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# Articulatory and Corrective Phonetics

A Course Intended for Second Year B.A Students of English  
Semester 3 & Semester 4

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Academic Year: 2022-2023

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## **I. Introduction**

This course introduces students to the theory and practice of English Phonetics and Phonology. It focuses on the segmental and supra-segmental components of the English sound system and helps them to gain an insight into the English pronunciation system and improve their listening and speaking skills. While the first year phonetics course is devoted to teach students the fundamentals of phonetics including the speech production mechanisms, basic phonetic terms and concepts, the different speech sounds in terms of classification, description, graphic representations and IPA symbols, the present course, intended for second year students, is designed to enhance the students' understanding of phonetic/phonological notions and rules, to boost their speaking and listening skills and to give them practice in pronunciation and English transcription.

Within phonetics, a distinction is made between phonetics and supra-segmental (or prosodic) phonetics. While the former deals with individual speech sounds (vowels and consonants as segments of speech), the latter is concerned with those features that extend over more than one segment such as stress and intonation. Therefore, the present course focuses on two main parts: **Articulatory Phonetics: The Segmentals** and **The Prosodic Aspects of English Pronunciation**. For pedagogical aims, these parts are divided into four chapters, which include different types of exercises that are an integral part of them.

### **1- Course Objectives:**

By the end of the course, students are expected to meet the following learning objectives:

- 1- Recognize and produce English (RP) speech sounds (vowels, consonants, words and sentences/utterances ) with accuracy and ease
- 2- Transcribe words and sentences using IPA symbols, recognize and accurately produce word and sentence stress.
- 3- Demonstrate awareness of aspects of connected speech (Elision, assimilation, linking and rhythm)

## 2- Course Pre-requisites:

In order to benefit from this course, students must be:

- 1- Familiar with the fundamentals of phonetics
- 2- Acquainted with speech production mechanisms
- 3- Acquainted with International Phonetic Alphabet (IPA).

\* **Requirements:** In order to be successful, students need to understand the theory presented in class and to do the numerous assignments of transcription they are provided with. Besides, more practice individually at home is required on the part of students as the time allotted to phonetics and phonology does not permit to complete all of them.

\* **Assessment:** Students are assessed through tests and an exam at the end of the semester.

## II. Course Outline:

### 1- Semester One

Week by Week	Lectures
Week 1	Introduction to Phonetics and Phonology
Week 2	English Vowels
Week 3	English Consonants
Week 4	Allophonic Variation : Useful Phonological Notions
Week 5	Allophonic Variation: Consonants
Week 6	Allophonic Variation: Vowels
Week 7	<b>Mid-term Test</b>
Week 8	Syllable Structure and Consonant Cluster
Week 9	Stress Patterns: Word Stress
Week 10	Stress in Simple Words
Week 11	Stress in Complex Words
Week 12	Sentence Stress
Week 13	Stress in Connected Speech
Week 14	<b>General Revision</b>
Week 15	<b>Exam</b>

## Chapter I: Segmental Phonology

### 1.1.Learning Goals and Objectives

- Distinguish between phonetics and phonology
- Know branches of phonetics and phonology
- Differentiate between consonants and vowels in all word-positions
- Distinguish phonemes and allophones
- Discuss the main allophonic variations of the English vowels and consonants
- Articulate sound segments in different phonetics contexts
- Be familiar with English pronunciation

### Lecture 1: Introduction to Phonetics and Phonology

#### Phonetics and Phonology:

There are two disciplines in linguistics which deal with sound, namely *phonetics* and *phonology*. Phonetics provides objective ways of describing and analyzing the range of sounds humans use in their languages. Phonology is interested in the sound patterns of particular languages, and in what speakers and hearers need to know, and children need to learn, to be speakers of those languages.

#### Phonetics:

In the introduction to his book “*A practical introduction to phonetics*”, Catford (1988) simply defined **Phonetics** as “the systematic study of human speech-sounds. It provides means of describing and classifying virtually all the sounds that can be produced by human vocal tracts” (p. 01). To classify the sounds of a particular human language, Phonetics makes use of the International Phonetics Alphabet (IPA), which is a phonetic notation system that was first created by the International Phonetic Association in 1886. In this course, IPA is used to represent all of the speech sounds in the English language and its two most prominent varieties: The Received Pronunciation (RP) and the General American (GA).

## **Phonology:**

Phonology is a branch of linguistics which studies all the aspects of speech sounds in languages or in a language with reference to their distribution, patterning and tacit rules governing pronunciation i.e., it is concerned with discovering the principles that govern the way that sounds are combined and organised in languages to determine which phonemes are used and how they pattern. In other words, phonology attempts to account for how speech sounds are combined, organized and convey meaning in a particular language(s).

The relationship between phonetics and phonology is a complex one, but we might initially approach phonology as narrowed-down phonetics. Quite small babies, in the babbling phase, produce the whole range of possible human sounds, including some which they never hear from parents or siblings: a baby in an English-speaking environment will spontaneously make consonants which are not found in any European language, but are to be found closest to home in an African language. However, that child will then narrow down her range of sounds from the full human complement to only those found in the language (s) she is hearing and learning, and will claim, when later trying to learn at school another language with a different sound inventory, that she cannot possibly produce unfamiliar sounds she made perfectly naturally when only a few months old.

## **Branches of Phonetics:**

The field of phonetics is traditionally divided into three sub-disciplines, namely: articulatory phonetics, acoustic phonetics, and perceptual phonetics.

There are three areas of study within phonetics : **articulatory phonetics**, which is the study of how speech sounds are made, or ‘articulated’, it describes in detail how the speech organs, also called vocal organs or articulators in the vocal tract are used in order to produce, or articulate speech sounds, **acoustic phonetics**, which deals with the physical properties of speech as sounds and waves ‘in the air’, i.e. the way in which the air vibrates as sounds pass from speaker to listener, and **auditory** (or perceptual) **phonetics**, which deals with the perception, ‘via the ear’, of speech

sounds by the listener i.e. how the sounds are transmitted from the ear to the brain, and how they are processed.

### Branches of Phonology:

Phonology can be divided into two branches: (1) segmental phonology and (2) suprasegmental phonology. (1) **Segmental phonology** is based on the segmentation of language into individual speech sounds provided by phonetics. Unlike phonetics, however, **segmental phonology** is not interested in the production, the physical properties, or the perception of these sounds, but in the function and possible combinations of sounds within the sound system. (2) **Suprasegmental phonology**, also called prosody, is concerned with those features of pronunciation that cannot be segmented because they extend over more than one segment, or sound.

The three phases of phonetics and the different spheres of phonetics and phonology are illustrated by the speech chain in Figure 1.

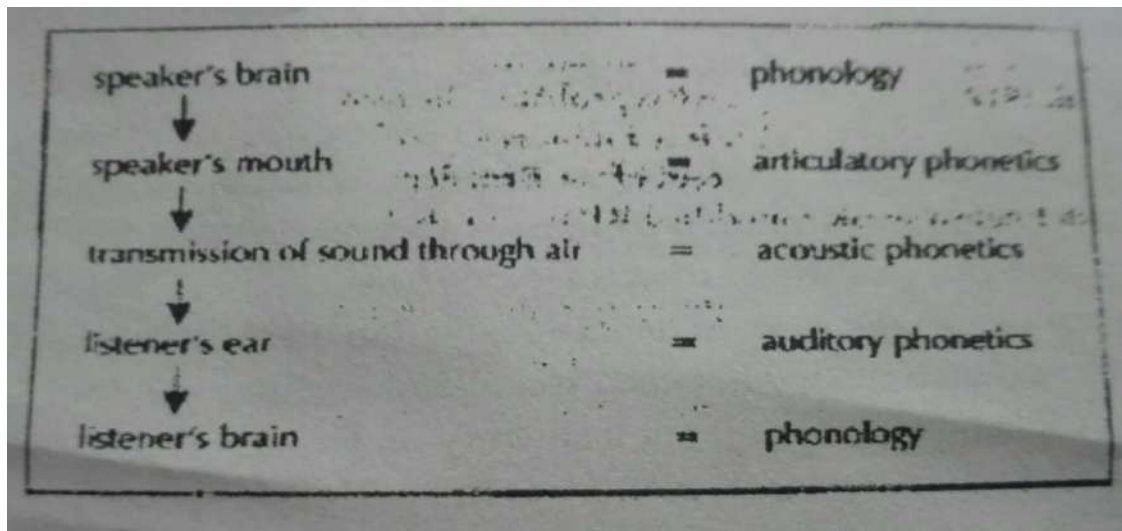


Figure 1: The Speech Chain

### The Importance of Learning Phonetics and Phonology:

Because of the confusing nature of the English spelling, it is particularly important to learn to think of English pronunciation in terms of phonemes rather than letters of the alphabet. Therefore, it is important to learn the English phonetics mainly because there is not always a correspondence between the English spoken form and the written form.



## Lecture 2: English Vowels

English has **44 sounds** divided into two types: **Consonant** and **vowel** sounds.

### Vowels:

From a phonetic point of view, vowels are sounds in which there is no obstruction to the flow of air as it passes from the larynx to the lips. A doctor who wants to look at the back of a patient's mouth often asks them to say “ah”; making this vowel sound is the best way of presenting an unobstructed view. However, if we make a sound like s, d it can be clearly felt that we are making it difficult or impossible for the air to pass through the mouth. Most people would have no doubt that sounds like s, d should be called consonants (Roach, 2009). There are three types of English vowels, namely: *monophthongs*, *diphthongs*, and *triphthongs*. In English, these vowels are represented by the RP vowel chart. A vowel chart is a visual representation of where your tongue is while articulating a vowel.

From the phonological point of view, the vowel is the sound which has a central syllabic function (the vowel is usually the nucleus of a syllable).

### Description of Vowels:

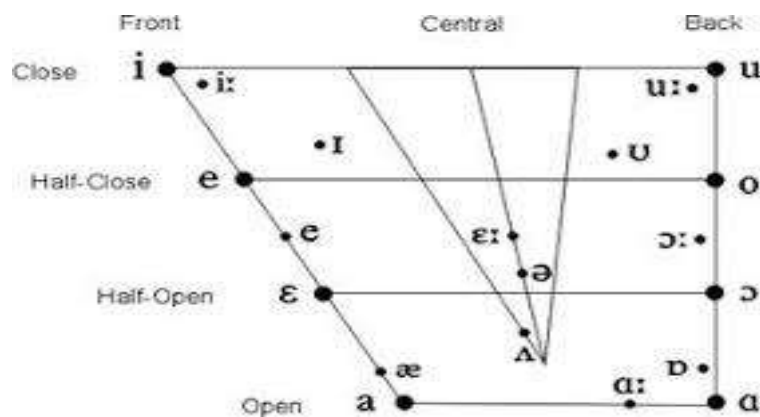
There are twelve pure vowels in RP. English vowel sounds are affected by the changing shape and position of the articulators. The different vowels can be categorised according to four features:

- 1- The position of the soft palate
- 2- The kind of opening formed by the lips. The lips can, generally, have three shapes:
  - **Rounded:** such as in the vowel /u:/ in words like ‘group’, ‘shoes’, ‘move’. The corners of the lips are brought together towards each other, with the lips pushed forward.
  - **Spread:** such as in the vowel /i:/ in words like ‘green’, ‘achieve’, ‘please’. The corners of the lips are moved away from each other, as for a smile.

- **Neutral:** such as in the vowel /ɑ:/ in words like ‘calm’, ‘heart’, ‘father’. The lips are not noticeably rounded or spread.
- 3- The part of the tongue which is mainly raised: is it the front, centre or back one? (place of articulation). Accordingly there are three sets of vowels
- **Front Vowels** or sounds in which the main raising is made by the front of the tongue toward the hard palate. The front vowels are /i:/ /ɪ /e/ /æ/.
  - **Central vowels** or sounds in which the main raising is made by the centre of the tongue toward the hard palate. The central vowels are /ɜ:/ /ʌ/ /ə/.
  - **Back vowels** or sounds in which the main raising is made by the back of the tongue toward the soft palate. The back vowels are /ʊ/ /u:/ /ɔ:/ /ɒ /ɑ:/.

**Cardinal Vowel Scale: Daniel Jones’ Diagram:**

Daniel Jones, the late 19<sup>th</sup> century and early 20<sup>th</sup> century phonetician, introduced a diagram called the *Cardinal vowel quadrilateral* which is a four sided chart used as a reference for the description of vowels. Phoneticians are using this chart to represent the most important degrees of raising of the tongue and the parts which are mainly raised or involved in the articulation of vowels. In addition, the position and shape of the lips are also represented in the chart. They put on it the vowels corresponding to each position. There are **7** short vowels, **5** long ones and **8** diphthongs as shown in the figure below:



**Figure 2: The Cardinal Vowels**

This chart or scheme represents the Cardinal Vowels System. It accounts for the range of vowels that the human vocal apparatus can make. Therefore, when you learn the cardinal vowels, you are not learning to make English sounds only, but rather you are learning about the human ability to articulate those sounds. In addition, you are acquiring the ability to describe, classify, and compare vowels.

Category	Vowel	Examples
Front	/i:/	<i>meet, achieve, please, police, theme, key, people</i>
	/ɪ/	<i>Sit, rhythm, except, sieve, savage, minute</i>
	/e/	<i>Bed, head, said, leopard, friend</i>
	/æ/	<i>Hand, lamp, sat, hat</i>
Back	/ɒ/	<i>Put, cushion, look, wolf, could</i>
	/u:/	<i>June, soon, group, move, blue, juice, shoes,</i>
	/ʊ/	<i>Pot, gone, want, cough, knowledge,</i>
	/ɔ:/	<i>Port, war, more, court, board, floor, cause, all,</i>
	/ɑ:/	<i>Part, calm, heart, father, calm, after, class</i>
Central	/ə/	<i>about, generous, suggest, oblige, possible,</i>
	/ɜ:/	<i>Her, turn, word, learn, journey</i>
	/ʌ/	<i>Cut, one, country, blood, does</i>

- 4- The degree of raising of the tongue (manner of articulation). The vowels in which the tongue is held as high as possible are called **close (high)** vowels (/i:/ and /u:/). Those in which the tongue is as low as possible are called **open (low)** vowels (e.g. /ɑ:/). Those in which the tongue is placed in an intermediate position are called **mid** vowels. A further more refined distinction differentiates between two groups of mid vowels: **half-close** (e.g. /e/ /ɔ/) and **half-open** (e.g. /ɜ:/ /ʌ/) vowels.

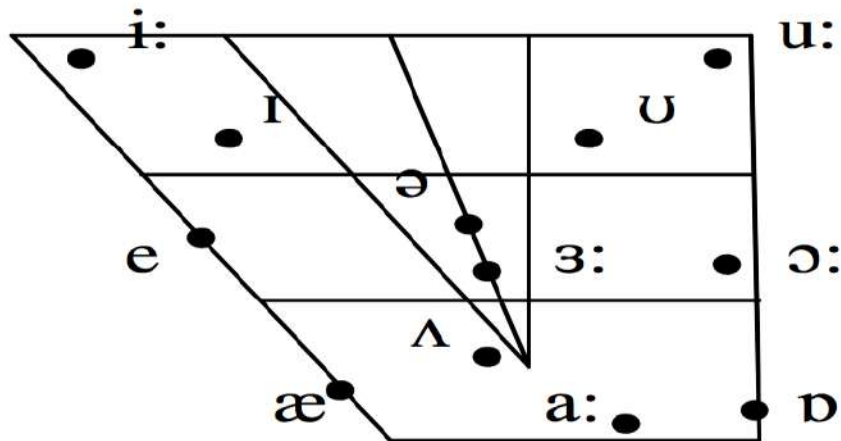
### Categories of Vowels:

- **Long Vowels:** the articulation of the vowel takes more time, the long vowels are

*/ɑ:/ /i:/ /ɔ:/ / /u:/ /ɜ:/* (The colon “:” refers to the length of the sound)

- **Short Vowels:** the articulation takes less time. The short vowels in English are */ɪ/ /e/ /æ/ /ɒ/*

*/ʊ/ /ʌ/ /ə/*



**Figure 3: Pure RP Vowels**

- **Mixed Vowels:** are vowels composed of two or three pure vowels, vowels composed of two pure vowels called **diphthongs** and vowels composed of three pure vowels called **triphthongs**.

