

## Non-derivational opacity in allomorph selection

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### Overview of this talk

- Example of a simple case of opacity in Aalst Dutch
- An analysis of the interaction between stress and morphology in Dutch vowel-initial suffixes
- The paradoxical suffix *-aar*
- Opacity in allomorph selection
- Possible restrictions on the theory of morphology/phonology interaction

### A simple case of opacity

**Opacity:** a form behaves phonologically as if it has shape A although its actual form is B.

Aalst Flemish (Collinet 1896, cf. Taeldeman 1980)

- (1) a. (A) groen@ buimen  
 (B) groen buimen  
 (C) \*groem buimen (green trees)  
 b. (D) en groem boimke (a green tree-DIM)

(2)

/groen@+buim@n/	*SCHWA	IDENT- <sup>☞</sup> O	NASAL ASSIMILATION	<sup>☞</sup> MAX-IO
☞ groen buim@n	*		*	*
<sup>☞</sup> groen@ buim@n	**!			
groem buim@n	*	*!		*

/groen+buim+k@/	*SCHWA	IDENT- <sup>☞</sup> O	NASAL ASSIMILATION	<sup>☞</sup> MAX-IO
groen buimk@	*		*!	
( <sup>☞</sup> ) ☞ groem buimk@	*			

### Stress behaviour of vowel-initial suffixes

- (3) a. **schwa -- stress-neutral:**  
 háring - háring[@] (\*háring[@]) `herring SG-PL'  
 b. **no schwa -- not stress-neutral:**  
 wíinkel - wíinkel'er `shop - shopkeeper'

(4) **no schwa -- stress neutral:**  
wánder - wánderlaar `walk - walker'

- (5) **Basic facts of Dutch word stress (in underived words)**
- Three-syllable window at the end of the word
  - Superheavy syllables attract primary stress
  - If the final syllable contains a schwa, the prefinal syllable is stressed

(6) **Morphology-Prosody Interface (MPI)**  
There should be a one-to-one correspondence between morphological brackets and phonological brackets (‘Align(Morph,Phon)').

(7) [[                    ]                    ]

\*[[                    ]                    ]

(8) **FullFull**  
Full vowels are not allowed in adjoined position.

(9)

/háring+@/	FULLFULL	MPI
☞ [[háring]@]		
[[haríng]@]		*!

/winkel+ier/	FULLFULL	MPI
[[wínkel]ier]	*!	
☞ [[winkel]íer]		

**Excursus: Consonant-initial suffixes**

(e1)

/winkel+ier/	FULLFULL	ONSET	MPI
☞ [[winkel]íer]			
[[wínkel]ier]	*!		
[[wínkel]ier]		*!	

(e2)

/mens@l@k+heid/	FULLFULL	ONSET	MPI
☞ [[méns@l@k]hèid]			
[[méns@l@k]heid]	*!		
☞ [[mens@l@k]héid]			

**The problem with -aar**

(10) (Booij 1997)

*denominal nouns*

Amsterdam /AmsterdAm/

Amsterdamm-er `inhabitant of A.'

Diemen /di:m@n/

Diemen-aar `inhabitant of D.'

Uddel /oed@l/

Uddelaar `inhabitant of U.'

*deverbal nouns*

eet /e:t/ `to eat'	et-er `eater'
luister /loeyst@r/ `to listen'	luister-aar `listener'
bedel /be:d@l/ `to beg'	bedel-aar `beggar'
reken /re:k@n/ `to compute'	reken-aar `computer'

- (11) NO LAPSE: Two schwa syllables in a row are not allowed  
 FOOTBIN: Feet are (minimally) binary.  
 WEIGHT: Superheavy syllables may not occur in weak position

(12)

	NO LAPSE	FOOTBIN	WEIGHT
(di:m@n-@r)	*!		
☞ (di:m@)(n-a:r)		*	

☞ (e:t@r)			
(é:ta:r)			*!

(13)

(e:tá:r)			
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(14) UNMARKED-ALLOMORPH

(15)

/wAnd@l/{/ar/,/@r/}	NO LAPSE	UNMARKED ALLOMORPH
☞ [wand@lar]		*
[wAnd@l@r]	*!	

