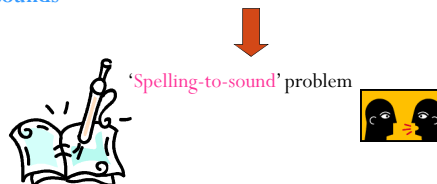# The Sounds of English

Dott.sa Gloria Cappelli

Spoken *vs.* Written English

- English is <u>not</u> a 'phonetically regular language': there is a gap between spoken and written language, i.e. a lack of one-to-one correspondence of *sound* and *orthographic symbol*.

- There are **26 letters** in the written alphabet for about **40 sounds**

'Spelling-to-sound' problem

Mandatory readings

You can find all the contents of the lessons on English Phonetics and Phonology in
Introducing English Language, Sections A1-B1.

Further readings

If you need to read more on the topic, you can read **Section D1**. Section **C1** contains some activities. On p. 121 you will find an amusing poem by Scottish poet Robert Burns "Ode to a Haggis". You can listen to a reading of the poem here:
http://youtu.be/DeLpWE6xScA

Further readings

If you could not attend the lessons, reading the following chapters might be useful:
- Crystal, D., *Cambridge Encyclopaedia of the English Language*, Chapter 17, p.236-255.
- *English Language. Description, Variation and Context*, Section I, Chapters on Phonetics, Segmental and Suprasegmental Phonology.

The IPA

The problem of there not always being the same correspondence between sounds and letters led a group of linguists to devise a special alphabet in which one symbol always represented the same sound

The **International Phonetic Alphabet** (IPA),
a set of internationally agreed symbols for representing speech sounds. Such representations are called *phonetic transcriptions*.

Ex.: Phonetic transcriptions in dictionary entries

im-age /ˈɪmɪdʒ/ n 1 a picture of someone or something in your mind: *As she spoke, an image of a country garden came into my mind.*

The study of English pronunciation

Speech sounds can be analysed on the basis of:

- their *physical* properties, i.e. from the *phonetic* point of view

- their *function* as part of an abstract language system, i.e. from a *phonological* point of view

- **PHONETICS**

  concerns the concrete characteristics (articulatory, acoustic, auditory) of the sounds used in the language

- **PHONOLOGY**

  concerns how sounds function in a systemic way in a particular language.

Phonetics

- Phonetics is the study of the way speakers produce, transmit and receive speech sounds.
- The phonetic unit of analysis is the **phone**, a concrete sound produced in speech. In phonetic transcription, we use square brackets **[ ]**.
- There are three main branches of Phonetics:

1. Articulatory Phonetics

studies the way speech sounds are produced by the speaker's articulatory organs

3. Acoustic Phonetics

studies the way speech sounds are transmitted through the air to reach the hearer

2. Auditory Phonetics

studies the way sounds are perceived by the hearer through auditory organs

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Phonology

- Whereas phonetics is chiefly concerned with the production of individual speech sounds, phonology is concerned with *segments*, that is sounds grouped together in syllables and words; *contrasts in sounds* which make differences of meaning within a language.
- The phonemic unit of analysis is the **phoneme**, i.e. the smallest unit with no meaning but with a potentially distinctive function of the words of a language. It is an abstract element of a given language system.
- In phonemic transcriptions we use slant brackets: / /
- Phonology may be classified as:

1. **Segmental Phonology**

The study of the way speech sounds are systematically organized in a specific language.

2. **Suprasegmental Phonology**

The study of sound contrasts that extend over segments, i.e. over phonemes (stress and intonation).

Segmental Phonology

- Sounds of a language = a set of distinct *segments*, i.e. *phonemes*

Speakers of a language know which segments contrast

When segments contrast, they are in *opposition* or *distinctive* of different words

- **p**et *vs.* **b**et

- h**i**t *vs.* h**o**t

- **MINIMAL PAIRS**

pairs of words which are different in respect of only one sound segment, but differ in meaning.

- *p*in, *b*in, *t*in, *d*in, *k*in, *ch*in, *g*in, *f*in, *th*in, *s*in, *sh*in, *w*in

/ p, b, t, d, k, t, tʃ, dʒ, f, θ, s, ʃ, w / → phonemes in opposition

---

Consonantal phonemes

- In initial position, we may have **22** consonantal phonemes capable of contrastive function.

- In medial position, we may also have /ʒ/ as in

  - le**tt**er   /letə/
  - lea**th**er   /leðə/
  - lei**s**ure   /leʒə/

- In final position, we may have /ŋ/ as in

  - si**n**   /sɪn/
  - si**ng**   /sɪŋ/

English has thus <u>24</u> phonemes

Phonemes and Allophones 1

- Phoneme is an abstract concept, an idealised or stylised version of the sound in question, it is not 'real'
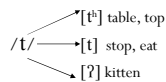
PHONEMES   *vs.*   ALLOPHONES

They make up the sound system of a language on the abstract level
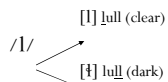
They are the sounds speakers actually produce

They are different ways of pronouncing the same phoneme in different contexts

Phonemes and Allophones 2

❖ The English phoneme /t/ has three distinct allophones:

/t/
- [tʰ] table, top
- [t] stop, eat
- [ʔ] kitten

❖ The English phoneme /l/ has two distinct allophones:

/l/
- [l] lull (clear)
- [ɫ] lull (dark)

Types of transcriptions

- We write phonetic symbols in slant brackets / / in order to distinguish *sounds* from *letters*.
- <u>Two</u> types of transcription:

1. Broad transcription

The symbols in slant brackets, i.e. / /, represent the underlying phonemes **but** do <u>not</u> give any detailed information about how these phonemes are actually realised.

