

## More Sound Change Issues

### 1. Motivations for Sound Change

- *Simplification; Marked > Unmarked*
- *Inventory Symmetry*

#### (1) Classical Arabic

	t	k	q	ʔ
b	d	ǧ		

(2) ǧ > g (Egyptian Arabic) ǧamal > gamal ‘camel’

#### (3) Egyptian

	t	k	q	ʔ
b	d	g		

- *Maximum differentiation*

#### (4) 16<sup>th</sup> Century Castilian

s S š

- (5) a. /kasa/ ‘hunt’  
 b. /kaSa/ ‘house’  
 c. /kaša/ ‘box’

(6) s > θ, š > x

#### (7) Modern Castilian

θ S x

- (8) a. /kaθa/ ‘hunt’  
 b. /kaSa/ ‘house’  
 c. /kaxa/ ‘box’

## 2. Ordered Sound Changes

- (9) Proto-Scandinavian    Old Norse            Modern Swedish  
       \* gastiz                >        gestr                >        gest                ‘guest’

(10) Four changes:

- rhotacism:                z > r
- umlaut                    a > e / \_\_ (C)Ci
- syncope                    i > Ø / V(C)C \_\_ r
- cluster reduction        r > Ø / C \_\_ #

Which possible orders account for the data?

- (11) a. rhotacism >> syncope  
       b. umlaut >> syncope  
       c. syncope >> cluster reduction
- (12) a. rhotacism >> umlaut >> syncope >> cluster reduction  
       b. umlaut >> rhotacism >> syncope >> cluster reduction

## 3. Chain Shifts

- (13) Latin            Spanish
- |    |          |                 |          |             |
|----|----------|-----------------|----------|-------------|
| a. | kuppa    | kopa            | ‘cup’    | pp > p      |
|    | gutta    | gota            | ‘drop’   | tt > t      |
|    | bukka    | boka            | ‘mouth’  | kk > k      |
| b. | sapere   | saber (> saβer) | ‘know’   | p > b (> β) |
|    | wi:ta    | vida (> biða)   | ‘life’   | t > d (> ð) |
|    | ami:ka   | amiga (> amiya) | ‘friend’ | k > g (> γ) |
| c. | kade:re  | kaer            | ‘fall’   | d > Ø       |
|    | re:gi:na | reina (> reuna) | ‘queen’  | g > Ø       |

(14) tt > t, t > d, d > Ø    *push chain - phonemic differences are maintained - a sound change into another phoneme’s space causes the latter to also change.*

(15) Alternatively: d > Ø, t > d, tt > t    *pull chain - a sound change leaves a paradigm gap - by Inventory Symmetry, another sound change fills this gap, in turn, leaving another gap.*