

# An introduction to phonological representations

EGG 2017, Olomouc

The Dialect of Grado (Walker (2005))

(Metaphonic alternations:  $e, o \rightarrow i, u$ ; No metaphony for  $\varepsilon, \omega$ )

a. [ATR]/e/o/

i. Class I/II adjectives and nouns:

	Singular	Plural	
Msc.	'vero	'viri	'true'
Msc.	'negro	'nigri	'negro'
Msc.	'tempo	'timpi	'time'
Msc.	'roso	'rusi	'red'
Msc.	'sordo	'surdi	'deaf'
Msc.	'tondo	'tundi	'round'

ii. Class III Adjectives and Nouns:

	Singular	Plural	
Masc.	'fjor	'fjuri	'flower'
Fm.	'a'mor	'a'muri	'love'

iii. Metaphonic alternations in the present singular of verbs:

	'meto	'kre-o	'romp-o	1 <sup>st</sup>
	'mit-i	'kri-i	'rump-i	2 <sup>nd</sup>
	'met-e	'kre-e	'rump-e	3 <sup>rd</sup>
	'put'	'believe'	'break'	

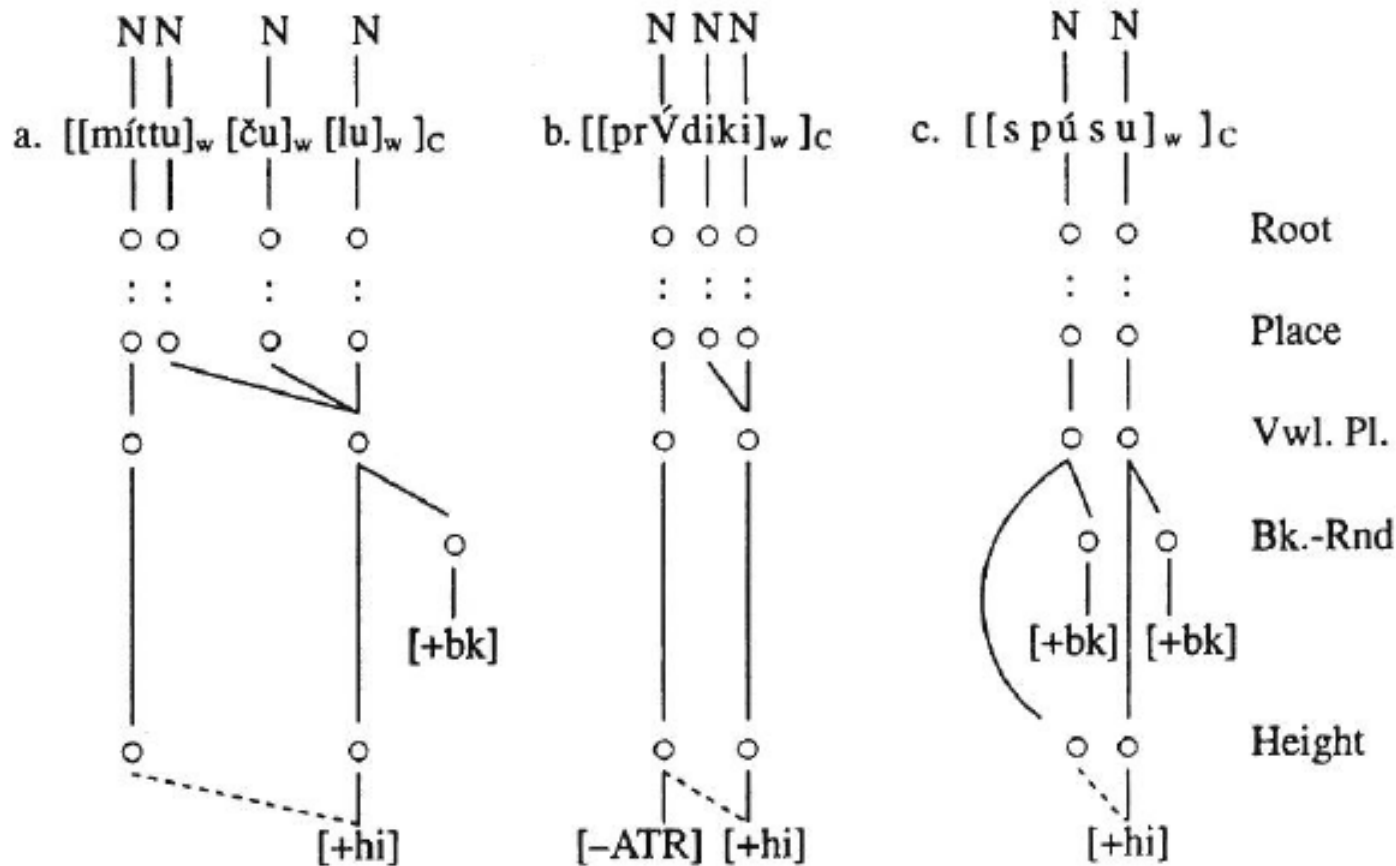
a. /e/ raised to [i]