2. Narrow transcription

Use of additional symbols and special markings, i.e. *diacritics*, in order to indicate allophones, within square brackets [ ].

e.g. /t/ > [tʰ]

To sum up…

PHONETICS

- studies all possible sounds that the vocal apparatus can make
- deals with a concrete level of analysis
- its units of analysis are phones and allophones
- its phonetic transcription is into [ ]

PHONOLOGY

- studies only those contrasts in sounds that make differences of meaning within a language system
- deals with an abstract level of analysis
- its units of analysis are phonemes
- its phonemic transcription is into / /

Producing sounds

- We use air not only to breathe, but also to speak
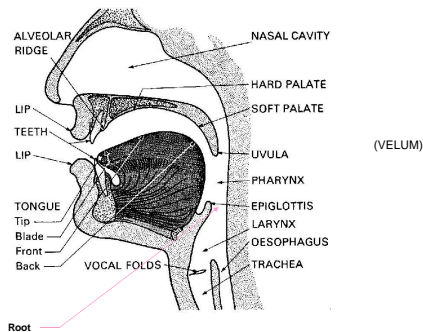- It is possible to produce sounds breathing in as well as <u>breathing out</u>

  The most common method in the languages of the world.
  All English sounds are usually produced with air being pushed out from the lungs through the mouth and nose → 'pulmonic egressive airstream mechanism'

- Sound is *air vibration*
- When we speak, air is pushed out from our mouth or nose and the neutral surrounding air pressure is disturbed, producing *sound waves*.
- Speech sounds are shaped in the *vocal tract*.

The vocal tract

ALVEOLAR RIDGE
NASAL CAVITY
HARD PALATE
LIP
SOFT PALATE
TEETH
LIP
UVULA
(VELUM)
PHARYNX
TONGUE
EPIGLOTTIS
Tip
LARYNX
Blade
OESOPHAGUS
Front
Back
VOCAL FOLDS
TRACHEA
Root

Articulators

The oral cavity contains the following articulators:

- Lips
- Tongue → composed of tip, blade, front, centre, back,   root
- Teeth
- Alveolar ridge → between the top front teeth and the hard   palate
- Hard palate, also called 'roof of the mouth'
- Soft palate or *velum*
- Uvula, i.e. the end of the velum
- Glottis, i.e. the opening between the vocal folds/cords

Important criteria to describe consonants

1. Place of Articulation
2. Manner of Articulation
3. Voicing

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1. Place of Articulation

• BILABIAL	lips	[b]	*b*ark
• ALVEOLAR	tongue against alveolar ridge	[d]	*d*ark
• LABIO-DENTAL	upper front teeth against the lower lip	[f]	*f*ine
• DENTAL	tongue protruding between upper and lower front teeth	[θ]	*th*in
• PALATO-ALVEOLAR	tip of the tongue in contact with the alveolar ridge, while the front of the tongue is raised towards the hard palate	[ʃ]	*sh*oe
• PALATAL	tongue against the hard palate	[j]	*y*et
• VELAR	the back of the tongue against the velum	[k]	*k*eep
• GLOTTAL	when the airstream is obstructed at the glottis	[h]	*h*eed

---

Examples per type

• BILABIAL
[b] *b*aby
[m] *m*eat
[p] *p*et
[w] *w*atch

• PALATO-ALVEOLAR
[dʒ] *j*am
[ʃ] *sh*op
[tʃ] *ch*urch
[ʒ] lei*s*ure

• LABIO-DENTAL
[f] *f*og
[v] *v*et

• PALATAL
[j] *y*ou

• GLOTTAL
[h] *h*ot

• DENTAL
[θ] *th*ing
[ð] *th*en

• VELAR
[g] *g*oal
[k] *k*eep
[ŋ] ri*ng*

• ALVEOLAR
[d] *d*og
[l] *l*orry
[n] *n*et
[r] *r*ed
[s] *s*ea
[t] *t*ea
[z] *z*oo

English Consonant Chart

MANNER		VOICING	Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
OBSTRUENTS	Stop	Voiceless	p			t		k	ʔ
		Voiced	b			d		g	
	Fricative	Voiceless		f	θ	s	ʃ		h
		Voiced		v	ð	z	ʒ		
	Affricate	Voiceless					tʃ		
		Voiced					dʒ		
SONORANTS	Nasal	Voiced	m			n		ŋ	
LIQUID	Lateral	Voiced				l			
	Rhotic	Voiced				r			
	Glide	Voiced	w				j	w	

Palato-alveolar

Non-rhotic (RP)   **Rhotic** (AmE)

Syllables (1)

• Vowels and consonants usually combine into larger units, i.e. **syllables**.
• A syllable consists of a <u>vowel</u> which acts as the *nucleus* or *centre* or *peak* of the syllable.

e.g. I, eye

• Many syllables have one or more consonants preceding the nucleus. This part of the syllable is called the *onset*.

e.g. <u>me</u>, <u>b</u>ee

• Consonants may also follow the nucleus, and this part is called the syllable *coda*.

e.g. a<u>nts</u>, e<u>ggs</u>

⚠️ The case of *syllabic consonants*

Syllabic Consonants

• <u>Assumption</u>: A *vowel* is an obligatory element in a syllable.

