الصوتيات

GREAT HEART

1st Lecture

Elements of the Lecture

Phonetics and Phonology and their types
What Phonological knowledge permits a speaker to...
Organs of Speech : The Vocal Tract, Parts of the Mouth, Glottis, Vocal Cords, Diagram of Human Head.
The Concept of Phoneme

INTRODUCTION

Definitions:

Phonetics : the study of the way humans make, transmit and receive speech sounds.

Divided into three main branches:

- Articulatory phonetics : the study of the way the vocal organs are used to produce speech sounds.
- Acoustic phonetics : the study of the physical properties of speech sounds.
- Auditory phonetics : the study of the way people perceive speech sounds.

Phonology:

The study of the sound system of languages, and of the general properties displayed by these systems.

(Roach, 1999)

The systems of rules underlying the sound patterns in a language.

(Denham & Lobeck, 2010)

◊ This involves knowing what sounds are or are not in the language and the rules that govern pronunciation.

Read and analyse the following scripts:

Aiteyu–ah, nemmain wat debladigarmen say, mos Malaysians tok Manglish. Bekoswai? Bekos we all shai oni to spik proper English – afturds people ting we trying to action oni. But Manglish is best–la when you want to simply toktok like fren-fren la.

◊ You want to toktok osoken, no pobem, we gifchan you flers la. Simply lern by hart the list of popular Manglish words and phrases, and very soon oridi you can go round blarfing like tera oni.

Phonological knowledge permits a speaker to

- produce sounds that form meaningful utterances

  E.g. /**n**/ /**æ**/ /**b**/ - nab or ban but not **bn**a or **nb**a
- recognise foreign accent

  E.g. buffet origami pistachio

- make up new words

  E.g. / **s** / / **e** / / **n** / / **t** / - sent, tens, nets, nest

- add appropriate phonetic segments to form plurals and past tenses

  E.g. plural**s**- books ros**es**; past tense- pick**ed** t**oo**k

- know what is or is not a sound in ones' language

  E.g. no word in Eng begins with the nasal /**ŋ**/

Speech Organs and Articulation

How are speech sounds made?

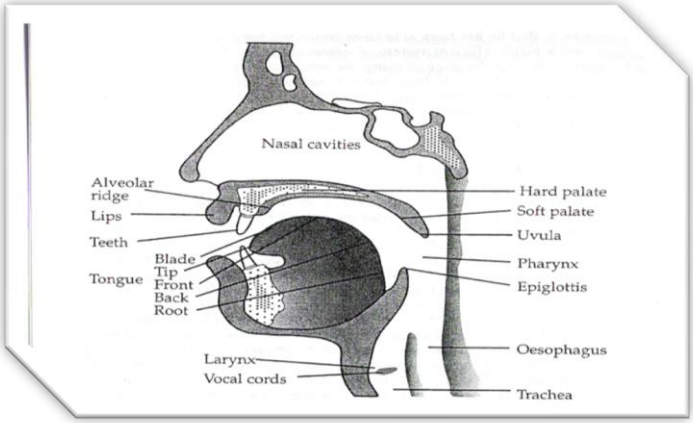
First, air coming from the lungs passes through the vocal tract, which shapes it into different speech sounds.

The air then exits the vocal tract through the mouth or nose or both.

The process by which air is made to move out of the lungs is called an **egressive pulmonic airstream.**

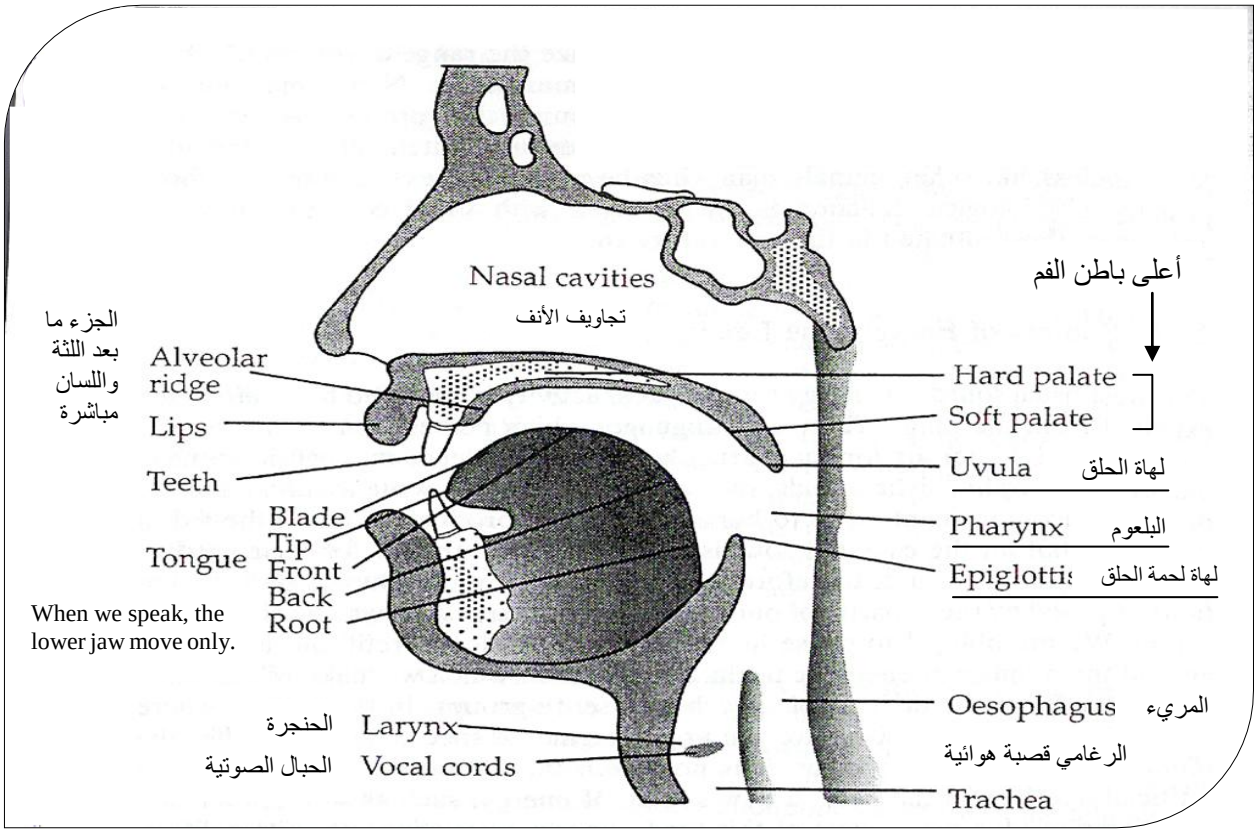
All English sounds are produced in this manner.

HOW IS SPEECH POSSIBLE?



THE AIRSTREAM EXPELLED FROM THE **LUNGS** IS THE MOST COMMON SOURCE OF ENERGY FOR OUR VOCAL ACTIVITY.
IN THE **TRACHEA OR WINDPIPE** IT PASSES THROUGH THE LARYNX, CONTAINING THE VOCAL FOLDS OR **VOCAL CORDS**.
THE FRONT PORTION OF THE **TRACHEA OR WINDPIPE** IS PROMINENT IN THE NECK BELOW THE CHIN AND IS KNOWN AS **"ADAM'S APPLE".**

ANOTHER VIEW



Seven main articulators

1. **The pharynx** : A tube which begins just above the larynx.

- Top end is divided into two:
  a) the back of the mouth
  b) beginning of the way thru' the nasal cavity

2. The velum or the soft palate :

The **velum** is raised so that air cannot escape through the nose.

- When the tongue is in contact with the lower side of the velum, ***sounds(velar consonants)*** <u>such as</u> / **k** / and / **g** / are produced.

3. The hard palate

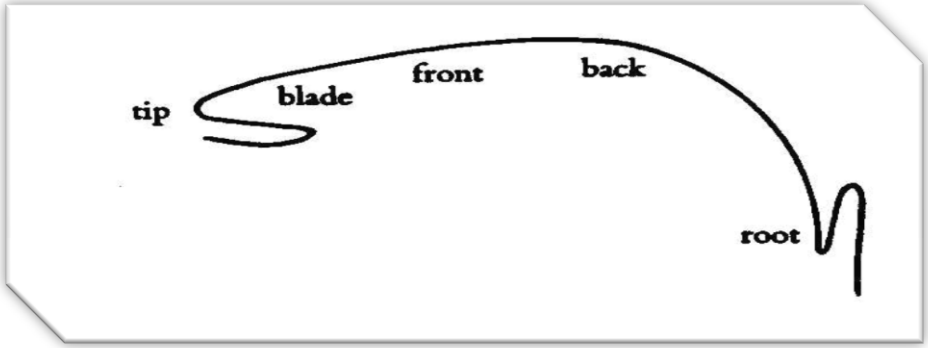
- often called the *'roof of the mouth'*.
- has smooth curved surface.

4. The alveolar ridge

- between the top front teeth and the hard palate.
- surface is covered with little ridges.
- sounds made by the tongue touching this area <u>such as</u> / **t** / and / **d** / are called ***alveolar***.

5. The tongue

- a very important articulator.
- Can be moved into many different places and different shapes.
- Parts of the tongue:



6. The teeth

- consist of upper and lower teeth
- Sounds made with the tongue touching the front teeth such as / **t** / and / **d** / are called ***dental.***

7. The lips can be

- pressed together to produce bilabial sounds, such as / **p** / and / **b** /
- brought into contact with teeth to produce ***labiodental*** *sounds such as* / **f** / and / **v** /
- can be rounded to produce lip-shape for vowels like / **u:** /

The 7 articulators are the main ones but there are 3 others to remember

Larynx

- a very complex and independent articulator.
- the larynx (Adam's apple) vibrates when you produced the voiced sound, / **z** /.

Jaws

- the movement of the jaws (especially the lower one) helps a lot in speaking.

Nose and **nasal cavity**

- very important part of our vocal apparatus of making sounds, specifically **nasal** sounds such as / **m** /,/ **n** /, / **ŋ** /

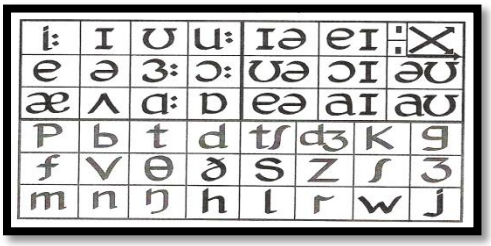
THE CONCEPT OF "PHONEME"

What are these symbols?

iː READ	ɪ SIT	ʊ BOOK	uː TOO	ɪə HERE	eɪ DAY	John & Sarah Free Materials 1996
e MEN	ə AMERICA	ɜː WORD	ɔː SORT	ʊə TOUR	ɔɪ BOY	əʊ GO
æ CAT	ʌ BUT	ɑː PART	ɒ NOT	eə WEAR	aɪ MY	aʊ HOW
p PIG	b BED	t TIME	d DO	tʃ CHURCH	dʒ JUDGE	k KILO	g GO
f FIVE	v VERY	θ THINK	ð THE	s SIX	z ZOO	ʃ SHORT	ʒ CASUAL
m MILK	n NO	ŋ SING	h HELLO	l LIVE	r READ	w WINDOW	j YES

They are called **phonemic symbols** (as opposed **to phonetic symbols**).

Each one represents a **PHONEME**, that is, **ONE** specific **SIGNIFICANT** speech sound.

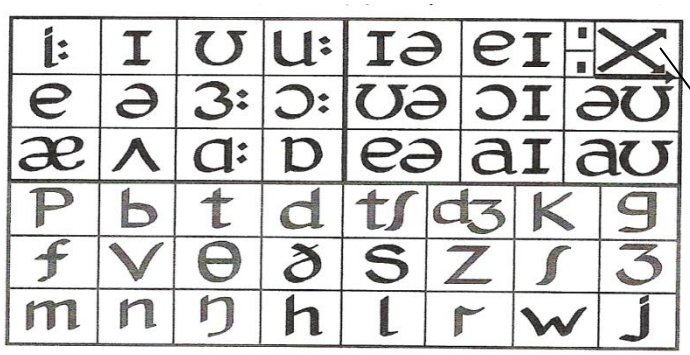


Significant?

By "significant" we mean that each of these sounds can make a difference in the meaning of a word. Take the case of **"map"** and **"cap".** Phonemes / **m** / and / **k** / are significant from the moment they can alter the meanings of words.

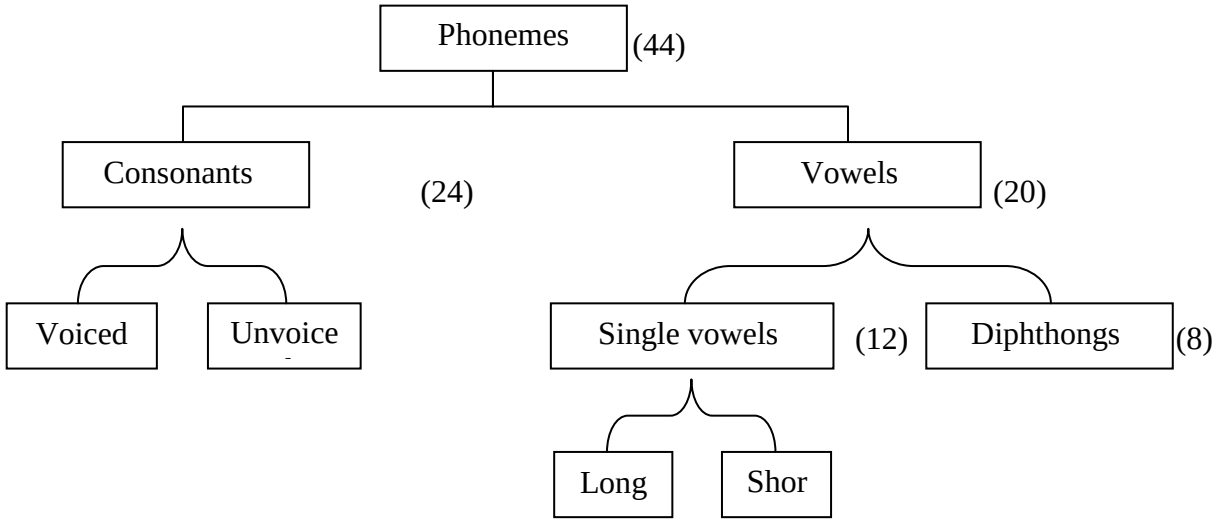
PHONEMES !!!

- A phoneme is the smallest **contrastive** unit in the sound system of a language.
- A phonene is a minimal unit that serves **to distinguish between meanings of words.**
- By convention, a phoneme is represented between / **slashes** /, e.g. / **b** /, / **m** /.

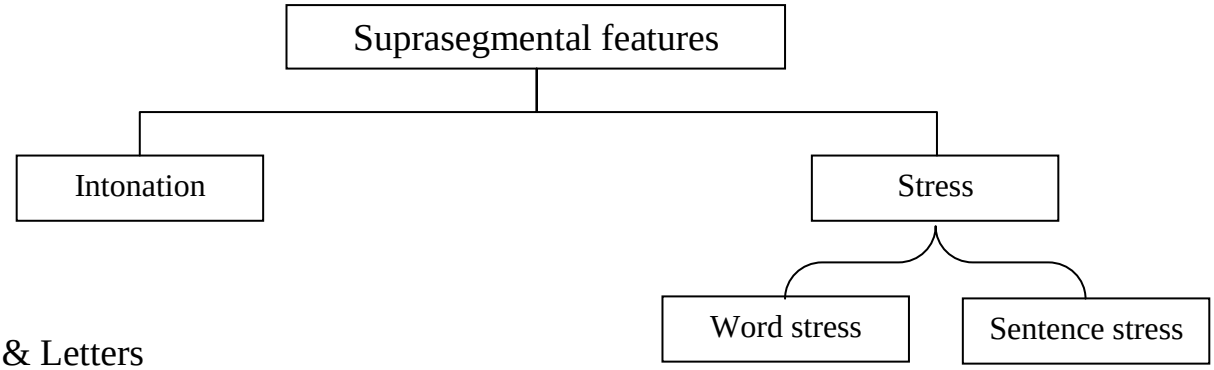


HOW MANY PHONEMES ARE THERE IN THE ENGLISH LANGUAGE?

Features of Pronunciation



Features of Pronunciation



Phonemes & Letters

Do not necessarily have one to one sound correspondence

⊙ Different letters – one sound

e.g. Letters ‘q’ ‘c’ ‘k’ - / k / in **q**uick, **c**all, **k**id

⊙ One letter – different sounds

e.g. ‘ **I** ’- / **ɪ** / in **i**nk, / **aɪ** / in h**i**nd, / **ɜ**: / in **i**rk

⊙ Combination of letters – one sound

e.g.‘ **wh** ’ / w / in **wh**en, ‘ ght ’ / **t** / in nig**ht**,
‘gh’ /f/ in lau**gh**

⊙ Letters – silent

e.g. bom**b**er, a**l**mond, si**g**n

2nd Lecture

SOUNDS OF ENGLISH : Consonants

Consonants
The Place Of Articulation
Manner of Articulation
IPA Chart
Terms: Phonemes, Allophones, minimal pairs, Complementary Distribution, Free variation.

- CONSONANTS

Consonants are sounds produced with some restriction or total closure in the vocal tract as the air from the lungs is pushed through the glottis out the mouth.

24 consonants in English (including /j/ & /w/)

- Description:

Voicing : Voiced (vibrated) or voiceless (non-vibrated) ?

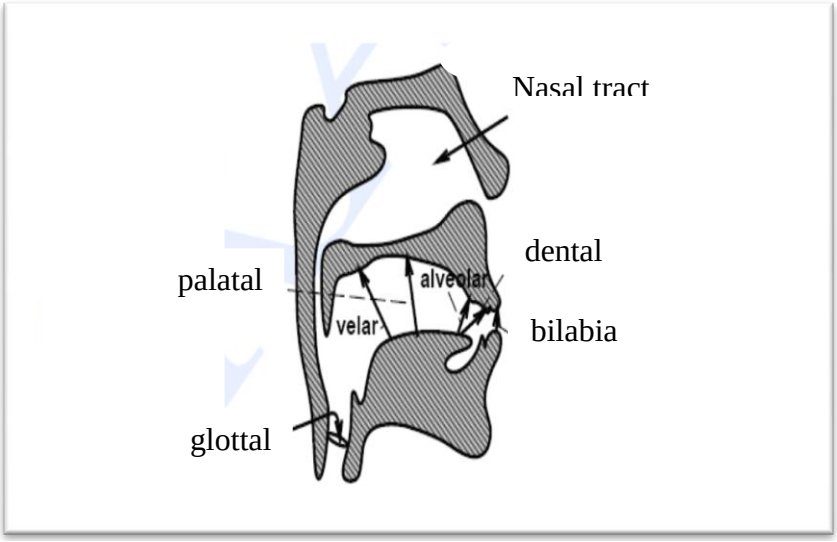
- Manner of articulation
- Place of articulation

- **Place of Articulation**

In articulatory phonetics, the **place of articulation** (also **point of articulation**) of a consonant is the point of contact where an obstruction occurs in the vocal tract between an **articulatory gesture**, an active articulator (typically some part of the tongue), and a passive location (typically some part of the roof of the mouth). Along with the manner of articulation and the phonation, this gives the consonant its distinctive sound.