<i>métt-o</i>	'I put'	<i>mítt-i</i>	'you put'
<i>kréd-o</i>	'I believe'	<i>kríd-i</i>	'you believe'
<i>kwést-o</i>	'this (NEUT)'	<i>kwíst-u</i>	'this (MASC.SG)'
<i>kwést-e</i>	'these (FEM.PL)'	<i>kwíst-i</i>	'these (MASC.PL)'
<i>pés-a</i>	'heavy (FEM.SG)'	<i>pís-u</i>	'heavy (MASC.SG)'
<i>més-e</i>	'month (MASC.SG)'	<i>mís-i</i>	'month (MASC.PL)'
<i>métt-a=ča=la</i>	'put it (FEM.SG) there'	<i>mítt-u=ču=lu</i>	'put it (MASC.SG) there'
<i>métt-e=če=le</i>	'put it (FEM.PL) there'	<i>mítt-i=či=li</i>	'put it (MASC.PL) there'

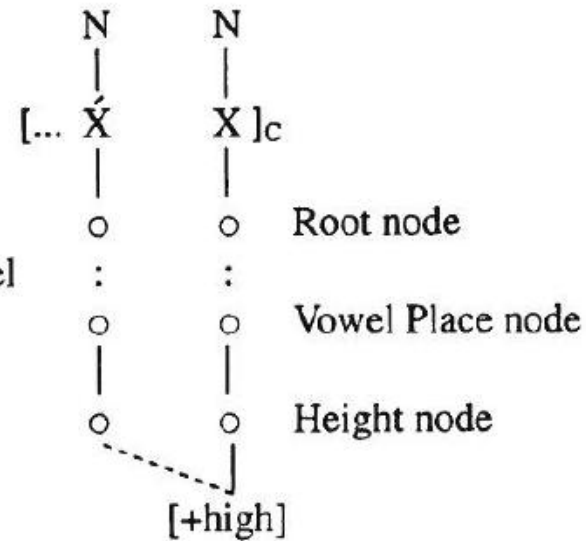
b. /o/ raised to [u]

<i>fjór-e</i>	'flower (MASC.SG)'	<i>fjúr-i</i>	'flower (MASC.PL)'
<i>spós-a</i>	'wife (FEM.SG)'	<i>spús-u</i>	'husband (MASC.SG)'
<i>póč-e</i>	'flea (MASC.SG)'	<i>púč-i</i>	'flea (MASC.PL)'
<i>róšš-a</i>	'red (FEM.SG)'	<i>rúšš-u</i>	'red (MASC.SG)'
<i>skjifós-a</i>	'fussy (FEM.SG)'	<i>skjifús-u</i>	'fussy (MASC.SG)'
<i>lóng-a</i>	'long (FEM.SG)'	<i>lúng-u</i>	'long (MASC.SG)'

2) Metaphony:



- (17) **Servigliano metaphony**  
 operation: spreading  
 tier scansion: minimal  
 argument: [+high]  
 trigger: V]<sub>c</sub>  
 target condition: primary stressed vowel



c. /ɛ/ raised to [e]

<i>modést-a</i>	'modest (FEM.SG)'	<i>modést-u</i>	'modest (MASC.SG)'
<i>sgwéz-a</i>	'sinister (FEM.SG)'	<i>sgwéz-u</i>	'sinister (MASC.SG)'
<i>ššwért-a</i>	'eccentric (FEM.SG)'	<i>ššwért-u</i>	'eccentric (MASC.SG)'
<i>pétten-e</i>	'comb (MASC.SG)'	<i>péttin-i</i>	'comb (MASC.PL)'
<i>prédok-o</i>	'I preach'	<i>prédik-i</i>	'you preach'
<i>pérsak-a</i>	'peach tree (FEM.SG)'	<i>pérsuk-u</i>	'peach (MASC.SG)'
		<i>pérsik-i</i>	'peach (MASC.PL)'

d. /ɔ/ raised to [o]

