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Eslarn Infinitive Allomorphy is Optimizing

mfm XXVI
May 26, 2018

Main Claims

- **Evidence for phonological optimization** in suppletive allomorphy (Kager 1996, Bonet et al. 2007, Wolf 2015)
- Opaque allomorph selection follows from **containment-based approach to coalescence** (Zaleska 2018)

Approaches to phonologically conditioned Suppletive Allomorphy

- **Phonological Optimization:** Phonological optimization selects among output forms with different listed allomorphs (Kager 1996, Bonet et al. 2007, Wolf 2015) ⇒ Contexts for every allomorph can be heterogeneous, reflecting different markedness constraints
- **Morphological Subcategorization:** Each allomorph selects for bases with a specific phonological shape(Bye 2006, Paster 2006) ⇒ Apart from default allomorphs, every allomorph should be restricted to a single natural class of contexts

The Language:

- High Palatinate variety of Northern Bavarian – Elimination of Standard German schwas and excessive diphthongization
- Spoken in the town of Eslarn ([islɪŋ], (49°35' N, 12°31'), documented in detail by Bachmann (2000)

The Problem for Subcategorization

Subcategorization frames should identify natural classes:

-n ↔ Infinitive / [-nasal +low] _
-ɐ ↔ Infinitive (else)

↯ predicts that -ɐ should appear after consonants that are not [+low]: *vɛt-ɐ/vɛt-n, *ʃɛl-ɐ/ʃɛl-n

-ɐ ↔ Infinitive / [+nasal -low] _
-n ↔ Infinitive (else)

↯ predicts that -n should appear after all non-nasal vowels: *ʃrai-n/ʃrai-ɐ, *bau-n/bau-ɐ

Distribution of Allomorphs

	1sg	Infin.			1sg	Infin.	
a. **Fricatives**	laf	laf-m̩	'run'	d. **Liquids**	ʃɛl	ʃɛl-n	'ring'
	les	les-n̩	'read'		hul	hul-n	'get'
	sɔ͡ʊx	sɔ͡ʊx-ŋ̩	'quest'		be.tl̩ʸ	be.tl̩ʸ-n	'beg'
b. **Nasals**	ram	ram-ɐ	'vacate'	e. **Non-low Vowels**	ba͡ʊ	ba͡ʊ-ɐ	'build'
	rɛn	rɛn-ɐ	'run'		ʃra͡ɪ	ʃra͡ɪ-ɐ	'yell'
	sɪŋ	sɪŋ-ɐ	'sing'		lɔ͡ʊ	lɔ͡ʊ-ɐ	'let'
c. **Stops**	vɪp:	vɪp:-m	'teeter'	f. **Low Vowels**	ma:	ma:-n	'mow'
	rɛt:	rɛt:-n	'save'		fɔ͡ɐ	fɔ͡ɐ-n	'drive'
	lɛk:	lɛk:-ŋ	'lick'		he͡ɐ	he͡ɐ-n	'hear'

Bidimensional Dissimilation

Stemfinal Consonants

← [-nasal] [+nasal] →

-n -ɐ

Stemfinal Vowels

← [+low] [-low] →

Constraints

*NN	Assign -1 to every pair of adjacent nasal stops
$*V_{+low}V_{+low}$	Assign -1 to every pair of adjacent low vowels
$\text{Share}_{\text{Place}}$ TN	Assign +1 to every lexical nasal which shares Place with a preceding lexical consonant
$\sigma_{3\mu}$	Assign -1 to every trimoraic syllable
*V̆	Assign ∗ to every reduced vowel

Ranking:

*NN ≫ {$*V_{+low}V_{+low}$, $\text{Share}_{\text{Place}}$ TN} ≫ $*\sigma_{3\mu}$ ≫ *V̆

Basic Analysis

Non-Low Vowels: Non-low vowels select -ɐ to avoid an overlong syllable ($*\sigma_{3\mu}$):

Input: baʊ {-n,-ɐ}	$*V_{+low}V_{+low}$	$*\sigma_{3\mu}$	*V̆
☞ a. baʊ-ɐ			-1
c. baʊ-n		-1!	

