

Handout 2

Phonology

Book: E.C. Zsiga *The Sounds of Language: An Introduction to Phonetics and Phonology*, 2013

0. Basic terminology

Phonology vs phonetics	<b>phonology</b>	
	<b>phonetics</b>	
Phoneme vs phone vs allophone	<b>/phoneme/</b>	
	<b>[phone]</b>	
	<b>allophone</b>	
<b>Complementary distribution</b>		

**Accidental gaps** – possible but non-existent words.

Examples:

English voiced consonants *bet/pet, geek/keek*

Non-distinctive feature in English: nasal vowels *bean-bead, roam-robe*

Hungarian examples of distinctive features and minimal pairs?

! Orthography does not necessarily represent the sounds of a language

Example:

*Did he believe that Caesar could see the people seize the seas? My father wanted this book badly.*

1. Distinctive features

**Feature geometry:** features can be grouped together (place of articulation, manner of articulation, voice, etc.)

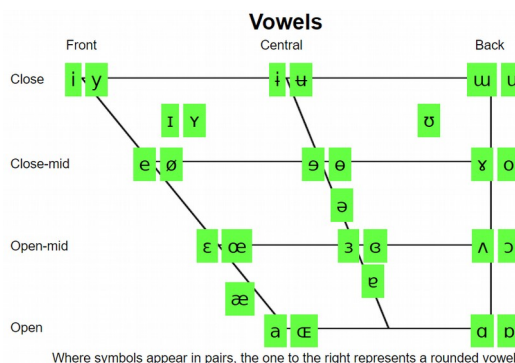
Feature Specifications (partial)

	p	b	m
consonantal	+	+	+
labial	+	+	+
voiced	-	+	+
nasal	-	-	+

**Binary features:** [±high] [±low] for vowels, [±voice] for consonants

IPA: International Phonetic Alphabet

<http://www.ipachart.com/>



	Bi-labial	Labio-dental	Dental	Alveolar	Post alveolar	Retro flex	Pala tal	Velar	Uvu lar	Phary ngeal	Glott al
<b>Plosive</b>	p b			t d		ʈ ɖ	c ɟ	k g	q ɢ		ʔ
<b>Nasal</b>	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
<b>Trill</b>				r					ʀ		
<b>Tap or Flap</b>				ɾ		ɽ					
<b>Fricative</b>	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
<b>Lateral Fricative</b>				ɬ ɮ							
<b>Approximant</b>		ʋ		ɹ		ɻ	j	ɰ			
<b>Lateral Approximant</b>				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Areas shaded grey indicate articulations judged impossible.

+ additional tables (for example, affricates)

## 2. Rules

Phonemic string → phonetic pronunciation / context    A → B / X \_\_\_ Y

Example: feature changing rules

		/d/ deletion	assimilation
a.	hand-picked /hænd pɪkt/	/hæn pɪkt/	[hæ:m pɪkt]
b.	hand-grenade /hænd grɪneɪd/	/hæn grɪneɪd/	[hæ:ŋ grɪneɪd]

How can we describe these transformations?

### Types of rules

Assimilation, dissimilation, feature addition rules, lenition, fortition, segment addition (epenthesis) /deletion rules, metathesis rules.

### Rule ordering

#### Feeding vs bleeding

**Feeding:** the application of the first rule creates a context in which the second rule can now apply.

**Bleeding:** the application of the first rule creates a context in which the second rule can no longer apply.

#### Example:

a.  $k \rightarrow tʃ / \_ i$

b.  $i \rightarrow u / k \_$

Underlying: c. /ki/

Simultaneous application: d. tʃu

Ordering a-b: e. tʃi

Ordering b-e: f. ku

## 3. Prosodic/suprasegmental/autosegmental

Larger than a segment – **syllable**

Within a syllable: **onset / coda / nucleus**

[<sub>σ</sub> Onset [<sub>Rhyme</sub> [Nucleus] [Coda]]]

**Tones:** Chinese *high, rising, dipping, falling*

**Stress:** fixed / non-fixed, primary/secondary

