Parallel articulation as a mechanism of emergence of new phonemes

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$$1 + 1 = 1$$
$$X + Y = Z_{XY}$$

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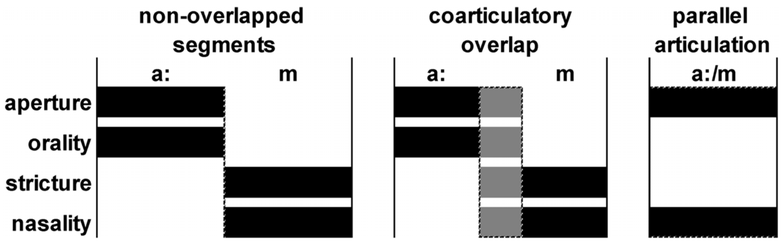
Segmental accounts of reduced pronunciation

- selected basic **sound change mechanisms** from the point of view of **phonetic features** (PhF)
  - **elision** – no PhFs of the given phone are preserved
  - **lenition** – one (or more) *intrinsic* PhFs are:
    - absent in articulation, replaced by an *extrinsic* PhF (structurally speaking)
    - not fully realized
  - **parallel articulation** (PA) – phone X gains PhF(s) of phone Y, yielding Z
    - "pseudo-elision" of Y
    - at least one PhF of Y lives on as part of Z



Parallel articulation

- a proposal for a **category** of **phoneme emergence mechanisms** which is **grounded in articulation**
  - PA is often subsumed under **elision**, even though at least one **PhF** of the **"elided" segment** is **preserved**
- principle: **extreme co-articulation**
  - **integrating** the **perceptually distinctive PhFs** of **two** (non-adjacent?) **phones** during **reduced pronunciation**
  - as part of the **crystallization of minimal phonetic information** (MPhI) within **higher-order**, **semantic** units
- possible **developments**:
  - if MPhI bears **functional load** → **phonemicization** (original phonemes lost / retained in diff. environments)
  - **peripheral** existence subject to restrictions of **time**, **space**, **register**… → **facultative allophone**

Intrinsic vs. *extrinsic* phon. features

- *intrinsic* PhFs:
  - a list of all the PhFs of a phone in its **ideal form**
  - a theoretical (**static**, **abstract**) construct
- *extrinsic* PhFs:
  - not part of the **ideal form** of the phone
  - may be **superimposed** on any **concrete instance** of the phone

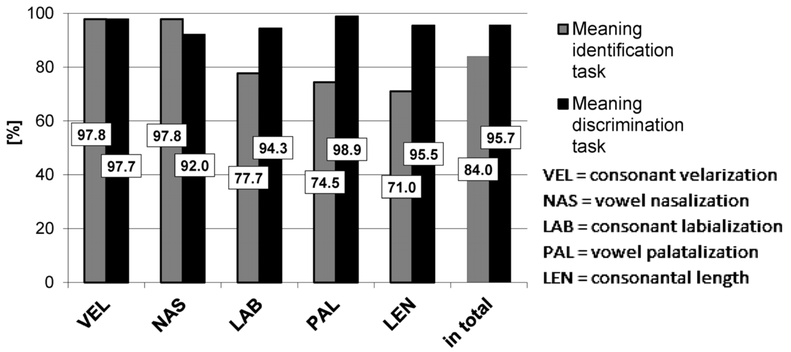
Hosts and guests

- **host** (possibly) **loses own intrinsic PhF** and **gains guest's intrinsic PhF** as **own *extrinsic* PhF**
- PA of **V + C** or **C + V** (V may also be a **glide**):
  - if PA tends towards *aperture*: host = V, guest = C
  - if PA tends towards *stricture*: host = C, guest V (often glide)
- PA of **C + C**: no clear tendencies, depends on PhFs of X and Y and their **articulatory compatibility**
- PA of **V + V**:
  - in general, no host / guest relationship → **averaging**

X	Y	extr. PhF	PA	example		where	when	source
C + glide								
g	w	labial	b	*gwiwos	bios	(>) Class. Greek	hist.	[11: 10]
s	j	palatal	ʃ	"issue" [ɪsjuː]	[ɪʃuː]	English et al.	cont.	[6: 257]
h	j	voiceless	ç	"humour" [hjuːmə]	[çuːmə]	English	cont.	[14: 230]
Nasal + C								
n#	k	voiced	g	ðen katalaβeno	ðe gatalaβeno	New Greek	hist.	—
n	t	voiced	d	enter	eder/edər	Irish	hist.	—
r + C								
r	s	fricative	r̝	Wurst [vurst]	buřt [buř̝t]	German/Czech	hist.	[7: 85]
ɾ	d	retroflex	ɖ	stæːɾ + -din	[stæːɖɪn]	Norwegian	cont.	[13]
C-coloured V								
æɪ	n	nasal	æ̃ɪ̃	"glance" [glæɪns]	[glæ̃ɪ̃s]	English	cont.	[16: 541]
o	n	nasal	õ	"sollen Sie" [zɔlən ziː]	[zɔ̃ ziː]	German	cont.	[5: 89]
e	n	nasal	ẽ	[den]	[tẽ]	Norwegian	cont.	[2]
ɜ	r	rhotic	ɜ˞	(tɜrm >) [tɜrm]	[tɜ˞m]	English	hist.	[14: 202]
j	u	front	y	"computer" [kʰəmpʰjurə˞]	[kʰpʰyrə˞]	English	cont.	[3]
V averaging								
a	i	—	ɛː	*aydho	ēdha-	Sanskrit	hist.	[4: 72]
uː	i	front	yː	*mūsi	mȳs	(>) Old English	hist.	[9: 161]

Listening experiment (see [8])

- **word-sense disambiguation** anchored in **non-systemic** representations of syllable **nuclei**:
  - C labialization: [su] > [sʷ] × [s]
  - V nasalization: [aːm] > [ãː] × [aːˌ]
  - C velarization: [lo] > [lːˠ] × [lːˌ]
  - V palatalization: [jɛ] > [ɛ̟] × [ɛ]
  - C length: [sɪ] > [sˑ] × [s]



Phonetics | phonology interface

- **PA**: a **phonetic process** anchored in **situated interactions** and **phonetic detail** which may be called upon to play a **functional role** on a **case-by-case** basis
- **phonological change** as a possible eventual **by-product**

Acknowledgements

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