- **Diphthongs:** A diphthong is a sound that is produced as a result of a glide from one vowel to another (combines two different positions in sequence. There are eight diphthongs in RP: */eɪ/* as in ‘take’, */aɪ/* as in ‘buy’, */ɔɪ/* as in ‘boy’, */ɪə/* as in ‘fear’, */eə/* as in ‘care’, */əʊ/* as in ‘go’, */ʊə/* as in ‘pure’, */aʊ/* as in ‘cow’.

Category	Diphthong	Examples
Closing	/eɪ/	<i>Late, aid, play, reign, grey, break</i>
	/aɪ/	<i>Nice, fly, die, bye, height, high, guy, eye, aisle</i>
	/ɔɪ/	<i>Boil, voice, boy, oyster, buoy</i>
	/əʊ/	<i>Old, toe, Low, road, soul, though, plateau, sew</i>
	/aʊ/	<i>sound, doubt, allow, town</i>
Centring	/ɪə/	<i>Hear, zero, here, dear, deer, idea, fierce, weird</i>
	/eə/	<i>Hair, parent, care, bear, there, their</i>
	/ʊə/	<i>Pure, moor, tour, during</i>

- Triphthongs:** A triphthong is a speech sound produced as a result of a glide from one vowel to another and then to a third, all produced rapidly and without interruption. There are five triphthongs in RP. They are composed of the five closing diphthongs with the schwa /ə/ added on the end: /eɪə/ as in ‘player’, /aɪə/ as in ‘fire’, /ɔɪə/ as in ‘employer’, /əʊə/ as in ‘lower’, /aʊə/ as in ‘power’.

Triphthongs	Examples
/eɪə/	<i>Player, layer, greyer</i>
/aɪə/	<i>Higher, liable, drier</i>
/ɔɪə/	<i>Loyal, employer, enjoyable</i>
/əʊə/	<i>Lower, slower, mower</i>
/aʊə/	<i>Flower, vowel, sour, power</i>

## Lecture 3: English Consonants

### Consonants:

Consonants are sounds produced with obstruction of the air in the vocal tract. Producing a consonant involves making the vocal tract narrower at some location than it usually is. We call this narrowing a constriction. Which consonant is formed depends on where in the vocal tract the constriction is and how narrow it is. It also depends on whether the vocal folds are vibrating, whether air is flowing through the nasal or the oral cavity and whether the articulation requires much or less muscular effort. Thus, consonants can be described and classified along four major dimensions: place of articulation, manner of articulation, voicing and force of articulation. For example, the English consonant /t/ is usually described as an alveolar plosive voiceless Fortis consonant while /m/ is described as bilabial nasal voiced lenis.

➤ **Place of Articulation:** where the sounds are made or at what point and between which organs does the closure take place?

1. **Bilabials:** the lips are the primary articulators (lips brought together). They are /p/ as in 'put' and 'apply', /b/ as in 'bring' and 'oblige', /m/ as in 'many' and 'cream', /w/ as in 'worm' and 'one'.

2. **Labio-dentals:** the lower lip articulates with the upper teeth. They are the sounds: /f/ as in 'fever' 'belief' 'enough' 'photograph', and /v/ as in 'very' 'provide'.

3. **Dentals:** The tip and rims of the tongue articulates with the upper teeth. Here we find the tongue between the teeth or just behind the upper teeth. They are the sounds /θ/ as in 'thing' 'method' 'breath' and /ð/ as in 'then' 'weather'.

4. **Alveolars:** the blade or tip of the tongue articulates with the alveolar ridge, behind the teeth.

They are the sounds /t/ /d/ /n/ /s/ /z/ /l/ /r/

/t/ as in 'tick' 'stop' 'cut'. /d/ as in 'day' 'produce' 'board'. /n/ as in 'nose' 'organise' 'moon'. /s/ as in 'some' 'glass' 'practice' 'circus'. /z/ as in 'zodiac' 'was'. /l/ as in 'lip' 'alone'. /r/ as in 'run' 'strike'.

5. **Post-alveolar:** the blade or the blade and the tip of the tongue articulate with the alveolar ridge. There is sometime an arising of the front of the tongue towards the hard palate. This is the case for the sounds /ʃ/ /ʒ/ /tʃ/ /dʒ/.  
/ʃ/ as in 'sheep' 'machine' 'brush' , /ʒ/ as in 'rouge' 'measure' 'treasure'. /tʃ/ as in 'cheap' 'question' 'match'. /dʒ/ as in 'judge' 'journalist' 'George' 'danger' 'garbage'.
  6. **Palatal:** the front of the tongue articulates with the hard palate. There is no movement of the tip of the tongue. /j/ as in 'your' 'new' 'Europe' 'stupid'.
  7. **Velars:** the back of the tongue articulates with the soft palate. They are /k/ as in 'catch' 'package' 'check'. /g/ as in 'go' 'ghost' 'begin'. /ŋ/ as in 'sing' 'eating' 'twinkle'.
  8. **Glottal:** the narrowing takes place in the pharynx, at the glottis (the point between the two folds of the vocal cords). /h/ as in 'house' 'who' 'prohibit'.
- **Manner of Articulation:** the obstruction to the air made by the organs of speech may be total, intermittent (partial), or may just constitute a narrowing sufficient to cause friction. Consequently, there are six consonants identified according to their manner of articulation.
1. **Plosive:** There is a complete closer between two organs or points of articulation behind which the air builds and then is released quickly, explosively. In English, The Plosive consonant sounds are /b, p, d, t, g, k /
  2. **Affricate:** There is a complete closure at some points, but the separation of the organs is so slow that friction is the characteristic of the second element of the sound. In other words, there is a closure followed by friction. The Affricate consonant sounds are / dʒ/, /tʃ/
  3. **Nasal:** There is a complete closure or an obstruction to the air to go through the mouth because the soft palate is lowered, so the air escapes through the nose. The Nasal consonant sounds are:/m, n, ŋ/
  4. **Lateral:** The air stream is allowed through both sides of the tongue. The Lateral consonant sound is /l/

**5. Approximants:** The articulators approach each other but not sufficiently to produce a complete consonant such as a plosive or fricative. The Approximant consonant sounds are :

/w, j, r/

**6. Fricative:** The interaction between two organs leads to a so narrow closure. The result is that when the air stream passes through them a friction is produced because the air is forced through. The Fricative consonant sounds are: /f, v, z, s, ʒ, h, ð, θ, ʃ/

➤ **Voicing:** Voicing refers to the level of vibration of the vocal cords.

**1. Voiced:** A voiced consonant is produced when the vocal cords vibrate (the vocal cords are very close to each other so the air will blow them apart as it forces its way through).

**2. Voiceless:** A voiceless consonant is produced when the vocal cords do not vibrate (the vocal cords are wide apart, so the air escapes unimpeded)

Consonants are in two categories **voiced** and **voiceless** as shown in the table below:

Voiced Consonant Sounds	Voiceless Consonant Sounds
/b/, /v/, /ð/, /d/, /z/, /ʒ/, /dʒ/, /g/, /m/, /n/, /ŋ/, /l/, /w/, /j/, /r/.	/p/, /f/, /θ/, /t/, /s/, /ʃ/, /tʃ/, /k/, /h/

The following IPA chart contains the consonant phonemes of the English language:

		MANNER	VOICING	PLACE					
				Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar
Obstruent	Stop	Voiceless	p			t		k	ʔ
		Voiced	b			d		g	
	Fricative	Voiceless		f	θ	s	ʃ		h
		Voiced		v	ð	z	ʒ		
	Affricate	Voiceless					tʃ		
		Voiced					dʒ		
Sonorant	Nasal	Voiced	m			n		ŋ	
	Liquid	Lateral	Voiced				l		
		Rhotic	Voiced					r (ɹ)	
		Glide	Voiced	w				j	(w)

**Chart 1: Consonants Phonemes**



## International Phonetics Alphabet:

Most of the IPA symbols in the table above are the same letters we use in spelling these words, but there are a few differences. One difference between spelling and phonetic usage occurs with the letter *c*, which is sometimes used to represent a /k/ sound, as in *cup* or *back*, and others to represent an /s/ sound, as in *receive*. Moreover, the phoneme /ŋ/ is used mainly to represent (ing) and other cases such as: king /kɪŋ/, trying /traɪŋ/, think /θɪŋk/, hang /hæŋ/.

## Lecture 4: Allophonic Variation: Useful Phonological Notions

### Phoneme:

A phoneme is the smallest meaningless unit of a language system or the **smallest segment** of sound which can distinguish one word from another i.e. it is the smallest contrastive unit in the sound system of a language and it is usually represented between slashes / . . . /. There are **44 phonemes** in English.

We know that there are two phonemes /b/ and /p/ in English because they are the only basis of the contrast in meaning between the forms *big* and *pig*. For example, the word *dog* changes to *fog* if you change the phoneme /d/ to /f/. These pair of words, which differ by only *one phoneme*, are known as **minimal pairs**.

### Minimal Pairs:

A minimal pair is a pair of words of the same language that have different meanings and which differ in only ONE sound. Since the difference between the two sounds is meaningful, the words must be stored differently in memory. Thus, the difference in sounds is significant, and so the two sounds must both be phonemes.

### Example 1: /lɪp/ and /tɪp/

- These two words are different words of English. However, they differ only in their initial sound. Therefore, the [l] [t] difference is significant for English speakers. Consequently, both [l] and [t] are stored in the memory. Thus, English includes the phonemes /l/ and /t/.

**Example 2:** /bæg/ and /beg/

- These two words are distinct words of English. Therefore, the speech sounds [æ] [e] are significant to the mind. Thus, English includes the phonemes /e/ and /æ/.

**Allophones:**

A phoneme is realised as one or more phones in different environments. These phones are called allophones. Thus, an allophone is a phonetic variant of a phoneme in a particular language which do not contribute to distinctions of meaning. For example, /p/ in **peak** is aspirated [p<sup>h</sup> i:k] and /p/ in **speak** is unaspirated [spi:k]. [p] [p<sup>h</sup>] are allophones of the English phoneme /p/ because the ‘p’ sound in *peak* is slightly different from the ‘p’ sound *speak*. You can discover this difference when you repeat the two words loudly several times putting your hand in front of your mouth.

Therefore, an allophone is any realization of a phoneme or a sound which counts as an alternative way of saying a phoneme in a particular language. In other words, it is a non-distinctive phonetic variant of a phoneme in a particular language. This variant is enclosed between square brackets and is usually context-based. For example, the words *port* and *sport* contain the phoneme /p /, but the /p / in *port* is realised in a slightly different manner from the /p / in *sport* (aspirated [p<sup>h</sup>] vs [p]). These two variants are allophones of the phoneme / p /.

Languages differ in terms of the inventory of their phonemes. While aspirated and unaspirated /p/ are allophones of the same phoneme (they are not distinctive: it is impossible in English to oppose an aspirated [p<sup>h</sup>] to a non-aspirated one in the same phonetic context to distinguish meanings) in English, they are considered as different phonemes in Hindi (a word with aspirated /p / has a meaning and the same word with unaspirated /p / has a different meaning). Thus, while aspiration is not contrastive in English, it is in Hindi.

In the light of the above discussion, a *phoneme* can be defined as a family of similar sounds which a language treats as being “the same”. Members of the family are called its allophones, which are variations from a norm (the phoneme). Thus, [p] and [p<sup>h</sup>] are allophones of the phoneme /p/.

**Types of Transcriptions:** two types of transcriptions can be differentiated: phonemic and phonetic.

- **Phonemic Transcription:** showing the pronunciation of words using a simple set of symbols representing phonemes. It is a transcription usually found in the dictionary which is enclosed between slashes. For example: girl /gɜ:l/ think /θɪŋk/. Thus, it refers to the pronunciation of words as they exist in our minds. It captures only enough aspects of a pronunciation to show how a word differs from other words in the language and ignores as many details as possible.
- **Phonetic Transcription:** it is a transcription with more details about the pronunciation of words i.e., it represents the utterance in terms of phones or allophones and so, it is enclosed between square brackets. It refers to the pronunciation of words as they are actually pronounced by our organs of speech. It encodes more information about the exact pronunciation of sounds. In other words, it captures as many aspects of a specific pronunciation as possible and ignores as few details as possible. In this kind of transcription allophones are represented. For example: proposal [prəˈpʰəʊzl] the allophone [pʰ] is **aspirated** and [ɪ] is **dark** and **syllabic**.

### **The Environment:**

Usually, an allophone is produced when one of the phonemes features changes under the influence of the context in which the phoneme appears. This context is also known as the **environment**. An environment or a context is all the parts of the utterance that directly surround a given sound. The environment of a sound may be adjacent sounds, or a break in the sound such as at the beginning of a syllable, word or phrase.

- In the word [pæt], [p\_t] is the environment for the sound [æ].
- In the word [pen], [pe\_#] is the environment for the sound [n]. (“#” represents the end of a word)
- In the word [kæt], [#\_æt] is the environment of the sound [k].

## Lecture 5: Allophonic Variation: Consonants

In this lesson, we will discuss two examples of aspects of speech that speakers produce unconsciously. Phonology tries to describe, explain and provide rules for most of those aspects.

Different allophones of consonants are realised as a result of changes that occur on phonemes. The most important ones are aspiration, (de)voicing, variations in place of articulation, variations in manner of articulation and glottal replacement/glottal reinforcement.

### Aspiration:

Aspiration is one of the changes that may occur on a phoneme. In other words, it is a feature that characterizes one of the allophones of a given phoneme. Put simply, aspiration is the presence of a puff of air at the end of a sound. For example, the voiceless plosive /p/ can be aspirated [p<sup>h</sup>], (the [h] means aspirated) i.e., pronounced with a /h/ sound. You can see aspiration by putting your fingers in front of your lips and notice the difference in breathiness as you produce pairs like:

Pin [p<sup>h</sup>ɪn] and Spin [spɪn]

Pie [p<sup>h</sup>aɪ] and Spy [spaɪ]

In English, word initial voiceless plosives (or stops) /p,t,k/ are aspirated whereas non-word initial voiceless plosives are not aspirated.

Piece [p<sup>h</sup>i:s] and Speed [spi:d]

Tea [t<sup>h</sup>i:] and eat [i:t]

Cat [k<sup>h</sup>æt] and Fat [fæt]

### Variations in Place of Articulation:

Some allophones are realised when the place of articulation of the phonemes changes under the influence of the context in which the phoneme appears. The most common variations in place of articulation occur within words and even at word boundaries. They include the following cases:

- **Dentalization:**

When the alveolar consonants / t, d, n, l / occur before the dental fricatives / θ / and / ð /, they are articulated as dentals. Dentalization is symbolised by [̣] under the symbol of the phoneme. Examples of dentalisation in words include *Tenth, Health, wealth, Eighth, width*.

- **Retraction / advancement:**

When the alveolar consonants / t, d / precede /r /, they are retracted (pronounced with a post-alveolar articulation). Retraction is indicated by adding the minus mark [ - ] under the symbol of the phoneme.

**Examples:**

Compare /t /in *tea* and *tree*

Compare /d /in *do* and *drew*

The velar plosives /k, g / are advanced before front vowels and retracted before back vowels. the minus mark [ - ] and the plus mark [ + ] under the symbol of the phoneme are used to symbolise retraction and advancement, respectively.

