

Advanced Phonology:  
Opacity and Phonological Architecture

**Optional Schwa Deletion (OSD)  
in French**

$$\text{ə} \rightarrow \emptyset$$

## Dell (1985)

- Les règles et les sons: Schwas in adjacent syllables
  - Optional schwa deletion (OSD)
  - Rule:  $\text{ə} \rightarrow \emptyset / V\#C\_ \text{ (optional)}$

$/\tilde{a}vi\#d\text{ə}\#t\text{ə}\#bat\emptyset/$  'you feel like fighting!'

$\swarrow \quad \searrow \quad \searrow$

$\tilde{a}vi\#d\text{ə}\#t\text{ə}\#bat\emptyset \quad \tilde{a}vi\#d\#t\text{ə}\#bat\emptyset \quad \tilde{a}vi\#d\text{ə}\#t\#bat\emptyset$

$\ast \tilde{a}vi\#d\#t\#bat\emptyset$

## Dell (1985)

- Self-bleeding

$$/ãvi \#dɔ \#tɔ \#batʊ/$$
  

$$[ãvi \#d \#tɔ \#batʊ] \rightarrow [ãvi \#dɔ \#t \#batʊ] \rightarrow [ãvi \#dɔ \#tɔ \#batʊ]$$
  
 Self-bleeding

Simultaneous application and  
 application get the wrong result.

## Dell (1985)

- Direction: Left-to-Right and not Right-to-Left
  - Right-to-Left is wrong (deleting 2 schwas) – not because the generated sequence is illegal in the language [kstr]

L'interdiction de certains groupes de consonnes dans l'output de VCE ne peut pas être mise sur le compte d'une contrainte générale qui interdirait à certaines séquences d'apparaître dans les représentations phonétiques<sup>66</sup>. Par exemple dans *il veut que ce travail soit bien fait* on prononce [... vöksətra...], [... vökəstra...] mais pas \* [... vökstra...], quoique le groupe [kstr] soit présent dans la représentation phonétique de *extraordinaire* et dans une de celles de *lux(e) trop voyant*. Il

## 1 - Iterativity

- SPE (Chomsky and Halle 1968): Non-iterative application, but:
  - Simultaneous application of OSD generates wrong output
  - Argument for self-bleeding

## 2 - Locality

- Riggle and Wilson (2005): It seems the choice is position-specific
- Challenge for OT - an extended version can generate local optionality

(9) Inter-derivational reranking (illustrated for two positions)

- C dominates D at both positions  
C@1 >> D@1, C@2 >> D@2
- C dominates D at position 1 but not at position 2  
C@1 >> D@1, D@2 >> C@2
- C dominates D at position 2, but not at position 1  
D@1 >> C@1, C@2 >> D@2
- C is dominated by D at both positions  
D@1 >> C@1, D@2 >> C@2

(12) Local evaluation in French

/ãvidə <sub>1</sub> tə <sub>2</sub> batʁ/	*SCHW@2	MAX-V@2	MAX-V@1	*SCHW@1	SYLLCON
b. ãvidə <sub>1</sub> tbatʁ		*		*	*
b.' ãvidtə <sub>2</sub> batʁ	* !		* !		

## Open Questions

- Verify Dell's analysis of OSD, is it valid today? Do speakers prefer opaque (self-counterbleeding) or transparent (self-bleeding) forms?
  - Iterativity and optionality
- Specifically here – in which direction does the rule operate?

## Addressing the question

- Record the different options (4 for example) with a native
  - Build sentences with valid sequences like [kstr]
  - Use also articulatory difficult sequences
- Let speakers judge between options



$\varnothing \rightarrow \emptyset$