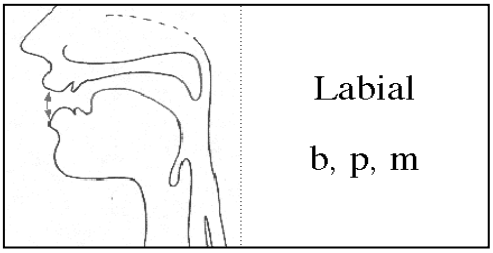
- Place of articulation (**passive**)

The passive place of articulation is the place on the more stationary part of the vocal tract where the articulation occurs. It can be anywhere from the lips, upper teeth, gums, or roof of the mouth to the back of the throat.



1. Bilabial or Labial

Labial: Consonants whose main restriction is formed by the two lips coming together have a bilabial place of articulation. In English these include [**p**] as in *possum,* [**b**] as in *bear, and [***m**] as in marmot.*



Labial (/ **p** /, / **b** /, / **m** /, :

- constriction (or complete closure) at lips
- the only unvoiced labial is /**p**/
- the only nasal labial is /**m**/

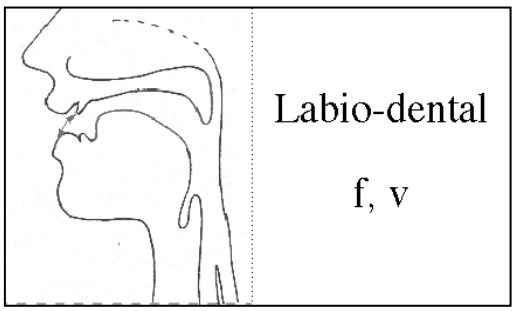
Labial consonants are consonants in which one **or** both lips are the active articulator

- The Lower Lip and the Upper Lip press together .
- Sounds like **: b, m, p,**
  Ex. /**m**/ my /**p**/ pen /**b**/ book

2. Labio-Dental (/ **f** /, / **v** /) :

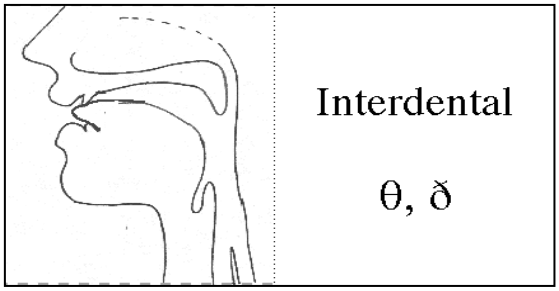
- *The English* ***labiodental consonants [v]*** and [**f**] are made by pressing the bottom lip against the upper row of teeth and letting the air flow through the space in the upper teeth.
- produced by constriction between lower lip and upper teeth
- in English, all labio-dental phonemes are fricatives

EX: / **f** / fan, phone / **v** / view, vision



3. Dental (/**th**/, /**dh**/):

- Dental: Sounds that are made by placing the tongue against the teeth are dentals. The main dentals in English are the [**th**] of *thing or the [**dh**] of though, which are* made by placing the tongue behind the teeth with the tip slightly between the teeth.
- produced by constriction between tongue tip and upper teeth (sometimes tongue tip is closer to alveolar ridge)
- in English, all dental phonemes are fricatives

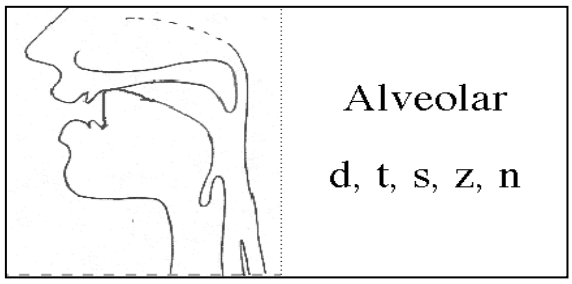


- Ex: /**th**/ teeth, thin → the tip of the tongue touches the upper teeth.
- /**dh**/ then, the, there → the blade of the tongue touches the upper teeth.

4. Alveolar (/**t**/, /**d**/, /**s**/, /**z**/, /**n**/, /**l**/):

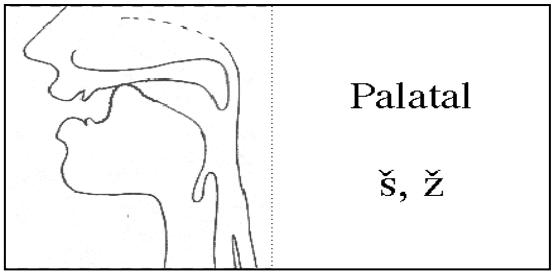
- **Alveolar**: The alveolar ridge is the portion of the roof of the mouth just behind ALVEOLAR the upper teeth. Most speakers of American English make the phones [**s**], [**z**], [**t**], and [**d**] by placing the tip of the tongue against the alveolar ridge. The word cooronal is often used to refer to both dental and alveolar.

- tongue tip is at or near alveolar ridge
- a large number of English consonants are alveolar
- / **l** / before vowel is "light" / l /, after vowel is "dark" / l /.
  (/ **t** / table) (/ **d** / door) (/ **s** / see) (/ **z** / zoo) (/ **n** / nose) (/ i / eye) .



5. Palato-Alveolar (/**sh**/, /**zh**/, /**ch**/, /**jh**/, /**r**/):

- The **palato-alveolar sounds [sh] (shrimp), [ch] (china), [zh] (Asian),** and [**jh**] (**jar**) are made with the blade of the tongue against this rising back of the alveolar ridge
- tongue is between alveolar ridge and hard palate
- 2 fricatives, 2 affricates, 1 retroflex
- retroflex has "depression" midway along tongue
- the palato-alveolar fricatives tend to have strong energy due to weak constriction allowing large airflow



6. Palatal (/ **y** /):

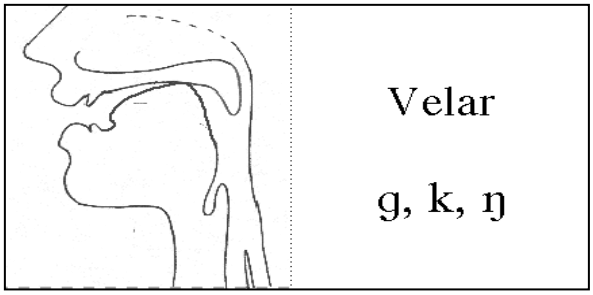
- P**alatal: The roof of the mouth (the palate) rises sharply from the back of the alveolar** ridge.. The palatal sound [**y**] of *yak is made by placing the front of the* tongue up close to the palate.
- produced with tongue close to hard palate
- "extreme" production of / **iy** /

  Ex. Yard, you, university, student

Note: **Unimportant** → is common with the first two letters of (University), however, they sound differently.

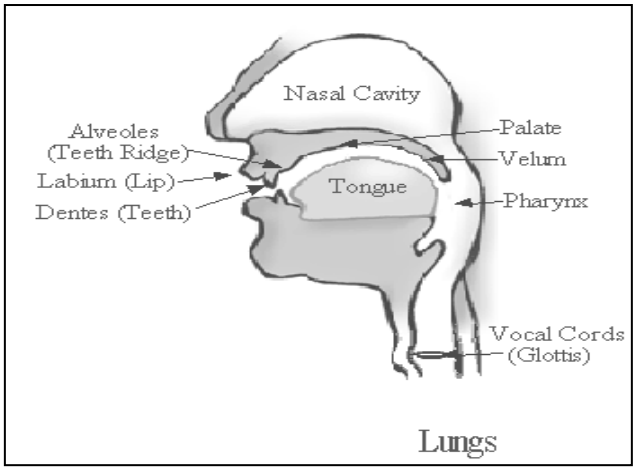
7. Velar (/**k**/, /**g**/, /**ng**/):

- **Velar**: The velum or soft palate is a movable muscular flap at the very back of the roof of the mouth. The sounds [**k**] (*cuckoo), [**g**] (goose), and [**N**] (kingfisher) are* made by pressing the back of the tongue up against the velum.
- produced with constriction against velum (soft palate); the back of the tongue touches the velum (the soft palate)
- only plosives /**k**/ and /**g**/, and nasal /**ng**/
- Ex. /**k**/ car, cat, kind, key
- /**g**/ gas, goal, gear
- /**ng**/ playing, driving



8. Glottal (/**h**/):

- **Glottal**: (the *glottis* is the space between the vocal folds). A glottal stop is a speech sound articulated by a momentary, complete closing of the glottis in the back of the throat. It exists in many languages, as in English and Hawaiian *uh-oh, O'ahu, and ka'aina*.
- /**h**/ is the nominal glottal phoneme in English; in reality, the tongue can be in any vowel-like position
- the primary cue for /**h**/ is formant structure without voicing, an energy dip, and/or an increase in aspiration noise in higher frequencies.



❖ Place of articulation (**active**)

The articulatory gesture of the active place of articulation involves the more mobile part of the vocal tract. This is typically some part of the tongue or lips. The following areas are known to be contrastive:

1. The lower lip (*labial*)
2. Various parts of the front of the tongue:

The tip of the tongue
The upper front surface of the tongue just behind the tip, called the *blade* of the tongue
3.The surface of the tongue *under* the tip

In bilabial consonants both lips move, so the articulatory gesture is bringing together the lips, but by convention the lower lip is said to be active and the upper lip passive.

❖ MANNER OF ARTICULATION – PLOSIVES

Consonants are sounds which involve full or partial blocking of airflow. In English, the consonants are **p, b, t, d, ch, j, k, g, f, v, th, dh, s, z, sh, zh, m, n, ng, l, r, w,** and **y**. They are classified in a number of different ways, depending on the vocal tract details we just discussed.

1. Stops, also known as plosives. The air is blocked for a moment, then released. In English, they are
   p, b, t, d, k, and **g**.

   a. Bilabial plosives: **p** (unvoiced) and **b** (voiced)
   b. Alveolar plosives: **t** (unvoiced) and **d** (voiced)
   c. Velar plosives: **k** (unvoiced) and **g** (voiced)

Aspiration – the blowing out of air for the voiceless plosives. We use both in English (**pit vs poo**), but it isn't a distinction that separates one meaning from another.

2. Fricatives

:2. **Fricatives** involve a slightly resisted flow of air. In English, these include
f, v, th, dh, s, z, sh, zh, and h.

a. Labiodental fricatives: **f** (unvoiced) and **v** (voiced)
b. Dental fricatives : **th** (as in thin -- unvoiced) and **dh** (as in the -- voiced)
c. Alveolar fricatives : **s** (unvoiced) and z (voiced)
d. Palatal fricatives : **sh** (unvoiced) and **zh** (like the s in vision -- voiced)
e. Glottal fricative : **h** (unvoiced)

Voiceless: / f /, / ɵ /, / s /, / ʃ /, /h/
Voiced: / v /, / ð /, / z /, / ʒ /

3. Affricates:

total closure of speech organs and air is released with friction

(Voiceless: / **ʧ** / *church*) (Voiced: / **ʤ** / *judge)*

4. Nasals

Sounds are produced when air flow through the mouth is completely blocked and released through the nose.
Voiced : / m / , / n / , / ŋ /
There are no voiceless nasals.

5. LIQUIDS

Liquids are sounds with very little air resistance. In English, we have **l** and **r**, which are both alveolar, but differ in the shape of the tongue. For l, we touch the tip to the ridge of the teeth and let the air go around both sides. For the **r**, we almost block the air on both sides and let it through at the top. Note that there are many variations of **l** and **r** in other languages and even within English itself! Both / **l** / and / **r** / are voiced. red , led

6. APPROXIMANTS – GLIDES

Semivowels are sounds that are, as the name implies, very nearly vowels. In English, we have **w** and **y**, which you can see are a lot like vowels such as **oo** and **ee**, but with the lips almost closed for **w** (a bilabial) and the tongue almost touching the palate for **y** (a palatal). They are also called **glides**, since they normally "glide" into or out of vowel positions (as in woo, yeah, ow, and oy).
Examples : / **w** / and / **j** / Both sounds are voiced. wed yet

IPA Chart

		PLACE OF ARTICULATION													
		Bilabial		labiodental		dental		alveolar		palatal		Velar		glottal	
		-v	+v	-v	+v	-v	+v	-v	+v	-v	+v	-v	+v	-v	+v
manner of articulation	Stops	p	b					t	d			k	g	ʔ	
	Fricatives			f	v	θ	ð	s	z	ʃ	ʒ			h	
	Affricates									tʃ	dʒ				
	Nasals		m						n				ŋ		
	lateral Approximant								I						
	Retroflex Approximant								ɹ						
	Glides	M	w								j				
		−V (= voiceless) and +V (= voiced)													

❖ PHONEMES

Phoneme: smallest significant unit of sound.
Contrast: / **p** / and / **b** / 'pin' and 'bin' are phonologically similar except for the first phoneme.
The same applies to / **s** / and / **ʃ** /, 'sip' and 'ship'.

Minimal pairs- two different words which are identical in every way except for one sound segment that occurs in the same place in the string.

E.gs.: mat met ray lay
/ m**æ**t / / m**e**t / / **r**eɪ / / **l**eɪ /

If more than two words in a string, they are called minimal sets.

E.gs.: sue, shoe, chew bib, bit bid big
/ **s**u: / / **ʃ**u: / / **tʃ**u: / / bɪb / / bɪ**t** / / bɪ**d** / / bɪ**g** /

❖ ALLOPHONES

Allophone : a variant of a phoneme
Example: the / **p** / in 'pil' is different though similar sound in 'spil'.
The difference is in the aspiration /**p**/ in 'pit' can be transcribed /p^hɪ t/ with /p^h/ indicating aspiration. What about 'tap'?
Allophones occur only in certain positions within a word.

- Complementary distribution :

When two or more sounds do not occur in the same sound environment.
E.g.: / **l** / at the end of a syllable – / bʊ**l** / and /l/ at the beginning of a syllable - / **l**et /

- FREE VARIATION

Free variation - When a word is pronounced in two different ways – using two different phonemes but has no effect on the meaning.
Examples:
'either' - /a**Iðə**/ or / **i:ðə** /
'ed' endings of the past tense
'tomato' - / təma:təʊ / or / təme**I**təʊ /

3rd Lecture

Exercise

CONSONANT DESCRIPTION PRACTICE
Describe the following consonants.

[s]

[d]

[Z]

[T]

[m]

[w]

Give the consonant that the following descriptions correspond to.

voiced velar nasal
voiceless post alveolar affricate
voiced bilabial stop
voiceless velar stop
voiced alveolar fricative
voiced palatal glide

Manner of Articulation	Bilabial	Labio dental	Inter dental	Alveolar	Alveo-palatal	Palatal	Velar	Glottal
	Place of Articulation							
Stop	p b			t d			k g	ʔ
Fricative		f v	θ ð	s z	ʃ ʒ			h
Affricate					tʃ dʒ			
Nasal	m			n			ŋ	
Lateral Approximant				l				
Retroflex Approximant				ɹ				
Glide	ʍ w					j		

State of the Glottis

Voiceless	Voiced

Say whether the following consonants are voiced or voiceless.

[z], [T], [b], [p], [D], [s].
[f], [v], [t], [d], [k], [g], [S] (**this is the symbol for the sh of ship**)

- The following pairs of words are distinguished in pronunciation partly or solely according to whether they contain a voiced (**vd**) or a voiceless (**vl**) consonant. Say

which is the crucial consonant in each case, and specify its voicing status.

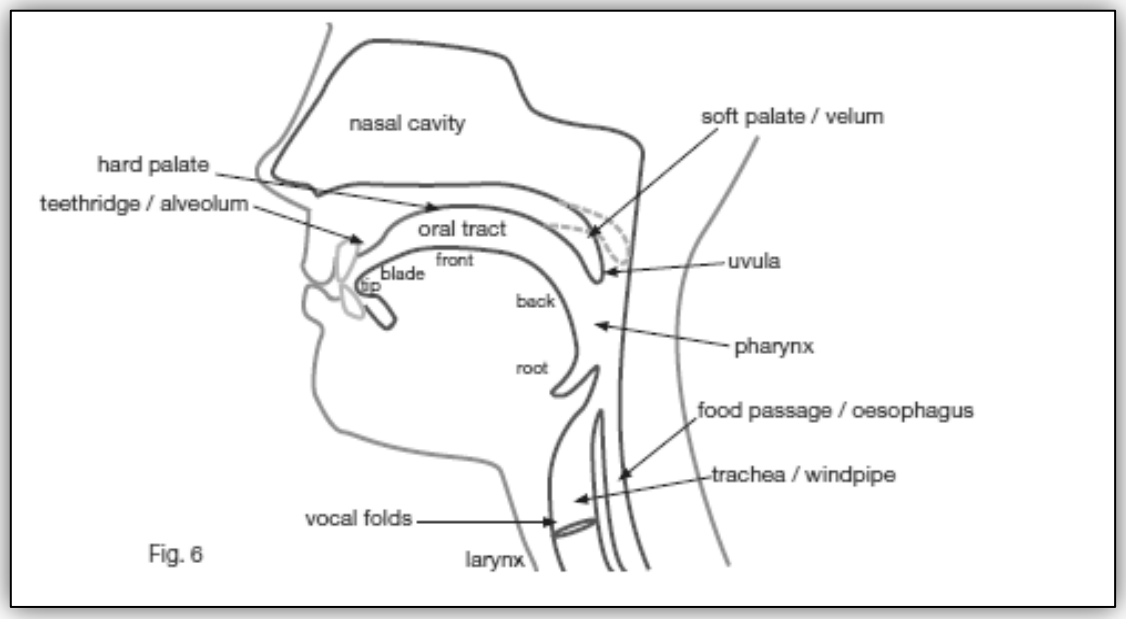
pin, bin
fail, veil
toll, dole
gin, chin
zoo, sue
wreath, wreathe ("in smiles")
either, ether (a kind of gas)
Aleutian, allusion.

- Changing the voicing of a single consonant in each of the following results in a different word.

