ani*	*hord-hat*
CC 2	*čukl-ok*	*čukl-ani*	★

the size of suffix types

	-(V)C	-(V)CV(C)
V suffix	*ápol-ok, botl-ok* ‘-NDF.1SG’; *ápol-unk, botl-unk* ‘-NDF.1PL’	
C/V suffix	*ápol-s, botl-as* ‘-NDF.2SG’	*ápol-tok, botl-otok* ‘-NDF.2PL’; *ápol-na, botl-ana* ‘-COND’
C suffix	*ápol-d, botol-d* ‘-SBJV.DEF.2SG’	*ápol-hat, botol-hat* ‘-POT’; *ápol-va, botol-va* ‘-ADV.PCP’

the availability of “epenthesis” cannot be derived from stem-final consonants (cf. NDF.1SG, INF, POT forms)

“epenthesis” available	“epenthesis” not available
*fü**rd**-ök, fü**rd**-eni~fürö**d**-ni, förö**d**-het* ‘bathe-’	*ho**rd**-ok, ho**rd**-ani, ho**rd**-hat* ‘wear-’
*igé**ňl**-ek~igéňe**l**-ek, igéňe**l**-ni, igéňe**l**-het* ‘require-’	*šíň**l**-ek, šíň**l**-eni,* ★ ‘suffer-’
*o**sl**-ok, o**sl**-ani~oso**l**-ni, oso**l**-hat* ‘disperse-’	*kos**l**-ok, kos**l**-ani,* ★ ‘be.dirty-’
*bo**tl**-ok, bo**tl**-ani~boto**l**-ni, boto**l**-hat* ‘stumble-’	*kot**l**-ok, kot**l**-ani,* ★ ‘brood-’
*fuldo**kl**-ok~fuldoko**l**-ok, fuldo**kl**-ani~fuldoko**l**-ni, fuldoko**l**-hat* ‘suffocate-’	*čuk**l**-ok, čuk**l**-ani,* ★ ‘hiccup-’

verbal patterns with stem-final *-n(V)l-*

	‘NDF.1SG’	‘INF’	‘POT’	gloss
stable vowel	*trón**o**l-ok*	*trón**o**l-ni*	*trón**o**l-hat*	‘sit.on.throne-’
alternating vowel	*özön**nl**-ök*	*özön**nl**-eni~özön**ö**l-ni*	*özön**ö**l-het*	‘crowd-’
nondefective stable CC	*ajá**nl**-ok*	*ajá**nl**-ani*	*ajá**nl**-hat*	‘suggest-’
defective stable CC	*meghašo**nl**-ok*	*meghašo**nl**-ani*	★	‘self.conflict-’

verbal stem-final CC clusters

	only alternating C(V)C	both alternating C(V)C and stable CC	only stable CC
C+plosive	jg rg lg zg žg	**rd**	**rt lt ld jt nt nd ng nč st zd št žd dd gg cc dzdz**
C+fricative	ks ps	**jz** rz lz **nz mz** ňz gz bz ls	rs
C+nasal	rm		
C+l	pl bl	jl rl **nl** ňl ml zl sl šl žl tl dl kl gl	**ll**
C+r	tr dr pr br		**rr**

legend: **final cluster in free stem**, final cluster in defective stem

paradigm patterns

stem type	paradigm pattern	base *-Ø/ik* ‘NDF.3SG’	V suffix eg ‘NDF.1SG’	C/V suffix eg ‘INF’	C suffix eg ‘POT’
VC	⟨1|1,1,1⟩	*ápol* ‘care’	*ápol-ok*	*ápol-ni*	*ápol-hat*
VC/CC 1	⟨1|0,1,1⟩	*kotor* ‘scoop’	*kotr-ok*	*kotor-ni*	*kotor-hat*
VC/CC 2	⟨0|0,01,1⟩	*botl-ik* ‘stumble’	*botl-ok*	*botol-ni* ~ *botl-ani*	*botol-hat*
CC 1	⟨0|0,0,0⟩	*hord* ‘wear’	*hord-ok*	*hord-ani*	*hord-hat*
CC 2	⟨0|0,0,–⟩	*čukl-ik* ‘hiccup’	*čukl-ok*	*čukl-ani*	★

Paradigmatic Support (ParSup)

