

24.961

Homework due in class 1 of week# 5.

## Voicing assimilation in Dutch

(adapted from Kager 1999)

Consider the pattern of voicing assimilation in Dutch (Trommelen and Zonneveld 1979):

a.	/d+ k/	tk	bloedkoraal	'red coral'
b.	/k+ v/	kf	boekvorm	'book form'
c.	/s+ v/	sf	bosveen	'peat'
d.	/p+ z/	ps	diepzee	'deep sea'
e.	/v+ z/	fs	drijfzand	'quicksand'
f.	/d+ v/	tf	handvaat	'handle'
g.	/t+ z/	ts	hartzeer	'heartache'
h.	/x+ t/	xt	hoogtij	'heyday'
i.	/x+ v/	xf	hoogvlakte	'plateau'
j.	/d+ p/	tp	huidplooi	'skin crease'
k.	/z+ p/	sp	kaaspers	'cheese press'
l.	/z+ v/	sf	kaasvorm	'cheese mold'
m.	/s+ b/	zb	kasboek	'cash book'
n.	/b+ z/	ps	krabzeer	'scratching sore'
o.	/x+ b/	xb	lachbui	'fit of laughter'
p.	/f+ b/	vb	lafbek	'coward'
q.	/v+ k/	fk	lijfknecht	'serf'
r.	/d+ z/	ts	Noordzee	'North Sea'
s.	/x+ v/	xf	pechvogel	'unlucky person'
t.	/b+ k/	pk	slobkous	'gaiter'
u.	/f+ z/	fs	strafzaak	'trial'
v.	/p+ d/	bd	stropdas	'tie'
w.	/t+ b/	db	witboek	'white book'
x.	/k+ d/	gd	zakdoek	'handkerchief'

Two types of voicing assimilation interact in this pattern.

- State precisely, but informally, the generalizations concerning voicing assimilation in Dutch consonant clusters.
- The following constraints can be used to account for the assimilation pattern. Show how they must be ranked, and provide pair-wise ranking arguments for each

Faithfulness constraints:

- Ident<sub>Onset</sub>(Stop) 'An onset stop is featurally identical to its input correspondent'
- Ident<sub>Onset</sub>(Fricative) 'An onset fricative is featurally identical to its input correspondent'

Markedness constraints:

- Agree 'the members of a consonant cluster agree in voicing'
- \*[+ voice, -son] 'an obstruent is not [+ voice]

c. Support your analysis by showing providing full tableaux for the following forms:

1. voiceless stop + voiced stop: / stropdas /
2. voiceless fricative + voiced stop: /lafbek/
3. voiced stop + voiced fricative: /krabzeer/

d. The analysis, as it stands, makes the wrong prediction for the following representative data (transcribed in IPA). First state what the problem is, then propose a constraint (and rank it!) in order to solve the problem:

- |    |       |                |
|----|-------|----------------|
| a. | kasə  | 'cash (pl.)'   |
| b. | kazə  | 'cheese (pl.)' |
| c. | zɛxə  | 'say'          |
| d. | vurə  | 'carry'        |
| e. | voχəl | 'bird'         |

e. Describe the factorial typology derived from all possible re-rankings (3!) of the two faithfulness constraints with the markedness constraint against voiced-obstruents given in (b). In each case assume that AGREE is at the top of the hierarchy.