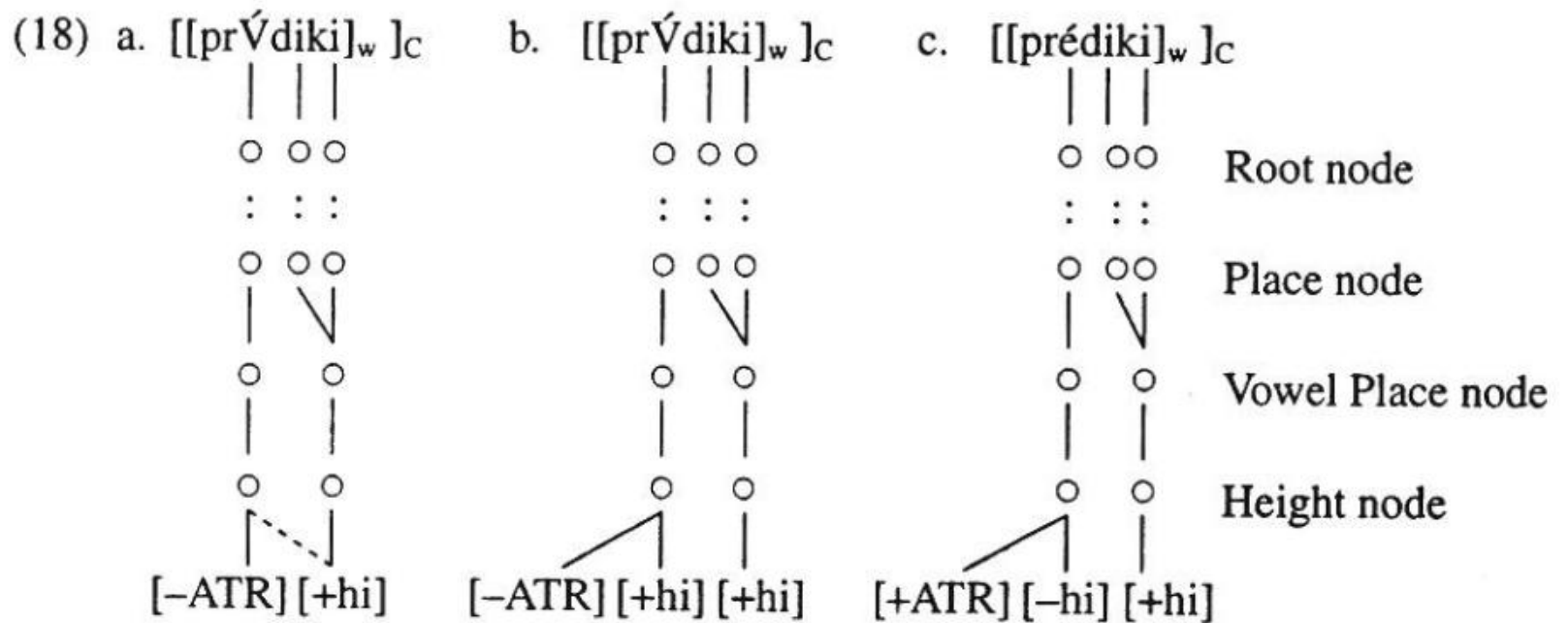
<i>sprót-a</i>	'pedantic (FEM.SG)'	<i>sprót-u</i>	'pedantic (MASC.SG)'
<i>mór-e</i>	'he dies'	<i>mór-i</i>	'you die'
<i>mórt-a</i>	'dead (FEM.SG)'	<i>mórt-u</i>	'dead (MASC.SG)'
<i>móš-a</i>	'depressed (FEM.SG)'	<i>móš-u</i>	'depressed (MASC.SG)'
<i>birikókan-a</i>	'apricot tree (FEM.SG)'	<i>birikókun-u</i>	'apricot (MASC.SG)'

	i	e	ɛ	a	ɔ	o	u
high	+	-	-	-	-	-	+
low	-	-	-	+	-	-	-
back	-	-	-	+	+	+	+
round	-	-	-	-	+	+	+
ATR	+	+	-	-	-	+	+

# The representation of vowels

- Nibert (1998) assumes a constraint/filter \*[+high,-ATR] proposed by Calabrese (1991)
- ‘hybrid’ computational system with rules and constraints
- Are filters universal? How are they acquired?