Low Vowels: Low vowels select -n by dissimilation ($*V_{+low}V_{+low}$):

Input: heɐ {-n,-ɐ}	$*V_{+low}V_{+low}$	$*\sigma_{3\mu}$	*V̆
a. heɐ-ɐ	-1!		-1
☞ c. heɐ-n		-1	

Non-nasal Consonants: Non-nasal consonants select -n to acchieve sharing of place features (Sh_{Pl})

Input: vɛk: {-n,-ɐ}	*NN	Sh_{Pl}	$*\sigma_{3\mu}$	*V̆
a. vɛk:-ɐ		!		-1
☞ b. vɛ(k:-ŋ̩)		+1		

Nasal Consonants: Nasal consonants select -ɐ by dissimilation (*NN):

Input: rɛn {-n,-ɐ}	*NN	Sh_{Pl}	$*\sigma_{3\mu}$	*V̆
☞ a. rɛn-ɐ				-1
b. rɛ(n-n̩)	-1!	+1		

Opacity in Coalescence

	1sg	Infin.			1sg	Infin.	
	vɪp:	vɪp:-m	'teeter'		lep	lem	'live'
Geminates	rɛt:	rɛt:-n	'save'	**Singletons**	ret	ren	'talk'
	lɛk:	lɛk:-ŋ	'lick'		lek	leŋ	'put'

Allomorph selection depends on stem-final input, not output segment:

[ʃra͡ɪ] → [ʃra͡ɐ] → *[ʃra͡m] 'yell'
[ʃra͡ɪp] → *[ʃra͡ɐ] → [ʃra͡m] 'write'

[klap] → [klam] 'pick'
[ram] → *[ram] → [ramɐ] 'vacate'

Coalescence as Coalescence

Nasal+nasal coalescence should be possible whenever nasal+stop coalescence is possible:

Input: $k_1l_2a_3p_4$-n_5	*CC	Max	Unif	Id Plc	Id nasal
a. $k_1l_2a_3p_4$-n_5	-1!				
b. $k_1l_2a_3p_4$		-1!			
☞ a. $k_1l_2a_3m_{4,5}$			-1	-1	**-1**

Input: = $r_1a_2m_3$-n_4	*CC	Max	Unif	Id Plc	Id nasal
☞ a. $r_1a_2m_3$-n_4	-1!				
b. $r_1a_2m_3$				-1	
c. $r_1a_2m_{3,4}$			-1	-1	

References

Bachmann, Armin R. (2000), *Die Mundart von Eslarn in der Oberpfalz*, Frank Steiner Verlag, Stuttgart.

Bonet, Eulália, Maria-Rosa Lloret and Joan Mascaró (2007), 'Allomorph selection and lexical preferences: Two case studies', *Lingua* **117**, 903–927.

Bye, Patrik (2006), Allomorphy – selection, not optimization. Ms.,University of Tromsø, CASTL.

Kager, René (1996), On affix allomorphy and syllable counting, *in* U.Kleinhenz, ed., 'Interfaces in Phonology', Akademie-Verlag, Berlin, pp. 155–171.

Paster, Mary (2006), Phonological Conditions on Affixation, PhD thesis, University Of California, Berkeley.

Wolf, Matt (2015), Lexical insertion occurs in the phonological component., *in* E.Bonet, M.-R.Lloret and J. M.Altimiras, eds, 'Understanding Allomorphy: Perspectives from Optimality Theory', Equinox, London, pp. 361–407.

Zaleska, Joanna (2018), Coalescence without Coalescence, PhD thesis, Universität Leipzig.

Fake Coalescence in Containment

'Coalescence' = Assimilation + Deletion (Zaleska 2018)
Dissimilation and Place sharing apply despite deletion:

Input: ram {-n,-ɐ}	*NN	$*V_{+low}V_{+low}$	Sh_{Pl}	$*\sigma_{3\mu}$	*V̆
☞ a. ram-ɐ					-1
c. ra(m-m)	-1!		+1	-1	

Input: ʃra͡ɪp {-n,-ɐ}	*NN	$*V_{+low}V_{+low}$	Sh_{Pl}	$*\sigma_{3\mu}$	*V̆
a. ʃra͡ɪp-ɐ			!		-1
b. ʃra͡ɪp-ɐ			!	-1	
☞ c. ʃra͡ɪ(p-m)			+1	-1	