• **Exception**: In words of two or more syllables, when a *nasal*, i.e. /m/ or /n/, or an *approximant*, i.e. /l/ or /r/, functions as the peak of the syllable in place of a vowel.

This happens when the unstressed vowel in the syllable becomes so *reduced* that it effectively disappears, leaving the coda to function alone as the peak → *Syllabic consonants*

e.g. button > [bʌ] + [tɒn] → [bʌtən] or [bʌtn̩]

Syllabic /l/	**Syllabic /n/**	
• bottle > [bɒtl̩]	• eaten > [ɪːtn̩]	Use of the **diacritic** to indicate the syllabic consonant
• cattle, trouble, couple	• threaten, seven,	
• papal, panel, pedal	heaven, often	

Syllabic /m/	**Syllabic /r/**
• uppermost > [ʌpm̩əʊst]	• history > [hɪstr̩i]

4

Syllables (2)

Words can be:

- *monosyllabic* → one syllable, structure (C)<u>V</u>C
  e.g. car, star, love, I, am

- *disyllabic* → two syllables, consonant is preceded
  and succeeded by a vowel,<u>V</u>C<u>V</u>(C)   e.g.
  topic, accord, sunny

- *polysyllabic* → more than two syllables
  e.g. enemy, luxury, misunderstanding

It is important to look for the
pronunciation <u>behind</u> a word's *spelling*.
e.g. *all* is VC (<u>not</u> VCC)
fox is CVCC (<u>not</u> CVC)

The distribution of consonants (1)

Consonants can occur in three different positions:

- **word-initial** → at the beginning of a word (CV)
- **word-medial** → between vowels in a word of two syllables (VCV)
- **word-final** → at the end of a word (VC)

➢ **PLOSIVES**

- /p/ → <u>p</u>et /pet/   a<u>p</u>art /əpɑːt/   cu<u>p</u> /kʌp/
- /b/ → <u>b</u>it /bɪt/   a<u>b</u>out /əbaʊt/   ca<u>b</u> /kæb/
- /t/ → <u>t</u>ape /teɪp/   i<u>t</u>em /aɪtəm/   boa<u>t</u> /bəʊt/
- /d/ → <u>d</u>og /dɒg/   a<u>dd</u>ress /ədres/   ba<u>d</u> /bæd/
- /k/ → <u>c</u>at /kæt/   a<u>cc</u>ord /əkɔːd/   sti<u>ck</u> /stɪk/
- /g/ → <u>g</u>irl /gɜːl/   a<u>g</u>ain /əgen/   fo<u>g</u> /fɒg/

The distribution of consonants (2)

➢ **FRICATIVES**

- /f/ → <u>f</u>ood /fuːd/   sa<u>f</u>ety /seɪftiː/   lau<u>gh</u> /lɑːf/
- /v/ → <u>v</u>et /vet/   ri<u>v</u>er /rɪvə/   lo<u>v</u>e /lʌv/
- /θ/ → <u>th</u>ing /θɪŋ/   py<u>th</u>on /paɪθən/   ba<u>th</u> /bɑːθ/
- /ð/ → <u>th</u>en /ðen/   fa<u>th</u>er /fʌðə/   brea<u>the</u> /briːð/
- /s/ → <u>s</u>ip /sɪp/   fa<u>c</u>ing /feɪsɪŋ/   ri<u>ce</u> /raɪs/
- /z/ → <u>z</u>one /zəʊn/   pha<u>s</u>ing /feɪzɪŋ/   ma<u>z</u>e /meɪz/
- /ʃ/ → <u>sh</u>ip /ʃɪp/   fa<u>c</u>ial /feɪʃəl/   Iri<u>sh</u> /aɪərɪʃ/
- /ʒ/ → <u>g</u>enre /ʒɒnrə/   mea<u>s</u>ure /meʒə/   bei<u>ge</u> /beɪʒ/
- /h/ → <u>h</u>otel /həʊtel/   a<u>h</u>ead /əhed/   – *(never word-final)*

honour, heir, shepherd, hour, heiress → pronounced
with *mute* /h/ (unaspirated).

The distribution of consonants (3)

➢ **NASALS**

- /m/ → <u>m</u>eat /miːt/   ti<u>m</u>er /taɪmə/   la<u>mb</u> /læm/
- /n/ → <u>n</u>et /net/   ti<u>n</u>y /taɪniː/   su<u>n</u> /sʌn/
- /ŋ/ → – *(never word-initial)*   si<u>n</u>k /sɪŋk/   so<u>ng</u> /sɒŋ/
      fi<u>n</u>ger, ba<u>n</u>k   wro<u>ng</u>, comi<u>ng</u>

It occurs before velar plosives /k, g/.