# The representation of vowels

- the strategy employed by Servigliano is negation
- \*[-ATR,+high] → -[-ATR,+high] → [+ATR,-high]
- a natural analysis of such data is the spreading of feature [+high] from the following vowel to the preceding one
- no such analysis is available under ET
- as a matter of fact the metaphony data should not exist
- In sum: ET allows for a much more natural account of vowel reduction, while the binary feature framework allows for a much more natural account of metaphony

# The representation of vowels

- Is ET devenseless against the metaphony data?
- van Oostendorp and d'Alessandro (2016) 'Abruzzese metaphony and the |A|-eater'

# The representation of vowels

## (2) MASCULINE NOUNS

a > i	<i>lu canə</i>	<i>li chinə</i>	‘the dog/s’ <sup>3</sup>
e > i	<i>lu velə</i>	<i>li vilə</i>	‘the veil/s’
ε > i	<i>lu martellə</i>	<i>li martillə</i>	‘the hammer/s’
ɔ > u	<i>lu/la nəpɔtə</i>	<i>li nəputə</i>	‘the nephew-niece/s’
o > u	<i>lu wa.ɰlonə</i>	<i>li wa.ɰumə</i>	‘the young boy/girl/s’

## (3) MASCULINE ADJECTIVES

a > i	<i>mattə</i>	<i>mittə</i>	‘crazy SG-PL’
e > i	<i>nerə</i>	<i>nirə</i>	‘black SG-PL’
ε > i	<i>bellə</i>	<i>billə</i>	‘beautiful SG-PL’
ɔ > u	<i>turdəllonə</i>	<i>turdəllumə</i>	‘dumb SG-PL’
o > u	<i>novə</i>	<i>nuvə</i>	‘new SG-PL’

## (4) VERBS (1<sup>ST</sup> VS 2<sup>ND</sup> PERSON SING. ALTERNATION)

a > i	<i>magnə</i>	<i>mignə</i>	‘I-eat/you eat’
e > i	<i>vedə</i>	<i>vidə</i>	‘I see/you see’
ε > i	<i>leggə</i>	<i>liggə</i>	‘I read/you read’
ɔ > u	<i>dərmə</i>	<i>durmə</i>	‘I sleep/you sleep’
o > u	<i>sonə</i>	<i>sunə</i>	‘I play/you play’

FEMININE NOUNS never show any metaphony:

(5) a	<i>la mammə</i>	<i>li mammə</i>	‘the mother/s’
e	<i>la cestə</i>	<i>li cestə</i>	‘the basket/s’
ε	<i>la cendə</i>	<i>li cendə</i>	‘the belt/s’
ɔ	<i>la ɣənmə</i>	<i>li ɣənmə</i>	‘the skirt/s’
o	<i>la mojə</i>	<i>li mojə</i>	‘the wife/wives’

# The representation of vowels

*‘The word *muturettə* can, for example, denote a small motor, when masculine, or a small motorbike, when feminine; the article will show which gender is used in the singular, but in the plural the presence or absence of metaphony will denote the distinction...’*

(6) a. *nu/lu muturettə*  
‘a/the small motor’

*ddu/li muturittə*  
‘two/the small motors’

b. *na/la muturette*  
‘a/the small motorbike’

*ddu/li muturettə*  
‘two/the small motorbikes’

# The representation of vowels

- interaction with  $\alpha$ -insertion

a. *la*                      *casə*  
the-F.SG      house-F.SG  
'the house'

b. *la*    *cas**a***                      *ros**c**ə*  
the-F.SG house-F.SG              red-F.SG  
'the red house'

# The representation of vowels

- interaction with  $\alpha$ -insertion

a.	<i>lu</i>	<i>canə</i>	
	the-M.SG	dog-M.SG	
	‘the dog’		
b.	<i>lu</i>	<i>canə</i>	<i>cioppə</i>
	the-M.SG	dog-M.SG	lame-SG
	‘the lame dog’		
c.	<i>*lu cana cioppe</i>		
	the-M.SG	dog-M.SG	lame-SG
d.	<i>li</i>	<i>china</i>	<i>ciuppə</i>
	the-M.PL	dogs-M.PL	lame-PL
	‘the lame dogs’		

# The representation of vowels

- interaction with *a*-insertion
- *a* surfaces in masculine plural forms due to the working of metaphony, which is moving of |A| to the word-final position
- how is that achieved?