**Examples:**

Compare /k / in *keep* and *car*

Compare /g/ in *geese* and *garden*

**Velarization:**

It is a secondary articulation of consonants by which the back of the tongue is raised toward the soft palate or velum, during the articulation of the consonant. Indeed, the tongue is drawn far up and back in the mouth toward the velum as if to pronounce a back vowel such as /u/.

The English phoneme /l/ has two allophones: the so-called **clear** [l] as in ‘leave’ [li:v], and **dark or velarized** [ɫ] as in ‘shield, heal’ [ʃi:ɫd] [hi:ɫ]

✓ We can say that /l/ is velarized when word final or before a consonant, as in ‘ball, filled’.

- ✓ We can say that /l/ is not velarized or “light” when it is before a vowel, as in ‘lamb, swelling’.

A **clear** /l/ is produced with the front of the tongue high in the mouth and the back of the tongue low. A **dark** /l/ is made with the back of the tongue raised; the center is low, so that the whole tongue has more or less the shape of a spoon.

### **Variations in Manner of Articulation:**

A consonantal phoneme can be realised differently by changing its manner of articulation in a specific context. The most striking cases involve /r/, /j/ and the plosives.

Change from frictionless to fricative:

- The /r/ is articulated as a fricative after /d/ and unaspirated /t/ (*dry/ stream*)
- The /j/ becomes fricative (and voiceless) when it combines with /h/ (*huge*) and when preceded by the aspirated voiceless plosives (*pure, cues, tune*).

- **No release (inaudible release):**

When a plosive is followed by another plosive, the release of the first plosive cannot be heard. The diacritic for an unreleased plosive or an inaudibly released plosive is [ ] to the right of the plosive symbol (*Upgrade, apt, rubbed, chickpea*).

- **Nasal release:**

Nasal release means that a plosive consonant is released by allowing the air to escape through the nasal cavity in anticipation of the articulation of the nasal. This occurs when a plosive precedes a homorganic nasal (that has the same place of articulation as the plosive) or a syllabic nasal. nasal release is indicated by a superscript[n] to the right of the plosive. (*sudden, kitten, happen, madness, sad news*)

- **Lateral release:**

Lateral release means that a plosive is released in a lateral manner, i.e. by allowing the air to escape on both sides of the tongue. A Plosive is released laterally when it is followed by /l/.

(*little, badly*, ). The diacritic used to indicate lateral release is a superscript[l̪] to the right of the plosive.

## Lecture 6: Allophonic Variation: Vowels

Different realizations of the same vowel can vary with respect to two main features: vowel shortening (pre-fortis clipping) and nasalization.

### Vowel Shortening

The length of a vowel varies according to whether it occurs in an open syllable, before a voiced consonant or before a voiceless consonant: a given vowel is longest in an open syllable, next longest in a syllable closed by a voiced consonant, and shortest in a syllable closed by a voiceless consonant. When a vowel occurs before a voiceless consonant in the same syllable, it is shortened (pronounced slightly shorter than usual). This phenomenon is referred to as pre-fortis clipping ( sounds are shorter or clipped when they occur before a voiceless (fortis) consonant in the same syllable. The diacritic for pre-fortis clipping is [ ̣ ] , placed above the symbol for the clipped short vowel or diphthong ( [ ̣ ě, ̣ ɨ, , ̣ ʊ, ̣ æ, ̣ ʌ, ̣ ěɪ, ̣ ɔɪ, ̣ aɪ, ̣ əʊ ...]) and [ ˑ ] instead of the colon for the clipped long vowels ([iˑ, uˑ, ɜˑ, ɑˑ, ɔˑ]).

#### Shortened vowels

*Seed* [iˑ]

*Hard* [ɑˑ]

*Save* [ɛ̣ɪ]

*Height* [ạ̈ɪ]

*Cap* [æ̣]

*Lock* [ɒ̣]

*rough* [ʌ̣]

#### No Shortening

*seat* [i:]

*heart* [ɑ:]

*Safe* [eɪ]

*hide* [aɪ]

*cab* [æ]

*log* [ɒ]

*rub* [ʌ]

It is worth mentioning that only the fortis consonants trigger pre-fortis clipping; lenis consonants do not, even if they are devoiced.

## Exercises

**1) - How many sounds are there in the following words:**

Love: ..... half: ..... Wrist: ..... ought: .....

Reason: ..... Measure: ..... understand: ..... Bounce: .....

**2) - Write the symbols for the vowels included in the following words and then provide the description of each vowel:**

World / / .....

Hand / / .....

watch / / .....

Bought / / .....

Butter / / .....

/ / .....

**3) - Write the symbols for the diphthongs included in the following words and then provide the description of each diphthong:**

Brown / / .....

Slow / / .....

Slide / / .....

Safe / / .....

Fear / / .....

Spoil / / .....

**4) - Can the following words be considered as minimal pairs:**

Lead/led, wig/ring, dead/dad, copy/coffee, pride/fried

.....  
.....



.....  
 .....  
**5) - Identify the sound and then provide its description:**

1. The initial sound in *Thames* is / /      It is .....
2. The second sound in *said* is / /      It is .....
3. The second sound in *island* is / /      It is .....
4. The last sound in *courage* is / /      It is .....
5. The initial sound in *horizontal* is / /      It is .....
6. The initial sound in *chef* is / /      It is .....
7. The last sound in *fly* is / /      It is .....
8. The third sound in *margarine* is / /      It is .....
9. The second sound in *butcher* is / /      It is .....

**6) - Describe the environment of the sounds which correspond to the letters in bold:**

Beach: ..... Weight: ..... Naught: .....

Bomb: ..... **show**: ..... Surrender: .....

**7) - Identify the aspirated and unaspirated sounds in the following examples:**

Teenager / coffee / Spice / Tune/ Pool / look /appease / Precautions / Party /  
 /tall / peak / speak / appear / school / spy / impel / spoil / encourage

Aspirated	Unaspirated

**8) - Identify dark 'l' and light 'l' in the following words:**

Parliament/ Example/ Child/ Lazy/ lemonade/ Loyal/ bottle/  
 /shoulder /follow/ sailor/plural/ whistle/ help/

Clear /l/	Dark /ɫ/

**9) - Transcribe the following words phonetically:**

Speed: ..... book: ..... car: ..... Appeared: .....  
Pleasure: ..... goat: ..... toast: ..... tiny: .....  
Cry: ..... cream: ..... Kneel: ..... Mile:.....

**10) - Provide the symbols and give two examples for each.**

1. Aspirated **k** : .....
2. Syllabic **n**: .....
3. Dentalised **d**: .....
4. Unaspirated **t**: .....
5. Labiodental **m**: .....
6. Devoiced **l**: .....
7. Labiodental **n**: .....
8. Velarized **l**: .....
9. Voiceless **w**: .....
10. Fricative **r**: .....

**11)- Find the mistakes and correct them:**

/craim/ ..... /wreslɪŋ/ ..... /pɑ:rkɪŋ/ ..... /waɪvs/.....  
/θi:z/ ..... /jækɪt/ ..... /yeləʊ/ ..... /sɪxti/ .....

## Chapter II: Supra-segmental Phonology

### 2.1. Learning Goals and Objectives

- Understand the structure of the English syllable
- Distinguish strong and weak syllables
- Understand stress placement and its importance in speech
- Distinguish stress placement in simple and complex words
- Develop an awareness in phrasal stress, sentence stress and variable stress

### Lecture 7: Syllable Structure and Consonant Cluster

#### Syllable Definition :

All words can be cut up into units called syllables. The syllable is defined as a unit of spoken language larger than a phoneme. It is a unit of pronunciation uttered without interruption, forming whole or part of a word, and usually having one vowel (or vowel-like) sound, or diphthong sound optionally surrounded by one or more consonants. In fact, phoneticians and phonologists, in their attempts to define the term, have relied on different criteria, so different definitions are provided.

- **Phonetic Definition:** From a phonetic point of view, the syllable is defined as a unit that is made up of a centre characterised by little or no obstruction to airflow and which sounds comparatively loud; before and after that centre, there will be greater obstruction to airflow. E.g. In the monosyllabic word *seen* /si:n /, the vowel /i:/ is the centre surrounded by the consonants /s / and /n /.
- **Phonological Definition:** from a phonological point of view, a syllable is defined as a complex unit consisting of nuclear and marginal elements. Nuclear elements are the vowels or syllabic segments (While the nucleus is usually a vowel, it is also possible for some consonants like the /l / and /n / to be syllabic in words such as *table*, *little*, *cotton* and *button*); marginal elements are the consonants or non-syllabic segments. In the monosyllabic

word *speak* /spi:k/, the vowel /i:/ is the nuclear element, while initial consonant cluster /sp/ and the final consonant /k/ are marginal elements.

**Counting Syllables:** to find the number of syllables in a word, follow the following steps:

1. Count the vowels in the word.
2. Subtract any silent vowels (like the silent *e* at the end of the word) such as: *mate* /meɪt/.
3. Diphthongs count as one vowel sound like: *crime* /kraɪm/, *slow* /sləʊ/, *boy* /bɔɪ/.
4. The number of vowel sounds must be the same as the number of syllables such as:  
*Believe* /bɪˈli:v/ , *perhaps* /pəˈhæps/ , *record (v)* /rɪˈkɔ:d/ , *money* /ˈmʌni/
5. When there is a word that has an “-le” in final position, we divide before the consonant before the “-le”. For example: *hum/ble*, *dou/ble*, *whis/tle*.

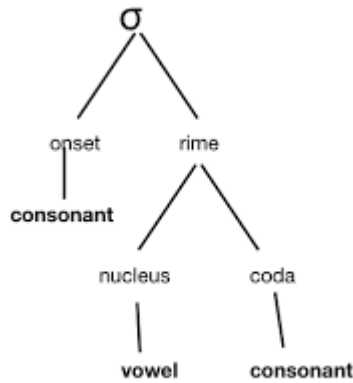
The English word can be in one syllable or divided into syllables. So, there are:

- **Monosyllabic words** (having one syllable) as in **did** /dɪd/, **was** /wɒz/ /wəz/
- **Disyllabic words** (having two syllables) as in **doctor** /dɒktə/, **Friday** /fraɪdeɪ/
- **Trisyllabic words** (having three syllables) as in **difficult** /dɪfɪkəlt/
- **Polysyllabic words** (having four syllables) as in **civilization** /sɪvəlaɪzɪʃn/

In English, a syllable can consist of a vowel preceded by one consonant (CV) or by two consonants (CCV) or by three consonants (CCCV). The vowel of the syllable may also be followed by one consonant (VC) or by two consonants (VCC) or by three consonants (CVCCC) as in *text/tekst/* or by four consonants (CVCCCC) as in *texts/teksts*

### **The Structure of the English Syllable:**

Syllables have internal structure: they can be divided into parts. The parts are **onset (O)** and **rhyme (R)**; within the **rhyme** we find the **nucleus (N)** also known as the **(peak)** and **coda (C)**. Not all syllables have all parts; the smallest possible syllable contains a nucleus only. A syllable may or may not have an onset and/or a coda. A tree diagram is used to represent Syllable structure.



- **The Onset:** the onset is the beginning sounds of the syllable; the ones preceding the nucleus. These are always consonants (we can have one, two or three consonants as an onset) in English. All consonants in English, except [ŋ] can appear as onsets. [ʒ], however, is rare. In the following words, the **onset** is in bold characters (**read**, **flop**, **strap**).
- If a word contains more than one syllable, each syllable will have the usual syllable parts (**win.dow**, **to.ma.to**, **fun.da.men.tal**).
- If the first syllable of a word begins with vowel (any vowel may occur, though “u” is rare) we say that this initial syllable has a **zero onset**.
- **Rhyme (or rime):** the rhyme is the rest of the syllable, it can be divided up (Rhyme=nucleus+coda).
- **The Nucleus:** as the term suggests, 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, the nucleus is a vowel (or diphthong) in most cases.
- **The Coda:** is usually one, or more consonants. The coda may be absent in some syllables.
- In English, the syllable structure analysis of the words ‘**read**’ and ‘**flop**’, for instance are as follows (the IPA symbols are used to show the sounds in the word/syllable):

**Read = one syllable**

Onset= [r]

Rhyme= [i:d]

**Flop= one syllable**

Onset= [fl]

Rhyme= [ɒp]

Nucleus= [i:]

Coda= [d]

Nucleus= [ɒ]

Coda= [p]

In its minimal form, a syllable is composed of only the nucleus (e.g. *eye, are, a, or, err, owe, ear* and *air*). So, the Nucleus or the Peak is the only **obligatory** element or compulsory part of the syllable in all languages. In English, vowels can initiate (*ice, ear, earth*) or end syllables (*high, low, sir*). In addition to the vowel, a syllable may include an onset and/or a coda. So, the Onset and the Coda are **optional**.

Syllables can be categorised as **Closed** or **Open** syllables. The difference between them is concerned with the presence or the absence of the coda; a syllable with a coda is a closed syllable (e.g. *on, height, eight*) and a syllable without a coda is an open syllable (e.g. *sea, eyes, high*). It is worth to mention that the Onset is not taken into consideration (there are open syllables with or without onsets and there are closed syllables with or without onsets).

### **Weak and Strong Syllables:**

In English, a distinction is made between weak and strong syllables. Weak syllables tend to be quieter and shorter than strong syllables. Moreover, a strong syllable can have as its nucleus any English vowel phoneme except /ə/, while a weak syllable can only have as its nucleus one of the following: the schwa /ə/, a close front unrounded vowel /ɪ/, a close back rounded vowel /ʊ/, or a syllabic consonant.

### **Close Front and Close Back Vowels:**

There are many cases in present-day British and American English where the distinction between /ɪ/ and /i:/ is very difficult. For example, it is difficult to tell whether the final vowel of *city* and *easy* should be described as /i:/ or /ɪ/. It seems to belong neither to the /ɪ/ phoneme nor to /i:/. A parallel argument can be made for the distinction between /ʊ/ and /u:/ in words such as *to* and *who*. The sound does not seem to be either of the two phonemes. The solution adopted by Roach for these neutralised sounds is to use the symbol for the long vowel but

without the length mark e.g. /bɪzi/ and /tu/.

### **Syllabic Consonants:**

In unstressed syllables where usually the realization of the underlying sequence of schwa plus consonant can be represented in one consonant called “syllabic consonant”. Syllabic consonants are the consonants that make syllables without vowels. The English consonants /m, n, ŋ, r, l/ can be the nuclei of syllables if they are preceded by a consonant. Such consonants are called syllabic consonants and are transcribed with a small vertical line under the syllabic consonant sound e.g. /r̩/

- ✓ **Syllabic /n/:** is the most common syllabic consonant which is found after alveolar plosives and fricatives; in the case of /t,d/ sounds followed by /n/ such as in eaten /i:tn/, seven /se.vn/, threaten /θre.tn/, heaven /hev̩n/.
- ✓ **Syllabic /l/:** the lateral /l/ is mostly syllabic at the end of the word, if it fell immediately after plosives and fricatives such as in cattle /kæ.tl/, bottle /bo.tl/, muddle /mʌ.dl/, tunnel /tʌ.nl/, couple /kʌ.pl/, trouble /trʌ.bl/, struggle /strʌ.gl/, panel/pæ.nl/, petal/pe.tl/, parcel /pɑ:.sl/, kernel /kɜ:.nl/
- ✓ **Syllabic /m/:** as in bottom /bɒ.t̩m/, rhythm /rɪ.ð̩m/.

### **Consonant Cluster:**

When we have more than one consonant appearing as either the onset or coda (or both) of a syllable, we call them a **consonant cluster**.