Which consonant and which word? (Sometimes there's more than one possibility. Concentrate on the pronunciation, not on the spelling.)

seal
razor
ice
scarce
ankle
dug
bicker
lunge
thigh

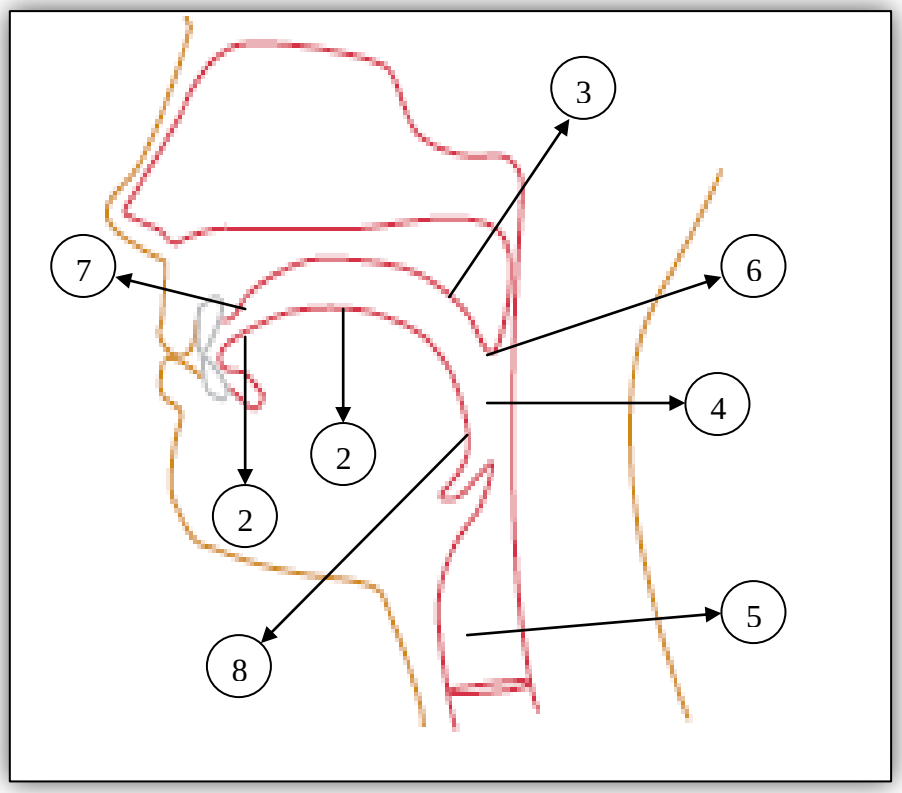
Do you Remember the Vocal Tract?



Exercises

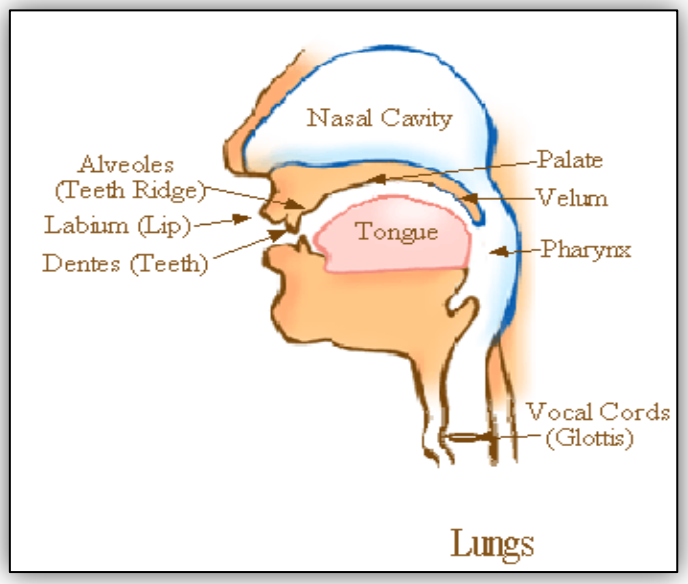
- *Show where the following are situated on this diagram of the upper vocal tract:*

1. blade of tongue, 2. front of tongue, 3. velum, 4. pharynx, 5. larynx, 6. uvula, 7. alveolum, 8. root of tongue.



- *Which of the following parts of the vocal tract are moveable?*

Lips, tongue, alveolum, pharynx, velum, uvula, nasal cavity



- Say whether the following are **T**RUE or **F**ALSE . if false , say what the correct statement should be.

(a) The pharynx is cartilaginous structure attached to the trachea .
(b) The alveolum serves to open and dose the entrance to be nasal cavity.
(c) The lower front teeth are not involved in speech.
(d) The uvula is the extreme tip of the soft pal.
(e) Larynx is an alternative name for the teeth

- Give the technical names for the following :

Wind- pipe , voice – box , space between the vocal cords , food – pipe , soft palate , teethridge, cavity at the back of the throat.

- Resisting the temptation to look at the text again, place the following consonants in the appropriate square in fig.28 above (say the sound to yourself if in doubt). Voiceless and voiced pairs go next to one another in the same square (voiceless first) .

[k , d , p , g , ɻ , b, ɖ , t]

Fig. 28

bilabial	dental	alveolar	velar

		place of articulation													
		Bilabial		labiodental		dental		alveolar		palatal		Velar		glottal	
		-v	+v	-v	+v	-v	+v	-v	+v	-v	+v	-v	+v	-v	+v
manner of articulation	Stops	p	b					t	d			k	g	ʔ	
	Fricatives			f	v	θ	ð	s	z	ʃ	ʒ			h	
	Affricates									tʃ	dʒ				
	Nasals		m						n				ŋ		
	lateral Approximant								I						
	Retroflex Approximant								ɹ						
	Glides	M	w								j				
		−V (= voiceless) and +V (= voiced)													

- Complete the following characterizations by inserting, in each case, two of the following terms: voiced, voiceless, bilabial, dental, alveolar, velar. N.B. voicing comes before place of articulation in such characterizations.

[b] is a _____ _____ consonant

[k] is a _____ _____ consonant

[d] is a _____ _____ consonant

[t] is a _____ _____ consonant

- Give the IPA consonant symbol corresponding to each of the following characterizations :

Voiceless alveolar _____

Voiced velar _____

Voiced dental _____

Voiceless bilabial _____

- The consonants in each of the following pairs are alike in some respects, but different in others. Specify the resemblances and differences. Example : [**p**] and [**b**]. Both are bilabial. Both are stops. [**p**] is voiceless, [**b**] is voiced.

[z] and [d]
[s] and [d]
[t] and [k]
[v] and [g]
[b] and [β]
[v] and [β]
[b] and [v]
[s] and [ʃ]

- Insert these affricates in the appropriate place on the following chart :

[tʃ] , [dʒ], [ʦ], [ʣ]

Bilabial	labiodental	dental	alveolar	Post- alveolar	palatal	Velar	uvular	Pharyn-geal	glottal

4th Lecture

Vowels

You'll recall that consonants are grouped according to certain "dimensions": Place of articulation, manner of articulation, etc. Vowels can also be grouped according to the dimensions along which they vary.
The Language Construction Kit lists these dimensions as Height, Frontness, Roundedness,

❖ Height

How high is the tongue – i.e., how close to the roof of the mouth? This is usually divided into three positions, quite creatively named "High," "Mid," and "Low." :-) Say "B**ee**" or "Y**ou**." That is High. Say "C**a**t" or "F**a**ther." That is Low. Say "S**ay**" or "Sh**ow**." That is Mid.

❖ Frontness

What part of the tongue is involved; that is, what part is raised or lowered? Is it the part close to the front of the mouth, the back, or the center? These are ever-so-cleverly classified as "Front," "Central," and "Back." Front vowels are heard in "B**ee**," "Sn**a**ke," and "C**a**t." Back vowels are heard in "Y**ou**," "Sh**ow**," and "F**a**ther." English has only two (some would lump them together and say only one) Mid vowels.
Essentially, it's the same sound but is classified as to whether it's used in a stressed or unstressed syllable. For stressed syllables, the Mid vowel is that which you hear in "Sh**u**t **U**p." The same sound, in an unstressed syllable, is the famous "Schwa Sound," which all English vowels very sneakily mutate into whenever you don't bother to put syllable stress on them. It's the sound of the first syllable in "**a**bout," for one example.

❖ Roundedness

In pronouncing these vowels, your tongue can't do it all alone; the position of the lips is also a consideration. Compare "S**ee**" and "S**ue**." Both have High vowels; "See" has a Front vowel and "Sue" a back vowel. What else differentiates them? It's the lip-rounding; for "See" you pull the corners of your mouth back tightly while for "Sue" you round them into a nice little "O"

▪ Hint:

All vowels involve free passage of lung air through the upper vocal tract.

(This is what distinguishes them from consonants, for which, as you began to see in the last chapter, there is always some obstruction above the level of the larynx **).**

The impediment to the airstream for vowels is located at the glottis, not in the supra-glottal tract: the vocal folds are in close enough contact for vibration to occur. The sound wave that this generates is amplified by the resonance of the cavities above the larynx.

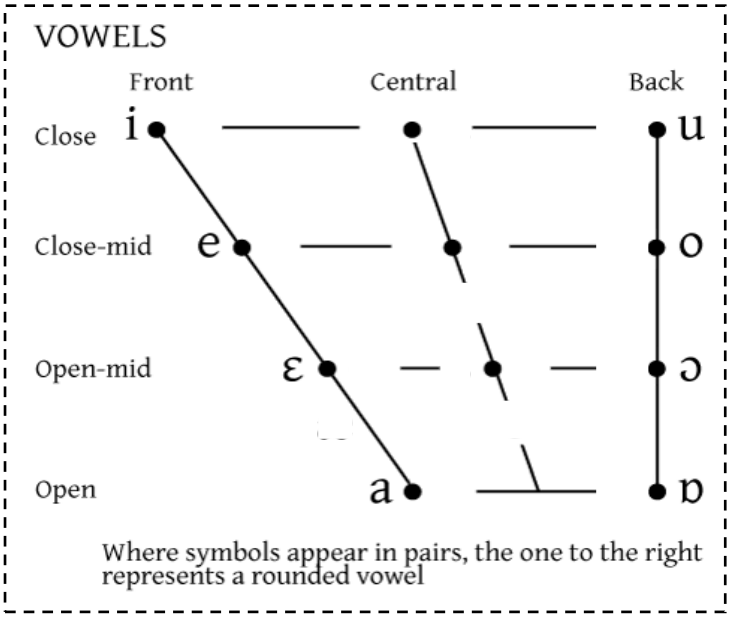
This means that vowels are normally voiced: "normally" because voiceless vowels are a possibility — they can best be thought of as whispered vowels. Although the vocal folds aren't actually vibrating for these, there's still sufficient constriction at the glottis for the airstream to be impeded and for turbulence **(i.e.** a sound wave **)** to be generated — you can feel this constriction if you say a few vowels in as loud a whisper as you can.

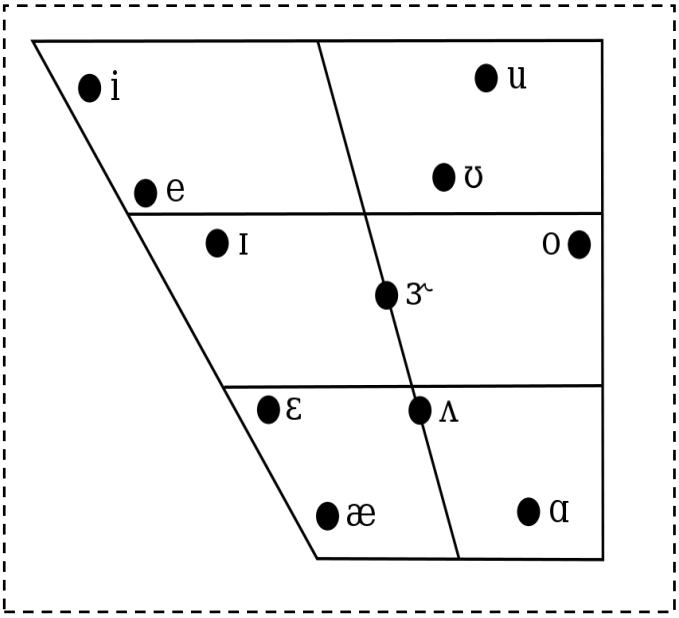
✶ VOWELS

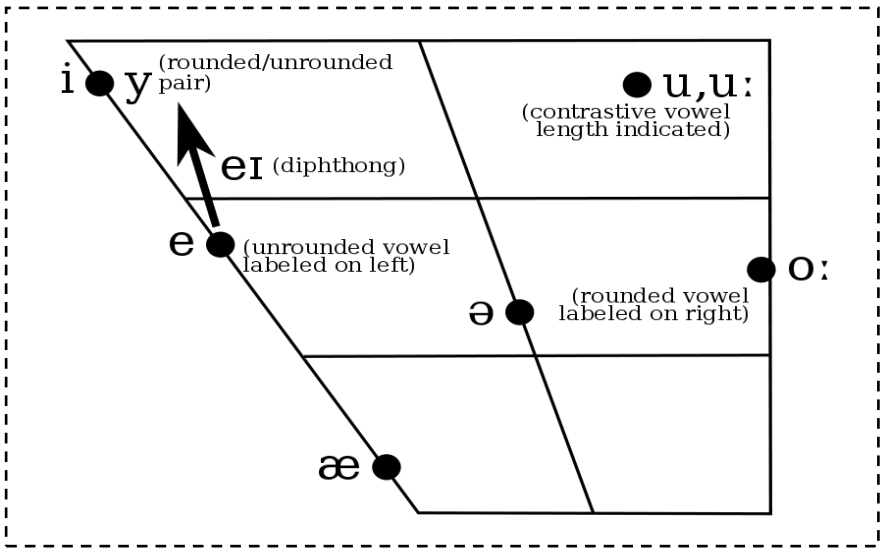
They are sounds in which there is no obstruction to the flow of air as it passes from the larynx to the lips

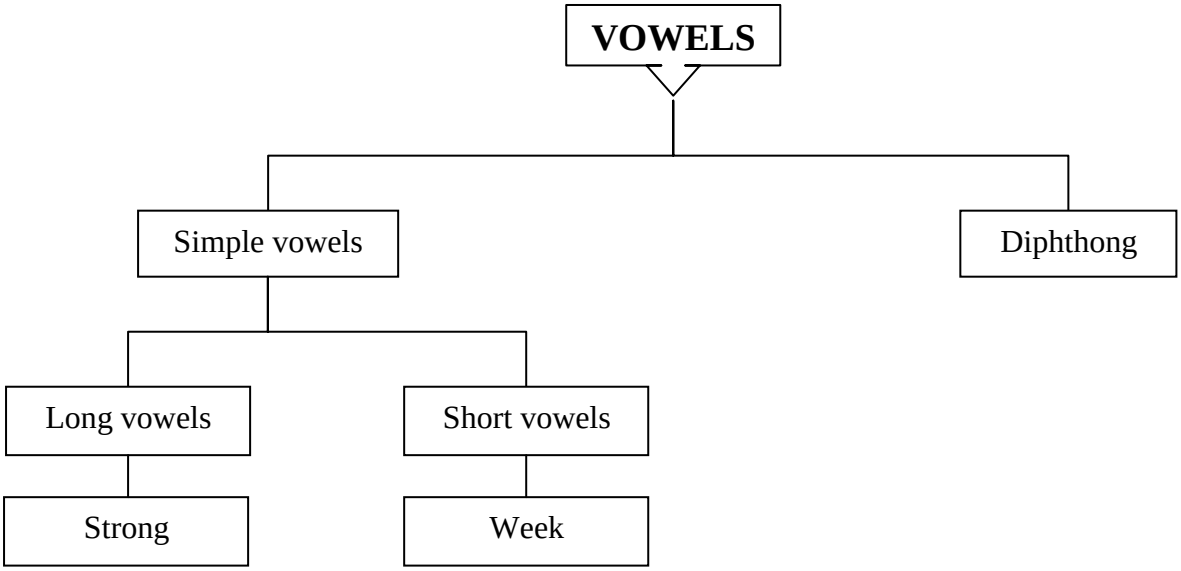
They are classified on the basis of a close-open and front- back diagram.

Vowel chart







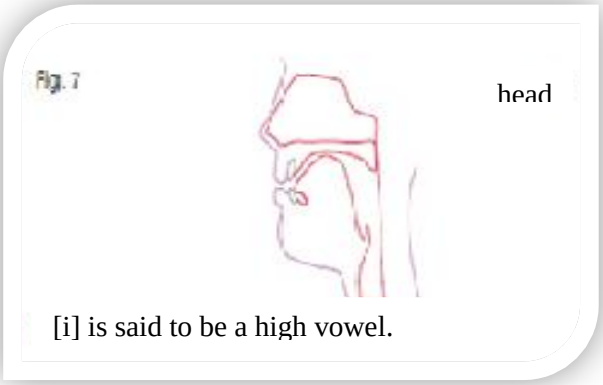


A. LONG VOWELS " strong "

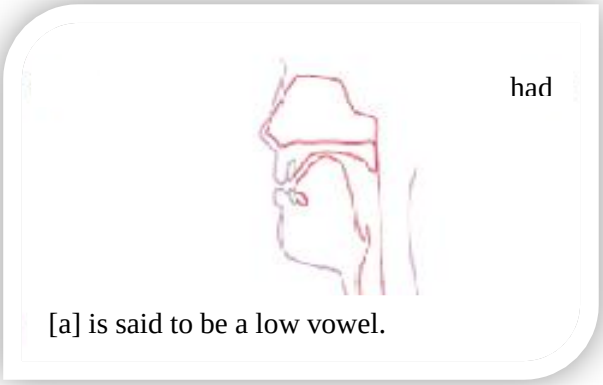
1. / iː / ➔ feel ➔ / f **iː** l /
   need ➔ / n**iː** d /
   free ➔ / fr**iː** /
   meat ➔ / m**iː** t /
   meet ➔ / m**iː** t /

2. / ɑː / ➔ path ➔ / pɑː θ /
   art ➔ / ɑː rt /
   father ➔ / fɑː ðə r /

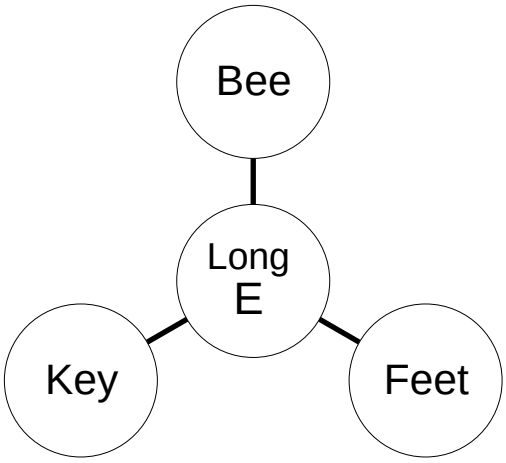
Classifying vowels is in large part a matter of specifying tongue positions. Here is the diagram for **head** (**i**-type vowel). The surface of the tongue is high in the mouth –close to the hard palate, but not does enough for the airflow to be impeded, which would turn the vowel into a consonant.



For **had**, the tongue is low in the mouth-almost flat; the mouth is much more open inside than for heed.



Long E Sound



3. / **ɔ:** / ➔ all ➔ / **ɔ:** l /
   four ➔ / f**ɔ:** r /
   walk ➔ / w**ɔ:**k **/**
   bought ➔ / b**ɔ:**t

4. / **u:** / ➔ refuse ➔ / refj**u:**z /
   Soup ➔ / s**u:**p **/**
   Pool ➔ / p**u:**l /

5. / **3:** ➔ girl ➔ / g**3:**rl /
   Bird ➔ / b**3:**rd /
   Earth ➔ / **3:**rθ /

Now the [u] of who'd is also a high vowel. What makes it different in quality from [i]?