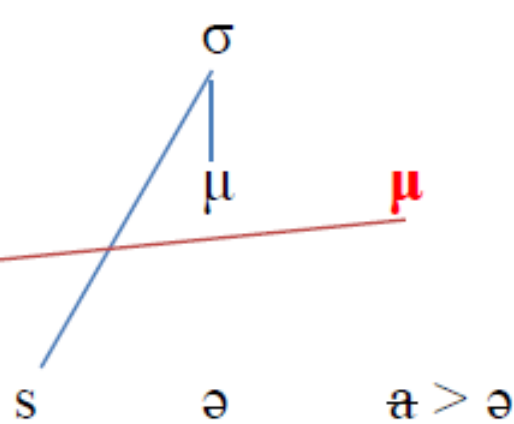
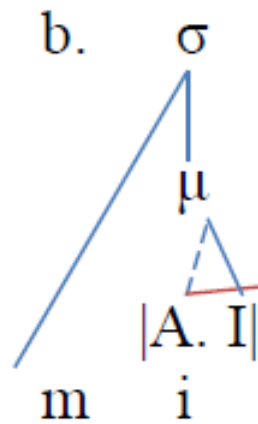
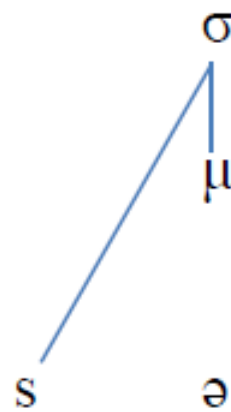
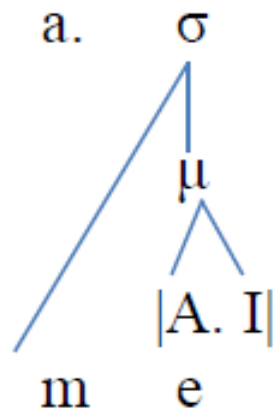


# The representation of vowels

- van Oostendorp and d'Alessandro assume that features [masculine, plural] are realized as a mora
- they assume the following Well Formedness Condition
  - a. Every mora should be linked to something (either higher-order prosody or segmental material)
  - b. A segment cannot be linked to more than one mora.
  - c. A syllable cannot host more than three mora's.
- the mora will attract the |A| because it is 'the most sonorous segment' (mora is the |A|-eater)

# The representation of vowels

mesə/ misə (month-M.SG/PL)

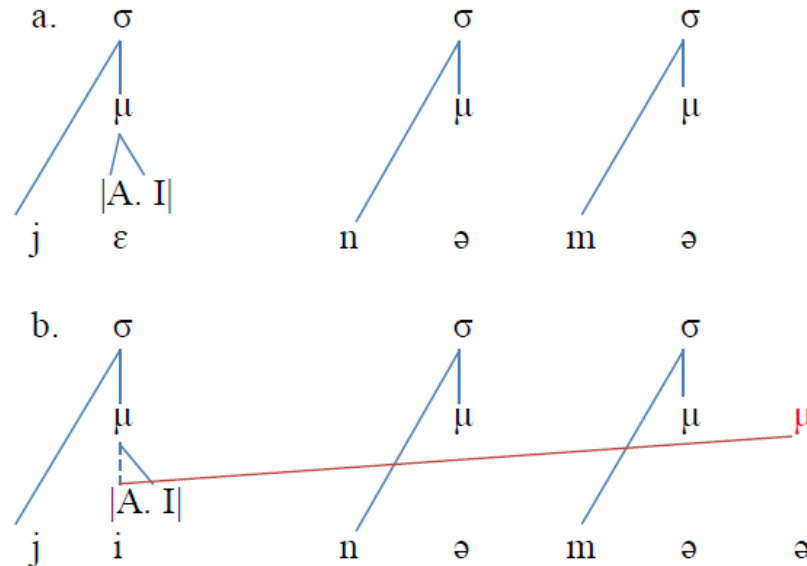


# The representation of vowels

- ‘The reason why metaphony targets only the stressed vowel is that all vowels following that vowel are reduced in Abruzzese, and therefore will not contain an |A| element.’