➢ **AFFRICATES**

- /tʃ/ → <u>ch</u>ap /tʃæp/   bu<u>tch</u>er /bʊtʃə/   <u>church</u> /tʃɜːtʃ/
- /dʒ/ → <u>j</u>am /dʒæm/   lo<u>dg</u>er /lɒdʒə/   a<u>ge</u> /eɪdʒ/

The distribution of consonants (4)

➢ **APPROXIMANTS**

- /w/ → <u>o</u>nce /wʌns/   to<u>w</u>ard /təwɔd/   – *(never word-final)*
- /j/ → <u>y</u>ellow /jeləʊ/   – *(never word-medial)*   – *(never word-final)*

Also called '**yod**'. Often in combination with other vowel sounds:
union /juːnjən/   cute /kjuːt/   beauty /bjuːtiː/
new /njuː/ *vs.* AmE /nuː/

- /l/ → <u>l</u>et /let/   hi<u>ll</u> /hɪl/   pi<u>ll</u>ar /pɪlə/
  Clear l → word-initial
  Dark l [ɫ] → word-final and before another consonant as in he<u>l</u>p,
  fi<u>l</u>m, mi<u>l</u>k

- /r/ → <u>r</u>un /rʌn/   mi<u>rr</u>or /mɪrə/   – *(never word-final)*

In RP, /r/ is never pronounced in final position, because RP is a <u>**non-rhotic**</u> accent.
In American, Scottish and Irish English, /r/ is always pronounced in final position. They
are <u>**rhotic**</u> accents.
      car   RP /kɑː/ *vs.* /kɑːr/ AmE

Consonant clusters (1)
CLUSTER

= a succession of two or more *contiguous
consonants* in a word, as the *str-* cluster of *strap.*

Consonant cluster '*ps*'

- When <u>word-initial</u>, /p/ is *omitted*:
      <u>p</u>seudo- /sjuːdəʊ/
      <u>p</u>salm /sɑːm/
      <u>p</u>sychology /saɪkɒlədʒiː/

- When in <u>word-medial</u> or <u>word-final</u> position, *both* sounds are *pronounced*:
      u<u>ps</u>et /ʌpset/
      cor<u>ps</u>e /kɔːps/
   li<u>ps</u> /lɪps/

Consonant clusters (2)

- Consonant cluster '*kn*':

- When <u>word-initial</u>, /k/ is *omitted*:

know	/nəʊ/
knee	/niː/
knife	/naɪf/
knight	/naɪt/
knowledge	/nɒlidʒ/

BUT → acknowledgment /əknɒlidʒmənt/

- Consonant cluster '*gn*':

- When <u>word-initial</u> and <u>word-final</u>, /g/ is *omitted*:

gnome	/nəʊm/
reign	/rein/

- When in <u>medial position</u>, *both* sounds are *pronounced*:

pregnant   /pregnənt/

Criteria for describing English Vowels

1. Openness of the mouth and height of the tongue

2. Area of the mouth (front, central and back)

3. Shape of the lips (rounded and unrounded)

4. Length or duration (long and short vowels)

The Cardinal Vowel Diagram

- The Cardinal Vowel Diagram includes the so-called *primary vowels*. These are the vowels that are most familiar to the speakers of most European languages. It was devised to provide a set of *reference points* for the articulation of vowels. Cardinal vowels are indicated with a *C* preceding the phonetic symbol. They are *positional reference points*, rather than actual phonemes.
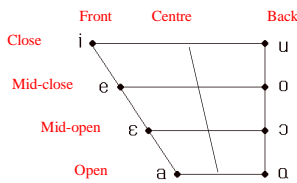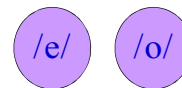

Cardinal Vowels
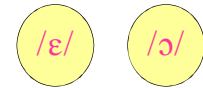

/i/ represents the highest point at the *front* of the mouth
/u/ is the highest point at the *back* of the mouth
Vowels in the region of /i/ or /u/ are called <u>close</u> or <u>high</u> vowels.

/a/ is the lowest point at the *front* of the mouth
/ɑ/ is the lowest point at the *back* of the mouth
Vowels in the region of /a/ or /ɑ/ are called <u>open</u> or <u>low</u> vowels.

They are <u>mid-close</u> vowels

They are <u>mid-open</u> vowels

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English Vowels

- From a *phonetic* point of view, vowels are articulated with an open configuration of the vocal tract and involve the vibration of the vocal folds.

- From a *phonological* point of view, vowels usually occupy the middle of a syllable, i.e. the nucleus.

- English has:
  7 short vowels
  5 long vowels   } → PURE VOWELS or monothongs
  8 diphthongs
  5 triphthongs

- For the *phonetic description* of vowels, articulation reference is made to tongue position, i.e. openness, height and area of the mouth, length and shapes of the lips.

Monothongs

- A monothong is a 'pure vowel'.
- When spoken in isolation, the position of the mouth remains unchanged.
- English has <u>12</u> monothongs, which can be described in relation to *cardinal vowels* and on the basis of <u>length</u>:
  → <u>7 *short*</u> vowels and <u>5 *long*</u> vowels.
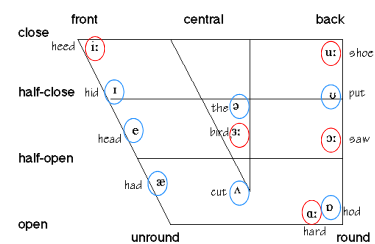
Exercise...

➤ Long or short vowel?

- cool →   1. /ʊ/   2. /u:/ ⭕
- full →   1. /ʊ/ ⭕   2. /u:/
- June →   1. /ʊ/   2. /u:/ ⭕
- scarlet →   1. /ʌ/   2. /ɑ:/ ⭕
- mud →   1. /ʌ/ ⭕   2. /ɑ:/
- pill →   1. /ɪ/ ⭕   2. /i:/
- niece →   1. /ɪ/   2. /i:/ ⭕
- picture →   1. /ɪ/ ⭕   2. /i:/
- fog →   1. /ɒ/ ⭕   2. /ɔ:/
- lord →   1. /ɒ/   2. /ɔ:/ ⭕
- knowledge → 1. /ɒ/ ⭕   2. /ɔ:/
- work →   1. /ə/   2. /ɜ:/ ⭕

Ear training...

