

## ACTL phonology tutorial 1

Wouter Jansen  
wouter.jansen@kuvik.net  
<http://wouter.jansen.kuvik.net>

November 12, 2004

## Today's motto

"[T]here are significant generalizations to be made about assimilation and [...] the formulation of these generalizations and their incorporation into phonological metatheory represent promising objectives for research." (Schachter 1969:355)

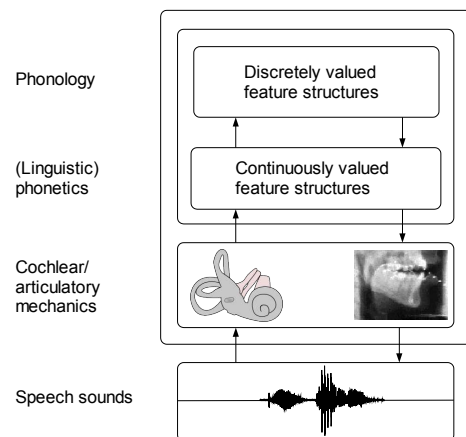
## Recap of 15-10

- Two conceptions of the phonology-phonetics interface:
  1. A traditional model: **Modified Extended Standard Modularization** (MESM)
  2. An alternative: a single module covers both phonology and phonetics

## MESM

- Phonological representations and rules stated in terms of categorical features
- Single underlying forms for (most) output allophones and allomorphs
- Phonological representations are converted into scalar phonetic features at the phonology-phonetics interface
- Linguistic phonetics responsible for 'low-level' post-processing and interfaces with peripheral auditory and articulatory systems

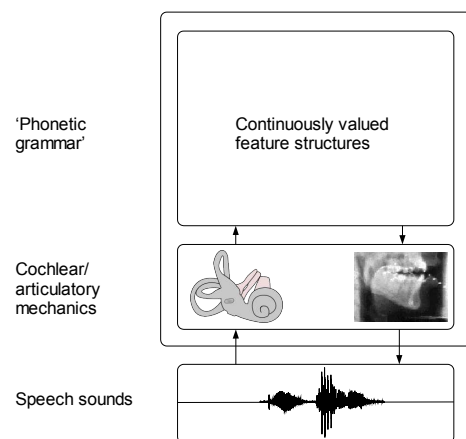
## MESM



## An alternative

- All representations and rules stated in terms of fine phonetic detail
- Allophones and allomorphs are stored in the lexicon and may interfere during production and perception

## An alternative



## An alternative

- The alternative model has been developed in part as a result of a more detailed understanding of:
  1. The phonetic manifestation of phonological rules: e.g., **incomplete neutralisation**
  2. The nature of 'low-level' phonetic processes
- Case studies: Hungarian and English RVA

## Previous observations: Hungarian

- Hungarian is a language with [voice]-symmetric (neutralising) RVA ([Vago, 1980](#); [Kenesei et al., 1998](#); [Siptár & Törkenczy, 2000](#))
- /fy:c/+ /bɔn/ [fy:jbɛn] 'in (a) whistle'  
/se:p/+ /zɛne:s/ [se:bzɛne:s] 'beautiful musician'
- /rɔb/+ /to:l/ [rɔpto:l] 'from (a) prisoner'  
/hɔb/+ /sifon/ [hɔpsifon] 'cream-maker'

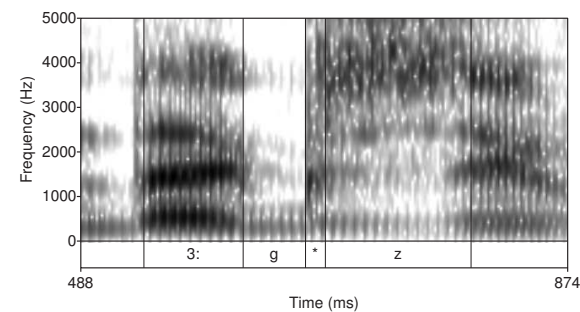
## Previous observations: English

- RVA is at best a low-level phonetic process, triggered almost exclusively by [-voice] obstruents:
  - ◆ [Jones \(1956\)](#); [Gimson \(1994\)](#): RVA to lenis obstruents is typical L2 (French, Dutch) 'error'
  - ◆ [Gimson \(1994\)](#): English [+voice] fricatives devoice before a [-voice] obstruents in 'close-knit' combinations. Vowel length rarely affected
  - ◆ [Haggard \(1978\)](#); [Stevens et al. \(1992\)](#); [Smith \(1996\)](#) English [+voice] fricatives are subject to (partial) devoicing across contexts, especially after another ([-voice]) obstruent and utterance finally