- (22) a. 'mɔ.nə.kə    mu.nə.tʃə    (monk-M.SG/PL)  
 b. 'mɔ.b:ə.lə    mu.b:ə.lə    (furniture-M.SG/PL)  
 c. 'jɛ.nə.mə    ji.nə.mə    (son-in-law.my- M.SG/PL)

- (23) jenəmə, jinəmə



# The representation of vowels

- Problem: *cane* 'dog' contains only element |A| in its stressed syllable
- this syllable surfaces with /i/ in the metaphony context

# The representation of vowels

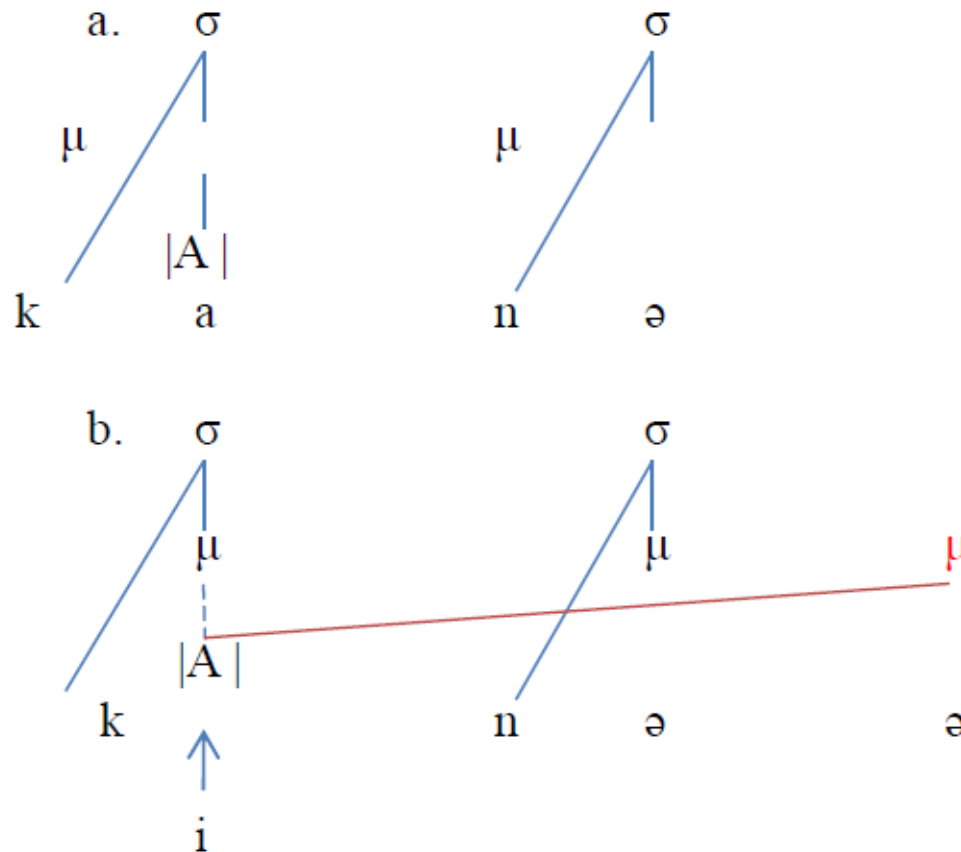
- interaction with  $\alpha$ -insertion

a.	<i>lu</i>	<i>canə</i>	
	the-M.SG	dog-M.SG	
	‘the dog’		
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	the-M.SG	dog-M.SG	lame-SG
	‘the lame dog’		
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	the-M.PL	dogs-M.PL	lame-PL
	‘the lame dogs’		

# The representation of vowels

- interaction with  $\alpha$ -insertion

canə, chinə (dog-M.SG/PL)