A consonant cluster is a group or sequence of consonants that appear together in a syllable without a vowel between them. It is important to distinguish between consonant clusters and digraphs with which they are often confused. In contrast to a consonant cluster, a digraph is a group of two or more symbols which really stand for just one sound (usually a consonant).

In the word *chat*, the letters *c* and *h* appear contiguously but are *not* a consonant cluster, even though both are separate consonants in other contexts (cat; hat). In this instance, *ch* is a digraph

because the *ch* sequence represents a single sound in the underlying English sound system. Examples of consonant clusters are: /sp/ and /ts/ in the word *spots* ---- /spr/ in the word *spray*.

### **The Syllable Onset/ The Syllable Coda:**

As such, we may have initial and final consonant clusters. There are some **patterns** or rules of phonological system concerning syllable structures. Exactly how many consonants and which ones can occur in the onset and coda are determined by a series of **sequence constraints**, commonly known as **Phonotactics**.

### **Phonotactics:**

A set of rules that specify the permissible sequences of consonants in the onset and coda. In other words, they 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. For instance, in English, consonant clusters can occur in both syllable-initial and syllable final positions (i.e., as onset or coda) and English allows up to three consonants in the onset and three consonants in the coda. If a word does begin with three consonants, the first will always be /s /, the second must be a voiceless stop / p, t, k / and the third a liquid / l, r / or a glide /w, j/.

#### ➤ **Initial Consonant Clusters:**

In English, a word or a syllable 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 sounds [l r w y]. Thus, we get words such as ‘**squeeze**’ [skwi:z] in English. We have two kinds of initial clusters: initial two-consonant clusters and initial three-consonant clusters.

- Initial two-consonant clusters are of two sorts. One sort is composed of ‘s’ followed by one of a small set of consonants. Examples of such clusters are found in words like ‘sting’ [stɪŋ], ‘sway’ [swei], ‘smoke’ [sməʊk]. The ‘s’ in these clusters is called **pre-initial** consonant while the other consonants that



follow it are the **initial** consonants. The other sort begins with one of a set of about fifteen consonants followed by one of the set ‘l, w, r, j’ as in ‘play’ [pleɪ], ‘tray’ [treɪ], ‘quick’ [kwɪk], ‘few’ [fju:]. The first consonant in these clusters is called the **initial** consonant and the second one the **post-initial**.

- Initial three-consonant clusters have a clear relationship with the two sorts of the two-consonant cluster described above. Examples of three-consonant initial clusters are ‘split’ [split], ‘stream’ [stri:m], ‘square’ [skweə]. The ‘s’ in these examples is the **pre-initial** consonant, the ‘p’, ‘t’ and ‘k’ that follow ‘s’ are the **initial** consonant and the ‘l’, ‘r’ and ‘w’ are the **post-initial**.

➤ **Final Consonant Clusters:**

In a syllable’s coda, we have the possibility of up to four consonants. This maximum (four consonants) is more common for one-syllable words.

- If there is no consonant, we say that there is a **zero coda**, as in ‘do’, ‘though’
- When there is one consonant only, this is called, this is called the final consonant. Any consonant can be final in English except ‘h’, ‘r’, ‘w’ and ‘j’ as in ‘cat’, ‘dream’, ‘seen’.
- Two-consonant final clusters are of two sorts. The first one includes **final** consonant preceded by a **pre-final** one. Pre-final consonants in English form a small set: m,n,l,ŋ,s. We can see these in ‘bump’ [bʌmp], ‘bent’ [bent], ‘bank’ [bæŋk], ‘belt’ [belt], ‘ask’ [ɑ:sk]. The other sort of two-consonant final cluster is made of a **final** consonant followed by a **post-final** one. Post-final consonants also form a small set: s,z,t,d,θ. We can see these in examples like ‘bets’ [bets], ‘beds’ [bedz], ‘backed’ [bækt], ‘bagged’ [bægd], ‘eighth’ [eɪθ]
- Final three-consonant clusters are also of two types. The first one is **pre-final** plus **final** plus **post-final**, as set out in the following table:

		<b>Pre-final</b>	<b>Final</b>	<b>Post-final</b>
'helped'	he	l	p	t
'banks'	bæ	ŋ	k	s
'bonds'	bɒ	n	d	z
'twelfth'	twe	l	f	θ

- The second type shows that more than one post-final consonant can occur in a final cluster: **Final** plus **Post-final 1** plus **Post-final 2**. Post-final 2 is again one of 's,z,t,d,θ'.

		<b>Pre-final</b>	<b>Final</b>	<b>Post-final 1</b>	<b>Post-final 2</b>
'fifths'	fr	--	f	θ	s
'next'	ne	--	k	s	t
'lapsed'	læ	--	p	s	t

- Four-consonant clusters can be analysed as consisting of a final consonant preceded by a **pre-final** and followed by **post-final 1** and **post-final 2**.

		<b>Pre-final</b>	<b>Final</b>	<b>Post-final 1</b>	<b>Post-final 2</b>
'twelfth's'	twe	l	f	θ	s
'prompts'	prɒ	m	p	t	s

- A small number of cases seem to require different analysis, as consisting of a **final consonant** with **no pre-final** but **three post-finals**.

		Pre-final	Final	Post-final 1	Post-final 2	Post-final 3
'sixths'	si	--	k	s	θ	s
'texts'	te	--	k	s	t	s

### Division of Syllables:

Counting the number of syllables that a word contains is usually an easy task. Nonetheless, dividing a word into syllables (dividing word-medial sequences between onsets and codas) can be problematical. There are three main criteria of syllabication (or syllable division):

- ✓ Morphemic: syllable boundaries should correspond with morpheme boundaries. For example, the compound word *classmate* and the affix word *dislike* are divided /class.mate / and /dis.like/, respectively (In this section, syllable division is marked by a stop).
- ✓ Phonotactic: syllable division should accord with the rules of combination: the phonotactics of syllable onsets and syllable codas. In other words, syllables should not be divided in a way that violates what is known of English syllable structure. In the word *sequel*, both /si:.kwəl/ and /si:k.wəl / are divisions which accord the phonotactic principle.

However, these three principles, sometimes fail to give a clear answer. So, a further principle referred to as “**Maximisation of Onsets**” or “**Maximal Onsets Principle**”, which is widely recognised in contemporary phonology, is followed as far as possible. This principle sets a preference for assigning as many consonants as possible to the onset rather than to the coda where possible. So, “**Maximisation of Onsets**” is a principle of syllabification whereby the onset is made as large as possible, consistent with the phonotactics of a word-initial onset. For example, for the word *dictate*, we can imagine three possible divisions: *di.ctate*,

*dic.tate*, *dict.ate*. The correct choice is determined by the principle of **Maximisation of onsets**. The largest onset would be *di.ctate*; however, because the sequence / kt / never occurs in English as the onset of the first syllable of a word and because / t / is a possible onset for a word, the correct division is *dic.tate*. This division thus results in the largest possible onset.

However, when the application of the principle of **maximisation of onsets**, in the word *better* or *seven* for instance, would result in a syllable which violates the general principle that the vowel does not occur in open syllables (syllables ending with a short vowel /ɪ/, /e/, /æ/, /ʌ/, /ʊ/ or /ʊ/ constitute a violation of English phonotactics). Thus, the first (or only) intervocalic consonant is assigned to the coda and the word *better* is divided /'bet.ə/ whereas *beater* is divided /'bi:.tə /.

The division of *better* as /bet-ə / does not seem completely satisfactory. This problem of ambiguous medial sequences can be resolved by applying the principle of **ambisyllabicity**, which says that in an unstressed syllable, the first consonant of the onset serves as the coda of a preceding syllable. So, the / t / in *better* and the / v / in *seven* are regarded as ambisyllabic. In other words, they straddle the syllable boundary: they belong both to the coda of the first syllable and to the coda of the second syllable.

## Lecture 8: Stress Patterns: Word Stress

### 1- The Nature of Stress:

In English, when a word has more than one syllable, one of the syllables will be produced with more force, energy and prominence than the rest, this emphasis is called stress. Thus, Stress is the power that we put on the syllable to make it louder, longer, and stronger. We mark a stressed syllable in transcription by placing a small vertical line ( ' ) high up before the syllable, and the stress may fall on the first, second, third or fourth syllable.

The first syllable of words like: 'father', 'open', 'camera' is stressed, that the middle syllable is stressed in 'potato', 'apartment', 'relation', and that the final syllable is stressed in 'about', 'receive', 'perhaps'.

/ˈfɑːðə/

/pəˈteɪtəʊ/

/əˈbaʊt/

/ˈəʊpən/

/əˈpɑːtmənt/

/rɪˈsiːv/

/ˈkæmrə/

/rɪˈleɪʃn/

/pəˈhæps/

In English, therefore, the position of stress is variable, not fixed. It falls on different syllables: the ultimate (e.g. re.'ceive), the penultimate (e.g. 'con.cert), the antepenultimate (e.g. re.'place.a.ble), the ante antepenultimate and so on.

**1.1. Factors of Stress Placement:** At least four different factors are important:

**1- Loudness:** stressed syllables are louder than unstressed syllables, if one syllable is made louder than the others, it will be heard as stressed.

**2- Length:** stressed syllables are longer than unstressed ones and take more time to pronounce than the vowel of the unstressed syllables, which is reduced in length.

**3- Vowel Quality:** A *stressed syllable* has a prominent vowel, the stressed syllable mostly have strong vowels /e, æ, ɒ, ɑː, iː, ɒː, ɜː, aɪ, aʊ ... ) whereas the weak vowels /ə, ɪ/ are frequently unstressed in polysyllabic words.

**4- Pitch of the Voice:** it is the most efficient factor for recognizing the prominence of stressed syllable in which the stressed syllable is pronounced with a higher pitch than unstressed ones. For example, If all syllables are said with low pitch except for one said with high pitch, then the high-pitched syllable will be heard as stressed and the others as unstressed. To place some movement of pitch (e.g. rising or falling) on a syllable is even more effective in making it sound prominent.

Prominence, then, is produced by four main factors: (1) loudness, (2) length, (3) quality (4) pitch. Generally, these four factors work together in combination, although syllables may sometimes be made prominent by means of only one or two of them. Experimental work has shown that these factors are not equally important; the strongest effect is produced by pitch, and length is also a powerful factor. Loudness and quality have much less effect.

If we compare the words transport in *means of transport* (noun) and *to transport goods* (verb) we can hear an important difference in pronunciation. In *means of transport*, the first syllable /træn/ gets the greater emphasis than the second /spɔ:t/, while in *to transport goods*, it's the second which gets the greater emphasis. This emphasis is called **stress**. Thus, we can say that in the noun TRANsport /**tr**ænsɔ:t/ the first syllable is stressed, while in to transPORT /træn`**sp**ɔ:t/, the second syllable is stressed.

## 1.2. Levels of Stress:

Some words, especially long ones (polysyllabic words), contain syllables with varying degrees of stress. It is commonly thought that levels of stress are distinguishable, though phoneticians do not agree on how many degrees of stress are linguistically relevant in a word. Famous British phoneticians (P. Roach and A.C. Gimson) usually distinguish three degrees of stress in the word:

➤ **Primary Stress:** is the strongest type of stress in prominence (louder, longer, and higher in pitch). E.g: water /'wɔ:tə/ beautiful /'bju:tɪfl/ house /'haʊs/.

➤ **Secondary Stress:** is weaker than the primary stress in prominence. Long words may have an extra stress, the second most stressed syllable in the word. The secondary stress is marked with a small lowered vertical (, ) line preceding the stressed syllable.

E.g: information /,ɪnfə'meɪʃən/ understand /,ʌndə'stænd/

➤ **Unstressed Syllables:** is the absence of stress, it can be found in the weak syllables /ə/ and /ɪ/. E.g: alone /ə'ləʊn/ envy /'envɪ/

### 1.3. Placement of Stress within a Word:

In English, the assignment of stress to a particular syllable in a word is dictated by a set of rules. In order to decide on stress placement, it is necessary to make use of some or all of the following information:

1. Whether the word is morphologically simple, or complex. If it is complex, is it a compound word or an affix word (containing one or more affixes).
2. The grammatical category to which the word belongs. the stress-assignment rules make a distinction between nouns and verbs since the rules for them are different from each other.
3. The number of syllables in the word.
4. The phonological structure of those syllables: stress rules depend crucially on the phonological structure of syllables. A distinction is made between heavy and light syllables. A heavy syllable is a syllable that contains either a long vowel or a diphthong, with or without a coda or a short vowel with a coda, whereas a light syllable is a syllable that contains a short vowel and no coda. As a general rule, heavy syllables attract stress.

## Lecture 9: Stress in Simple Words

The choice of stress placement in the two-syllable words is either the first syllable or the second will be stressed according to the rules of stress placement on each one of them.

- **Stress on the First Syllable:** mostly in two syllable **nouns** and **adjectives** the stress falls on the first syllable. E.g. present /ˈpreznt/ clever /ˈklevə/ happy /ˈhæpi/
- **Stress on the Second Syllable:** most of two-syllable **verbs** receive the stress on the second syllable. Present /priˈzent/ decide /diˈsaɪd/ begin /bɪˈɡɪn/

### 1. Two Syllabic Words: (verbs, nouns, adjectives, adverbs, prepositions)

- ✓ If the **second syllable** contains a **long vowel** or a **diphthong** (except /əʊ/) or ends with a **consonant cluster**, the **second syllable** is **stressed**. Otherwise, the first syllable (except if it contains /ə /). is stressed.
- ✓ If the **second syllable** contains a **short vowel** or the **diphthong /əʊ/**, stress is on the **first syllable**.

<b>Verbs</b>	apply /əˈplai/      attract /əˈtrækt/      arrive /əˈraɪv/ complete /kəmˈpli:t/      receive /riˈsi:v/      withdraw /wɪðˈdrɔ:/ correct /kəˈrekt/      assist /əˈsɪst/      open /ˈəʊpən/      enter /ˈentə/ envy /ˈenvi/      borrow /ˈbɒrəʊ/      follow /ˈfɒləʊ/
<b>Nouns</b>	balloon /bəˈlu:n/      finger /ˈfɪŋgə/      money /ˈmʌni/ estate /ɪˈsteɪt/      design /dɪzain/
<b>Adjectives</b>	correct /kəˈrekt/      alive /əˈlaɪv/      lovely /ˈlʌvli/      pretty /ˈprɪti/
<b>Adverbs</b>	hardly /ˈhɑ:dlɪ/      outside /aʊtˈsaɪd/      above /əˈbʌv/      over /ˈəʊvə/
<b>Prepositions</b>	among /əˈmʌŋ/      beyond /bɪˈjɔ:nd/      until /ənˈtɪl/      along /əˈlɒŋ/



**N.B:**

- ✓ The syllable which contains the schwa /ə/ is never stressed.
- ✓ Two-syllable words with /ə/ in the 1<sup>st</sup> syllable therefore the stress on the 2<sup>nd</sup> syllable.

E.g: Ahead /ə'hed/ oppose /ə'pəʊz/ suggest /sə'dʒest/

- ✓ Two-syllable words with a schwa /ə/ in the 2<sup>nd</sup> syllable then the stress on the 1<sup>st</sup> syllable.  
Purpose /'pɜ:pəs/ ballad /'bæləd/

**2. Three Syllabic Words:** (verbs, nouns, adjectives)

- ✓ If the **third syllable** contains a **long vowel, diphthong**, or a **consonant cluster**, the **third syllable** is **stressed**. Otherwise, the penultimate syllable will be stressed.
- ✓ If the **third syllable** contains a **short vowel, diphthong /əʊ/** it is unstressed and the **second syllable** is **stressed**.