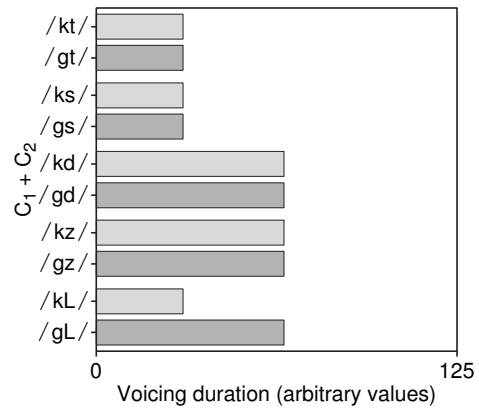
## Previous observations: English

- Some evidence of assimilation to English [+ voice] obstruents: [N. Thorsen \(1971\)](#); [Myers \(2002\)](#)

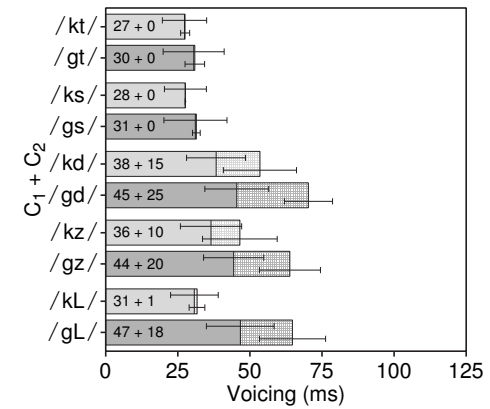
## Acoustic analysis of two-way obstruent clusters



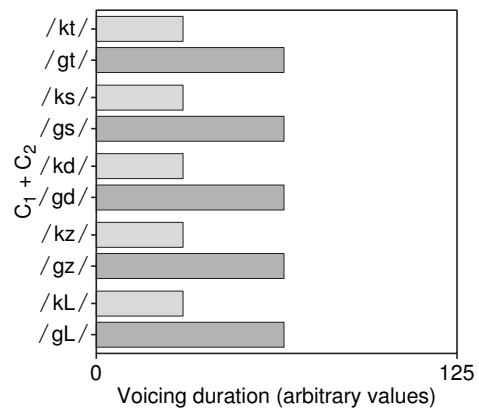
## Hungarian C<sub>1</sub> voicing: predictions



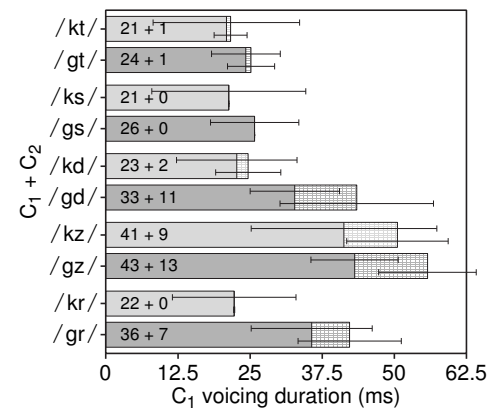
## Results: Hungarian C<sub>1</sub> voicing



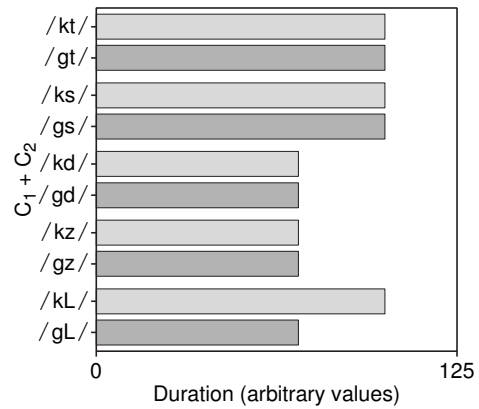
## C<sub>1</sub> voicing: no assimilation



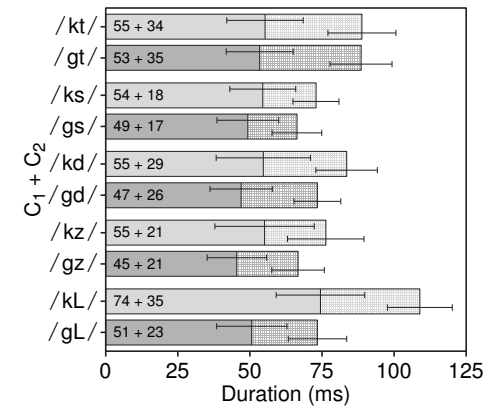
## Results: English C<sub>1</sub> voicing



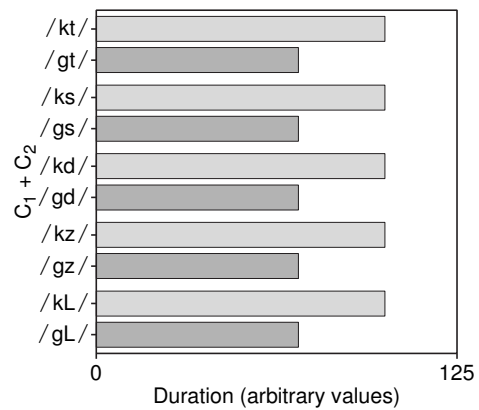
## Hungarian C<sub>1</sub> duration: predictions