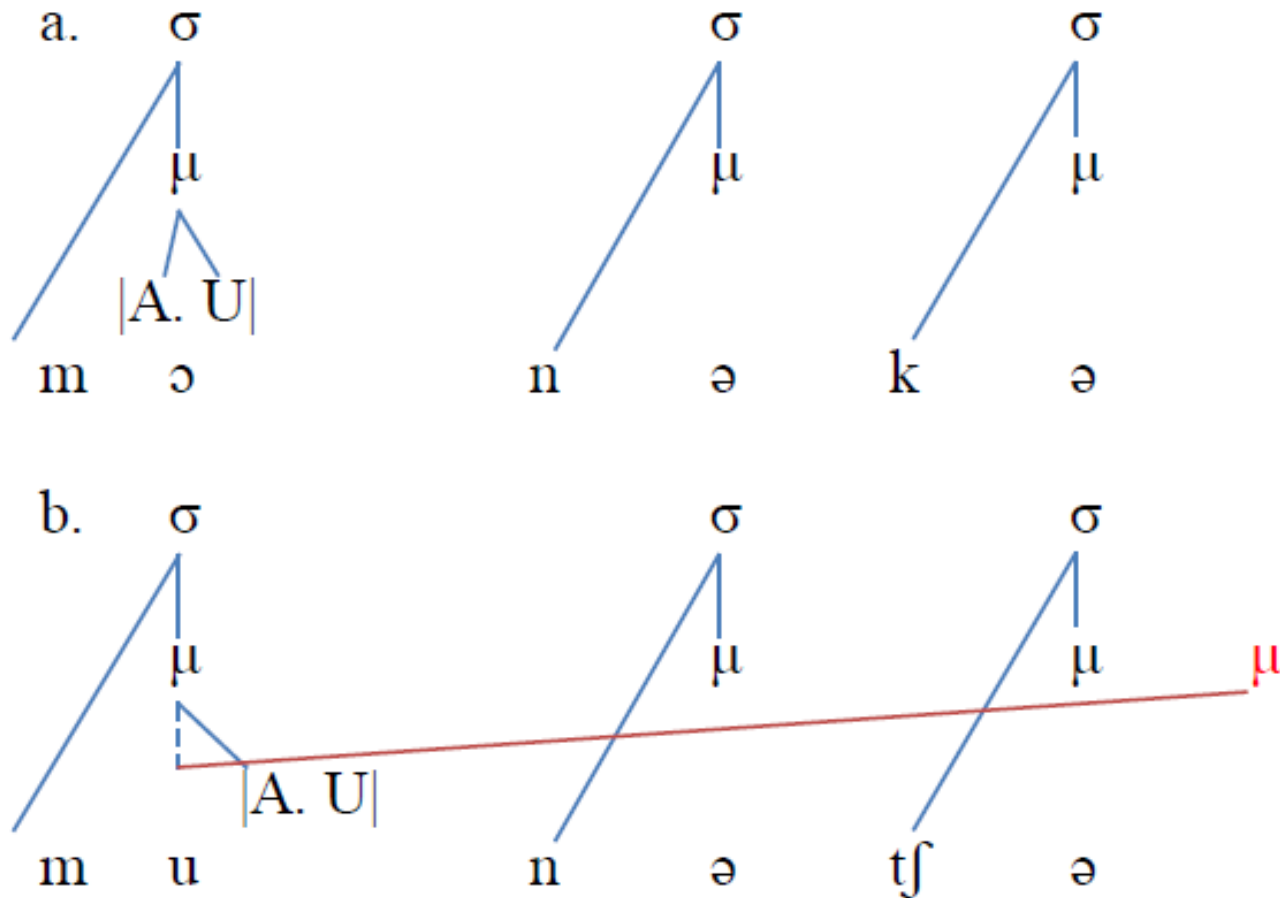


# The representation of vowels

- van Oostendorp and d'Alessandro (2016) provide two solutions:
- that /i/ is the 'default' realization of the stressed syllable in Abruzzese/Ariallese
- or that the [masc, plural] is actually a mora AND element |I|
- in *china 'dogs'* |I| surfaces on the stressed syllable
- this is legitimized by the final palatalization

# The representation of vowels

monəke/ munətʃə (monk-M.SG/PL)