➤ The perfect match:

1. ham	A. /hem/
2. harm	B. /hʌm/
3. hem	C. /hæm/
4. hum	D. /hɑ:m/

1-C   2-D   3-A   4-B

1. bed	A. /bæd/
2. bad	B. /bɔ:ld/
3. bard	C. /bed/
4. bald	D. /bɑ:d/

1-C   2-A   3-D   4-B

1. rubbing	A. /lʌvɪŋ/
2. robin	B. /rʌbɪŋ/
3. robbing	C. /rɒbɪn/
4. loving	D. /rɒbɪŋ/

1-B   2-C   3-D   4-A

Diphthongs

- Diphthongs are sounds which consist of a movement or *glide* from one vowel to another.
- They have the feature of *length*.
- The <u>first part</u> of a diphthong is much longer and stronger than the <u>second part</u>. As the glide to the second part happens, the loudness of the sound decreases.
- English has *8 diphthongs*, which are classified in terms of the tongue height of the finishing vowel position.

Centring (3)
- towards /ə/
/ɪə/ → beard, beer
/eə/ → pair, air
/ʊə/ → tour, poor

Closing (5)
- towards /ɪ/ (3)
/eɪ/ → baby, paid, bay
/aɪ/ → nice, buy
/ɔɪ/ → voice, boy
- towards /ʊ/ (2)
/əʊ/ → home, no, toe
/aʊ/ → house, now

Triphthongs

- A triphthong is a *glide* from *one vowel* to *another* and then to *a third*, all produced rapidly and without interruption.
- Triphthongs are formed by adding a *central glide*, i.e. towards /ə/, to the <u>closing diphthongs</u>.

- /eɪ/ + /ə/ → **/eɪə/** player
- /aɪ/ + /ə/ → **/aɪə/** fire, liar, desire
- /ɔɪ/ + /ə/ → **/ɔɪə/** royal
- /əʊ/ + /ə/ → **/əʊə/** lower
- /aʊ/ + /ə/ → **/aʊə/** tower, power, hour

Exercise...

➤ Choose the right vowel sound:

- first →   1. /ə/   2. /ɪ/   3. /ɜ:/ ⭕
- phone →   1. /ɔ:/   2. /əʊ/ ⭕   3. /ɒ/
- fawn →   1. /ɔ:/ ⭕   2. /əʊ/   3. /ɒ/
- tart →   1. /ɑ:/ ⭕   2. /ʌ/   3. /ɜ:/
- fare →   1. /ɑ:/   2. /eə/ ⭕   3. /ɜ:/
- sure →   1. /u:/   2. /ɔ:/   3. /ʊə/ ⭕
- shower →   1. /aʊə/ ⭕   2. /ɔɪə/
- bought →   1. /əʊ/   2. /ɔ:/ ⭕   3. /ʊ/
- cup →   1. /ʌ/ ⭕   2. /ɑ:/   3. /ʊ/
- laid →   1. /e/   2. /eɪ/ ⭕   3. /aɪ/
- burn →   1. /u:/   2. /ɑ:/   3. /ɜ:/ ⭕
- above →   1. /ɔ:/   2. /ɒ/   3. /ʌ/ ⭕
- juice →   1. /ʊɪ/   2. /ʊ/   3. /u:/ ⭕
- about →   1. /æ/   2 /ə/ ⭕   3. /e/

Homophones and Homographs

Homophones (*homo-* 'same' + *phone* 'sound') are words which are pronounced identically.

- piece - peace → /pi:s/
- son - sun → /sʌn/
- buy - bye - by → /baɪ/
- die - dye → /daɪ/
- no - know → /nəʊ/
- wood - would → /wʊd/
- knight - night → /naɪt/

Homographs (*homo-* 'same' + *graph* 'writing') are words which are written the same way, but pronounced differently.

- read (Present) *vs.* read (Past) → /ri:d/ *vs.* /red/
- close (V) *vs.* close (Adv) → /kləʊz/ *vs.* /kləʊs/
- live (V) *vs.* live (Adj) → /lɪv/ *vs.* /laɪv/

Morpho(pho)nology

🔵 **Morphonology** is the analysis of the phonological aspects of morphemes.

Some special rules of pronunciation include:

• Past Tense Formation of regular verbs

      {**-ed**} →   /d/ or /t/ or /ɪd/

• 3rd Person Singular of present tense of verbs
• Plural Formation of regular forms
• Saxon Genitive

      {**-s**}
      {**-s**}   /s/ or /z/ or /ɪz/
      {**'s**}

Past Tense Formation

1. If the stem ends in /t/ or /d/:

    {-ed} > **/ɪd/**

    wan*t*ed, nee*d*ed, insis*t*ed, wai*t*ed, pain*t*ed

2. If the stem ends in any *voiced sound*, i.e. vowels and voiced consonants except /d/:

    {-ed} > **/d/**

    pla*nn*ed, ru*bb*ed, ca*rr*ied, pla*y*ed, ju*dg*ed, li*v*ed

3. If the stem ends in any *voiceless consonant* apart from /t/:

    {-ed} > **/t/**

    mi*ss*ed, lau*gh*ed, fini*sh*ed, sto*pp*ed, wa*sh*ed, rea*ch*ed

---

Exercise...