<b>Verbs</b>	entertain /entə'teɪn/ encounter /ɪn'kʌʊntə/ resurrect /rezə'rekt/ Determine /dɪ'tɜ:mɪn/ encourage /ɪn'kʌrɪdʒ/ consider /kən'sɪdə/
<b>Nouns</b>	synopsis /sɪ'nɒpsɪs/ disaster /dɪ'zɑ:stə/

**N.B:**

- ✓ If the **3<sup>rd</sup> syllable** contains a **short vowel** and the **2<sup>nd</sup>** contains a **short vowel** and do not end with a **consonant cluster**, both 2<sup>nd</sup> and 3<sup>rd</sup> syllables are unstressed, stress on the 1<sup>st</sup> syllable.

E.g: Emperor /'empərə/ parody /'pærədi/ insolent /'ɪnsələnt/

professor /prə'fesə/ opportune /ɒpə'tju:n/ infamous /'ɪnfəməs/

**Word-class Pairs:**

There are many pairs of two-syllable words with identical spelling which differ from each other in stress placement, apparently according to word class (noun, verb, adjective). The stress will be placed on the second syllable of the verb but on the first syllable for the noun or adjective.

<b>Word</b>	<b>Noun/Adjective</b>	<b>Verb</b>
Absent	/ˈæbsnt/ (adj)	/æb'sent/ (v)
Addict	/ædɪkt/ (N)	/ə'dɪkt/ (v)
Compact	/'kɒmpækt/ (N)	/kəm'pækt/ (v)
Conduct	/'kɒndʌkt/ (N)	/kən'dʌkt/ (v)
Conflict	/'kɒnflɪkt/ (N)	/kən'flɪkt/ (v)
Contrast	/'kɒntræst/ (N)	/kən'træst/ (v)
Increase	/'ɪnkri:s/ (N)	/ɪn'kri:s/(v)
Desert	/'dezət/ (N)	/dɪ'zɜ:t/ (v)
Impact	/ˈɪmpækt/ (N)	/ɪm`pækt/(v)
Convict	/ˈkɒnvɪkt/ (N)	/kən`vɪkt/(v)
Extract	/ˈekstrækt/ (N)	/ɪk`strækt/ (v)
Protest	/'prəʊtest/ (N)	/prə'test/ (v)
Record	/'rek ɔ:d/ (N)	/rɪ'k ɔ:d/ (v)
Suspect	/'sʌspekt/ (N)	/sə'spekt/ (v)
Subject	/'sʌbdʒɪkt/ (N)	/səb'dʒekt/ (v)
Insult	/'ɪnsʌlt/ (N)	/ɪn'sʌlt/ (v)
Permit	/'pɜ:mɪt/ (N)	/pə'mɪt/ (v)
Refund	/'ri:f ʌnd/ (N)	/rɪ'f ʌnd/ (v)

## Lecture 10: Stress in Complex Words

The general definition of a complex word is a word composed of more than one grammatical unit or semantic one (i.e. morpheme). Hence, a word like *careful* (**care** + **ful**), or *blackbird* (**black** + **bird**), being composed of two grammatical units each, are complex words. *Carefully* (**care** + **ful** + **ly**) and *carelessness* (**care** + **less** + **ness**) are also complex and are composed of three grammatical units each.

Complex words are of two major types: words made of a basic **stem word** with the addition of an **affix**, and **compound words**, which are made of two (or occasionally more) independent English words (e.g. 'ice-cream', 'armchair'). We will look first at the words made with affixes; these will be called **affix words**. Affixes are of two sorts in English: **prefixes**, which come before the stem (e.g. prefix 'un-' stem 'pleasant' = 'unpleasant') and **suffixes**, which come after the stem (e.g. stem 'good' + suffix '-ness' = 'goodness').

Stress assignment in complex words is guided by a fairly complex set of rules. It is worth mentioning that the rules provided below do not cover the stress patterns of all affix words.

### - Placement of Stress in Affix Words:

The addition of affixes affects the placement of word stress in three main ways:

1. Stress falls on the affix itself (*circle* but *semicircle*: the addition of the prefix *semi*-causes the stress to shift from *circle* to *semi*- / *profiteer*: the addition of the suffix -*eer* causes the stress to shift from the first syllable in *profit* to the ultimate syllable containing the suffix -*eer*).
2. No effect: the affix does not make any difference to the stress pattern of the resulting word ('comfortable: the addition to '*comfort*' has no effect on the placement of stress, which remains on '*comfort*' / 'marketing: the addition to '*market*' has no effect on the placement of stress, which remains on '*market*').

3. Stress is shifted from its original position to a different syllable in the stem. (*'magnet* but *mag'netic*: the addition of the suffix *-ic* to *'magnet* causes the stress to shift from the first syllable of the stem to the second syllable of the stem).

### 1. Stress Assignment on Prefixes:

There is no prefix that always carries primary stress. In the words containing prefixes such as: (**a- , ab, co, de, dis, im, in, re, un**) the primary stress mostly does not fall on the prefix but on one of the stem syllables. Consequently, the best statement seems to say that stress in words with prefixes is governed by the same rules as those for words without prefixes.

Prefixes	Examples
<b>a-</b>	aside /ə'saɪd/, aback /ə'bæk/, apart /ə`pɑ:t/
<b>ab</b>	<i>abnormal</i> /æb'nɔ:məl/, <i>absolve</i> /əb'zɒlv/
<b>co</b>	<i>cooperative</i> /kəʊ'ɒpəreɪv/, <i>cohabit</i> /kəʊ'hæbɪt/
<b>de</b>	<i>demotivate</i> /di:'məʊtɪveɪt /, <i>decode</i> / di:'kəʊd/
<b>dis-</b>	Dislike /dɪs 'laɪk/ disagree /dɪsə 'gri:z/
<b>Im-</b>	Impossible /ɪm 'pɒsəbl/ immortal /ɪ 'mɔ:tl/
<b>In-</b>	Invaluable /ɪn 'væljuəbl/ incorrect /ɪn 'kɒrəkt/
<b>re-</b>	Reorder /rɪ 'ɔ:də/ rearrange /ri:ə 'reɪndʒ/
<b>un-</b>	Uncertain /ʌn 'sɜ:tn/ unfaithful /ʌn 'feɪθfl/

- ✓ There are many exceptions in English because of the vastness of the language. Thus, stress placement in complex words is not always predictable. However, the rules do work mostly.

**E.g:** impotent /'ɪmpətənt/ impulse /'ɪmpʌls/ infinite /'ɪnfɪnət/

## 2. Stress Placement on Suffixes:

There are so many suffixes that it will only be possible to examine a limited number of them. We will examine only those which are common and productive, i.e., are applied to a large number of stems and could be applied to more to make new English words.

- ✓ **Suffixes Carrying Primary Stress Themselves:** the suffixes which attract the primary stress to the *final syllable*, they are also called stress-attracting suffixes.

Suffixes	Examples
'ese'	Japan /dʒəˈpæn/ -- Japanese /dʒæpəˈniːz/ Portuguese /pɔːtʃəˈgiːz/
'eur'	Entrepreneur /ɒntrəˈprɜːnɜː/
'ee'	Refugee /refjuˈdʒiː/ Absentee /æbsənˈtiː/
'eer'	Volunteer /vɒlənˈtɪə/ -- mountaineer /maʊntəˈniə/
'aire'	Questionnaire /kwestʃəˈneə/ Millionaire /mɪljəˈneə/
'ette'	laundrette /lɔːnˈdret/
'esque'	Picturesque /pɪktʃəˈresk/ Arabesque /æərəˈbesk/
'ique'	Critique /kriˈtiːk/ Technique /tekˈniːk/

- ✓ **Stress-neutral suffixes:** Suffixes neither receiving stress nor affecting it, such suffixes include the inflectional suffixes (plural; possessive; third person singular present tense -s; progressive -ing; past -ed; past participle -en/-ed; comparative -er; and superlative -est), and several derivational ones:

Suffixes	Examples
'able'	comfortable /ˈkʌmfətəbl/ considerable /kənˈsɪdərəbl/
'age'	Percentage /pəˈsentɪdʒ/ marriage /ˈmæɪrɪdʒ/
'dom'	kingdom /ˈkɪŋdəm/, wisdom /ˈwɪzdəm/
'al'	refusal /rɪˈfjuːzl/

'en'	widen /ˈwaɪdən/
ship	editorship/'sensəʃɪp/, dictatorship/dɪk'tetətʃɪp/
'ful'	wonderful /ˈwʌndəfl/ sorrowful /'sɒrəʊfl/ , beautiful /'bjʊ:tɪfl/
'ing'	amazing /ə'meɪzɪŋ/ educating /'edʒʊkeɪtɪŋ/, interesting/'ɪntrestɪŋ/,
'ish'	devilish /ˈdevlɪʃ/ childish /ˈtʃaɪldɪʃ/
'like'	birdlike /ˈbɜːdlɪk/ native-like /ˈneɪtɪvleɪk/
'less'	powerless /ˈpaʊələs/ bottomless /'bɒtəmləs/, defenseless /dɪ'fensləs/
'ly'	hurriedly /ˈhʌrɪdli/ apparently /ə'pærəntli/, rapidly /'ræpɪdli/
'ment'	punishment /ˈpʌnɪʃmənt/ development /dɪ'veləpmənt/
'ness'	yellowness /ˈjeləʊnəs/ tenderness /'tendənəs/, greatness /'greɪtnəs/
some	quarrelsome /'kwɒrɪʃəm/ Troublesome /ˈtrʌblsəm/
wise	otherwise /'ʌðəwaɪz/, clockwise /'klɒkwaɪz/,
'ous'	poisonous /ˈpɔɪzənəs/ enormous /ɪ'nɔːməs/
'y'	funny /ˈfʌni/

- ✓ **Suffixes causing Penultimate Stress:** Suffixes not carrying stress but affecting it i.e., when the following suffixes are added to the stem, the primary stress shifts to the last syllable of the stem (or the penultimate syllable) the syllable preceding the suffix.

Suffixes	Examples
'eous'	advantageous /ædvən'teɪdʒəs/ simultaneous /sɪmə'l'teɪniəs/
'graphy'	photography /fə'tɒgrəfi/ Demography /dɪ'mɒgrəfi/
'ial'	proverbial /prə'vɜːbiəl/ Industrial /ɪn'dʌstriəl/
'ian'	Historian /hɪ'stɔːriən/ phonetician /fəʊnɪ'tɪʃən//

'ic'	climatic /klaɪ`mætɪk/ economic /,i:kə'nɒmɪk/
'ion' 'ation'	Interaction /ɪntə`rækʃən/ participation /pɑ:tɪsɪ`peɪʃən/
'ive'	reflexive /rɪ`fleksɪv/ Productive /prɒ`dʌktɪv/

✓ **Stress on the Ante-penultimate Syllable:** (ante-penultimate: third from the end)

Some words end with the suffixes below, count three syllable from the end of the word, the third is stressed.

Suffixes	Examples
'acy'	Democracy /dɪ`mɒkrəsi/ Aristocracy /æɪrɪ`stɒkrəsi/
'ity'	tranquility /træŋ`kwɪləti/ Creativity /kri:ɪv`tɪvɪti/
'ly'	accidentally /æksɪ`dentəli/

**3. Compound Words:** Compound words are formed from a combination of two or more elements that constitutes on semantic unit. They normally contain a single primary accent on one syllable, another syllable carrying a secondary accent. Compound words may receive stress either on the first word or the second. There are three types of compound words in English as follows:

- **Hyphenated Compounds:** Good-hearted, life-saver, one-way, well-done, part-time.
- **Closed compounds:** Armchair, postman, teapot, crossword, goodwill.
- **Open compounds:** Cassette recorder, coffee machine, phone call, ice age.

a) – **Noun compounds are the most frequent compounds in English:**

They are of three types: **noun + noun**, **adjective + noun** and **verb + noun**.

✓ In **noun + noun compounds**, the first element of the compound receives primary stress.

Typewriter /`taɪpraɪtə/ -- sunrise /`sʌnraɪz/ -- suitcase /`su:tkeɪs/ -- tea-cup /`ti:kʌp/ --

Air conditioner /`eə kən,dɪʃnə/ drugstore /`drʌgstɔ:/ dressing room /`dresɪŋru:m/

**Exceptions:** headmaster week-end mankind

- ✓ The same stress pattern applies to **noun + verb** compounds and some **adjective + noun** compounds :

˘ Rainfall ˘sunrise ˘blackboard ˘dark room

**b) – Stress in compound words composed of adjective and ‘ed’:**

Stress moves to the second element if the first element is an adjective and the second ends with (ed), as in:

Bad-tempered /bæd ˘tempəd/ Long-sighted /lɒŋ ˘saɪtɪd/

**c) - Stress in compound words composed of adjective + gerund:**

Compound words composed of an **adjective and a gerund** at the end receive stress on the second element.

Good-‘looking, easy- ‘going, ,global ‘warming,

**d) - Compounds in which the first element is a number:**

Stress moves to the second element if the first element is a number, as in:

four-wheels /fɔː ˘wi:lz/ Second class /sekənd ˘klɑ:s/

**e) – Compounds functioning as adverbs are usually finally stressed:**

Stress moves to the second element if the compound word functioned as an adverb, as in:

South-East /səʊθ ˘i:st/ down-‘stream /daʊn ˘stri:m/ upside down /ʌpsaɪd ˘daʊn/

**f) - Compounds which function as verbs and have an adverbial element first:**

Stress moves to the second element if the compound word functioned as a verb, as in:

ill-treat /ɪl ˘tri:t/ downgrade /daʊn ˘greɪd/



**g) - Phrasal verbs are stressed on the second element:**

Let `down          take `over          turn `off

**h) - Compounds which include past participle + noun are stressed on the second element:**

lost 'property          in,verted 'comma

**4. Variable Stress:**

The stress pattern is not always fixed and unchanging in English words; there are cases where stress shifts to another position. The two main reasons why this occurs include the fact that in connected speech, some words are influenced by the adjacent words and the fact that not all speakers agree on the placement of stress in some words.

- ✓ When the final- stressed compound words are used before a word that begins with a strongly stressed syllable, stress tends to shift to the first word of the compound.

Compare:

1.a. The performance was really first 'rate.

1.b. She runs a 'first-rate 'business.

Other examples:

*bad-'tempered*      but      *a 'bad-tempered 'teacher*

*heavy-'handed*      but      *a 'heavy-handed 'sentence*

*old-'fashioned*      but      *'old-fashioned 'clothes*

## Lecture 11: Sentence Stress

### Introduction:

When we speak, we use words but most of the time phrases and sentences too. We have already dealt with some patterns of word stress, but what happens at the level of phrases and sentences? Obviously, in a sentence more than one word will be stressed. To understand sentence stress, you need to consider some aspects of speech such as categories of words (content words Vs function ones), rhythm, and phrasal stress.

### Definition:

Sentence stress is the music of spoken English. Like word stress, sentence stress can help you to understand spoken English, especially when spoken fast. You remember that word stress is accent on **one syllable** within a **word**. Sentence stress is accent on **certain words** within a **sentence**.

*'Tom could 'hardly 'believe his 'eyes.*

*They could have 'chosen a 'better 'time for their 'holiday.*

The words *Tom*, *hardly*, *believe* and *eyes* (in the first sentence) and *chosen*, *better*, *time*, *holiday* (in the second sentence) are stressed because they are important for the meaning of the sentence. These words belong to the category of content words which contrasts with the category of function words or grammatical words.

### ***Content Words Vs Function Words:***

At the clausal level, normally, words that carry higher information content in the utterance are given **higher stress** than those carrying lower input (information). It is generally the case that one word is stressed more than any other since it possesses the highest information content for the discourse utterance, that is, it informs the hearer most. The group of words described above is largely from what is called '**content**' words as opposed to '**function**' words.