B. SHORT VOWELS

1. / ɪ / ➔ hit ➔ / hɪt /
This ➔ / ðɪs /
Exam ➔ / ɪgzæm /

2. / **e** / ➔ nest ➔ / n**e**st /
Enter ➔ / **e**ntər /

Fig 10

[i] high + front
[u] high + back
[a] low + front

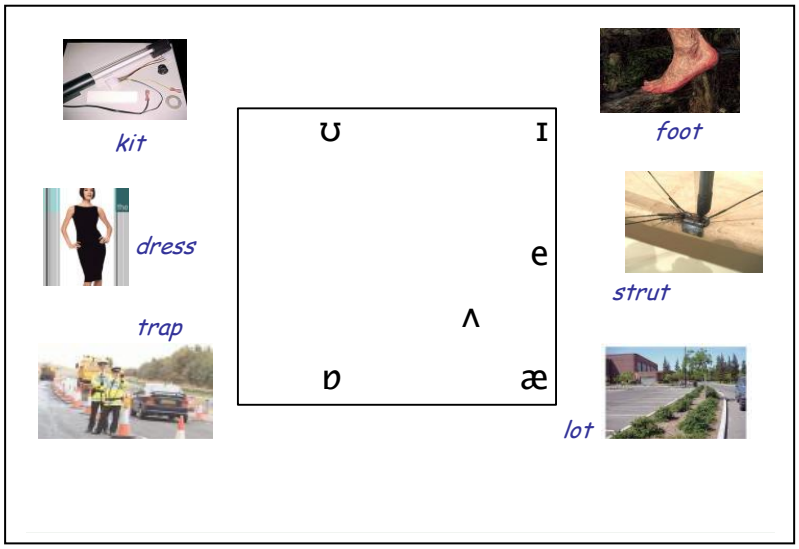
3. / **æ** / ➔ cat ➔ / k**æ**t /
hat ➔ / h**æ**t /
and ➔ / **æ**nd /

4. / **ʌ** / ➔ but ➔ / bʌt /
gun ➔ / gʌn /
duck ➔ / dʌk /

5. / **o** / ➔ dog ➔ / d**o**g /
   Shop ➔ / ʃ**o**p /
   Strong ➔ / str**o**ŋ /

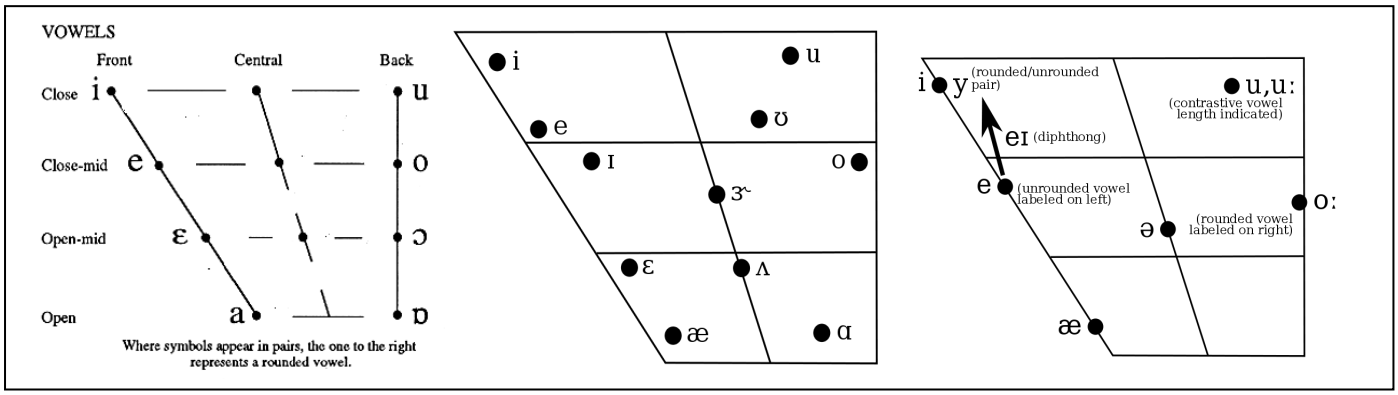
6. / ʊ / ➔ put ➔ / p**ʊ**t /
   Look ➔ / lʊk /
   Books ➔ / bʊks /
   Box ➔ / bʊks /

7. / ə / ➔ a play ➔ / əplaeI /
   again ➔ / əgeIn /
   a sleep ➔ / əsli:p /
   apartment ➔ / əpa:rtmənt /



- Again without looking at the text, say whether the following the statement are **t**rue or **f**alse.
  Correct any that are false.

a. [a] is a high back vowel.
b. [i] is a high front vowel.
c. [u] is a low back vowel.
d. [a] is a low front vowel.



- Practice using the alternative terminology :

a. Which is [i], open or close ?
b. Which is [u], open or close?
c. Which is [a], open or close?

- Match the articulatory terms in the first column with the descriptions in the second column

a. Low "surface of tongue raised towards hard palate"
b. Open "tongue advanced"
c. Front "tongue retracted"
d. High "narrow oral cavity"
e. Back " tongue flat"
f. Close "wide oral cavity"

5th Lecture

Elements of the Lecture

Short & Long Vowels with Diagrams
Diphthongs
Triphthongs & Glides

- **Phonetics**

The Study of the way Humans make, Transmit, and Receive Sounds.

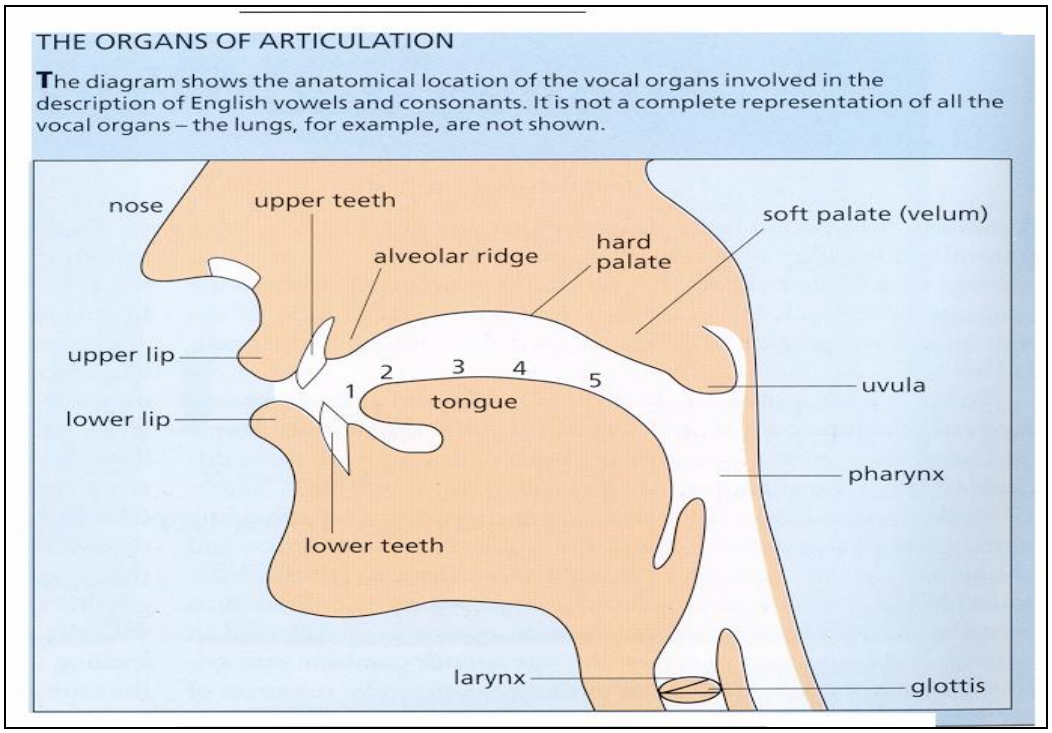
- **Phonology**

T he study of sound systems of languages.

- **Phoneme**

A phonological segment that can be phonetically predicted by a rule – /**b**/ in *bit* and /**p**/ in ***pit***.

The Organs of Speech and Articulation



- Languages are made up of vowels and consonants sounds
- English consists of 44 sounds (20 vowels and 24 consonants)

Vowels

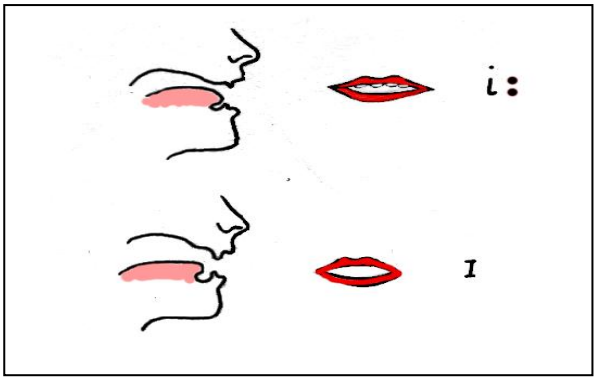
- Most vowel sounds are modified by the shape of the lips. (rounded / spread / neutral)
- Sounds are made by vibrating the vocal cords (voicing).

Vowels can be

a. single sounds – monophthongs or pure vowels
b. Double sounds - Diphthongs
c. Triple sounds - Triphthongs

Triphthongs : http://ead.univ-angers.fr/~menan/cerel/english/phonetics/english_phonetics.htm

- Pure vowels usually come in pairs consisting of long and short sounds

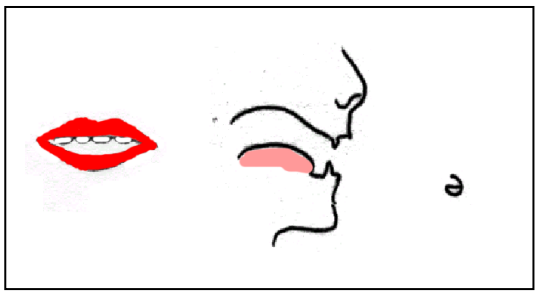


This is found in the word t***ea.***
The lips are **spread** and the sound is **long**

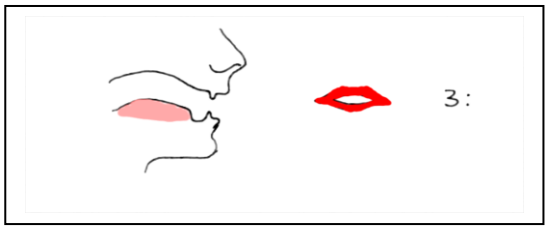
This is found in the word h***i***p.
The lips are **slightly spread** and the sound is **short**

The tongue tip is raised slightly at the front towards the alveolar. In the longer sound the tongue is raised higher.

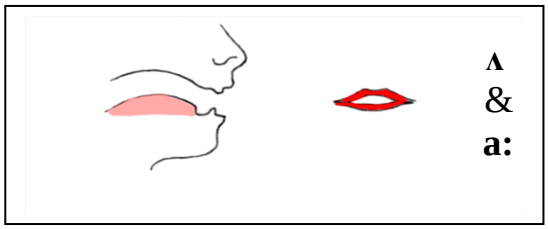
- The most common sound in English – the Schwa



This sound is made by relaxing the mouth and keeping your lips in a **neutral** position and making a **short** sound. It is found in words like pap***er,*** ov***er, a***bout, and common in weak verbs in spoken English.



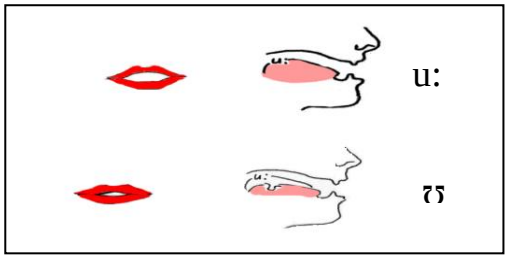
This sound is the **long** form of the schwa sound. It is found in words like th***ir***teen and b***ir***d.
The mouth is relaxed and lips are **neutral.**



This is the short sound – ***u***p, c***u***t & b***u***tter
This is the **long** sound – c***ar,*** f***a***st & d***ar***k
The centre of the tongue is raised towards the soft plate, the lips are **neutral.**

The **long** sound – y***ou,*** t***oo*** & bl***ue***

The short sound – G***ood,*** w***ou***ld & w***oo***l

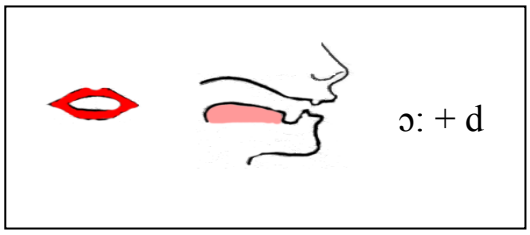


The lips are **rounded** and the centre and back of the tongue is raised towards the soft plate. For the **longer** sound the tongue is raised higher and the lips are **more rounded.**

Made with **rounded** lips and tongue slightly raised at the back

The **long** sound– d***oor,*** f***our*** & m***ore***

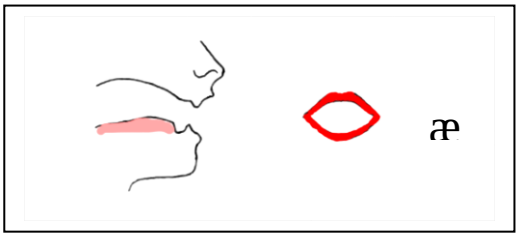
The **short** sound – h***o***t, cl***o***ck and wh***a***t.



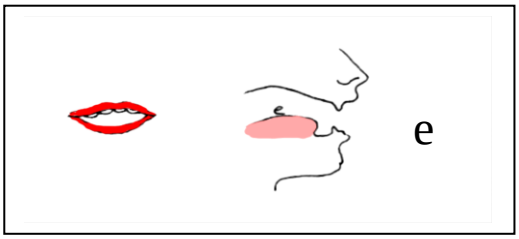
Two of the vowels do not have long sounds

This sound is made with the mouth **spread** wide open.

It is found in – c***a***t, m***a***n, ***a***pple & r***a***n



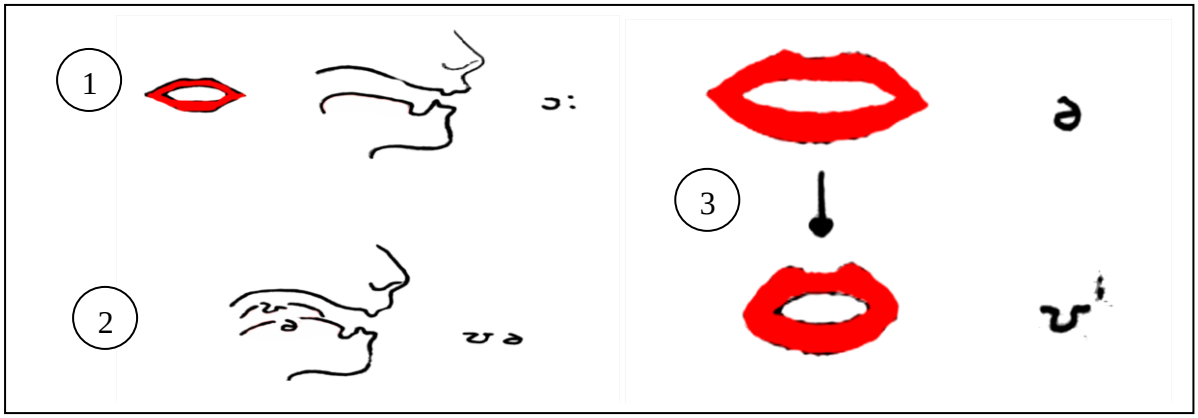
The sound of 'e' is found in – w***e***t, l***e***ft, wh***e***n & t***e***ll. Like the sound for 'a' it is a short sound that has no long version.
The vowel sounds we have just reviewed make up the rest of the diphthongs etc. that come next.



❋ ***Diphthongs, Triphthongs & Glides***

- **Diphthongs** are combinations of two sounds- **English has 8 diphthongs**
- **Triphthongs** are combinations of three sounds- **English has 1 triphthong (a diphthong + a schwa sound)**
- **Glides** are sounds made when the tongue moves from one position to another.

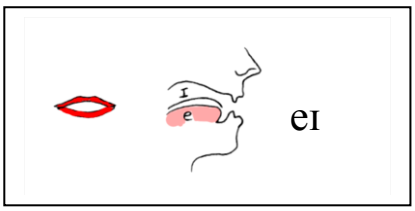
- Here we have three sounds; The sounds from 1) f**or** 2) t**our** 3) g**o**



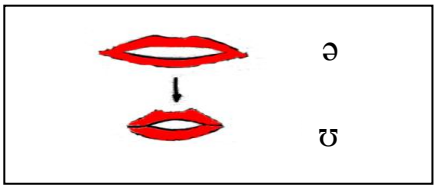
- Two of these sounds are diphthongs, combinations of vowels.

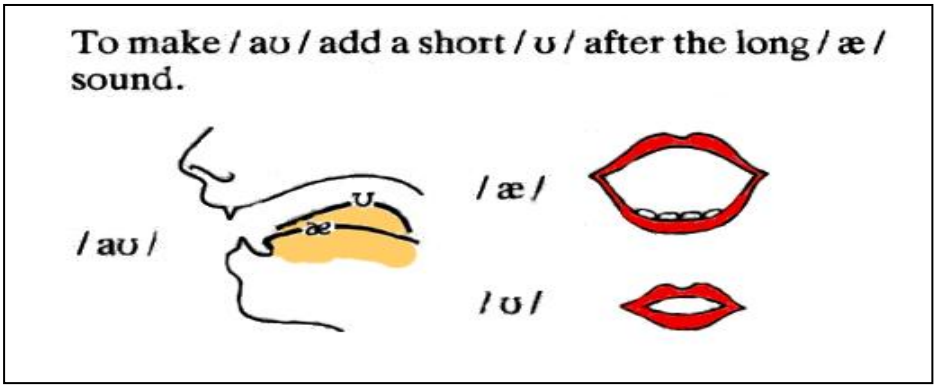
- Diphthongs are made by sliding the tongue for one position to another - this is know as a glide.

This diphthong is found in – h***ay,*** d***a***te, scr***a***pe & v***ei***n.



Here two more pure vowels are combined to make a sound.
This sound is like saying the letter 'O'. It begins with a ***er*** (schwa) and moves towards the '***oo***' sound found in g***oo***d.





Words like *cow*, *down*, *ground* and *town* all contain this sound.
(The ***a:*** is also used to make this diphthong)

Diphthongs are combinations of pure vowels.

a:+ I = 'aI'	- t*ie*, b*uy*, h*eigh*t & n*igh*t
e + I = 'eI'	- w*ay,* p*ai*d & g*a*te
ɔ: + I = 'ɔɪ'	– b*oy*, c*oi*n & c*oy*
e + ə = e ə	- wh*ere*, h*air* & c*are*
I + ə = I ə	- h*ere*, h*ear* & beer

Review all 8 sounds and try the exercises on the worksheets

6th Lecture

Phonetic Transcription

❖ The Meaning of Phonetic Transcription

⌑ Phonetic transcription **(**or phonetic notation**)**
is the visual representation of speech sounds (or phones).