# The representation of vowels

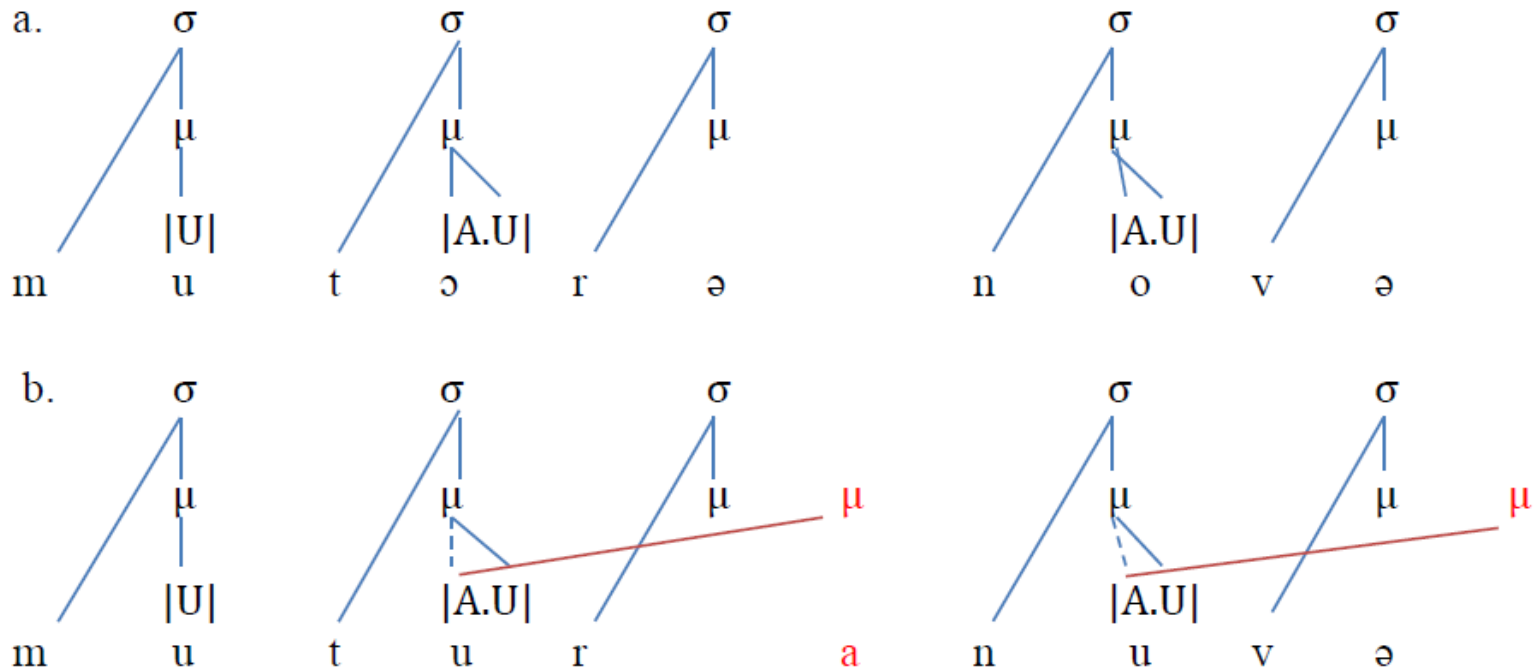
- interaction with  $\alpha$ -insertion

a.	<i>lu</i>	<i>canə</i>	
	the-M.SG	dog-M.SG	
	‘the dog’		
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	the-M.SG	dog-M.SG	lame-SG
d.	<i>li</i>	<i>china</i>	<i>ciuppə</i>
	the-M.PL	dogs-M.PL	lame-PL
	‘the lame dogs’		

# The representation of vowels

- interaction with *a*-insertion
- the *a* is not etymological: historically the affix was /i/

lu mutoreǎ novə, li mutura nuvə



# The representation of vowels

- van Oostendorp and d'Alessandro claim that a is pronounced in intaphrasal position because it is like intra-word position
- /a/ does not reduce inside words, only at the end
- intraphrasal position is like intra-word position

(29) cavallə/ capabballə/ waglionə ('horse/ downhill/ boy')

(30) mammə, casə ('mother/ house')

# The representation of vowels

- is the solution employed for Abruzzese extendable to Servigliano?

a. /e/ raised to [i]

<i>métt-o</i>	'I put'	<i>mítt-i</i>	'you put'
<i>kréd-o</i>	'I believe'	<i>kríd-i</i>	'you believe'
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<i>métt-e=če=le</i>	'put it (FEM.PL) there'	<i>mítt-i=či=li</i>	'put it (MASC.PL) there'

b. /o/ raised to [u]

<i>fjór-e</i>	'flower (MASC.SG)'	<i>fjúr-i</i>	'flower (MASC.PL)'
<i>spós-a</i>	'wife (FEM.SG)'	<i>spús-u</i>	'husband (MASC.SG)'
<i>póč-e</i>	'flea (MASC.SG)'	<i>púč-i</i>	'flea (MASC.PL)'
<i>róšš-a</i>	'red (FEM.SG)'	<i>rúšš-u</i>	'red (MASC.SG)'
<i>skjifós-a</i>	'fussy (FEM.SG)'	<i>skjifús-u</i>	'fussy (MASC.SG)'
<i>lóng-a</i>	'long (FEM.SG)'	<i>lúng-u</i>	'long (MASC.SG)'

c. /ɛ/ raised to [e]

<i>modést-a</i>	'modest (FEM.SG)'	<i>modést-u</i>	'modest (MASC.SG)'
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