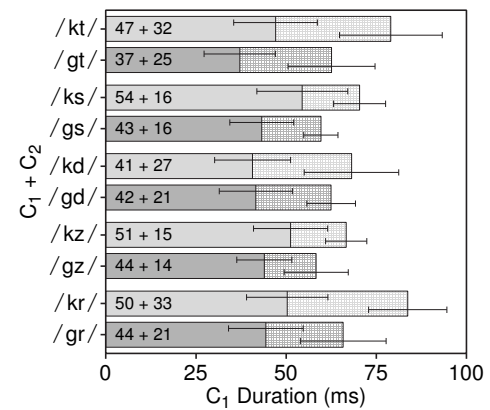
## Results: Hungarian C<sub>1</sub> duration



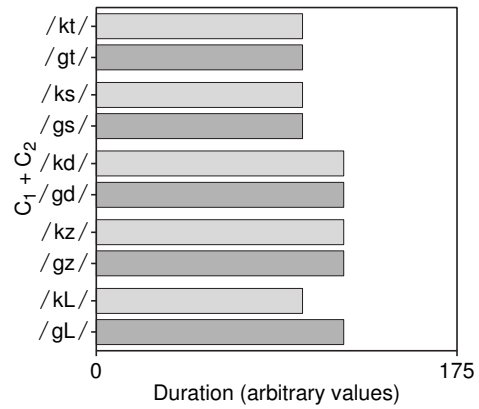
## C<sub>1</sub> duration: no assimilation



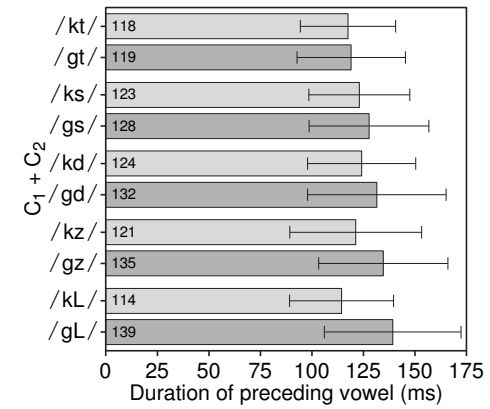
## Results: English C<sub>1</sub> duration



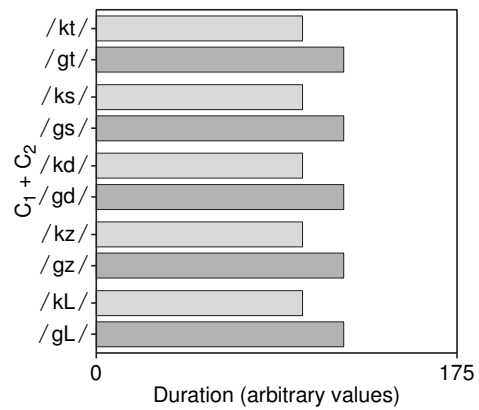
## Hungarian V<sub>1</sub> duration: predictions



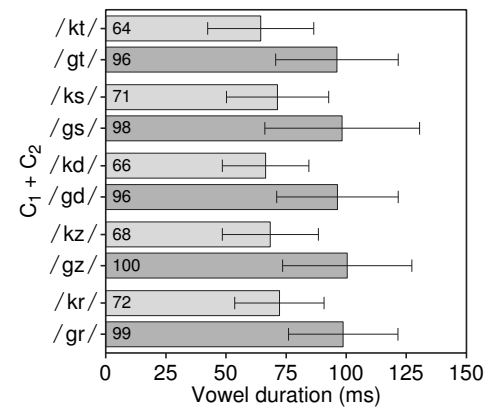
## Results: Hungarian (long) V<sub>1</sub> duration



## V<sub>1</sub> duration: no assimilation



## Results: English V<sub>1</sub> duration



## Conclusions

- English RVA applies to a subset of the phonetic cues to [voice] and is clearly non-neutralising
- Hungarian RVA is qualitatively and quantitatively different:
  - ◆ in applying to more (all?) cues
  - ◆ in having stronger effects
- Nevertheless, Hungarian RVA is still appears to be non-neutralising

## Conclusions

- **Voicing assimilation** refers to a set of phonetically heterogenous processes
- Any viable model of the phonology-phonetics interface needs to be able to account for at least the English and Hungarian forms of RVA

## Assignment

- Read [Fourakis & Iverson \(1984\)](#) and [Port & O'Dell \(1985\)](#)
- Summarise the main arguments regarding (syllable-)final devoicing made by both sets of authors, paying special attention to methodological issues

## References

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