The most common type of phonetic transcription uses a phonetic alphabet, e.g., the International Phonetic Alphabet.

The International Phonetic Alphabet (revised to 2005)

Consonants (Pulmonic)

Missing some symbols? Apply Doulos SIL font

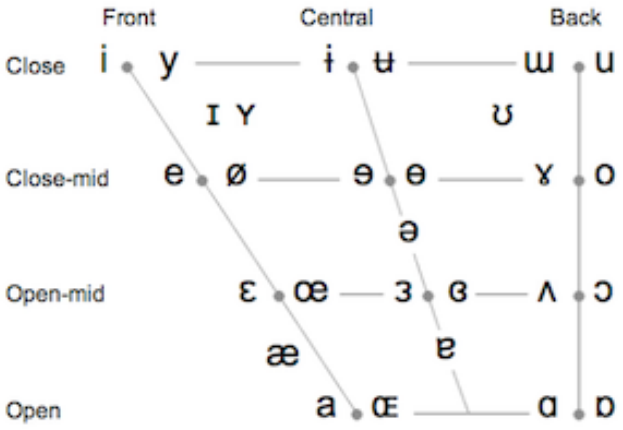
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k g	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

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	ɓ	Bilabial	’	Examples:
ǀ	Dental	ɗ	Dental/alveolar	p’	Bilabal
ǃ	(Post)alveolar	ʄ	Palatal	t’	Dental/alveolar
ǂ	Palatoalveolar	ɠ	Velar	k’	Velar
ǁ	Alveolar lateral	ʛ	Uvular	s’	Alveolar fricative

Vowels



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

♦ There are two “golden rules” for transcription:

1. **Think of the pronunciation, not the spelling.** Instead of letting yourself be mesmerized by the written form of the word, look away, or close your eyes, and ask yourself how you actually pronounce it. Among a thousand other pitfalls, this will help you to avoid inserting an [l] into your transcription of salmon, it will ensure that you transcribe the s of his with [z] not with [s], or the *f* of of with [v] not with [f], and it will prevent you from including the silent b of doubt in your transcription.

2. Use one symbol for each identifiable sound.
In many cases, the orthography (i.e. the spelling system) uses more than one letter in cases where a single symbol is required in a transcription: **ps, sh, ch, tch** are cases in point.
And a transcription, though it may be shorter, can convey
more precise information than the orthographic form (the spelling): **th** corresponds to either [**T**] or [**D**]) and the notorious -ough to [**ʌf**], [**u**:], [**ə**],[**aʊ**], [**əʊ**] or [**ɒf**] (enough, through, borough, bough, although, ough).

✱ *Broad and Narrow*

- Broad transcriptions
  - Represent only contrastive sounds (**phonemes**)
  - Enclosed in slashes: / /
  - Generally use only alphabetic symbols
- Narrow transcriptions
  - Represent **phones**
  - Capture as much phonetic detail as possible
  - Enclosed in brackets: **[ ]**
  - Can require use of diacritics

✱ *Broad and Narrow Phonetic transcription*

⌖ Broad phonetic transcription: captures the basic sounds; What the speaker *intended* to say; roughly equivalent to a phonemic transcription.

⌖ Narrow phonetic transcription: captures the precise pronunciation; what the speaker actually said; makes use of the full resources of the IPA.

⌖ Notational convention:

- Slashes / / for phonemic transcription
- Square brackets [ ] for phonetic transcription.

⌑ *English Phonemes*

Familiar IPA symbols, same sound:

1. [p] '**p**ot'
2. [b] '**b**ought'
3. [t] '**t**ot'
4. [d] '**d**ot'
5. [k] '**k**it'
6. [g] '**g**ot'
7. [r] '**r**ot'
8. [f] '**f**ought'
9. [v] '**v**ote'
10. [s] '**s**ot'
11. [z] '**z**it'
12. [m] '**m**a'
13. [n] '**n**ot'
14. [l] '**l**ot'
15. [w] '**w**alk'
16. [h] '**h**ot'

- *Sound/symbol correspondence*

enough [ʌf]	through [u:]	thorough [ə]	thought [ɔ:]	bough [aʊ]
think [θ]	those [ð]	thistle [θ]	thong [θ]	
church [tʃ]	chemistry [k]	Cheryl [ʃ]		

- *Familiar IPA symbols, different sounds:*

17. [j] ‘**y**acht’ *“yod”*
18. [i] ‘h**ee**d’
19. [e] ([ej]) ‘h**ay**ed’ ([ej] = a “diphthong”)
20. [ɑ] ‘h**o**d’
21. [o] ([ow]) ‘b**o**de’ ([ow] = a “diphthong”)
22. [u] ‘wh**o’**d’

- A **diphthong** is a phoneme that combines two phones.

- *Unfamiliar IPA symbols, for consonants:*

23. [θ] ‘**th**ought’ *“theta”*
24. [ð] ‘**th**ough’ *“edh”*
25. [ʃ] ‘**sh**ot’ *“esh”*
26. [ʒ] ‘vi**si**on’ *“ezh”*
27. [ŋ] ‘ri**ng**’ *“engma”*
28. [tʃ] ‘**ch**op’
29. [ʤ] ‘**j**ot’

Present		**Past**		**Participle**	
Am – is –are		Was –were		been	
Beat –s	/bi:t/	beat	/bi:t/	beaten	/'bi:tn/
Become –s	/bɪ 'kʌm/	became	/bɪ 'keɪm/	become	/bɪ 'kʌm/
Begin –s	/bɪ 'gɪn/	began	/bɪ 'gæn/	begun	/bɪ 'gʌn/
Bend –s	/bend/	bent	/bent/	bent	/bent/
Bind –s	/baɪnd/	bound	/baʊnd/	bound	/baʊnd/
Bite –s	/baɪt/	bit	/bɪt/	bitten	/'bɪtn/
Bleed – s	/bli:d/	bled	/bled/	bled	/bled/
Blow –s	/blou/	blew	/blu:/	blown	/bloun/
Break –s	/breɪk/	broke	/brouk/	broken	/'broukən/
Bring –s	/brɪŋ/	brought	/brɔ:t/	brought	/brɔ:t/
Build –s	/bɪld/	built	/bɪlt/	built	/bɪlt/
burn–s	/bɜ:rn/	burnt	/bɜ:rnt/	burnt	/bɜ:rnt/

Burn –s	/bɜ:rn/	burned	/bɜ:rnd/	burned	/bɜ:rnd/
Buy –s	/baɪ/	bought	/bɔ:t/	bought	/bɔ:t/
Catch- es	/kætʃ/	caught	/kɔ:t/	caught	/kɔ:t/
choose –s	/tʃu:z/	chose	/tʃouz/	chosen	/'tʃouzən/
Come –s	/kʌm/	came	/keɪm/	come	/kʌm/
Cost –s	/kɒst/	cost	/kɒst/	cost	/kɒst/
Cut –s	/kʌt/	cut	/kʌt/	cut	/kʌt/
Dig –s	/dɪg/	dug	/dʌg/	dug	/dʌg/
Do –es	/du:/	did	/dɪd/	done	/dʌn/
draw –s	/drɔ:/	drew	/dru:/	drawn	/drɔ:n/

Dream –s	/dri:m/	dreamed	/dri:md/	dreamed	/dri:md/
Drink –s	/drɪŋk/	drank	/dræŋk/	drunk	/drʌŋk/
Drive –s	/draɪv/	drove	/drouv/	driven	/'drɪvən/
Eat –s	/i:t/	ate	/eɪt, et/	eaten	/'i:tn/
Fall –s	/fɔ:l/	fell	/fel/	fallen	/'fɔ:lən/
Feed –s	/fi:d/	fed	/fed/	fed	/fed/
Feel –s	/fi:l/	felt	/felt/	felt	/felt/
Fight –s	/faɪt/	fought	/fɔ:t/	fought	/fɔ:t/
Find –s	/faɪnd/	found	/faʊnd/	found	/faʊnd/
Fly – flies	/flaɪ/	flew	/flu:/	flown	/floun/
Forget –s	/fər 'get/	forgot	/fər 'gɒt/	forgotten	/fər 'gɒtn/
Forgive –s	/fər 'gɪv/	forgave	/fər 'geɪv/	forgiven	/fər 'gɪvən/
Freeze –s	/fri:z/	froze	/frouz/	frozen	/'frouzən/
Get –s	/get/	got	/gɒt/	got	/gɒt/
Get –s	/get/	got	/gɒt/	gotten	/'gɒtn/
Give –s	/gɪv/	gave	/geɪv/	given	/'gɪvən/
Go -goes	/gou/	went	/went/	gone	/gɒn/
Grow –s	/grou/	grew	/gru:/	grown	/groun/
Hang –s	/hæŋ/	hung	/hʌŋ/	hung	/hʌŋ/
Have –has	/hæv/	had	/hæd/	had	/hæd/
Hear –s	/hɪər/	heard	/hɜ:rd/	heard	/hɜ:rd/
Hide –s	/haɪd/	hid	/hɪd/	hidden	/'hɪdn/
Hurt –s	/hɜ:rt/	hurt	/hɜ:rt/	hurt	/hɜ:rt/

Keep –sa	/ki:p/	kept	/kept/	kept	/kept/
Know –s	/nou/	knew	/nu:/	known	/noun/
Lay –s	/leɪ/	laid	/leɪd/	laid	/leɪd/
Lead –s	/li:d/	led	/led/	led	/led/
Learn –s	/lɜ:rn/	learnt	/lɜ:rnt/	learnt	/lɜ:rnt/
Learn	/lɜ:rn/	learned	/lɜ:rnd/	learned	/lɜ:rnd/
Leave –s	/li:v/	left	/left/	left	/left/
Lend –s	/lend/	lent	/lent/	lent	/lent/
Lie –s	/laɪ/	lay	/leɪ/	lain	/leɪn/
Lose –s	/lu:z/	lost	/lɒst/	lost	/lɒst/

Make –s	/meɪk/	made	/meɪd/	made	/meɪd/
Mean –s	/mi:n/	meant	/ment/	meant	/ment/
Meet –s	/mi:t/	met	/met/	meta	/met/
Pay –pays	/peɪ/	paid	/peɪd/	paid	/peɪd/
Read –s	/ri:d/	read	/red/	read	/red/
Ride –s	/raɪd/	rode	/roud/	ridden	/'rɪdn/
Ring –s	/rɪŋ/	rang	/ræŋ/	rung	/rʌŋ/
Rise –s	/raɪz/	rose	/rouz/	risen	/'rɪzən/
Run –s	/rʌn/	ran	/ræn/	run	/rʌn/

Teach –es	/ti:tʃ/	taught	/tɔ:t/	taught	/tɔ:t/
Tear –s	/teər/	tore	/tɔr/	torn	/tɔrn/
Tell –s	/tel/	told	/tould/	told	/tould/
Think –s	/θɪŋk/	thought	/θɔ:t/	thought	/θɔ:t/
Throw –s	/θrou/	threw	/θru:/	thrown	/θroun/
Understand –s	/ʌndər 'stænd/	understood	/ʌndər 'stʊd/	understood	/ʌndər 'stʊd/
Wake –s	/weɪk/	woke	/wouk/	woken	/'woukən/
Wear –s	/weər/	wore	/wɔr/	worn	/wɔrn/
Win –s	/wɪn/	won	/wʌn/	won	/wʌn/
Write	/raɪt/	wrote	/rout/	written	/'rɪtn/

❋ Transcription – the art of reducing speech to writing

❋ Remember: a word in isolation may be spoken differently to a word in connected speech

***to* = [tu:]**

give it to him = [gɪv ɪt tə ɪm]

7th Lecture

Syllable Structure in English

What Does Syllabification of a Word Mean?

- ◊ Words can be cut up into units called **syllables.**
- ◊ Humans seem to need syllables as a way of segmenting the stream of speech and giving it a rhythm of strong and weak beats, as we hear in Music.
- ◊ Syllables exist only to make speech easier for the brain to process.
- ◊ A word contains at least one syllable.

△ *Most speakers of English …*

…have no trouble dividing a word up into its component syllables. Sometimes how a particular word is divided might vary from one individual to another, but a division is always easy and always possible. Here are some words divided into their component syllables **(**a period is used to mark the end of a syllable**):**

tomato = to.ma.to
window = win.dow

(some people might put some of the periods in different places in this word).

❖ **Syllables and their parts**

✶ The parts are **onset** and **rhyme**; within the rhyme we find the **nucleus** and **coda**.

✶ Not all syllables have all parts; the smallest possible syllable contains a nucleus only.

✽ A syllable may or may not have an onset and a coda.

❖ Onset (O)

Onset: the beginning sounds of the syllable; the ones preceding the nucleus. These are always consonants in English. The nucleus is a vowel in most cases, although the consonants **[r], [l],[m], [n]**, and the velar nasal (the 'ng' sound) can also be the nucleus of a syllable.

In the following words, the onset is in bold; the rest underlined.

r<u>ead</u> fl<u>op</u> str<u>ap</u>

△ If a word contains more than one syllable, each syllable will have the usual syllable parts:

w<u>in</u>.**d**<u>ow</u>
t<u>o</u>.**m**<u>a</u>.**t**<u>o</u>
pr<u>e</u>.**p**<u>os</u>.**t**<u>e</u>.**r**<u>ous</u>
f<u>un</u>.**d**<u>a</u>.**m**<u>en</u>.**t**<u>al</u>

❖ Rhyme (R)

Rhyme (or rime): the rest of the syllable, after the onset (the underlined portions of the words above).

- The rhyme can also be divided up:

Rhyme = nucleus + coda

❖ Nucleus (N)

◊ Nucleus is the core or essential part of a syllable. A nucleus must be present in order for a syllable to be present.

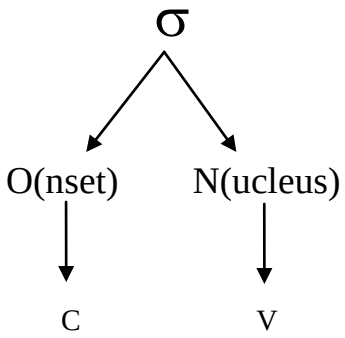
- In English and most other languages, most syllable nuclei are **vowels**.

- The English liquids **[r l]** and the nasals **[m n]** can be the nuclei of syllables under certain conditions. **[r]** can be a nucleus as easily as a vowel, in any position: the words 'bird', have **[r]** as the nucleus; in other words, there is no vowel in the pronunciation of these syllables, even though they have one in the spelling. **[brd]**

[l] and the nasals **[m n]** become syllable nuclei when they follow an alveolar consonant in the last syllable of a word. This happens in the relaxed or casual rather than very formal articulation of the word. Compare casual vs. formal pronunciations of 'button', 'bottle', 'bottom'.

The Core Syllable

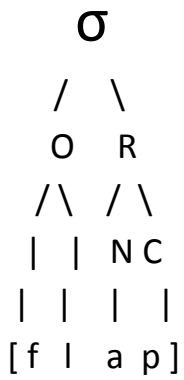
The core syllable is made up of a Nucleus preceded by an Onset:



* Some languages only have CV syllables.
* More commonly, languages allow for syllables of greater complexity.
* The core syllable is, however, found in every language.
* The fact that CV syllables are cross-linguistically attested offers an interesting parallel with their invariable occurrence in early child language.

✶ Linguists often use tree diagrams to illustrate syllable structure. 'Flop', for example, would look like this (the word appears in IPA symbols, not English spelling).
's' = 'syllable'; **'O'** = 'onset'; **'R'** = 'rhyme'; **'N'** = 'nucleus'; **'C'** = 'coda'.

- The syllable node at the top of the tree branches into Onset and Rhyme; the Onset node branches because it contains two consonants, **[f]** and **[l].** The Rhyme node branches because this syllable has both a nucleus and a coda.



△ *Steps to determine the diagram:*

a. Determine the nucleus (N)
b. Add Rhyme (R) on the ordinate of the nucleus
c. Determine the onset (O) and the coda (C).

◊ The syllable structure analysis of the words 'read', 'flop', 'strap' and 'window' are as follows (IPA symbols are used to show the sounds in the word/syllable):

* **read = one syllable**
Onset = [r]
Rhyme = [id] (within the rhyme:)
Nucleus = [i]
Coda = [d]

* **flop = one syllable**
Onset = [f l]
Rhyme = [a p]
Nucleus = [a]
Coda = [p]

* **window = 2 syllables**
First syllable: [wIn]
Onset = [w]
Rhyme = [I n]
Nucleus = [I]
Coda = [n]
Second syllable: [d o]
Onset = [d]
Rhyme = [o]
Nucleus = [o]

(This syllable has no coda)

✶ *Notice*

a. **If a syllable has the coda**, it is called as **closed syllable**
Example : cap, sit, man
b. **If a syllable doesn't have the coda** it is called as **open syllable.**
Example : he, she, me

❖ *Liquids and nasals as syllable nuclei*

- The English liquids [**r l**] and the nasals [**m n**] can be the nuclei of syllables under certain conditions. [**r**] can be a nucleus as easily as a vowel, in any position: the words 'bird', 'word', 'her', 'fur', the first syllable of 'perceive' and 'surname' and the final syllables of 'mother', 'actor' (in casual pronunciation) all have [**r**] as the nucleus; in other words, there is no vowel in the pronunciation of these syllables, even though they have one in the spelling.

- [**l**] and the nasals [**m n**] become syllable nuclei when they follow an alveolar consonant in the last syllable of a word. This happens in the relaxed or casual rather than very formal articulation of the word. Compare casual vs. formal pronunciations of 'button', 'bottle', 'bottom'.

- When one of these sounds is a syllable nucleus, this is shown in transcription by putting a very short vertical line under the IPA symbol
[**r̩ l̩ m̩ n̩**].

Summary of the elements of a phonological system…

The phonological system of a language includes various units plus patterns which are used to combine the units into larger units. The units of a phonological system are:

1. features: aspects or characteristics of a speech sound that arise from the way the sound is articulated or the way it sounds to the ear. 'Voicing' is a feature that varies according to whether or not the vocal cords vibrate during the articulation of a sound; the sound [**s**] is voiceless, but the sound [**z**] is voiced, for example. Other features include 'manner', or what sort of gesture or position is used to make a consonant sound (a 'stop' involves blocking the airstream completely for a fraction of a second, as for [**p**], while a 'fricative' involves creating a narrow opening through which air escapes, as for [**f**]. There are also **suprasegmental features**, which are 'overlaid' on syllables or words. One such feature is **stress**, known outside linguistics as 'where the accent is in a word'. In 'potato', the stress falls on the second syllable; in 'promise' on the first.

2. segments: a segment is a speech sound such as [**m**] or [**i**]. Speech sounds are made by putting several features together. [**m**], for example, is created by vibrating the vocal cords (feature**: voiced**), closing the mouth at the lips (feature**: bilabial**), and lowering the soft palate so that air can escape through the nose (feature: **nasal**). These three gestures occur simultaneously. The result is a **voiced bilabial nasal,** [**m**]. Thus, segments are units that are built up from features; features are the building blocks for segments.