Content Stressed Words	Function Unstressed Words
Nouns, verbs, adjectives, adverbs, question words, possessive pronouns, demonstrative pronouns, prepositional adverbs, quantifiers, negations.	Articles, modal auxiliaries, auxiliary verbs, prepositions, conjunctions, personal pronouns, possessive adjectives, demonstrative adjectives.

N.B. When **auxiliaries** are followed by **negation**, they are rather **stressed**.

E.g: You `mustn't / `aren't (auxiliary + not) is **stressed**.

Content words are the key words of a sentence. They are the important words that carry the meaning or sense. Function words, however, are not very important words. They are small, simple words that make the sentence correct grammatically. They give the sentence its correct form or "structure". If you remove the structure words from a sentence, you will probably still understand the sentence. However, if you remove the content words from a sentence, you will **not** understand the sentence. The sentence has no sense or meaning.

**Unstressed** syllables in English are often also called **weak** syllables whereas **stressed** syllables are referred to as **strong** syllables. The alternative pronunciations of a number of English function words are called **weak** and **strong forms**.

If you stress all the words in an utterance, you may sound unpleasant or even cause misunderstanding because you are giving too much information, and English speakers usually stress all words only when they are impatient or angry.

Imagine that you receive this telegram message:

**Sell            car            gone            France**

This sentence is not complete. It is not a "grammatically correct" sentence. However, you probably understand it. These four words communicate very well: ***Somebody wants you to sell their car for them because they have gone to France.***

## **SELL my CAR I've GONE to FRANCE**

The new words do not really add any more information. However, they make the message more correct grammatically. We can add even more words to make one complete, grammatically correct sentence. But the information is basically the same:

Will you **SELL** my **CAR** because I've **GONE** to **FRANCE**

### **Phrasal Stress:**

Foreign learners of English may need as first practical step to understand and practice sentence stress in English to deal with phrasal stress.

### **Definition:**

Phrasal Stress is an important part of the rhythm of English. It is a term that refers to the most stressed word in each phrase in a sentence. Each sentence that has more than one phrase in it has its most stressed word in the last phrase. This is generally called sentence stress. When we give that word the most prominent stress, we are not only showing that this word is important, but also that the sentence is ending.

### **What are the Patterns:**

When we read a sentence normally (without giving any word extra [emphasis](#)), each thought group (phrase) in a sentence has one word that is most stressed. This word is the last [content word](#) in that phrase. The last content word in the last phrase *of the sentence* is said to be the most stressed in the sentence.

- ✓ Read slowly and deliberately the following two sentences as if you were in a presentation.

Then, the stress pattern would look like:

The noisy *car* / has been *parked* / in the *garage*  
Many *people* / often *read* / *just* the first and last *sections* / of a *Novel*

When they are said more rapidly, there will be fewer pauses and less stress on the content words:

The noisy car has been parked in the *garAGE*.

Many people often read just the first and last sections of a *Novel*

## Lecture 12: Stress in Connected Speech

### Introduction:

This lesson addresses the notion of stress in words as perceived in connected speech. Four major types of stress are identified.

- Tonic stress
- Emphatic stress
- Contrastive stress
- New information stress

### 1- Tonic Stress:

An **intonation unit** has only **ONE** tonic syllable; this simply means that the **tonic syllable** is an obligatory component of the intonation unit. In other words, the intonation unit has almost always one “peak of stress”, which is called '**tonic stress**', or '**nucleus**'. Because stress applies to syllables, the syllable that receives the **tonic stress** is called '**tonic syllable**'.

Tonic stress is almost always found in a **content word** and found in the final position of an utterance. It is, however, important to remember that a sentence can have **more than one intonation unit**, and therefore have **more than one tonic stress**. It is also worth noting that the **tonic stress placement** here is said to be **neutral, unmarked** or **default** type i.e. it does not express **emphasis** or **contrast**. This is called **neutral tonic placement**. The neutral tonic is normally placed on **the last content word**. Consider the following, in which the tonic syllable is underlined:

- ✓ I'm going. /gəʊɪŋ/
- ✓ I'm going to London. /lʌŋdən/
- ✓ I'm going / to London / for a holiday. /hɒlɪdeɪ/

Generally, the final tonic stress in a sentence receives the most stress. In the above example, 'holiday' receives the strongest stress.

A question does arise as to what happens to the previously tonic assigned syllables. They are still stressed, however, not as much as the tonic syllable, producing a **three level stress** for utterances. Then, the following is arrived at., where the tonic syllable is further capitalized:

- ✓ I'm going to London for HOLiday.

In some exceptional cases, the tonic stress may fall on an earlier content word or on a function word. Here are some examples:

- ✓ He bought a new `mountain bike. (NO tonic on the second part of initially stressed compound)
- ✓ It was `nice, I think. (NO tonic on afterthoughts, appended remarks)
- ✓ We'll just `stay here. (NO tonic on common adverbs)
- ✓ That's what the `book says. (NO tonic on "obvious predicates")

#### **Tonic on a function Word:**

- ✓ No, you `can't. ( Tonic on an auxiliary if no other stressable word)
- ✓ Where are you `from? (Tonic on preposition in short sentences without main verb)
- ✓ This is `mine. (Tonic on possessive pronoun)

In the second type of tonic placement, the speaker wishes to **emphasize some part** of the utterance, **contrast a part** of it with something or **focus on some new information**, which may be achieved by placing the tonic stress at a different place from where it would normally appear.

#### **2- Emphatic Stress:**

Emphasis is used to show extra emotion in our speech. By giving extra stress to different words in an English sentence, we can actually *change the meaning* of the sentence. To do this, we give them emphasis with an even higher tone, a longer stressed syllable, and louder sound than a normally-stressed word.

In other words, one reason to move the tonic stress from its utterance final position is to assign an **emphasis** to a **content word**, which is usually a modal auxiliary, an intensifier, an adverb, an adjective, etc. Here are two examples to illustrate **emphatic stress**:

a- It was very `BOring. (unmarked)

b- It was `VEry boring. (emphatic)

a- You mustn't talk so `LOUDly. (unmarked)

b- You `MUSTN'T talk so loudly. (emphatic)

In simpler words, when something is to be emphasized, stress placement should be changed from the major noun to another **content** word such as an adjective (big, difficult, great, bright, etc.), intensifier (very, extremely, completely, utterly, especially, etc.). doing so is achieving emphasis in the right place or aspect of the utterance.

### 3- Contrastive Stress:

In **contrastive contexts**, the stress pattern is quite different from the emphatic and non-emphatic stresses in that any lexical item in an utterance can receive the tonic stress **provided that the contrastively stressed item can be contrastable in that universe of speech**. No distinction exists between content and function words regarding this. The contrasted item receives the tonic stress provided that it is contrastive with some lexical element (notion) in the stimulus utterance.

**Contrastive stress** is used to point out the difference between one object and another. It tends usually to be used with determiners such as 'this, that, these, those'. Consider the following examples:

a) Do you like this one or `THAT one?

b) I like `THIS one.

a) Do you want these or `THOSE curtains?

b) I like `THOSE curtains.

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

- ✓ She played the piano yesterday. (It was her who...)
- ✓ She played the piano yesterday. (She only played (not. harmed) ...)
- ✓ She played the piano yesterday. (It was the piano that...)
- ✓ She played the piano yesterday. (It was yesterday...)

Observe again in the sentences below the meaning changes according to the contrastive stress.

- ✓ 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)

#### 4- New Information Stress:

In a response given to a **wh-question**, the information supplied, naturally enough, is **stressed**. That is, it is pronounced with more breath force, since it is more prominent against a background given information in the question. Simply said, when asked a question, the requested information is naturally stressed more strongly.

- |                                                         |                                   |
|---------------------------------------------------------|-----------------------------------|
| a) <u>What's</u> your <u>NAME</u> ?                     | b) My name's <u>GEORGE</u> .      |
| a) <u>Where</u> are you <u>FROM</u> ?                   | b) I'm from <u>WALES</u> .        |
| a) <u>Where</u> do you <u>LIVE</u> ?                    | b) I <u>live</u> in <u>BONE</u>   |
| a) <u>When</u> does the <u>school</u> term <u>END</u> ? | b) It <u>ends</u> in <u>MAY</u> . |
| a) <u>What</u> do you <u>DO</u> ?                       | b) I'm a <u>STU</u> dent.         |

The questions given above could also be answered in short form except for the last one, in which case the answers are:

George,                      Wales,                      in Bone      in May      a Student

In other words, 'given' information is omitted, not repeated. In the exchange:



a) What's your **NAME**?

b) (My name's) **George**.

The 'new' information in this response is 'George.' The part referring to his name is given in the question, so it may be omitted.

**Exercises:**

**1) - How many syllables does each of the following words include:**

Neighbor: ..... next: ..... Traditional: ..... postcard: .....

Secret: ..... Toxic: ..... cramped: ..... explain: .....

**2) - Analyze the syllable structure of the following words:**

Next, neighbor, toxic, cramped

.....  
.....  
.....  
.....

**3) - Analyze the initial consonant clusters of the following words:**

Plight, problem, clean, crawl, thrive, sleep, shrewd, splendor, spring

.....  
.....  
.....  
.....

**4) - Analyze the final consonant clusters in the following words:**

Field, haunt, indulge, wolf, pink, twinkle

.....  
.....  
.....  
.....

**5) - Transcribe the following sentences and mark the stressed words.**

1- John is coming over tonight. We are going to work on our homework together.

.....

2- We should have visited some more castles while we were travelling through the park.

.....

3- Jack bought a new car last Friday.

.....

4- They have been working hard these last few months.

.....

**6) - Transcribe the following text phonetically.**

In Britain and around the world, the image of the family continues to change. The traditional "Victorian family", in which the man was the breadwinner, the woman the homemaker and the children numerous and obedient, is giving ways to new ideas about what the modern family should look like.

One of the most obvious characteristics of the new family is that there are not always two parents. Due mostly to the rise in divorces since World War I, single-parent families are becoming more and more frequent and accepted in British society. Usually, it is the mother who takes responsibility for raising the child and she has to balance the pressures of earning a living and raising her children at the same time

.....  
.....  
.....  
.....  
.....

**7) - Analyse the onset structure of the following monosyllabic words:**

Sphere -- plane -- drew -- juice -- knight -- spring -- chef – square

.....  
.....  
.....  
.....  
.....

**8) - Analyse the coda structure of the following monosyllabic words:**

Begged -- thinks -- comb -- jinxed -- changed -- guests – laughed -- sculpts

.....  
.....  
.....  
.....  
.....

**9) - When you hear the word repeat it, then place a stress mark before the stressed syllable:**

Enemy ..... collect ..... capital ..... paradise ..... elephant ..... observer  
..... Profit ..... entertain ..... Interrupt ..... Depend .....

**10) - Transcribe the following words, mark the stressed syllables and justify your answers:**

Employee ..... classroom ..... academic .....  
big-headed ..... derive ..... contagious .....

**11) - Transcribe and mark stress in the words underlined in the following sentences:**

1. I got my first record as a present when I was eleven.
2. You've progressed well this year, but I'd like to see even more progress.

3. We import too much petrol and the country's export figures are going down.
4. It started as a student protest, but now the army has rebelled against the government. 5.
- In the desert, there is a big contrast between temperatures in the day and at night.
6. The companies produce household objects such as fridges and washing machines. 7.
- Imports have gone up recently. In fact we are importing twice as much as last year. 8.
- The group has just recorded a new record.

**12) - Identify the syllable that takes the main stress in the words or phrase underlined.**

1. I always like working outdoors. I'm really lucky to have found an outdoor job. 2.
- Put the TV on. We'll be just in time for the ten o'clock news.
3. As a novelist I'd say he is first-rate. But he's really a second-rate poet. 4.
- My friend's Chinese; she plays in the Chinese orchestra.
5. I live in Piccadilly, near Piccadilly Circus. 6.
- I really hate overcooked vegetables.
7. They always wear really up-to-date clothes.
8. You can take a boat upstream from Greenwich to Westminster.
9. Your food will be stone-cold if you don't eat it now.

**13) - Read the sentences and decide if the words underlined are phrases or compound words.**

1. He was killed in that green house ( or greenhouse).
2. I went to the shopping centre to buy myself a couple of cotton shirts.
3. I think I've left my car keys in my handbag.
4. Would you prefer to visit the White House or Buckingham Palace.
5. We live in Cambridge Avenue, which is just off the High Street.
6. They own a cotton factory and several steel mills in South America.
7. Did you order a cheese sandwich and some orange juice?

## 2- Semester Two

<b>Week by Week</b>	<b>Lectures</b>
Week 1	Intonation: Form and Meaning
Week 2	Intonation Unit Structure
Week 3	Intonation Patterns
Week 4	Follow up of Intonation Patterns
Week 5	Functions of Intonation
Week 6	Follow up of Functions of Intonation
Week 7	<b>Mid-term Test</b>
Week 8	Rhythm
Week 9	Weak and Strong Forms
Week 10	Assimilation
Week 11	Follow up of Assimilation
Week 12	Elision
Week 13	Linking
Week 14	<b>General Revision</b>
Week 15	<b>Exam</b>

### Chapter III: Intonation in English

#### 3.1. Learning Goals and Objectives

- Develop an awareness of English intonation
- Understand the different intonation patterns
- Use appropriate intonation based on context
- Understand the different functions of intonation

## Lecture 13: Intonation: Form and Meaning

### Intonation:

Intonation is defined by Jones (1960) as the variations which take place in the pitch of the voice in connected speech, i.e. the variations in the pitch of the musical note produced by vibration of the vocal cords. According to Roach (1991) the pitch of the voice plays the most important part in intonation. Only in very unusual situations do we speak with fixed, unvarying pitch, and when we speak normally the pitch of our voice is constantly changing.

So, we call the melody of language intonation. The latter refers to the total pattern of pitch changes, i.e., the rising and falling of the voice when a person is speaking, within an utterance. Intonation is another important element of spoken English. It is the English intonation which makes English sound really English. In addition, it makes speech meaningful. In English, intonation adds the meaning of an utterance in two ways:

- A. It shows the relationship of words within and between sentences.
- B. It tells something about the feeling of the speaker.

In other words, different pitches may indicate different meanings for the same utterance. They also help us express our feelings: happiness, sadness, surprise, annoyance, anger, disbelief and so on. In listening to the meaning of an utterance, therefore, we listen to how speakers talk as well as to what they say. The HOW and WHAT together give us the meaning of an English utterance.

We now see the importance of using the appropriate intonation patterns when we speak. Otherwise, we may be sending messages using intonations that contradict what we want words to say. In fact, intonation patterns that disagree with the content of the utterance may indicate doubt, sarcasm, or confusion.

## **Tone:**

According to Roach (1991) a unit of speech bounded by pauses has movement, of music and rhythm, associated with the pitch of voice. This certain pattern of voice movement is **tone**.

A tone is a certain pattern, not an arbitrary one, because it is meaningful in discourse. By means of tones, speakers signal whether to refer, proclaim, agree, disagree, question or hesitate, or indicate completion and continuation of turn-taking, in speech. Each tone-unit contains a syllable that carries the tone.

This syllable is called the **tonic syllable**. It has a high degree of prominence. A tonic syllable does not only carry a tone but also a type of stress that is called **tonic stress**.

- Consider two common one-syllable utterances like 'yes' and 'no'. You may say these with either the pitch remaining at a constant level or with the pitch changing from one level to another. The overall behaviour of the pitch in these examples is tone.