➢ Endings: /d/, /t/ or /ɪd/?

• helped	/d/	(/t/)	/ɪd/
• hated	/d/	/t/	(/ɪd/)
• cried	(/d/)	/t/	/ɪd/
• gained	(/d/)	/t/	/ɪd/
• killed	(/d/)	/t/	/ɪd/
• sorted	/d/	/t/	(/ɪd/)
• crashed	/d/	(/t/)	/ɪd/
• turned	(/d/)	/t/	/ɪd/
• needed	/d/	/t/	(/ɪd/)
• pushed	/d/	(/t/)	/ɪd/
• arrived	(/d/)	/t/	/ɪd/
• slipped	/d/	(/t/)	/ɪd/

Plural, 3rd Person Sing. and Saxon Genitive

• If the stem ends in a sibilant, i.e. /s/, /z/, /ʃ/, /ʒ/, or an affricate, i.e. /tʃ/ or /dʒ/:

    {-es} > **/ɪz/**

    ki*ss*es, a*x*es, ro*s*es, di*sh*es, swi*tch*es, ju*dg*es, Charle*s*'s

• If the stem ends in any non-sibilant and non-affricate voiced sound, i.e. vowels and voiced consonants:

    {-s} > **/z/**

    d*ay*s, go*e*s, ladi*e*s, frien*d*s, wa*v*es, pla*n*s, John's, Richar*d*'s,

• If the stem ends in any non-sibilant voiceless sound, i.e. voiceless consonants:

    {-s} > **/s/**

    to*p*s, wri*t*es, lau*gh*s, pi*ck*s, mon*th*s, Je*f*'s

Exercise...

➢ Endings: /s/, /z/ or /ɪz/?

• cups	(/s/)	/z/	/ɪz/	• roses	/s/	/z/	(/ɪz/)	
• snakes	(/s/)	/z/	/ɪz/	• socks	(/s/)	/z/	/ɪz/	
• glasses	/s/	/z/	(/ɪz/)	• pears	/s/	(/z/)	/ɪz/	
• beds	/s/	(/z/)	/ɪz/	• biscuits	(/s/)	/z/	/ɪz/	
• sizes	/s/	/z/	(/ɪz/)	• knees	/s/	(/z/)	/ɪz/	
• beaches	/s/	/z/	(/ɪz/)	• cats	(/s/)	/z/	/ɪz/	
• bikes	(/s/)	/z/	/ɪz/	• dreams	/s/	(/z/)	/ɪz/	
• caves	/s/	(/z/)	/ɪz/	• matches	/s/	/z/	(/ɪz/)	
• faces	/s/	/z/	(/ɪz/)	• sports	(/s/)	/z/	/ɪz/	
• villages	/s/	/z/	(/ɪz/)	• languages	/s/	/z/	(/ɪz/)	
• lives	/s/	(/z/)	/ɪz/	• Tom's	/s/	(/z/)	/ɪz/	
• cornflakes	(/s/)	/z/	/ɪz/	• Max's	/s/	/z/	(/ɪz/)	
• jobs	/s/	(/z/)	/ɪz/	• Matt's	(/s/)	/z/	/ɪz/	
• pens	/s/	(/z/)	/ɪz/					

Connected speech

When we *write*, we leave spaces between words.

vs.

When we *speak*, we run sounds and words together.

• Phonemes ***vary*** when in contact with adjacent phonemes from other words.

    These variations are the result of *connected speech*.

• Segments affect each other within individual words, and this influence also operates across word boundaries.

   • Three different processes that may characterize connected speech:

    Assimilation
    Elision
    Linking r

1. Assimilation

- Assimilation is the process by which two adjacent sounds influence the articulation of one another so that they become more alike or identical.
- It involves the *Final Consonant* (Cf) and the *Initial Consonant* (Ci) of two adjacent words:
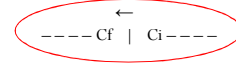
$$- - - - \text{Cf} \quad | \quad \text{Ci} - - - -$$

- These consonants influence each other in different ways, so that we can distinguish <u>three</u> different types of assimilation.
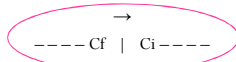
Anticipatory Assimilation	Perseverative Assimilation	Coalescence
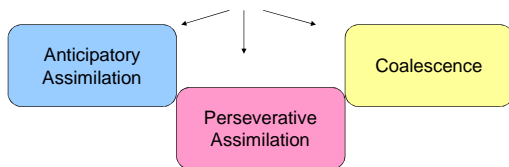
Anticipatory Assimilation

➢ Cf changes to become like Ci in some way.

$$\overset{\leftarrow}{- - - - \text{Cf} \quad | \quad \text{Ci} - - - -}$$

- /t/ → /p/ before a bilabial consonant
  that person > /ðæp pɜːsən/   light blue > /laɪp bluː/
- /t/ → /k/ before a velar consonant
  that case > /ðæk keɪs/ quite good > /kwaɪk gʊd/
- /d/ → /g/ before a velar consonant
  good girl > /gʊg gɜːl/
- ten-pin
  /n/ at the end of *ten* is often pronounced [**m**] in anticipation of the fact that the following word *pin* begins with a bilabial phoneme /p/ > the alveolar nasal becomes bilabial like /p/.

