# **Chapter Seven: Phonology**

# 1. PHONEME, PHONE, ALLOPHONE

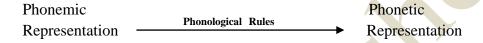
**Phoneme** → the smallest meaning-distinguishing sound unit

**Phone**  $\rightarrow$  a particular realization (pronunciation) of a phoneme

**Allophones** → a group of several phones, all of which are versions of one phoneme

#### 2. PHONOLOGICAL RULES

phonemic and phonetic representations are linked by phonological rules of three types: *Morphophonemic rules*, *Allophonic rules* and *Redundant rules* 



# 2.1. Morphophonemic Rules

determine different allomorphs of a morpheme

# 2.2. Allophonic Rules

fill in qualities of pronunciation which are absent in the lexical forms of morphemes but are required by their circumstances in speech

- (a) A coronal nasal /n/ is dental before a dental fricative  $[\theta, \delta]$ , e.g.  $tenth \rightarrow [t \in \mathbf{n}\theta]$
- (b) Syllable initial voiceless stops /p, t, k/ is aspirated, e.g.  $plan \rightarrow [p^hlæn]; tree \rightarrow [t^hri]; cream \rightarrow [k^hrim]$
- (c) Approximants /r, l, w, j/ are voiceless after a voiceless aspirated stop, e.g.  $play \rightarrow [ple]; cry \rightarrow [krar]; quick \rightarrow [kwik]; cute \rightarrow [kjut]$
- (d) Sometimes, there are syllables in which there is no vowel. In these syllables, instead of vowel, one of the sound segments /r, 1, m, n,  $\eta$ / must appear to function as a vowel  $\rightarrow$  syllabic segments.
- (e) Lateral liquid /l/ is *velarized* when it occurs word finally or before a final consonant, e.g.,  $told \rightarrow [told]$ ;  $feel \rightarrow [fil]$
- (f) Coronal stops /t, d, n/ are tapped before an unstressed vowel, e.g.  $water \rightarrow [warer]$ ;  $ladder \rightarrow [lærer]$
- (g) Vowels are nasalized before a nasal consonant, e.g.  $soon \rightarrow [s\tilde{\mathbf{u}}n]$
- (h) Stressed vowels are longest in an open syllable, then in a syllable closed with a voiced single consonant and least in a syllable closed with a voiceless in its syllable



characteristics of allophones:

- Pronunciation change
- Complementary distribution
- Free variation

#### 2.3. Redundant Rules

e.g. if a consonant is [+voice], then it is also [-tense]

#### 3. DISTINCTIVE vs. NON-DISTINCTIVE FEATURES

**Distinctive** → a feature which distinguishes one phoneme from another

Non-distinctive → features which don't create new meaning and only result in new pronunciation

#### 4. PHONOLOGICAL PROCESSES

#### 4.1. Assimilation

a phonological process that changes feature values of segments to make them more similar to their neighboring phones

- > local assimilation vs. long-distance assimilation
- homorganic nasal place assimilation
- > directions of assimilation

progressive (or perseverative) regressive (or anticipatory) coalescent

#### 4.2. Dissimilation

a phonological process that changes feature values of (neighboring) segments to make them less similar

#### 4.3. Segment Deletion

entire segments are lost, in some or all environments, e.g., lamb

#### 4.4. Elision

omission of a sound segment which would be present in the deliberately careful pronunciation of a word

- **Haplology** → omission of one or more sounds when they are next to a phonetically similar string, e.g., *library* → [laɪbri]
- Apocope  $\rightarrow$  deletion of the final element in a syllable, e.g., and  $\rightarrow$  [ən]; friendship  $\rightarrow$  [frɪnʃɪp]
- Syncope  $\rightarrow$  the omission of unstressed vowels within a word, e.g., general  $\rightarrow$  [d3enrəl]

#### 4.5. Epenthesis

a segment is inserted into the phonemic string, e.g., numer  $\rightarrow$  number

# 4.6. Prothesis

addition of a segment to the beginning of a string, e.g. scholar  $\rightarrow$  escuela

# 4.7. Liaison

"linking" or "joining together" of sounds, e.g., big apples → [bɪ **g**æplz]

# 4.8. Metathesis

reordering sequences of phonemes, e.g.,  $ask \rightarrow [xks]$ 

# **5. EXTRA POINTS**

- **5.1.** Diacritics
- **5.2.** Transcription
  - > Narrow transcription
  - > Broad transcription
- **5.3.** Minimal pairs
- **5.4.** Phonotactic constraints
- **5.5.** Co-articulation
- **5.6.** Ease of articulation  $\rightarrow$  assimilation, dissimilation and elision