## **Tone unit:**

In the study of intonation it is usual to divide speech into larger units than syllables. In longer utterances, there must be some points which mark a break between the end of one pattern and the beginning of the next. These breaks divide speech into tone-units, and are called tone-unit boundaries. An 'intonation unit' (also called intonation-group, tone group or tone-unit) is a piece of utterance, a continuous stream of sounds, bounded by a fairly perceptible pause. Thus, the most obvious factor to look for in trying to establish boundaries is the presence of a pause, and in slow careful speech (e.g. in lectures, sermons and political speeches) this may be done quite regularly. However, it seems that we detect tone-unit boundaries even when the speaker does not make a pause, if there is an identifiable break or discontinuity in the rhythm or in the intonation pattern.

An intonation unit or tone group usually corresponds to a sense group (a word, a phrase or a clause). It may contain several syllables, some of them stressed and some unstressed. The last stressed syllable is usually a marker of the highest importance and has the focus stress. On this syllable, there takes place a change of pitch, either an upward or downward movement, or a combination of the two.

So, Closely related with the notion of pausing is that a change of meaning may be brought about. Certain pauses in a stream of speech can have significant meaning variations in the message to be conveyed. Consider the example below, in which slashes correspond to pauses, the meaning (given in brackets) differs according to the place of the pause in the utterance:

When danger threatens your children ,call the police.

( you have to call the police when danger threatens your children.)

When danger threatens | your children call the police.

(Your children call the police whenever danger threatens)



## Lecture 14: Intonation Unit Structure

### Nucleus / tail / head / pre-head:

An important feature of English intonation is the use of an intonational accent (and extra stress) to mark the **focus** of a sentence. Normally this focus accent goes on the last major word of the sentence, but it can come earlier in order to emphasize one of the earlier words or to contrast it with something else (as we have already seen in emphatic / contrastive stress).

Within each intonation unit, there is usually one syllable called a **nucleus** which carries maximal prominence. This syllable is referred to as the tonic. The latter is important because it carries not only the major stress, but also the major pitch change: it changes according to the meaning intended by the speaker.

For example, this is the normal way of saying the following sentence:

I am WRItIng a LETter to him NOW.

There are ten syllables in this sentence among which three are stressed syllables. The last stressed syllable is NOW. So we say that NOW has the focus stress, and is the **tonic** syllable and therefore is the **nucleus** of the intonation unit. The nucleus is the essential part of the intonation unit. It is still present even if the unit consists of a single syllable, as is the case with many sentence words like *yes, no, why*, etc.

Any syllable or syllables that may follow the nucleus in an intonation unit are called the "**tail**". In the sentence "I am WRItIng a LETter to him", the three unstressed syllables after the nucleus are called the "tail" of this intonation unit. The part of an intonation unit that extends from the first stressed syllable up to the nucleus is called the "**head**" of the intonation unit. In the sentence "I am WRItIng a LETter to him", the "head" of this intonation unit is made up of three syllables: "writing a". Any unstressed syllable or syllables that may precede the "head", or the "nucleus" if there is no head, are called the "**pre-head**". In the sentence "I am WRItIng a LETter to him", "I am" comprises the "pre-

head" of this intonation unit. The tail, head, and pre-head are optional whereas the nucleus is obligatory.

So if you analyze the following sentence, we will come up with the structure of an intonation unit like this:

I am WRItIng a LET ter to him

P = Pre-head

H = Head

N = Nucleus

T = Tail

So, any feature of intonation should be analyzed and discussed in relation to tonic stress placement and pausing. Closely related with the notion of pausing is that a change of meaning may be brought about; certain pauses in a stream of speech can have significant meaning variations in the message to be conveyed. In the following example (slashes correspond to pauses), the meaning (given in brackets) differs according the place of the pause in the utterance:

- Those who sold quickly / made a profit  
(A profit is made by those who sold quickly.)
- Those who sold / quickly made a profit  
(A profit was quickly made by those who sold.)

It can also be pointed out that right pausing may become a necessity to understand and to be understood well.

## Lecture 15: Intonation Patterns

### Introduction:

Intonation is the rise and fall of the voice pitch in speaking; it helps us to understand the speaker's emotions and attitude (a question, excitement, doubt, threat, happiness, sadness, shock, surprise, anger, sarcasm, seriousness, annoyance etc.). In English, intonation is considered to play a major role in the construction of meaning.

**E.g:** - You are ↘ going. (statement)                      - You are ↗going? (Question)

- ✓ It is the rise and fall of pitch which makes the difference between the statement and the question. The rise and fall of pitch throughout is called **intonation**.

### Types of Tones

In connected speech, the voice-pitch is continually rising and falling. These variations produce intonations which may be described as “tunes”, “patterns” or “contours”. When the pitch of the voice rises we have a rising intonation; when it falls we have a falling intonation; when it remains on one note for an appreciable time, we have level intonation. Several intonation patterns are used in RP. The four commonest ones are **the falling tone** (Fall), the **rising tone** (rise), **falling-rising tone** and **rising-falling tone**.

As already seen, a unit of speech bounded by pauses has movement, of music and rhythm, associated with the pitch of voice. This certain pattern of voice movement is called tone. So, tone is a certain pattern, not an arbitrary one, because it is meaningful in language analysis.

By means of tones, speakers signal whether to refer, proclaim, agree, disagree, question or hesitate, or indicate completion and continuation of turn-taking in speech.

#### 1. Falling Tone- Fall (↘):

A falling tone, the most common used tone of all, is assertive and conclusive. It signals a sense of finality, completion and confidence (belief in the content of the utterance). It is used

for asking and giving information in normal, quiet, un-emphatic style. It is used in complete statements (not implying any continuation known to the speaker), WH questions (containing a specific interrogative word such as when, where, who, why, how...etc), commands, exclamatory sentences, in the last alternative of alternative questions, in the first part of tag questions and in the second part if the speaker expects the answer “yes”.

A speaker, by choosing a falling tone, also indicates to the addressee that is all he has to say, and offers a chance (turn-taking) to the addressee to comment on, agree or disagree with, or add to his utterance. However, it is up to the addressee to do either of these. This tone does in no way solicit a response from the addressee. Nonetheless, it would be polite for the addressee to, at least, acknowledge in some manner or form that he is partner in the discussion. Now, let us see the areas in which a falling tone is used.

**1. Proclamation:** The following is a proclamation in which a teacher is informing a student of the consequences of his unacceptable behaviour.

- I'll report you to the \b**head**master.

**2. Statements (Assertions):**

- I have arrived \b **early**
- I have spoken with the \b **cleaner**
- She is a \b **TEA**cher.
- It's \b **RAIN**ing.
- He finished it \b **YES**terday.
- I'm absolutely \b **CER**tain.

**3. Wh/ questions:**

- What have you \b **done**?
- Where is the \b **pencil**?
- Where does she \b **WORK**?

- How did you get to \KNOW it?

#### 4. Interjections and greetings:

- Nice to \meet you.
- Hel \lo \Hi

#### 5. Listing:

- I visited Paris, London, Cairo and \Madrid.

#### 6. Order:

- Do you \ homework.
- \ Stop it!
- Go and see a \ doctor
- Shut the door at \ONCE.
- Come \HERE Do what I \TELL you.
- Stop \TALKing.

#### 7. Exclamatory sentences:

- How \nice of you!
- What a wonderful sur\ prise!

#### 8. Alternative questions:

- Do you want coffee or \tea?
- Would you like to go for a /WALK or would you rather stay \HOME?
- Shall we /WALK, or go by /BUS or take the \UNderground?

#### 9. Gratitude:

- \Thank you

#### 10. Tag Questions -- Yes/no Questions expecting a confirmation or agreement

- You like it, \don't you? \Yes

- You study \ENGLISH, \DON'T you? ( I am sure you study English and I expect the answer “yes”).

## 2. Rising Tone (/):

### 2.1.Low-rise:

This tone is used in genuine 'Yes/No' questions (where the speaker does not know the answer). Such yes/no questions are uttered with a **rising tone**. It is also used in requests, introductory phrases/clauses, in the first part of alternative questions, in the second part of tag questions where the speaker is not sure of the answer, in direct address and in enumerations (when listing).

#### 1. Yes/no questions:

- Have you read this /BOOK?
- Shall we go out /NOW?
- a- isn't he ↗nice?      b- ↗Yes/ ↗No / I don't ↗know
- Do you want some ↗coffee?

#### 2. Tag questions (asking for confirmation)

- You don't speak Spanish, /DO you? (the speaker is not completely sure and asks for confirmation)

#### 3. Requests:

- Pass the /BREAD, please.

#### 4. Introductory phrases/clauses:

- If he /CALLS, ask him to \COME.
- All of a /SUDDen, the girl started to \CRY.

#### 5. Alternative Questions (except the last alternative)

- Can he speak /SPANish or \GERman?
- She speaks /French, /German and \RUSsian.

## 6. Direct address:

- /TOM, could you \HELP me, please.

## 7. Enumerations (Listing):

- /ONE, /TWO, /THREE , /FOUR , \FIVE.
- /RED, /BLUE, /BROWN and \YELlow.
- She speaks /French, /German and \RUSsian.

Other examples which are uttered with a rising tone are:

- ✓ **Attract somebody's attention:** a- excuse me    b- ↗Yes
- ✓ **To express also politeness, suspicion and encouragement:** It's ↗kind of you

➤ The low-Rise is used a lot in English, used as in 'agreement' or 'response with reservation'.

a- I've heard that it's a good school

b- ↗Yes (Low-Rise) (B's reply means that he is not completely agreed with what A said)

a- It's not really an expensive record, is it?

b- ↗No (Low-Rise) (B's reply indicates that he would not completely agree with it)

**2.2. High-Rise:** it may extend from low pitch to high pitch. It is associated with questions: asking for repetition or clarification. It may express surprise or incredibility.

You said ↗what?

↗What? (elliptical questions)

You ↗did?

- **Tag Questions:**

- You live in \Biskra, ↗don't you? (the speaker thinks you live in Biskra but he isn't sure and asks for confirmation)

- You live in \Biskra, \ **don't** you? (the speaker is sure and expects the answer 'yes') to get confirmation or agreement
- Nice \weather, \ **isn't** it? (the speaker is sure the weather is nice and expects the answer 'yes')

### 3. Fall-rise (\ /):

This tone also signals non-finality and continuation of the utterance. It signals a sense of limited agreement or response with reservation. It may also denote doubt or uncertainty, reproach, threat, disbelief, polite correction, partial statements and negative statements.

Examples may make this clearer:

1. A: I've heard that it's a good \SCHOOL.

B: \ / YES. (**Fall-rise**) (implying "I do not completely agree with you")

*B's reply would be taken to mean that he should not completely agree with what A said, and A would probably expect B to go on to explain why he was reluctant to agree.*

2. A: It's not really an expensive record, is it?

B: no (fall rise)

*The fall-rise in B's reply again indicates that he would not completely agree with A. Fall-rise in such contexts almost always indicates both something 'given' or 'conceded' and at the same time some 'reservation' or 'hesitation'.*

3. a- She's coming on \Wednesday

b- On \ / Thursday

a- There are \twenty students in the group

b- \ / Fifty

a- I came on \foot.

b- On \ / foot

a- She \refused to pay.

b- That's not \ / true

- She wasn't very \ / pleased. (Negative Statements)



### Other Examples:

3. I \ / THINK so. (implying “but I’m not quite sure”).
4. That’s not what I \ / MEANT. (implying “ though it may have sounded as if I meant it”).
5. I’ll do it if I \ / CAN.
6. It’s \ / POSSible.

### 4. Rise-fall ( / \ ):

This tone is used for expressing rather strong feelings of approval, disapproval, disbelief contrast or surprise.

- A: You wouldn’t do an awful thing like that, would you?    B: / \ NO
- A: It is midnight    B: / \ IS it!
- A: Isn’t the view lovely    B: / \ YES
- A: I think you said it was the best so far.    B: / \ YES
- A: I’m extremely sorry, but I probably lost the book you gave me.    B: / \ WHAT?

### Remarks:

- **Elliptical answers:** \ yes    yes, I \ do. (falling intonation)
- **Greetings:**
  - Good \ morning! (I am just greeting you)
  - Good / morning! ( expresses an added interest in the person addressed)
- **A vocative after hi or hello, has its own rising tone:**
  - \ Hi, / Margaret.    Hel \ lo, / Tim
- **Farewell :**
  - Good / bye! (a fall can be used, but a rise is more frequent)
  - Good \ bye! (get rid of an unwelcomed person)
- **Thank you**
  - \ Thank you (straightforward meaning)

↗Thank you (routine acknowledgment)

To express genuine gratitude, it necessary to use a fall.

**At the bank: Asking about fees**

- A:** Do you have any ↗questions?                    **High rise ( yes/no question)**
- B:** ∨ Yes, I want to know about ∨ fees.                    **Elliptical answer/ statement**
- A:** Which ↗ fees?                    **High rise (elliptical question)**
- B:** Overdraft ∨ fees.                    **Low fall (answer/ statement)**
- A:** You will be required to pay a small fee for every time of your ∨ draft.
- B:** How much is the ∨ fee?                    **Low fall (wh question)**
- A:** You'll have to pay \$25 every time you ∨overdraft.
- B:** That's a small ↗ fee?                    **High rise (yes/ no question)**
- A:** It should stop you from ∨overdrafting.
- B:** You would think it ∨ would, but it most likely ∨ won't.                    **Low fall (statement)**
- A:** Can I help you with anything ↗ else?                    **Low rise (polite request)**
- B:** That's it for to ∨ day. ↗ Thank you.                    **low fall ( statement)**

**low rise (routine acknowledgement)**

## Lecture 15: Functions of Intonation

Before we start the discussion of the function of intonation, let's ask ourselves what would be lost if we were to speak without intonation.

Let's imagine a speech in which every syllable was said on the same level pitch, with no pause and with no changes in speed and loudness. In fact, intonation makes it easier for a listener to understand what a speaker is trying to convey. There are many ways in which intonation does this.

Intonation has four main functions: attitudinal, accentual, grammatical and discourse function.

### 1. Attitudinal Function

Intonation enables us to express emotions and attitudes as we speak, and this adds a special meaning to spoken language. For example, the same sentence can be said in different ways, which might be labeled 'angry', 'happy', 'grateful', 'bored' and so on. For example, one may use a rise –fall with the word *yeah* when one is not really believing what is being said (in writing, No punctuation is really available to indicate this attitude, so one might write, "*Yeah, yeah*" he muttered, and hope that the correct idea is communicated). Another example is the word Yes pronounced with different tones: if someone calls you and you answer *yes* with a rising tone, you signal that you are opening an interaction with them; but if you say *Yes* with a falling tone, this may denote that you do not wish to speak to them and may even be interpreted as impolite.

A few examples about the attitudinal functions of the commonest intonation contours are provided below:

**Fall:** The attitudinal function that can be expressed by a falling tone is:

- **finality, definiteness:** That is the end of the news
- I'm absolutely certain Stop talking

• **Rise:** Most of the functions attributed to rises are nearer to grammatical than attitudinal, as in the three examples listed below. They are included here mainly to give a fuller picture of intonational function:

• **General question:** Can you help me Is it over

• **Listing :** red, brown, yellow or blue (blue is pronounced with falling tone)

• **‘More to follow’:** I phoned them right away (and they agreed to come)

• You must write it again (and this time get it right)

• **Encouraging:** It wont hurt

• **Fall-rise:**

• **Uncertainty, doubt:** you may be right It’s possible

• **Requesting:** Can I buy it

• Will you lend it to me?

• **Rise-fall**

• **Surprise, being impressed:** You were first all of them

• In addition to functions within tone, pitch variations may convey different functions. For example, wider pitch range tends to be used in excited to enthusiastic speaking, slower speed is typical of the speech of someone who is tired or bored, an do on.