Perseverative Assimilation

➢Cf influences Ci

$$\overset{\rightarrow}{- - - - \text{Cf} \quad | \quad \text{Ci} - - - -}$$

- When a feature of one segment is found in the following segment.
- Much rarer than anticipatory assimilation.
- ashtray
  in isolation it would be [æʃ] [treɪ]
  in connected speech > [æʃ**tʃ**reɪ]

The fricative quality of the /ʃ/ at the end of *'ash'* has been carried over to the /t/ at the beginning of *'tray'*, causing it to surface as [tʃ].

Coalescence

➢ Cf and Ci influence each other reciprocally and may *merge* into a single consonant.

$$\overset{\leftrightarrow}{- - - - \text{Cf} \quad | \quad \text{Ci} - - - -}$$
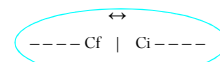
- /t/ → /tʃ/ before /j/
  haven't you > [hævən**tʃ**uː]
      /t/ at the end of *'haven't'* and /j/ at the beginning of   *'you'* being merged to give [tʃ].
- /d/ → /dʒ/ before /j/
  would you > [wʊ**dʒ**uː]
  should you > [ʃʊ**dʒ**uː]

2. Elision

- ❖ Elision entails the *omission of sounds*, syllables or words in connected speech. It is typical of informal discourse.
 It is the process whereby, under certain circumstances, a phoneme results having zero realization or is *deleted*.

  Eg.: Pri<u>me M</u>inister > [praɪmɪnɪstə]

- Loss of weak vowels after /p, t, k/:
  p<u>o</u>tato > [pʰˈtetəʊ]   t<u>o</u>mato > [tʰˈmɑːtəʊ]   c<u>a</u>nary > [kʰˈneərɪ]
- Loss of final /v/ in 'of' before consonants:
  'lots o<u>f</u> them' > [lɒts ə ðem]   waste o<u>f</u> money > [weɪst ə mʌni]
- Weak vowels + /n, l, r/ become syllabic consonants:
  to<u>n</u>ight > [tn̩aɪt]   po<u>l</u>ice > [pl̩iːs]   c<u>o</u>rrect > [kr̩ekt]
- Contractions
  I'll, you're, it'll, I'd, it's, who's, haven't…

3. Linking r

- In connected speech, we sometimes *link* words together.

  ⬇

  Linking r
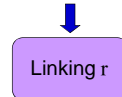
- The phoneme /r/ cannot occur in syllable-final position in RP, **but** when word's spelling *suggests* a final /r/, and a word beginning with a *vowel* follows, the usual pronunciation for RP speakers is to pronounce with /r/.

- Compare:

here > [hɪə]	with	here are > [hɪə**r** ə]
four > [fɔː]	with	four eggs > [fɔː**r** egz]

Suprasegmental phonology

- It goes *beyond* the individual speech sound.
- It studies *other aspects* of speech which affect *the way* that syllables, words and strings of words are uttered.
  - *Prosodic features*

Stress Pitch Intonation	Voice quality Volume Tempo
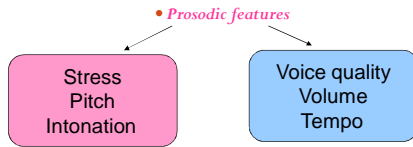
- Prosodic features are able to convey non-verbal meanings.
- English is a *stress language*, i.e. stress is an important part of the spoken identity of an English word.

Word Stress

- Stress is the means by which we give one syllable greater *prominence* than another.
- The prominence is usually due to an increase in *loudness*, but also *pitch* and *length* may contribute to the overall impression of prominence.
- Pitch is a perceptual characteristics of speech and is closely related to the frequency of vibration of the vocal cords and to the musical notion of low- and rise-pitched notes.
- The *placement of stress* within words depends on:
  - whether the word is morphologically simple or not, i.e. compound word or word with one or more affixes
  - grammatical category
  - number and structure of syllables
- Stress is graphically marked by a vertical stroke placed on the top left side of the *stressed syllable*:

  air > /ˈeə/

Types of stress (1)

- *Monosyllabic words* have only a *primary stress*.
- In *polysyllabic words*, a *secondary stress* may also be found besides the primary one, and it is marked by a stroke placed on the <u>bottom</u> left side of the stressed syllable.

  disbelief > /ˌdɪsbɪˈliːf/

Even if the main stress is on the <u>final syllable</u>, when you utter this word you will also give prominence to the first syllable, which thus is *not unstressed* as the <u>second one</u>, but yet it has a *lower degree of prominence* than the third one.

- Stress can be:

1.**Functional** → it distinguishes couples of apparently identical words as grammatically different, i.e. word-class pairs.

  abstract (Adj) > /ˈæbstrækt/ *vs.* (V) /əbˈstrækt/
  contrast (N) > /ˈkɒntrɑːst/ *vs.* (V) /kənˈtrɑːst/

2.**Syntactic** → it depends on the syntactic function of Adj.

  My friend is Japa<u>ne</u>se. *vs.* I love <u>Ja</u>panese food.
  They are students from over<u>seas</u>. *vs.* They are <u>o</u>verseas students.