3. syllables: a syllable is a **rhythmic** unit of speech. Syllables exist to make the speech stream easier for the human mind to process. A syllable comprises one or more segments; segments are the building blocks for syllables. Details on the syllable are found below.

4. words: words are made of syllables.

✶ *The **patterns** or rule systems of a phonological system include:*

1. phonotactics, also known as **sequence constraints**. These are restrictions on the number and type of segments that can combine to form syllables and words; they vary greatly from one language to another. In English, <u>for example,</u> a word may begin with up to three consonants, but no more than three. If a word does begin with three consonants, the first will always be [**s**], the second must be chosen from among the voiceless stops [**p t k**] and the third from among the liquids [**l r**] or glides [**w y**]. Thus we get words <u>such as</u> 'squeeze' [**s k w i z**] in English, but not words such as [**p s t a p**].

2. phonological processes, including **coarticulation processes**, are modifications of the feature structure of a sound that occur for one of two reasons: to make sounds that are near each other more alike, thus make articulation easier **(**assimilation**)**, or to make sounds more different from each other **(**for instance, aspiration makes voiceless stops such as [**p**] and [**k**] more different from voiced ones such as [**b**] and [**g**].

✶ *Draw, the syllable structure of the following words:*

apron
basic
began
begin
depend
even
hotel

✻ *<u>Exercise</u>: Analyzing the syllable structure of English words*

Using the models on the 'Syllable structure in English' page for the words 'read', 'flop', and 'window', analyze the following words into their syllable structure. (See page 37)

(1) Write the word with periods between the syllables; use IPA symbols - Ex. 'baby' = [be.bi]
(2) List and identify the parts of each syllable

Ex. : 'boondocks' = [bun.daks]

First syllable: [bun]

Onset [b]
Rhyme [un]
Nucleus [u]
Coda [n]

Second syllable: [daks]

Onset [d]
Rhyme [aks]
Nucleus [a]
Coda [ks]

* *Remember that diphthongs count as single vowel segments.*

Here are your words:

(1) playdough
(2) thanks
(3) nondescript (take your time!)
(4) toys
(5) straw
(6) plastic

8th Lecture

Syllables Practice

What are syllables?

- Syllables and their parts

- The parts are **onset** and **rhyme**; within the rhyme we find the **nucleus** and **coda**.
- Not all syllables have all parts; the smallest possible syllable contains a nucleus only.

* A syllable may or may not have an onset and a coda.

✶ Onset (O)

Onset: the beginning sounds of the syllable; the ones preceding the nucleus. These are always consonants in English. The **nucleus** is a vowel in most cases, although the consonants [**r**], [**l**], [**m**], [**n**], and the **velar nasal** (the 'ng' sound) can also be the nucleus of a syllable.

△ In the following words, the onset is in bold; the rest underlined.

r<u>ead</u> fl<u>op</u> str<u>ap</u>

△ If a word contains more than one syllable, each syllable will have the usual syllable parts:

w<u>in</u>.**d**<u>ow</u>
t<u>o</u>.**m**<u>a</u>.**t**<u>o</u>
pr<u>e</u>.**p**<u>os</u>.**t**<u>e</u>.**r**<u>ous</u>
f<u>un</u>.**d**<u>a</u>.**m**<u>en</u>.**t**<u>al</u>

✶ Rhyme (R)

Rhyme (or **rime**): the rest of the syllable, after the onset (the underlined portions of the words above). The rhyme can also be divided up:

Rhyme = nucleus + coda

✶ Nucleus (N)

◊ Nucleus is the core or essential part of a syllable. A nucleus must be present in order for a syllable to be present.

- In English and most other languages, most syllable nuclei are **vowels**.
- The English liquids **[r l]** and the nasals **[m n]** can be the nuclei of syllables under certain conditions. **[r]** can be a nucleus as easily as a vowel, in any position: the words 'bird', have **[r]** as the nucleus; in other words, there is no vowel in the pronunciation of these syllables, even though they have one in the spelling. **[brd]**

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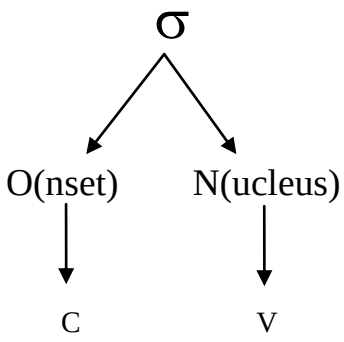
The Core Syllable

The core syllable is made up of a Nucleus preceded by an Onset:



Jump	⇒ ***How many <u>syllables</u> does this word have?*** ⇒	1	<u>Jump</u>
Jumping		2	Jump **.** ing
Help		1	<u>Help</u>
Hello		2	<u>hel</u> **.** <u>lo</u>
pencil		2	<u>pen</u> **.** cil
clock		1	<u>clock</u>
table		2	<u>ta</u> **.** ble
happy		2	<u>hap</u> **.** py
school		1	<u>school</u>
Liverpool		3	Liv**.** er**.** pool
Carefully		3	Care **.** ful **.** ly
Mummy		2	<u>mum</u> **.** <u>my</u>
computer		3	com**.** <u>put</u> **.** er

9th Lecture

Elements of the Class

Strong and Weak Syllables
Ths Shwa
Close front and close back vowels.
The Nature of Stress
Word stress rule
Sentence stress in English

❖ Syllable structure

The general structure of a syllable consists of the following segments:

- Onset (obligatory in some languages, optional or even restricted in others)
- Rime
- Nucleus (obligatory in all languages)
- Coda (optional in some languages, highly restricted or prohibited in others)

tree representation of a CVC syllable.

❖ Strong and weak syllables

A close observation of English phonology will reveal that many syllables are weak; this is true of many other languages ,but their constant occurrence and their importance makes it imperative to study them closely.
So it is necessary to study how these weak syllables are pronounced and where they occur in English..

✶ *What does "stress" mean?*

stress is the relative emphasis that may be given to certain syllables in a word, or to certain words in a phrase or sentence.

The term is also used for similar patterns of phonetic prominence inside syllables. The word **accent** is sometimes also used with this sense.

✶ *What do we mean by :strong: and :weak:?*

In the present context, we are using these terms to refer to phonetic characteristics of syllables. We could describe them partly in terms of stress (by saying, for example, that strong syllables are stressed and weak syllables unstressed),but until we describe what " stress" means such a description would be very useful.

* Rule

The more important thing to note at present is that any strong syllable will have as its centre one of the vowel phonemes(or possibly a triphthong)but not Shwa.

While comparing the weak syllables containing vowels with strong syllables, it is observed that vowel in a weak syllable tends to be shorter, of lower intensity and different in quality.

For example, in the other word " father /f ɑ: ə the second syllable , which is weak is shorter than the first, is less loud and has a vowel that cannot occur in strong vowels. In a word like " bottle" /bɒtl/ the weak second syllable contains no vowel at all, but consists entirely of the consonant. We call this a syllabic consonant.

❖ The vowel (" shwa") ə

The most frequently occuring vowel in English language is shwa **ə** , which is always associated with weak syllables. In quality it is mid(that is, half-way between close and open) and central **(** that is, half way between front and back**).**It is generally described **as lax,** that is , not articulated with much force and energy.

* Rule

Most of the weak syllables in English have **shwa** but it does not mean that all weak syllables have **shwa** . Learners of English will have to know about the proper placement of the **shwa**.

➢ *Here are some examples in which spellings act as guide to predict the weak syllable.*

- Spelt with " a '; strong pronuciation would be **æ**

attend / ətend / - character / kærəktə / - barracks / bærəks /

- Adjectival endings spelt " ate" ; strong pronunciation would be **eI**

intimate / IntImət / - accurate/ ækjərət / - desolate / desələt /

❖ *Close front and close back vowels*

Two other vowels are commonly found in weak syllables, one close front (in the general area of **i:** and **I**) and the other close back rounded (in the general region of **u:** and **ʊ**) .

In strong syllables it is easy to distinguish i: from **,u:** from **ʊ** , but in weak syllables the difference is not so clear. For example, although it is easy enough to decide which vowel one hears in **" beat "** or **" bit"** , it is much less easy to decide which vowel one hears in the second syllable of words such as, **" easy"** or **" busy".**

✶ *What is the weak form?*

English is a stress-timed language, which means that stressed syllables are equal in timing. In order to fit our words into this pattern, we tend to "squash" or compress other syllables or words occurring between stresses, in order to keep up with the more or less regular rhythm. Therefore, compressing or "weakening" some sounds is necessary to keep the rhythm of English.

A weak form is the pronunciation of a word or syllable in an unstressed manner.

Of course, the difference between the strong form (**stressed**) and the weak form (**unstressed**) of a word is not apparent in writing, but in speech these two variations in pronunciation can be drastically different. If spoken in isolation, the weak form of a word would probably be unintelligible. The difference between the two forms can affect meaning. See →

- Here is an example to show how strong and weak forms of a single word (***that***) can change the entire meaning of a sentence:
- John thinks that man is evil. **/ð ə t/**
  This version of the sentence, with the weak (**unstressed**) form of ***that***, means "John thinks all humans are evil." **ə**
- John thinks that man is evil. / **æt**/
  This version of the sentence, with the strong (**stressed**) form of ***that***, means "John thinks a specific (male) individual is evil."
- As indicated by this example, if a speaker unknowingly uses the strong form instead of the weak form, misunderstandings can occur.

* *There are two good reasons why weak and strong syllables ought to be learnt*

First, teaching weak forms can help students improve their production of spoken English. Because of the influence of their first language, foreign students tend to pronounce every word very clearly. As a result, their speech always sounds foreign, sometimes unintelligible, because enunciating each word in a sentence can disrupt the natural rhythm of spoken English.

Second, not knowing the weak form may inhibit students' comprehension of the English spoken by fluent speakers. Therefore, acquiring weak forms is important not only for students' production of spoken English but also for their listening comprehension.

❖ The nature of stress

◊ All stressed syllables (or strong syllables) are more **prominent** than unstressed syllables (or weak syllables) . Four different factors are important:

1. Stressed ayllables are **louder** than unstressed syllables; (loudness)

2. The **length** of syllables; If one syllable is longer than the others there is quite a strong tendency to hear it as stressed;

3. The **pitch** of the syllable: pitch in speech is realted to the frequency of vibration of the vocal cords and to the musical notion of low and high pitched notes;

4. A syllable will tend to be more prominent if it contains a vowel that is different in **quality** from neighbouring vowels (i.e look at vowels against vowels encountered in weak syllables)

✶ How do you say ***teacher***?

Longer	teeeeeeeeeeee cher	
Higher	tea	
		cher
Louder	TEA cher	
All three combined	TEEEEEEEEEE	
		cher

✶ Word Stress Rule

Word type		**Where is the stress?**	**Examples**
Two syllables	Nouns	on the first syllable	**cen**ter **ob**ject **flow**er
	Verbs	on the last syllable	re**lease** ad**mit** ar**range**
Compound	Nouns (N + N) (Adj. + N)	on the first part	**desk**top **pen**cil case **book**shelf **green**house
	Adjectives (Adj. + P.P.)	on the last part (the verb part)	well-**meant** hard-**headed** old-**fashioned**
	Verbs (prep. + verb)		under**stand** over**look** outper**form**

Word type		Where is the stress?	Examples
Phrasal Verbs		on the particle	turn **off** buckle **up** hand **out**
Word with added ending	-ic	the syllable before the ending	eco**no**mic Geo**me**tric e**lec**trical
	-tion, -cian, -sion		Tech**ni**cian gradu**a**tion co**he**sion
	-phy, -gy, -try, -cy, -fy, -al	the third from the last syllable	Pho**to**graphy bi**o**logy ge**o**metry
	-meter		Pa**ra**meter Ther**mo**meter ba**ro**meter

Word stress Rules

Rule	Applied to	Examples
Stress on the **1st** syllable	Most 2-syllable nouns	NOTEbook, LAMPshade, PRESent, REbel
	Most 2-syllable adjectives	HAPpy, HANDsome, CRACEful
Stress on the last /**2nd** syllable	Most 2-syllable verbs	preSENT, reBEL, seLECT, inVITE
Stress on penultimate syllable (the syllable which is **2nd** to the last)	words ending in –ic	DemoGRAPHic, PSYCHic, bioLOGic
	words ending in –sion & -tion	teleVIsion, revoLUtion, inVENtion, preCIsion
Stress on ante-penultimate syllable (the syllable which is **3rd** from end)	words ending in –cy, -ty, -phy, & -gy	biOgraphy, aBIlity, Allergy
	words ending in –al	psychoLOgical, mythLOgical
Stress on the **1st** part	Compound nouns	WHITEboard, STAIRway
Stress on the **2nd** part	Compound adjectives	red-HAIRED, high-HEELED
Stress on the **2nd** part	Compound verbs	overFLOW

❖ Sentence Stress in English

- Sentence stress is the music of spoken English. Like word stress, sentence stress can help you to understand spoken English, especially when spoken fast.

- Sentence stress is what gives English its **rhythm** or "beat". You remember that word stress is accent on **one syllable** within a **word**. Sentence stress is accent on **certain words** within a **sentence**.

➢ Most sentences have two types of word:

1) **content words**
2) **structure words**

Content words

are the key words of a sentence. They are the important words that carry the meaning or sense.

Structure words

are not very important words. They are small, simple words that make the sentence correct grammatically.

If you remove the structure words from a sentence, you will probably still understand the sentence.

➢ Imagine that you receive this telegram message:

		SELL		CAR			GONE		FRANCE

		SELL	my	CAR		I’ve	GONE	to	FRANCE

Will	you	SELL	my	CAR	because	I’ve	GONE	to	FRANCE

2			1		3			1	
Will	you	SELL	my	CAR	because	I’ve	GONE	to	FRANCE

✶ *Rules for Sentence Stress in English*

The basic rules of sentence stress are:

1) content words are stressed
2) structure words are unstressed
3) the time between stressed words is always the same

* Content words - stressed

Words carrying the meaning	Example
main verbs	SELL, GIVE, EMPLOY
nouns	CAR, MUSIC, MARY
adjectives	RED, BIG, INTERESTING
adverbs	QUICKLY, LOUDLY, NEVER
negative auxiliaries	DON'T, AREN'T, CAN'T

* Structure words - unstressed

Words for correct grammar	Example
pronouns	he, we, they
prepositions	on, at, into
articles	a, an, the
conjunctions	and, but, because
auxiliary verbs	do, be, have, can, must

10th Lecture

❖ Stress

Stress (within a word)
The nature of stress
Levels of stress
Placement of stress within a word

- suffixes
- prefixes
- compound words
- variable stress
- word-class pairs

❖ The nature of stress

Stress – a sound or syllable which is stressed is one upon which there is expended in the articulation relatively great breath effort and muscular energy**:** in voiced sounds, greater amplitude of vibration of the vocal folds, together with the reinforcing resonation of the supraglottal cavities, results in the physical terms in relatively great intensity of the sound or syllable, such intensity being perceived by the listener as greater loudness associated with the sound or syllable.

Production

- generally defined as the speaker using more **muscular energy** than is used for the unstressed syllables.
- -the muscles used to expel air is more active, producing higher superglottal pressure.

Prominence –
stressed syllable are recognised because they are more prominent than the unstressed syllable.

✶ *What makes a syllable prominent?*

There are certain factors that make a syllable more prominent and these factors often co exist to give considerable perceptual effect.

- stressed syllables are often **louder.**
- stressed syllables are made more prominent by its **length**.
- the **pitch** of the stressed syllable is noticeably different from the other syllables. (movement of pitch e.g. rising or falling)
- contains a **vowel which is of different quality** from the other vowels. (refer to "WEAK FORMS" in Roach pg 112)

❖ Levels of stress

Many levels of stress depending on the length of the word. (not just confined to two or three levels)

- the word 'around' – on the second syllable the pitch of the voice does not remain level but falls from a higher to a lower pitch (trans 1)
- the prominence from this pitch transition is called **primary stress (Roach) primary accentuation (Gimson)**
- **secondary stress** – weaker than primary stress but stronger than than an unstressed syllable.

'examination' , 'photographic',

❖ Placement of stress

How can we know the correct syllable to stress? Example ‘camera, ca’mera or came’ra?

- the word is morphologically complex or simple? I.e does it have one or more affixes or is it a compound word?

What part of speech? Noun? Verb?
The total number of syllables
Phonological structure of the syllables.

❖ Word stress/accentual patterns

2 syllables – if **verbs** – basic rule, the second syllable is accented.
Examples: in’vent, re’form.

If the final syllable is weak then the first syllable is accented
Examples: ‘open, ‘enter
Adjectives – ‘lovely, ‘yellow

Nouns – if the second syllable contains a short vowel, then the stress will go to the first syllable. If not, it will fall on the second syllable
Examples: ‘husband, ‘placard, ‘window, ‘money, bal’loon, Chi’nese, can’teen

❖ Word stress patterns

3 syllables
Verbs – is the final syllable is strong then it will be **stressed**
Examples : under’stand, enter’tain

If the last syllable is weak, stress will be on the preceding syllable if it is strong.
Examples: en’counter, de’termine

If both the second and third syllable are weak, the stress will go to the first syllable.
Examples: ‘parody

Nouns – if the final syllable is weak or ends with **{}**, then it is **unstressed**. If the syllable preceding this is strong, the stress will go to the middle syllable.
Examples: re’lation, po’tato, e’leven, sy’nopsis

Is the second and third syllable are both weak, the stress will go to the first syllable.
Examples: ‘yesterday, ‘innocence, ‘bachelor, ‘wanderer

To think: last syllables which are prominent, do they take a the secondary stress? (Roach pg. 100)

Complex words

- ◊ words made from a basic word form (stem) + an affix
- ◊ compound words – words composed of separable root morphemes. (football)

Affixes – prefixes
(comes before the stem, example: impossible) and suffixes (comes after the stem, example: happiness)

❖ suffixes

- **Suffixes carrying primary stress –** the primary stress is on the first syllable of the suffix. If the stem consists of more than one syllable then its first syllable will take a secondary stress

Ja'pan → ˌJapa'nese
'-ee' → ˌrefu'g**ee**
'-eer' → ˌmountai'n**eer**
'-ese' → 'portu'gu**ese**'
'-ette' → ˌciga'r**ette**
'-esque' → ˌpictur'**esque**

- **Suffixes that do not affect stress placement**

"-able" → 'comfort**able**
"-age" → 'anchor**age**
"-al" → 'refusal, 'rebutt**al**
"-en" → 'wid**en**
"-ful" → 'wonder**ful**
"-ing" → 'amaz**ing**
"-ish" → 'devil**ish**

For verbs with stems containing more than **1** syllable, the stress is always on the syllable immediately preceding "**-ish**" <u>e.g.</u> → re'plen**ish**

- **Suffixes that influence stress in the stem**

In these examples primary stress is on the last syllable of the stem.

