

# CSCD1034 Linguistics and Phonetics

## Study Notes

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# THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

## CONSONANTS (PULMONIC)

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	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p (b)		t (d)		t̪ (d̪)	c (ɟ)	k (g)	q (χ)	G		?
Nasal	m	m̪		n		ɳ	ɲ	ɳ̪	N		
Trill	B			r					R		
Tap or Flap		v		f		ɾ					
Fricative	ɸ (β)	f (v)	θ (ð)	s (z)	ʃ (ʒ)	ʂ (ʐ)	ç (ʝ)	χ (χ)	χ (χ)	h (ɦ)	h (ɦ)
Lateral fricative			ɬ (ɺ)	ɭ (ɻ)							
Approximant		u		ɹ		ɻ	j	ɻ̪	ɻ̪		
Lateral approximant			l	ɬ		ɻ	ɬ̪	ɻ̪	ɻ̪	L	

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

## CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
ʘ Bilabial	b Bilabial	,
ǀ Dental	d Dental/alveolar	p', Bilabial
ǃ (Post)alveolar	f Palatal	t', Dental/alveolar
ǂ Palatoalveolar	g Velar	k', Velar
ǁ Alveolar lateral	g' Uvular	s', Alveolar fricative

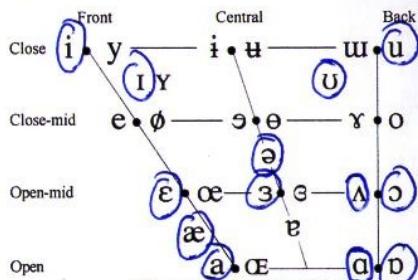
## OTHER SYMBOLS

ʍ Voiceless labial-velar fricative	ç z Alveolo-palatal fricatives
w Voiced labial-velar approximant	l Voiced alveolar lateral flap
ɥ Voiced labial-palatal approximant	ʃ Simultaneousʃ and X
h Voiceless epiglottal fricative	
ʕ Voiced epiglottal fricative	Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
ʢ Epiglottal plosive	

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. ï

o Voiceless	n̪ d̪	.. Breathy voiced	b̪ a̪	— Dental	t̪ d̪
— Voiced	s̪ t̪	~ Creaky voiced	b̥ ḁ	— Apical	t̥ d̥
~ Aspirated	t̪̫ d̪̫	— Lingualabial	t̪̫ d̪̫	— Laminal	t̪̫ d̪̫
, More rounded	ɔ̪	— Labialized	t̪w̪ d̪w̪	— Nasalized	ẽ
< Less rounded	ɔ̥	j Palatalized	t̪j̪ d̪j̪	n Nasal release	d̩n
+ Advanced	u̪	Y Velarized	t̪Y̪ d̪Y̪	— Lateral release	d̩l
- Retracted	e̪	ĩ Pharyngealized	t̪ĩ̪ d̪ĩ̪	— No audible release	d̩
** Centralized	ë̪	— Velarized or pharyngealized	ł̪		
* Mid-centralized	ɛ̪	—			
, Syllabic	n̪	— Raised	e̪	(I = voiced alveolar fricative)	
— Non-syllabic	e̪	— Lowered	e̥	(B = voiced bilabial approximant)	
~ Rhoticity	ə̪ a̪	— Advanced Tongue Root	e̥		
		— Retracted Tongue Root	e̪		

## VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

kp ts

## SUPRASEGMENTALS

- Primary stress
- Secondary stress
- Long ː
- Half-long ˑ
- Extra-short ē
- Minor (foot) group
- Major (intonation) group
- Syllable break .i.a.ækt
- Linking (absence of a break)

## TONES AND WORD ACCENTS LEVEL CONTOUR

é or ē	— Extra high	ë or ẽ	— Rising
é	— High	ê	— Falling
ē	— Mid	œ	— High rising
— Low	— Low rising	— Low falling	— Global rise
— Extra low	— Extra low falling	— Global fall	— Global fall
— Downstep	↗		
↑ Upstep	↘		

Phones used in English are circled in blue.

- \* **Consonant:** Phone restricted by tongue, teeth, lips, etc:
  - labi-: lip
  - alveol-: alveolar ridge
  - palat-: palate
  - uvul-: uvula
  - glot-: glottis
  - plosive: articulators touch before and/or after separating
  - nasal: airflow directed through nasal cavity
  - fricative: airflow vibrates articulators as if flows past
  - approximant: less restrictive than fricative
  - lateral approximant: combined lateral and approximant
  - affricate: combined plosive and fricative /tʃ dʒ/
- \* **Vowel:** Always voiced, airway mostly unrestricted
  - Tongue height may be close (high) or open (low)
  - Tongue may be extended to the front or back
  - Lips may or may not be rounded
- \* **Diphthong:** Combination of two vowels /eɪ aɪ ɔʊ əʊ ɔɪ ɪə eə/
- \* If one phone connects the end of one word and the beginning of another, record the phone with both words
- \* Spaces are inserted entirely for readability. They usually are used in marking boundaries of words.

# Morphology

The morphology of a language is the set of rules by which it forms words from morphemes, minimal units of meaning.

A word may be:

- Content word, which has lexical meaning. These are the nouns, verbs, adjectives and adverbs. These classes are open class, as they readily accept new entries,
- Function word, where it performs a grammatical function in a clause. These are the pronouns, articles, conjunctions and prepositions. These are closed class.

A morpheme may be:

- Free morpheme, where it can exist as its own word as a monomorphemic word.
- Bound morpheme, where it must be fixed to other morphemes. Bound morphemes include:
  - Affix, which is attached to either end of the word. Include:
    - Prefix, attached to the beginning of the word.
    - Suffix, attached to the end of the word.
  - Circumfix, which surrounds the word.
  - Infix, which appears inside another morpheme

Every language faces a trade-off between morphological complexity (expressing grammatical relations inflectionally) and syntactic complexity (expressing them peripherastically).

A morpheme may be:

- Derivational morpheme, which adds lexical meaning and turns the word into a separate derived word. They may or not change the word class. Once a derived word is firmly established in the lexicon, alternative derivations may be blocked.
- Inflectional morpheme, which adds grammatical meaning to the word. The word class does not change. There are eight inflectional morphemes in English: third-person singular present tense verb, past tense verb, progressive verb, past participle, plural noun, possessive noun, comparative adjective, superlative adjective.
- \* Use of derivational morphology results in the following processes of word creation:
  - Eponym, where a proper noun is used more liberally.
  - Compound word, made up of otherwise separate words
  - Back-formation, resulting in mistaken application of morphological rules
  - Blend, made up of fragments of separate words
  - Clipping, abbreviation of long words
  - Acronym, phonotactic sequence of initials of words
- \* A morphological rule is productive when it can be applied to all words of the relevant class. Inflectional morphemes are productive, while some derivational morphemes are not.
- \* Sign languages are as rich in morphology as spoken ones.