Types of stress (2)

3. **Semantic** → it brings about a change in meaning.

  bl<u>a</u>ckbird > /ˈblækbɜːd/ *vs.* bl<u>a</u>ck b<u>i</u>rd

  d<u>a</u>rkroom > /ˈdɑːkruːm/ *vs.* d<u>a</u>rk r<u>oo</u>m

  greenhouse > /ˈgriːnhaʊs/ *vs.* green h<u>ou</u>se

Stress in two-syllable words

- Two-syllable **Verbs**:
- if the second syllable contains a long vowel or a diphthong
- if it ends with more than one consonant

  that *second* syllable is **stressed**:

  ap<u>ply</u> > /əˈplaɪ/   at<u>tract</u> > /əˈtrækt/

- if the final syllable contains a short vowel and one (or no) final consonant

  The *first* syllable is **stressed**:

  <u>e</u>nvy > /ˈenvɪ/   <u>o</u>pen > /ˈəʊpən/

- Two-syllable **Adj**:
- Same rule → <u>lo</u>vely > /ˈlʌvlɪ/   cor<u>rect</u> > /kəˈrekt/
- **But** exceptions: h<u>o</u>nest > /ˈɒnɪst/   <u>per</u>fect > /ˈpɜːfekt/
- Two-syllable **Nouns**:
- If the second syllable has a short vowel, the **stress** is usually on the *first* syllable. Otherwise, it will be on the second one.

  <u>mo</u>ney > /ˈmʌnɪ/   bal<u>loon</u> > /bəˈluːn/

Stress in three-syllable words

- Stress tends to go on syllables containing a *long vowel* or a *diphthong* and/or ending with more than one consonant, but there are exceptions:

  <u>in</u>tellect > /ˈɪntəlekt/   op<u>por</u>tune > /ˈɒpətjuːn/
  <u>de</u>relict > /ˈderəlɪkt/

- The tendency is for word of three syllables to have simply a *primary stress* on the *first* or *second* syllable.

  <u>di</u>fficult > /ˈdɪfɪkəlt/   nar<u>ra</u>tor > /nəˈreɪtə/

- **But** if there is a *primary stress* on the *third* syllable, it is likely that the *first* syllable will be given a *secondary stress*.

  <u>con</u>tra<u>dict</u> > /ˌkɒntrəˈdɪkt/   <u>au</u>ction<u>eer</u> > /ˌɔːkʃəˈnɪə/

Complex word stress (1)

🌸 Some regularities:

- Stress is placed on the *last syllable* before the nominal suffix *-ity*:
  curious → curiosity

- Stress is placed on the *last syllable* before the adjectival suffix *–ic*:
  economy → economic

- All abstract nouns ending in *–ion* are stressed on the syllable preceding the suffix:
  introduction   translation   suspicion

- Stress falls before nominal and adjectival *–ian*:
  grammarian   librarian

- Stress is placed on the last syllable before the suffix *–ive*:
  interactive   reflexive

Complex word stress (2)

🌸 Stress does not change when the following suffixes are added to words:

- -able   → remarkable, reliable
- -er   → reader, interpreter
- -ess   → lioness, stewardess
- -hood   → childhood, likelihood
- -ing   → contributing
- -ish   → childish
- -ism   → nationalism
- -ful   → successful

- -less   → powerless
- -ly   → officially
- -man   → gentleman
- -ment   → development
- -ness   → happiness
- -or   → director
- -some   → handsome
- -ship   → scholarship

Compounds

- A compound is a word made of two words, both of which can exist independently in English.

🌸 **General rule**:

- If the first part of the compound is *adjectival*, the stress goes on the *second* element:

  loudspeaker > /ˌlaʊdˈspiːkə/   second-class > /ˌsekəndˈklɑːs/
  bad-tempered > /ˌbædˈtempəd/

  BUT

  bluebell > /ˈbluːbel/   gentleman > /ˈdʒentlmən/

- If the first element is a *noun*, the stress goes on the *first* element:

  typewriter > /ˈtaɪpraɪtə/   sunrise > /ˈsʌnraɪz/
  tea-cup > /ˈtiːkʌp/

Weak forms

- Certain English words can be pronounced in *two* different ways:

  Strong forms   Weak forms

  [ðæt] ← that → [ðət]
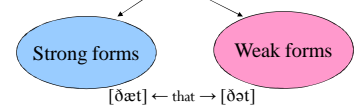
  When used with a   When used in a relative
  demonstrative sense.   clause or as a conjunction.
  E.g. *I like that.*

- Almost all the words that have both a strong and weak form are *function words*, i.e. grammatical words such as auxiliaries, prepositions, conjunctions, etc.
- Such words are more frequently pronounced in their weak form.
- It is important to learn weak forms in order to understand native speakers, who do use them.

Examples of weak forms

- AND → ən   n̩
  Come and see → ˈkʌm ən ˈsiː
  Fish and chips → ˈfɪʃ n̩ ˈtʃɪps

- BUT → bət
  It's good but expensive
  ɪts gʊd bət ɪksˈpensɪv

- THAN → ðən
  Better than ever
  ˈbetə ðən ˈevə

- OF → əv
  I'm fond of cats
  aɪm ˈfɒnd əv ˈkæts

  Strong forms tend to occur at the *end* of the sentence.

  Cats are what I'm fond of. → ˈkæts ə ˈwɒt aɪm ˈfɒnd ɒv

Possible questions

1. Explain what a minimal pair is and provide three examples of minimal pairs in English.
2. What is the difference between … (minimal pair, two phonemes, etc.)?
3. What type of consonants/vowels are the following…?
4. Give examples of the following types of consonants/vowels…
5. Provide the English words corresponding to the following phonetic transcriptions … (ex. /ˈgriːnhaʊs/ >> greenhouse)
6. On which syllable does the main stress go in the following words…?
7. What phenomenon can you observe in the following phrase? (for cases of assimilation, coalescence, elision or linking r).

11