"-eous" → ˌadvan'tag**eous**
"-graphy" → pho'to**graphy**
"-ial" → de'n**ial**
"-ic" → cli'mat**ic**
"-ion" → per'fect**ion**
"-ious" → in'jur**ious**
"-ty" → tran'quili**ty**
"-ive" → re'flex**ive**

❖ Prefixes

Effects on stress do not have comparative regularity, thus ~ safe to say governed by the same rules as those for words without prefixes.

❄ Compound words

Stms with hyphen "air-raid", smts as one word "strawberry", smts as two words "desk lamps"
Compounds with an adjectival first element and the –ed morpheme at the end

Examples: Bad-'tempered, half-'timbered,
heavy-'handed

Compounds in which the first element is a number in some form also tend to have final stress

Examples: three-'wheel
second-'class

Compounds functioning as adverbs are usually final-stressed

Examples: head-'first, North-'East, down-'stream

Compounds functioning as verbs and have an adverbial first element take the final stress

Examples: down-'grade, back-'pedal, ill-'treat

❄ Variable stress

Stress patterns change
Stress position may vary due to:

- the stress on other words occurring next to the word in question.
  Example: stress on the final stress compound tends to move to a preceding syllable if the following word begins with a strongly stressed syllable.

- Bad-'tempered → a 'bad-tempered 'teacher

- Not all speakers agree on the placement of the word. Example 'controversy vs. con'troversy

❄ Word-class pairs

Two syllable words identical in spelling, differ from each other in their word class.
Most of them are **prefix + stem**

Their stress placement is also different. I.e. stress should be on the second syllable for the verbs but on the first syllable for the nouns and adjectives.

Examples: 'permit (n) per'mit (v)
'present (n,adj) pre'sent (v)
'produce (n) pro'duce (v)

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✶ *Rules for Sentence Stress in English*

The basic rules of sentence stress are:

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* Content words - stressed

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adverbs	QUICKLY, LOUDLY, NEVER
negative auxiliaries	DON'T, AREN'T, CAN'T

* Structure words - unstressed

Words for correct grammar	Example
pronouns	he, we, they
prepositions	on, at, into
articles	a, an, the
conjunctions	and, but, because
auxiliary verbs	do, be, have, can, must

11th Lecture

✶ *What is Word Stress?*

In English, we do not say each syllable with the same force or strength. In one word, we accentuate ONE syllable. We say **one** syllable very **loudly** (big, strong, important) and **all the other syllables** very**quietly**. Let's take 3 words: **photograph**, **photographer** and **photographic**. Do they sound the same when spoken? No. Because we accentuate (stress) ONE syllable in each word. And it is not always the same syllable. So the **shape** of each word is different.

	Total syllables	**Stressed syllable**
PHO TO GRAPH	3	#1
PHO TO GRAPH ER	4	#2
PHO TO GRAPH IC	4	#3

* This happens in ALL words with 2 or more syllables: TEACHer, JaPAN, CHINa, aBOVE, converSAtion, INteresting, imPORtant, deMAND, etCETera, etCETera, etcetera

* The syllables that are not stressed are **weak** or **small** or **quiet**. Native speakers of English listen for the STRESSED syllables, not the weak syllables. If you use word stress in your speech, you will instantly and automatically improve your pronunciation **and your comprehension**.

* Try to hear the stress in individual words each time you listen to English - on the radio, or in films for example. Your first step is to HEAR and recognise it. After that, you can USE it!

✶ *Why is Word Stress Important?*

Word stress is not used in all languages. Some languages, Japanese or French for example, pronounce each syllable with eq-ual em-pha-sis.
Other languages, English for example, use word stress.
Word stress is not an optional extra that you can add to the English language if you want. It is part of the language! English speakers use word stress to communicate rapidly and accurately, even in difficult conditions. If, for example, you do not hear a word clearly, you can still understand the word because of the position of the stress.

❄ General Rules of Word Stress in English

There are two very simple rules about word stress:

1. **One word has only one stress.**
   (One word cannot have two stresses. If you hear two stresses, you hear two words. Two stresses cannot be one word. It is true that there can be a "secondary" stress in some words. But a secondary stress is much smaller than the main [primary] stress, and is only used in long words.)

2. **We can only stress vowels, not consonants.**
   Here are some more, rather complicated, rules that can help you understand where to put the stress. But do not rely on them too much, because there are many exceptions. It is better to try to "feel" the music of the language and to add the stress naturally.

❍ *1 Stress on first syllable*

rule	example
Most 2-syllable nouns	PRESent, EXport, CHIna, TAble
Most 2-syllable adjectives	PRESent, SLENder, CLEVer, HAPpy

❍ *2 Stress on last syllable*

rule	example
Most 2-syllable verbs	to preSENT, to exPORT, to deCIDE, to beGIN

There are many two-syllable words in English whose meaning and class change with a change in stress. The word **present**, for example is a two-syllable word. If we stress the first syllable, it is a noun (gift) or an adjective (opposite of absent). But if we stress the second syllable, it becomes a verb (to offer). More examples: the words **export**, **import**, **contract**and **object** can all be nouns or verbs depending on whether the stress is on the first or second syllable.

❍ *3 Stress on penultimate syllable (penultimate = second from end)*

rule	example
Words ending in -ic	GRAPHic, geoGRAPHic, geoLOGic
Words ending in -sion and -tion	teleVIsion, reveLAtion

* English Tip

For a few words, native English speakers don't always "agree" on where to put the stress. For example, some people say **teleVIsion** and others say **TELevision**. Another example is:**CONtroversy** and **conTROversy**.

❍ *4 Stress on ante-penultimate syllable (ante-penultimate = third from end)*

rule	example
Words ending in -cy, -ty, -phy and -gy	deMOcracy, dependaBIlity, phoTOgraphy, geOLogy
Words ending in -al	CRItical, geoLOGical

❍ *5 Compound words (words with two parts)*

rule	example
For compound nouns, the stress is on the first part	BLACKbird, GREENhouse
For compound adjectives, the stress is on the second part	bad-TEMpered, old-FASHioned
For compound verbs, the stress is on the second part	to underSTAND, to overFLOW

1. Can you pass me a **plas**tic knife?
2. **Chi**na is the place where I was born.
3. Please turn off the **tel**e**vi**sion before you go out.
4. I can't de**cide** which book to borrow.
5. Do you under**stand** this lesson?
6. Sparky is a very **hap**py puppy.

❄ *Stress on Verbs*

2 syllables – if **verbs** – basic rule, the second syllable is accented.

Examples: in'vent, re'form.

If the final syllable is weak then the first syllable is accented

Examples: 'open, 'enter
Adjectives – 'lovely, 'yellow

Let's NOW Explain the Stress of Verbs Only.

❑ *Two Syllables-Verb*

Verbs	on the last syllable	release
		admit
		arrange

❑ *Verbs → 3 syllables*

Verbs – is the final syllable is strong then it will be stressed
Examples : under'stand, enter'tain

Verbs (prep. + verb)	on the last part (the verb part)	understand
		overlook
		outperform

- If the last syllable is weak, stress will be on the preceding syllable if it is strong.
  Examples: en'counter, de'termine
- If both the second and third syllable are weak, the the stress will go to the first syllable.
  Examples: 'parody

□ *Phrasal Verbs versus Compound Nouns derived from phrasals*

Phrasal verbs (a.k.a. two-word or two-part verbs) are generally made up of a verb and preposition. For many of these, correct word stress is especially important as they have compound noun counterparts. In the following examples, the words on the left are phrasal verbs. The words on the right are nouns.

In phrasal verbs, the preposition gets the word stress.
If they have a noun counterpart, however,
it gets the stress on the first part.

let down	letdown
shut out	shutout
print out	printout
turn off	turnoff
take over	takeover

Phrasal Verbs	on the particle	turn off
		buckle up
		hand out

Nouns	on the first syllable	center
		object
		flower

Nouns – if the second syllable contains a short vowel, then the stress will go to the first syllable. If not, it will fall on the second syllable

Examples: 'husband, 'placard, 'window, 'money, bal'loon, Chi'nese, can'teen

- 3 syllables **Nouns** –

if the final syllable is weak or ends with {shwa}, then it is unstressed. If the syllable preceding this is strong, the stress will go to the middle syllable.

Examples: re'lation, po'tato, e'leven, sy'nopsis

If the second and third syllable are both weak, the stress will go to the first syllable.

Examples: 'yesterday, 'innocence, 'bachelor, 'wanderer

- Compound Words

Stms with hyphen "air-raid", smts as one word "strawberry", smts as two words "desk lamps"
Compounds with an adjectival first element and the –ed morpheme at the end.

Examples: Bad-'tempered, half-'timbered,
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For compound verbs, the stress is on the second part	to underSTAND, to overFLOW

Compound Words

Nouns (N + N) (Adj. + N)	on the first part	desktop
		pencil case
		bookshelf
		greenhouse
Adjectives (Adj. + P.P.)	on the last part (the verb part)	well-meant
		hard-headed
		old-fashioned

❄ IV. Homographs

Homographs are words which are written the same way but which have different pronunciation. In English, there are many words which have the same spelling, but whose part of speech changes with the word stress. If you listen carefully, you will hear that the vowel sounds change depending on whether they are stressed or unstressed.

VERB	**NOUN**
record	record
progress	progress
present	present
permit	permit

❄ Word stress patterns

Complex words

- words made from a basic word form (stem) + an affix
- compound words – words composed of separable root morphemes. (football)

Affixes – prefixes

(comes before the stem, example: impossible) and suffixes (comes after the stem, example: happiness)

- **Suffixes carrying primary stress –** the primary stress is on the first syllable of the suffix. If the stem consists of more than one syllable then its first syllable will take a secondary stress

Ja'pan → ˌJapa'nese
'-ee' → ˌrefu'g**ee**
'-eer' → ˌmountai'n**eer**
'-ese' → 'portu'gu**ese**'
'-ette' → ˌciga'r**ette**
'-esque' → ˌpictur'**esque**

- **Suffixes that do not affect stress placement**

"-able" → 'comfort**able**
"-age" → 'anchor**age**
"-al" → 'refusal, 'rebutt**al**
"-en" → 'wid**en**
"-ful" → 'wonder**ful**
"-ing" → 'amaz**ing**
"-ish" → 'devil**ish**

For verbs with stems containing more than **1** syllable, the stress is always on the syllable immediately preceding "**-ish**" e.g. → re'plen**ish**

- **Suffixes that influence stress in the stem**

In these examples primary stress is on the last syllable of the stem.

"-eous" → ˌadvan'tag**eous**
"-graphy" → pho'to**graphy**
"-ial" → de'n**ial**
"-ic" → cli'mat**ic**
"-ion" → per'fect**ion**
"-ious" → in'jur**ious**
"-ty" → tran'quili**ty**
"-ive" → re'flex**ive**

Word with added ending	-ic	the syllable before the ending	eco**no**mic Geo**me**tric e**lec**trical
	-tion, -cian, -sion		Tech**ni**cian gradu**a**tion co**he**sion
	-phy, -gy, -try, -cy, -fy, -al	the third from the last syllable	Pho**to**graphy bi**o**logy ge**o**metry
	-meter		Pa**ra**meter Ther**mo**meter ba**ro**meter

12th Lecture

Intonation & Sound Linking

* **Intonation:**

Improving sentence intonation is one of the key elements in your English pronunciation. Let's discuss the four basic types of word stress that lead to proper intonation in English.

❄ Tonic Stress

Tonic stress refers to the syllable in a word which receives the most stress in an intonation unit. An intonation unit has one tonic stress. It's important to remember that a sentence can have more than one intonation unit, and therefore have more than one tonic stress.
Here are some examples of intonation units with the tonic stress **bolded**.

He's **wait**ing
He's **wait**ing / for his **friend**
He's **wait**ing / for his **friend** / at the **sta**tion.

Generally, the final tonic stress in a sentence receives the most stress. In the above example, 'station' receives the strongest stress.
There are a number of instances in which the stress changes from this standard. Here are short explanations for each of the changes with example sentences to illustrate.

❄ Emphatic Stress

If you decide to emphasize something, you can change the stress from the principal noun to another content word such as an adjective (big, difficult, etc.), intensifier (very, extremely, etc.) This emphasis calls attention to the extraordinary nature of what you want to emphasize.

For example:
That was a difficult **test**. - *Standard statement*
That was a **difficult** test. - *Emphasizes how difficult the test was*

- There are a number of adverbs and modifiers which tend to be used to emphasize in sentences that receive emphatic stress.

- extremely
  terribly
  completely
  utterly
  especially
  etc.

❄ Contrastive Stress

Contrastive stress is used to point out the difference between one object and another. Contrastive stress tends to be used with determiners such as 'this, that, these and those'.
For example:
I think I prefer **this** color.
Do you want these or **those** curtains?

- Contrastive stress is also used to bring out a given word in a sentence which will also slightly change the meaning.

- **He** came to the party yesterday. (It was he, not someone else.)
- He **walked** to the party yesterday. (He walked rather than drove.)
- He came to the **party** yesterday. (It was a party not a meeting or something else.)
- He came to the party **yesterday**. (It was yesterday not two weeks ago or some other time.)

❄ New Information Stress

- When asked a question, the requested information is naturally stressed more strongly.
- For example:
- Where are you from? - I come from **Seattle**, in the USA.
  What do you want to do? - I want to go **bowling**.
  When does class begin? - The class begins at **nine o'clock**.
- Use these various types of stress to help improve your pronunciation and understandability.

❄ Introduction to Linking

- Native English speakers have ways of naturally transitioning from word to word, a concept we call linking. One of the first obstacles a language learner faces in listening comprehension is in understanding individual words when many whole sentences are said at a natural speed. It is difficult for even students with excellent vocabulary and grammar to *un*link the words that native speakers naturally hook together in their regular pronunciation patterns. Even when this is overcome, and a listener can confidently understand a native speaker of English, the skill of learning to link words in his or her own speaking often does not naturally occur.

- The failure to fluidly link words together is not likely to cause the same miscommunication as incorrectly producing sounds; however, the payoffs for learning how to link are significant. Even if two speakers use identical vocabulary and grammar when speaking to a native listener, the speaker with more fluid linking will be perceived as more fluent as a result of that subtle secondary level of communication.

- In dialog, words are continually linked together until there is a reason to pause. These pauses happen where there is the spoken equivalent of a comma or period in the sentence. We can also add a pause into a sentence to add emphasis. To begin, we'll practice linking just a couple words at a time.

- While the general concept of linking requires blending one word into the next, this is easier said than done. Linking words together often requires saying sounds together that do not naturally occur together within words. For a student who has probably been taught to speak English by carefully studying and learning the pronunciation of individual words distinctly this is decidedly non-intuitive. The essence of linking is to provide bridge sounds between individual words, using the last and first sounds of the adjacent words as the foundations.

- Vowels are not blended when linking. With vowels, an extra sound is placed between the words to keep both words clear and understandable.
- It is normal to have difficulty with linking and blending. The number of possible combinations of sounds is immense and it is almost impossible to practice every possible combination. For this reason, we will practice linking and blending within groups of sounds and we will need to learn (or review) some linguistics vocabulary first to help us.

- **To sum up:**
- The techniques for transitioning from word to word are called *linking.*

- **Linking Consonants and Vowels in American English Pronunciation**
- Consonants and vowels comprise the two largest categories of sounds in English. Vowels are the sounds created by the letters a, e, i, o, and u. The letters w and y also commonly create vowel sounds, and any word that ends in the letters w or y ends in a vowel sound.

- **Linking consonants and vowels**
- Blending consonants with vowels is one of the easiest sorts of links for non-native speakers. **To link a consonant sound to a vowel sound, the consonant sound is shared by both words.** It sounds like the consonant is both the last sound of the first word and as the first sound of the following word.

- Listen to the phrases wake up and mice eat. Notice that there is no pause between the words. In fact, the middle consonant sound is shared so perfectly with both the first and the second words, that we cannot hear (from this limited context) a difference between the following phrases.
- wake_up and way_cup
  mice_eat and my_seat

- *Wake_cup* and *way_cup* sound exactly the same when properly linked. (Although this may seem ambiguous, native speakers are used to differentiating based on context.) The *k sound* links the words in the same way, regardless if the *k sound* is the last sound of the first word, or the first sound of the second word.

- *Mice_eat* and *my_seat* are also pronounced identically because the consonant sound (the *s sound*) is shared equally between both words in both phrases.

- **Linking *a***
- The word "a" is usually said as a schwa and sounds much like the <u>short u</u> sound unless it is being emphasized in a sentence for some reason.
- To link to the word "a" between two consonant sounds, there should be no silent gap between the word "a" and the words that surround it. It will sound like it is a single longer word instead of two or more distinctly separate words.

- **Linking the Word *the***
- The word 'the' is the fourth most frequent word in spoken English. In addition to the troubles many languages have with the voiced th sound at the beginning of the word, the vowel at the end of the word the has three different pronunciations depending on the first sound of the word that follows it:
  1. the + consonant
  2. the + vowel (except <u>long e</u>)
  3. the + <u>long e</u>

- **Rule# 1: the + consonant**
- Linking the to a word that begins with a consonant sound requires saying the vowel as a very quick schwa (an unstressed vowel sound which sounds like a short u sound) and linking it with the next word. Say the word the with almost no vowel sound at all.
- Listen to the following examples:
- the_dog
  the_biscuit
  The_dog ate the_biscuit.

- **Rule# 2: the + vowel**
- Linking the to a word that begins with a vowel sound (except long e) requires pronouncing the final sound of the word the as a long e (the vowel sound in the word keep), then linking it with a y sound to the following word.
- Listen to the following examples:
- the_y_afternoon
  The_y_optometrist took the_y_afternoon off.

- **Rule# 3: the + long e**
- Linking the to a word that begins with a long e requires pronouncing the final sound in the word the as a schwa, then linking it smoothly to the following word. This is very similar to linking the + consonant.
- Listen to the following examples:
- the_emotions
  The_emotions of the_enormous catastrophe were strong.

- **Linking Continuous Consonants in American English pronunciation**
- Fricative, nasal, glide, and liquid sounds are all similar types of sounds in that they are all continuous consonant sounds; they are the same from beginning to end.

- **Linking the same continuous consonant**
- In American English pronunciation, when one word ends with the same continuous consonant sound as the next word begins with, the sound is only said one time and shared with both words. There should be no break or pause between the words.
- Listen to the following linked phrases.
- enough_food
  wants_some_more

- In the phrases *enough_food* and *wants_some_more* there is no pause between the words. In fact, the middle consonant sound is shared so perfectly with both the first and the second words that we cannot tell that the consonant occurs twice. Don't let different spellings for the sounds confuse you.
- Listen to this dialog between Squid and Wilma. Notice the same-fricative links.
- SQUID: Do we have enough_food for the party?
  WILMA: yeah, but Henry wants_some_more ice. There's only enough_for each glass to be half_full.