C/V-suffixed forms imitate the **base** and the C-suffixed forms

stem	pattern	comment
VC	⟨1|1,1,1⟩	
VC/CC 1	⟨1|0,1,1⟩	
VC/CC 2	⟨0|0,01,1⟩	base & C-suffixed forms differ: C/V-suffixed form vacillates
CC 1	⟨0|0,0,0⟩	
CC 2	⟨0|0,0,–⟩	base form typically has *-ik* suffix

Classical Lexical Conservatism (CLC) = intraparadigmatic conservatism

Steriade 1997, Pertsova 2005

- lexical precedents (listed allomorphs) influence the availability of repair:
  lapse in *rémedi+able* is repairable (*remédiable*) since the paradigm contains *remédial*
  but lapse in *párodi+able* is not (**paródiable*) since the paradigm does not contain **paródial*
- gaps occur in the paradigms of CC-final stems where:
  - simple concatenation, CC-C, is phonotactically ill-formed
  - and the given CC stem has no VC-final allomorph (lexical conservatism)

Output-Oriented Lexical Conservatism (OLC)

- an alternative interpretation of Lexical Conservatism where whole paradigms are evaluated: a paradigm must contain the same stem allomorph in at least two members
- that is, the following patterns are not conservative:
  ⟨0|0,0,1⟩, ⟨0|0,1,0⟩, ⟨0|1,0,0⟩, ⟨1|0,0,0⟩,
  ⟨1|1,1,0⟩, ⟨1|1,0,1⟩, ⟨1|0,1,1⟩, ⟨0|1,1,1⟩
- let us call this Output-Oriented Lexical Conservatism (OLC)
- why can't repair be based on forms of nondefective paradigms?
- why can some repairs still occur marginally, while others cannot at all?

hypotheses on repair

- repair should be **minimal**: repair can target only gaps (cf. the preference for minimal difference between input and output in Prince & Smolensky 2004)
- repair should produce a paradigm pattern that already exists **(= interparadigmatic conservatism)**
- as a consequence repair should satisfy PARSUP

potential repairs of defective ⟨0|0,0,–⟩ (CC 2)

	pattern	phon	CLC	OLC	PARSUP	min	comment
	marginal						
1	⟨0|0,0,**0**⟩	*	✓	✓	✓	✓	**čukl-hat*, but *%rejl-het* (= CC 1)
2	⟨0|0,0,1⟩	✓	*	*	*	✓	*čukl-ani*, *čuk**o**l-hat*
3	⟨0|0,01,1⟩	✓	*	✓	✓	*	*čukl-ani~čuk**o**l-ni*, *čuk**o**l-hat* (= VC/CC 2)
	impossible						
4	⟨0|0,1,1⟩	✓	*	✓	*	*	
5	⟨0|01,01,1⟩	✓	*	✓	✓	**	(this pattern exists: *fuldokol*)
6	⟨0|01,0,1⟩	✓	*	✓	*	*	

repairing defectiveness: where Lexical Conservatism fails

- CLC only allows repair to ⟨0|0,0,0⟩ (CC 1: *čukl-ok, čukl-ani, *čukl-hat*), but this is available only for some stems depending on the sonority of the stem-final Cs (*rejl-ek, rejl-eni, %rejl-het*)
- CLC rules out any repair that introduces a VC-final stem, but these exist marginally (⟨0|0,0,1⟩: *čukl-ok, čukl-ani, čuk**o**l-hat*; ⟨0|0,01,1⟩: *čukl-ok, čukl-ani~čuk**o**lni, čuk**o**l-hat*)
- OLC rules out ⟨0|0,0,1⟩: *čukl-ok, čukl-ani, čuk**o**l-hat*, a repair that marginally exists
- OLC allows several repairs that do not exist (because they violate both ParSup and minimality or they multiply violate minimality)

conclusions

- Lexical Conservatism evaluates a form relative to other known forms in its paradigm
- LC cannot “unlicense” a form if a similar form is available in the paradign, thus it does not explain the impossibility of all potential repairs of gaps
- these repairs are impossible because of
    - **Interparadigmatic Conservatism,** that is, a repair must result in an existing paradigmatic pattern (it is not forms but paradigms that are compared)
    - **minimality,** that is, repair is impossible even into an **existing** paradigmatic pattern if not minimal (“if it ain’t broken, don’t fix it”)
- therefore, Interparadigm Conservatism **and** minimality motivate paradigm gaps in Hungarian verbal paradigms

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