(16)

/sprek/{/ar/,/@r/}	NO LAPSE	UNMARKED ALLOMORPH
[sprekar]		*!
☞ [sprek@r]		

(17)

/wAnd@l/{/ar/,/@r/}	NOLAPSE	Sympathy	✿ UNMARKED ALLOMORPH	LICENSE	ALIGN
✿ [wÁnd@l@r]	*!				
[wAnd@l'@r]	*!				*
☞ [wÁnd@lar]			*	*	
[wAnd@lár]		*!	*		*

### Aalst Revisited

Facts (18)-(21) are due to Booij (1997)

- (18) een goed-0 boek                      een goed@ tafel  
       `a good book'                         `a good table'  
       het goed@ boek                      de goed@ tafel  
       `the good book'                     `the good table'  
       (de) goed@ boeken                  (de) goed@ tafels  
       `(the) good books'                 `(the) good tables'

- (19) het op@n-0 boek `the open book'  
       de hout-@n-0 tafel `the wooden table'

- (20) het geslag@n@ `the beaten' (neuter)  
       de geslag@n@ `the beaten' (person, non-neuter)

- (21) een prima-0 lezing `an excellent lecture'

(22)

/groen@+buimen/	*SCHWA	SYMPATHY	NASAL ASSIMILATION	✿ UNMARKED -ALLOMORPH
☞ groen buimen			*	*
groen@ buimen	*!			
groem buimen		*!		*


## The limits of Sympathy: Itô and Mester

(23)


Gàbriéle	Gábi	personal name
Wáldemàr	Wáldi	personal name
Górbatschòw	Górbi	surname
Schimánsky	Schímmi	surname
Àlkohóliker	Álki	`alcoholic'
Érdkùnde	Érdi	`geography'
Fundamentalist	Fúndi	`fundamentalist Green party member'

(24) All-S-Left: Align(S, Left, PrWd, Left)

(25)

B: andreas I: T+I	Max-IO	Dep- <sup>*</sup> O	<sup>*</sup> All- $\sigma$ -Left	max-BT
a .and. <sup>*</sup>	i!			reas
b .an.	i!			dreas
c .a.	i!			ndreas
d .a.n-i.		i	$\sigma$	dreas!
e .an.d-i. 		i	$\sigma$	reas
f .an.dr-i.		ri!	$\sigma$	eas
g .an.dre.a.s-i.		re!asi	$\sigma\sigma\sigma$	dreas

(26)

/andreas/+/T-i/	ONSET	TROCHEE	Dep- <sup>*</sup> O	<sup>*</sup> MPI	max-BT
a .and.-i <sup>*</sup>	*!				reas
b .and.ri			r!	*	dreas
C .an.d-i. 				*	reas
d.an.dr-i.			r!	*	eas
e .an.dre.as.-i.	*!	*	reas		dreas

- MPI = symmetrical case of Anchor

(27)

a.

- SONCON Complex onsets rise in sonority, complex codas fall in sonority.  
REALIZE-M For every morpheme in the input, the output must contain at least one segment of that morpheme.  
IDENT- $\otimes$ O Corresponding segments in  $\otimes$  candidate and output must have corresponding feature values.  
DEP-IO Every segment in the output must be present in the input  
ANCHOR-R Any element at the right edge of the input has a correspondent at the right edge of the output.  
MAX-IO Every segment in the input must be present in the output  
UMLAUT \*[a C<sub>0</sub>+ C<sub>0</sub> y]  
IDENT Corresponding segments in input and output must have corresponding feature values.

b.

/dag+r/	SON CON	REAL- M	IDENT- $\otimes$ O	$\otimes$ DEP- IO	ANCHOR- R	MAX- IO	UMLAUT	IDENT
$\otimes$ a. dag		*!			*	*		
b. dagr	*!		*					
$\rightarrow$ c. dagur				*			*	
d. dögur			*!	*				*

- The Karvonen and Sherman (1997) analysis uses DEP-IO as the constraint picking out the  $\otimes$  candidate. Most other sympathy analyses use Max constraints or constraint on alignment of phonological and morphological structure.