- **Linking Different Continuous Consonants**
- When linking different continuous consonant sounds, one sound should blend into the next with no break between words and without accidentally adding an extra vowel sound between the words. Because these sounds often don't occur next to each other within words, it may take extra practice at first to smoothly join these sounds together.
- Listen to the following linked phrases.
- because_she
  fresh_fruit

- In the phrases because she and fresh fruit there is no pause between the words. The consonant sounds blend evenly and smoothly from one sound to the next.
- Listen to the dialog between Squid and Wilma. Notice the continuous consonant links.
- SQUID: It's_still_snowing, isn't it?
  WILMA: No, it's_raining_now.

- **To sum up:**
- Because fricative, nasal, glide and liquid sounds are continuous, they can blend smoothly from one sound to the next. No silent gaps or additional vowel sounds should get added between linked continuous consonants.

- **Linking from the letter *t* in American English Pronunciation**
- The letter *t* is one of the most versatile letters in English pronunciation. In American English, there are four common pronunciations used for the letter *t*. There are huge variations of the pronunciation of the letter t among the different large English dialect groups (British, Australian, and American). The rules listed here**cannot** be used as guides for any dialect other than American English pronunciation.

- Basically, the letter *t* can:

1. Sound like a regular t sound (as in the word *time*)
2. Sound like a quick d sound (as in the word *little*)
3. Become a glottal stop (as in the word *partner*)
4. Be ignored and have no sound at all (as in the word *center*)

13th Lecture

Linking Sounds

❑ *Linking Discontinuous Consonants in American English Pronunciation*

Stops and affricates are called discontinuous consonant sounds because they briefly stop all air, then create sound when the air is released.
Because there are two parts to these sounds, linking them may cause the sound to change.

Stops are sounds that are created when the air is stopped from leaving the vocal tract for a short amount of time, then released smoothly.

Affricates are sounds that are created when the air is stopped from leaving the vocal tract for a short amount of time, then released with a smaller opening, causing friction.

❑ *Linking to a discontinuous consonant*

Linking *to* a stop or affricate is simpler than linking *from* a stop or affricate to another sound. To link to a stop or affricate from a continuous consonant sound or vowel sound, simply blend the first sound into the beginning of the stop or affricate. No pause should be added between the sounds.

Listen to the phrases ***can't_ache*** and ***can_take***. Notice that there is no pause between the words. In fact, the first sound blends smoothly into the beginning of the stop or affricate sound, and the stop or affricate is said normally. We cannot tell (from this limited context) the difference between the two phrases.
can't_ache and ***can_take***

❑ *Linking from a discontinuous consonant*

When a word that ends in a stop or affricate is linked to another word, the stop or affricate is often not fully said.
Oftentimes, the air is stopped in the vocal tract as normal, but the release of the air is said as the first sound of the next word.
This also happens within words with common consonant blends, like **b + r** (**bright**) or **c + r** (**cream**) or even with three consonants in a row, **s + c + r** (**scream**).

b+r, bright: If the word ***bright*** is said correctly, the lips are closed for the **b** sound, and the **r** sound is said immediately as the lips open.

c+r, cream: With the word *cream*, the r sound begins at the same time as the **k** sound is released.

s+c+r, scream: With the word *scream*, the **s** sound continues until the air is stopped for the **k** sound, and the **r** sound begins at the same the as the **k** sound is released. Sounds flows evenly from one to the next.

The technique for linking adjacent consonants within words is the same as native English speakers use to link discontinuous consonants between different words; the air is stopped in the vocal tract as normal, but the release of the air is said as the first sound of the next word.
Notice in the phrases Kate's creams and Kate screams, that there are two stops, the **t** sound and the **k** sound. Both phrases link **t + s + c + r**. The **t** sound is released as the **s** sound, and the **k** sound is released as the **r** sound. The **t** sound, **s** sound, **k** sound, and **r** sound all link with exactly the same technique, no matter if the **s** sound is the final sound of the first word, or the first sound of the second word. We cannot hear (from this limited context) a difference between the following phrases.
Kate's_creams and ***Kate_screams*** PlayListen to the following linked phrases.
keep_thinking
last_sunday

With linking, speakers need to learn to link sounds that are not commonly near each other within words. For example, in the phrase keep thinking, we link the **p** sound to the **th** sound. There are no words in English language (with the exception of compound nouns) that have a p sound followed by a **th** sound. However, the linking between these words occurs the same as it does when other words link a stop to another sound. With this phrase, we link the words by stopping the air with our lips, as we normally would for the **p** sound, but we release the air with the **th** sound.
With the phrase ***last_Sunday***, we link the words by stopping the air with our tongue for the **t** sound, but release it as the s sound.

❑ *Linking discontinuous consonants to the same sound*

There are two pronunciation options for when a stop or affricate is linked to the same sound;
(1) the sound is may only said one time, and shared with both words or (2) the first sound may be said very quickly with only a tiny release of air between words.

Listen to the following linked phrases.
take_care (linked stops)
orange_juice (linked affricates) Play
When linking the same stop sound, it is more likely that the sound is said only once, as in the example **take_care**, and shared with both words. When linking affricates, the sound may be said twice, but said very quickly the first time, as in the example **orange_juice**.

△ **To sum up:**

To link from a discontinuous consonant to another sound, the air is stopped in the vocal tract as normal, but the release of the air is said as the first sound of the next word. If the linked discontinuous consonant is to the same sound, different techniques may apply.

❄ **Linking from the letter *t* in American English Pronunciation**

- The letter ***t*** is one of the most versatile letters in English pronunciation. In American English, there are four common pronunciations used for the letter ***t***. There are huge variations of the pronunciation of the letter **t** among the different large English dialect groups (British, Australian, and American). The rules listed here**cannot** be used as guides for any dialect other than American English pronunciation.

- Basically, the letter ***t*** can:

1. Sound like a regular **t** sound (as in the word *time*)
2. Sound like a quick **d** sound (as in the word *little*)
3. Become a glottal stop (as in the word *partner*)
4. Be ignored and have no sound at all (as in the word *center*)

- The rules for these alternative sounds are discussed in depth in the ***when t doesn't sound like t*** lesson.

- It is important to realize that the rules for the letter ***t*** are still true when the ***t*** *sound* is the final sound of a word, linking to the word that follows it. Listen carefully to the following examples.

➢ Sound like **a** regular **t** sound

- SQUID : It took two days to type the entire story.
  WILMA : Why did it take so long?
  SQUID : I spilled tea on it, so I had to retype it.

- Sound like **a** quick **d** sound

  - SQUID : We should mee**t** a**t** Anne's after the mee**t**ing tomorrow.
    WILMA : I'll think abou**t** it.

- Become **a** glottal stop

  - SQUID : Did you eat my sandwich?
    WILMA : Yeah, I forgot my lunch at home.
    SQUID : So you ate mine?

- Be ignored and have no sound at all

  - SQUID : We should buy more cookies. A percent of the profit goes to charity.
    WILMA : I don't really think that's why you want them!

- **To sum up:**

The sounds before and after the *t sound*, namely *vowel sounds*, the ***r*** *sound*, **l** *sound*, ***m*** *sound* and ***n*** *sound* all can alter the letter ***t*** pronunciation. The ***t*** *sound* is also dependent on its placement in a word and syllable stress for determining the most likely pronunciation.

- **Linking Vowels**

Most sounds are linked together by blending one sound into the next (linking consonants and vowels, linking continuous consonants), or by combining the sounds together (linking stops and affricates). When linking a vowel to another vowel, however, the sounds are not blended together. Instead, Americans link vowels by adding a ***y*** *sound* or a ***w*** *sound* between the words.

Example: linking vowels with a ***y*** *sound*
I_**y**_admire Play
Example: linking vowels with a ***w*** *sound*
do_**w**_it

- Many non-native speakers tend to do one of two things when linking vowels; they either blend the vowels (which makes the sounds less clear), or they briefly stop all sound by closing the airflow at the back of the throat (called a glottal stop). While the glottal stops cause fewer miscommunications than blending vowels into one another, it does create speech that sounds choppy and non-fluent when it is used incorrectly.

  To create a smooth, fluid link between a word that ends in a vowel sound and a word that begins with a vowel sound, a quick ***y*** *sound* or ***w*** *sound* is added between the words, connecting one word to the next. This allows the listener to perceive both words as separate, while never needing to stop the airflow between words.

  Deciding whether to link vowels together with a ***y*** *sound* or a ***w*** *sound* will eventually come naturally to the speaker. Linking with the wrong sound will feel and sound awkward.

  Try saying the phrases with a ***w*** *sound* instead to hear the difference between a correct and incorrect pronunciation.
  I_**y**_admire
  very_**y**_old
  he_**y**_asked **P**

Try saying the phrases with a ***y*** *sound* instead to hear the difference between a correct and incorrect pronunciation.
do_**w**_it
now_**w**_on
new__**w**_ice skates

□ To review Linking Sound

To link a consonant sound to a vowel sound, the consonant sound is shared by both words.

wake_up *and* **way_cup**
mice_eat *and* **my_seat**

❄ Linking the Word ***the***

1) Rule# 1: the + consonant

i. the_dog
ii. the_biscuit
iii. the_dog ate the_biscuit.

2) Rule# 2: the + vowel

i. the_$_y$_afternoon
ii. the_$_y$_optometrist took
iii. the_$_y$_afternoon off.

3) Rule# 3: the + long e

i. the_emotions
ii. the_emotions of
iii. the_enormous

catastrophe were strong.

❑ **Linking the *same* continuous consonant**

enough_food
wants_some_more

❑ **Linking *Different* Continuous Consonants**

SQUID : It's_still_snowing, isn't it?
WILMA : No, it's_raining_now.
because_she
fresh_fruit

❍ **Linking from the letter *t***

1. Sound like a regular **t** sound (as in the word *time*)
2. Sound like a quick **d** sound (as in the word *little*)
3. Become a glottal stop (as in the word *partner*)
4. Be ignored and have no sound at all (as in the word *center*)

14th Lecture

Review: Exercises

Vowels and diphthongs			
1	i	tree	tri
2	I	insect	insekt
3	ɛ	bet	bɛt
4	æ	cat	kæt
5	ɑ	car	(ka / British) (kar / American)
6	ɒ	bought	bɒt
7	ɔ	saw	sɔ
8	ʊ	foot	fʊt
9	u	boot	but
10	ʌ	up	ʌp
11	ɜ	fur	(fɜ / British) (fɜr / American)
12	ə	ago	ə'gəʊ
13	er	play	pler
14	əʊ	know	nəʊ
15	aI	sky	skaI
16	aʊ	how	haʊ
17	ɔI	boy	bɔI
18	Iə	near	(nIə / British) (nIər / American)
19	eə	where	(weə / British) (weər / American)
20	ʊə	pure	(pjʊə / British) (pjʊər / American)

Vowel chart for standard British English																		
ʌ	**ɑ:**	**æ**	**ɛ**	**I**	**I:**	**ɒ**	**ɔ:**	**ʊ**	**ʊ:**	**aI**	**aʊ**	**eI**	**ɔI**	**ə**	**ɜ:**	**əʊ**	**ɛə**	**Iə**	**ʊə**
cut	cart	cat	bread	hit	heat	hot	Horse*	book	boot	bite	shut	shape	boy	mother	girl	phone	there	here	sure

*to pronounce / **ʊə** / words as / **ɔ:** / does not affect comprehension e.g. you say [**ʃɔ:**] instesd of [**ʃʊə**]

consonants			
1	p	play	pler
2	b	boy	bɔI
3	t	tree	tri
4	d	dog	dɒg
5	k	cat	kæt
6	g	got	gɒt
7	tʃ	chin	tʃIn
8	dʒ	judge	dʒʊdʒ
9	f	fine	fain
10	v	visit	vizət
11	θ	thin	θin
12	ð	then	ðɛn
13	s	sick	sik
14	z	zoo	zu
15	ʃ	shine	ʃain
16	ʒ	vision	viʒn
17	h	how	haʊ
18	m	much	mʌtʃ
19	n	now	naʊ
20	ŋ	sing	siŋ
21	l	leg	lɛg
22	r	read	rid –or- rɛd
23	j	yes	jɛs
24	w	wet	wɛt

Circle the correct phonetic transcription.

Example :

#	Rather	/ rɑːðə /	/ rɑːθə /
1.	Sad	/ sɑːd /	/ sæd / ✓
2.	Stood	/ stʊd /✓	/ stɒːd /
3.	Cry	/ krai /✓	/ krei /
4.	Sing	/ siŋ /✓	/ Siːŋ /
5.	But	/ bʊt /	/ bʌt /✓
6.	Caught	/ kʌt /	/ kɔːt /✓
7.	Nice	/ nais /✓	/ neis /
8.	Toy	/ tɔi /✓	/ tei /
9.	Fair	/ feə /✓	/ fʊə /
10	Strong	/ strʊŋ /	/ strɒŋ /✓
11	Wild	/ weild /	/ waild /✓
12	Cheese	/ ʃiːz /	/ tʃiːz /✓

Choose the correct answer

1.	Cut	⇨	a) kʌt	✓	b) kɔːt	c) kuːt	
2.	Jar	⇨	a) tʃ ɑː		b) dʒæ	c) dʒɑː	
3.	Food	⇨	a) fʌd		b) fʊd	c) fuːd	✓
4.	Very	⇨	a) vəriː		b) vʌriː	c) veriː	
5.	Show	⇨	a) dʒʊə		b) ʃ eə	c) ʃ əʊ	
6.	Young	⇨	a) jʌŋ		b) iʌŋ	c) yʌŋ	
7.	Pleasure	⇨	a) pleʒə		b) Plaːʃ ə	c) pleʃ ə	
8.	No	⇨	a) nʊə		b) nəʊ	c) nɔɪ	
9.	Oil	⇨	a) ɔːl		b) ɔɪl	c) ʊəl	
10.	Turn	⇨	a) tʌn		b) tɜːn	c) tʊn	
11.	Fort	⇨	a) fɜːt		b) fʌt	c) fɔːt	

Phonetics exercise

A easy ones: Transcribe the Phonetics into words.

Phonetics	**word**	**Phonetics**	**word**
bed	bed	deı	day
dɒg	dog	mæn	man
bıg	big	wʊmən	woman
sɔıl	soil	gɜ:l	girl

B Rosetta stone: use the examples to decipher the words.

Examples			
Phonetics	***word***	***Phonetics***	***word***
ɔ:lðəʊ	although	dʒeimz	James
'bɜ:θdei	birthday	kwiz	quiz
bəʊθ	both	'teləviʒən	television
' tʃɑ:miŋ	charming	jes	yes
Phonetics exercise			
Phonetics	***word***	***Phonetics***	***word***
'ɔ:lweız	always	ɑıs	ice
ə'meızıŋ	amazing	'intəvjʊ	interview
'ɔfəl	awful	'intrəstıŋ	interesting
bɔ:t	bought	lɑ:f	laugh
kʌm	come	lʌv	love
kʌzən	cousin	'mʌnı	many
'drɑıvıŋ	driving	mjʊ'zi:əm	museum
Ig;zɔ:stıd	exhausted	'peərənts	parents
ɑız	eyes	sɑıəns	science
'feıvrət	favourtite	sıns	since
faınd	find / fined	sməʊk	smoke
'fɒləʊd	followed	tɔ:k	talk
frenz	friends	tɔ:l	tall
gest	guest	'vedʒtəbəl	vegetable
'hedeık	headache	'w ɑ:drəʊb	wardrobe

Underline the word in each group which does NOT sound the same.

1. brake - break - brick	5. hall - hole - whole	9. soon - son - sun
2. dear - deer - die	6. know - no - now	10. soil - sole - soul
3. farther - father - further	7. meat - meet - met	11. suit - suite - sweet
4. hear - here - hire	8. read* - red - ride * *in the past*	12. weak - week - wick

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Underline the syllable that that contains schwa in each word or phrase.

1. Ago
2. Mother
3. The man
4. Fish and chips
5. Oh no. Not again.
6. What's for lunch?
7. He can play football.
8. Look at that funny man.
9. What's it all about then?
10. I'm sorry but she's not in.
11. Did they go to New York?
12. She can't come from Sydney.
13. Can she come back tomorrow?

Short and long vowels: in the following groups of words underline the word which contains the short from of the vowel:

1. march - heart - fun - calm	5. rich - meal - reach - eat
2. farm - mark - vase - come	6. caught - what - bought - port
3. but - smart - march - can't	7. short - taught - sport - dot
4. each - wheel - hill - bean	8. full - pool - fool - Luke

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2 The stress or accent on English words.

Look at the chart below. Each number represents a syllable. The underlined or big number represents the stressed syllable. Place the words under the chart into the correct columns.

1 – 2 - 3	1 – **2** - 3	1 – 2 - **3**
1 favorite	10 informal	15 magazine
2 microphone	11 invisible	
3 mineral	12 official	
4 miserable	13 refreshment	
5 penalty	14 religion	
6 Portugal		
7 tropical		
8 versatile		
9 vinegar		

Vowel chart for standard British English																		
ʌ	**ɑ:**	**æ**	**ɛ**	**I**	**I:**	**ɒ**	**ɔ:**	**ʊ**	**ʊ:**	**aI**	**aʊ**	**eI**	**ɔI**	**ə**	**ɜ:**	**əʊ**	**ɛə**	**Iə**	**ʊə**
cut	cart	cat	bread	hit	heat	hot	Horse*	book	boot	bite	shut	shape	boy	mother	girl	phone	there	here	sure

*to pronounce / **ʊə** / words as / **ɔ:** / does not affect comprehension e.g. you say [**ʃɔ:**] instesd of [**ʃʊə**]

Place the words into the columns on the vowel chart. Place only one word in each column.

Bed	Gone	Might	Shoe
Fair	Hill	Now	Soil
Farm	Hole	Poor	Son
Four	Man	Push	The
Gear	Male	Seem	Word

Transcribe the phonetics into words and then place them in the vowel chart.

Phonetics	***word***	***Phonetics***	***word***
bɛə	bear	kık	kick
bɪə	beer	gəʊ	go
bƷ:d	bird	ti:m	team
bɔ:n	born	mʊ:n	moon
bʌt	but	stɑ:t	start
fæn	fan	jʊ:	you

C Use your dictionary or your teacher to match the words with their vowel sounds.

Words ending in vowel-consonant -E		
fine	/ ɑɪ /	faɪn
name	/ eɪ /	neɪm
note	/ əʊ /	nəʊt
rule	/ ʊ: /	ruːl
scene	/ i: /	siːn
tone	/ əʊ /	təʊn

Words with long vowels		
arm	/ ɑ: /	ɑːm
born	/ ɔ: /	bɔːn
curl	/ Ʒ: /	kɜːl
feet	/ i: /	fiːt

D Use your dictionary to add the phonetic transcriptions. What is strange about each column?

Want	wɒnt	Come	kʌm	Cough	kɒf	dream	driːm
Was	wɒz (*unstressed*) wəz	Done	dʌn	Thought	θɔːt	Head	hɛd
Watch	wɒtʃ	Money	ˈmʌnɪ	Though	ðəʊ	Heart	hɑːt
What	wɒt (*unstressed*) wət	Month	mʌnθ	Through	θruː	Real	ˈrɪəl

Good Luck!

Great