## 2. Accentual Function

Intonation helps to produce the effect of prominence on syllables that need to be perceived as stressed. in particular the placing of tonic stress on a particular syllable marks out the word to which it belongs as the most important in a tone unit. The nucleus can in fact go onto any syllable in the phrase, although some positions are more likely and more common than others. In a very neutral production, the nucleus is most likely to fall on the lexically stressed syllable of the final content word of the tone unit. This occurs in most cases.

It is possible, however, to change the position of the nucleus from this neutral or default setting in order to affect meaning. Putting the nucleus on a syllable other than the default draws our attention to that syllable and suggests it is important. Three important cases are New vs Old information, contrastive stress and emphatic stress.

**New vs old information:** Intonation indicates new information. In conversation, the tonic shifts as new, important words come in.

A: Where did you go in the summer?    B: The south of FRANCE.

A: Which part of France do you prefer ?    B: The SOUTH of France.

In the first example, France is the most important word, so it is the tonic. In the response of speaker B in the second example (where the wording is identical), south has become the most important word because it gives new information (France has been mentioned in A's question, so it is considered as given information).

Other examples:

3. A: I fancy seeing a FILM.    B: What KIND of film?

A: Oh, Any kind of film.    B: How about a COMedy?

A: I can't STAND comedies.    B:I'd rather see an ACTION movie.

A: I've lost my umbRELLa.    B: A LADy's umbrella?    C: Yes. A lady's umbrella with STARS on it. GREEN stars.

• **Contrast:**

• a) | I want to know where he is traveling to | (the word 'to', which is a preposition, is not stressed because it is not a lexical word)

• b) | I don't want to know where he is traveling from |

• | I want to know where he is traveling to |

• a) | she was wearing a red dress |

• b) | she was not wearing a green dress | She was wearing a red dress |

• **Emphasis:** ( In these examples (a) is non-emphatic and (b) is emphatic)

• a) | It was very boring |

• b) | It was very boring |

• a) | You mustn't talk so loudly |

• b) | You mustn't talk so loudly |

• In addition to contrast and emphasis, there are other exceptions to the placement of the tonic stress on the last lexical word of the tone-unit. So the tonic stress may be placed earlier in the tone-unit if there is a word there with greater importance to what is being said. This can happen as a result of the last part of the tone-unit being already 'given' (i.e. something which has already been mentioned or is completely predictable), for example:

| Here is that book you asked me to bring | (the fact you asked me to bring it is not new)

### **Grammatical Function**

Another function of intonation is the indication of syntactic structure. The listener is better able to recognize the grammar and syntactic structure of what is being said by using the information contained in intonation. For example, intonation indicates the placement of boundaries between phrases, clauses or sentences.

| He usually comes late |

| He worked hard | and passed the exam |

| Because he worked hard | he passed the exam |

| A lot of industry's profits | go in taxation |

| Professor Bull | the Head of the Department | declared his support |

| I bought a nice new jacket | with a zip down the front | and a lot of pockets |

- Intonation is also used to disambiguate grammatically ambiguous sentences.

1.a. | Those who sold quickly | made a profit | (A profit was made by those who sold quickly.)

1.b. | Those who sold | quickly made a profit | ( A profit was quickly made by those who sold.)

2.a. | She read and graded papers | (she performed two activities relating to papers)

2.b. | She read | and graded papers | (she did a general activity of reading - perhaps including the papers-, and another activity of grading papers.)

Intonation is also used to distinguish the meanings of utterances that are identical. For example, it indicates the difference between questions and statements. In English, a rising tone is used for yes/no questions and a falling tone is used for statements.

| Is Bill a / DOCTOR | (rising tone)

| Bill is a DOCTOR | (falling tone)

However, it is possible to use a rising tone with a statement, making it a question:

| Bill is a DOCTOR | (statement: falling intonation) | Bill is a /DOCTOR | (question : rising intonation)

#### 4. Discourse Function

Intonation can signal to the listener what is to be taken as NEW information and what is already GIVEN, can suggest when the speaker is indicating some sort of contrast or link with material in another tone-unit and, in *conversation*, can convey to the listener what kind of response is expected.

| Since the LAST time we met | when we had that huge DINner | I've been on DIET |

The first two tone-units present information which is relevant to what the speaker is saying, but which is not something new and unknown to the listener. The final tone-unit, however, does present new information. Writers on discourse intonation have proposed that the falling tone indicates new information while rising (including falling-rising) tones indicate 'shared' or 'given' information.

### Exercises:

#### **1- Listen and repeat, then identify the tonic syllable.**

1. We could go by bus.
2. Of course its broken.
3. The car was where I left it.
4. How much is the biggest one?
5. I knew it would go wrong.
6. It was too cold.
7. That was a loud noise.
8. Have you finished?

#### **2. When you hear the sentence, say the response with the tone indicated.**

1. Hello, is that 661071?                      Yes
2. Do you know any scientists?              Some
3. Keep away from the road!                Why
4. How many dogs have you got?            Two
5. Have you ever heard such a terrible thing?    No
6. What colour is your car?                    Red
7. Do you want my plate?                      Please
8. Don't you like it?                            Yes
9. You haven't seen my watch, have you?      No
10. What was the weather like?                Wet

#### **3. Listen and repeat, trying to copy the intonation exactly**

1. What time will they come
2. A day return to London
3. The north pole would be warmer



4. Have you decided to buy it
5. I recorded them on a cassette

**4. In the following bits of conversation, you are supplied with an ‘opening line’ and a response that you must imagine saying. You are given an indication in brackets of the feeling or attitude expressed, and you must mark the intonation you think is appropriate on the tonic syllable. (Punctuation is left out since it may cause confusion)**

1. A: It looks nice for a \ SWIM                                      B: Its rather cold (*doubtful*)
2. A: Why not get a / CAR?                                              B: Because I can’t afford it (*impatient*)
3. A: I’ve lost my \ TICket                                              B: You’re silly the (*stating the obvious*)
4. A: You can’t have an ice \ CREAM                                      B: Oh please (*pleading*)
5. A: What time are the / BUSes                                              B: Seven o’clock seven thirty and eight (*listing*)
6. A: She got eight \ ‘A’ levels                                              B: eight (*impressed*)
7. A: How much \ WORK<sub>h</sub>ave you got to do    B: I’ve got to do the shopping ( *and more things after that*)
8. A: Will the \ / CHILdren go                                              B: Some of them might (*uncertain*)

**5. The following sentences are given without punctuation. Underline the appropriate tonic syllable places and mark tone-unit boundaries where you think they are appropriate:**

1. He wrote the letter sadly (*he wrote the letter in a sad way*)
2. He wrote the letter sadly (*it’s regrettable that he wrote the letter*)
3. Four plus six divided by two equals five
4. Four plus six divided by two equals seven
5. We broke one thing after another fell down
6. We broke one thing after another that night

**6. In the following exercise, read the ‘opening line’ and then decide the most suitable place for tonic stress placement (underline the syllable in the response):**

1. I like you to \ HELP me (right) can I do the shopping for you

2. I hear you're offering to do the \ SHOPping for someone

(right) can I do the shopping for you

3. What was the first thing that \ HAPpened first the professor explained he theory.

4. Was the theory explained by / STUdents no first the professor explained her theory

5. Tell me how the \ THEory was presented First she explained her theory

6. I think it starts at ten to \ THREE no ten past three

7. I think it starts at quarter past \ THREE no ten past three

8. I think it starts at ten past \ FOUR no ten past three

**7. Read aloud each of the sentences below. Please pay special attention to the intonation patterns.**

1- The situation is intolerable.

2- What time did you call?

3- Would you like some coffee?

4- The teacher is sick?

5- The President likes swimming, doesn't he?

6- We speak Spanish in Venezuela.

7- Pay attention to your teacher.

8- Let's rent a car.

9- Don't be silly.

10- Why are you angry?

11- Did you understand my explanations?

- 12- Will you come to class tomorrow?
- 13- Who broke the chair?
- 14- You didn't feel the earthquake?
- 15- There's a cat under the table.
- 16- Who are you waiting for?
- 17- Have you seen Arthur?
- 18- How long has he lived in Middleford?
- 19- Let's have a party on Friday.
- 20- Is Bruce going to ring Mary up?
- 21- No, he's telephoning another girl.
- 22- What's Mr. Steele putting on?
- 23- Can you tell me the time?

## Chapter IV: Aspects of Connected Speech

### 4.1.Learning Goals and Objectives

- Understand English Rhythm
- Be familiar with weak and strong forms in English
- Know how to pronounce combinations of sounds
- Understand how sounds are influenced by surrounding sounds
- Understand how to omit sounds and syllables to make the language easier to say, and faster

### Lecture 17: Rhythm

#### 1- Definition:

Rhythm can be found everywhere in life: the sound of a clock, the beating of the heart, the strokes of a swimmer, and of course in poetry and music. But rhythm in language is less familiar because it is less obvious.

The rhythm of a language is characterized by the timing pattern of successive syllables. In some languages, every syllable is given about the same length while in others, syllables vary in length. In English, strong beats are called **stress** -- the heart of the rhythmic pattern.

In our sentence, “**Will you sell my car because I’ve gone to France**”, the 4 **key words** (**sell, car, gone, France**) are accentuated or **stressed**. Why is this important for pronunciation?

It is important because it adds "music" to the language. Indeed, sentence stress is what gives English its **rhythm** or "beat". The notion of rhythm involves some noticeable events happening at regular intervals of time.

It has often been claimed that English speech is rhythmical, and that the rhythm is detectable in the regular occurrence of stressed syllables. This does not mean, of course, that the timing is as regular as a clock; it is rather relative.

## 2- Stress-timed Rhythm Vs Syllable-timed Rhythm:

It is usually claimed that English has **stress-timed rhythm**. This implies that stressed syllables tend to occur at relatively regular intervals whether they are separated by unstressed syllables or not.

The stress-timed rhythm theory states that the time from each stressed syllable to the next will tend to be the same, irrespective of the number of intervening unstressed syllables. In other words, each syllable receives an equal amount of time or the time between each stressed words is the same. The theory also claims that while some languages (e.g. Russian and Arabic) have stress-timed rhythm similar to that of English, others (such as French) have a different rhythmical structure called **syllable-timed rhythm**.

In these languages, all syllables, whether stressed or unstressed, tend to occur at regular time-intervals and the time between stressed syllables will be shorter or longer in proportion to the number of unstressed syllables.

In the sentence: “Will you **sell** my **car** because I’ve **gone** to **France**”

There is 1 syllable between (**SELL** and **CAR**) and 3 syllables between (**CAR** and **GONE**). But the **time** (*t*) between **SELL** and **CAR** and between **CAR** and **GONE** is the same.

We maintain a constant beat on the stressed words. To do this, we say "my" more **slowly**, and "because I've" more **quickly**. We change the speed of the small structure words so that the rhythm of the key content words stays the same.

2syll		1syll		3syll		1syll
Will	you	/sell	/my/	car	/because I've	/gone/ to /France?
t 1	beat	t1	beat	t1	beat	t1 beat

Another example is given below. In this sentence, the stressed syllables are given numbers:

˘Walk / ˘down the/ ˘path to the / ˘end of the ca˘nal

syll1      syll2                  syll3                  syll4      syll5

Syllable **1 and 2** are not separated by any unstressed syllables, **2 and 3** are separated by one unstressed syllable, **3 and 4** by two and **4 and 5** by three.

### 3- The Foot:

Some writers have developed theories of English rhythm in which a unit of rhythm, called the **foot**, is used. The foot begins with a stressed syllable and includes all following unstressed syllables up to (but not including) the following stressed syllable. The example sentence given above would be divided into feet as follows:

˘Walk / ˘down the / ˘path to the / ˘end of the ca˘nal

1            2                                  3                                  4                                  5

### 4- Rhythmic Strong and Weak Patterns:

Some theories of rhythm go further than this, and point to the fact that some feet are stronger than others, producing **strong-weak patterns** in larger pieces of speech above the level of the foot. To understand how this works, let's start with a simple example:

The word **'twenty'** has one weak and one strong syllable, forming one foot. A diagram of its rhythmical structure can be made, where **s** stands for 'strong' and **w** stands for 'weak':

<b>S</b>	<b>W</b>
twen	ty

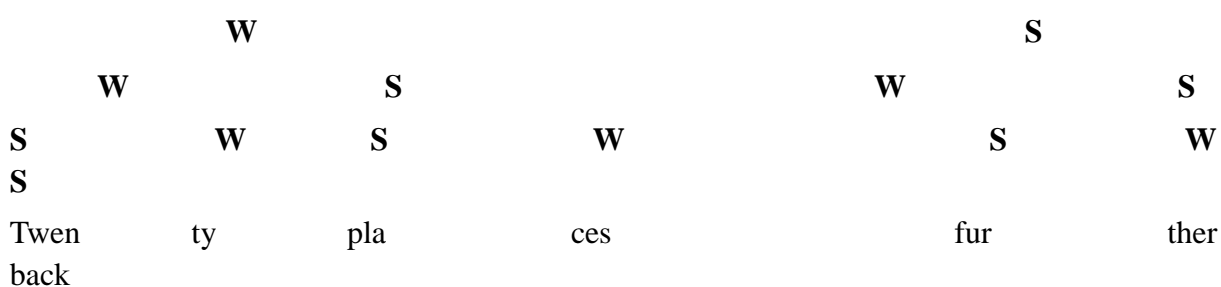
The word **'places'** has the same form:

<b>S</b>	<b>W</b>
Pla	ces

Now let's consider the phrase 'twenty places', where 'places' will normally carry stronger stress than 'twenty' (remember phrasal stress), i.e. will be rhythmically stronger. We can represent this in the following diagram:



If we consider this phrase in the context of a longer phrase 'twenty places further back', and treat the 'further back' part in the same way, we would get an more elaborate structure:



By analysing speech in this way it is possible to show the relationship between strong and weak elements, and the different levels of stress that exist in a particular utterance. The strength of any particular syllable can be measured by counting the number of times an **s** symbol occurs above it.

English speech tends towards a regular alternation between stronger and weaker, and in order to make this possible stress levels are adjusted. The effect is particularly noticeable in cases such as the following:

- ✓ *Compact* (adjective)    kəm'pækt        but        *compact disc*        'kɒmpækt 'dɪsk
- ✓ *Thirteen*                    θɜ: 'tɪ:n        but        *thirteenth place*        'θɜ:tɪ:nθ 'pleɪs
- ✓ *Westminster*            west'mɪnstə        but        *Westminster Abbey*        'westmɪnstə 'æbɪ

In brief, it seems that stresses are altered according to context. An additional factor is that English speakers vary in how rhythmically they speak: sometimes they speak very rhythmically while at other times they speak arrhythmically (that is, without rhythm)- for example when they are hesitant or nervous.

## 5- The Importance of Rhythm Practice:

Some languages do not have such a noticeable difference between weak and strong syllables as the one that exists in English. Therefore, native speakers of such languages learning English may find it helpful to practice repeating strongly rhythmical utterances since this forces the speaker to concentrate on making unstressed syllables weak.

Speakers of languages such as Japanese, Hungarian and Spanish, which do not have weak syllables, may well find such exercises of some value.

### Lecture 18: Weak and Strong Forms

#### Weak and Strong Forms:

Many single syllable words that are used very frequently in connected speech are often pronounced differently from when they are stressed or said by themselves. These words have two different forms called strong forms and weak forms. For instance, the word *from* is pronounced in isolation as /frɒm/ (strong form) and in the sentence *He came from work late*, as /frəm/ (weak form).

Given below is a list of the weak forms of some common English words. The strong form is used when the word is said in isolation or is stressed. In the case of verbs and prepositions, the strong form is also used when the word comes at the end of the sentence.

The words that have **weak** and **strong** forms are:

- Articles
- Prepositions
- Auxiliary verbs
- Modal verbs
- Pronouns
- Possessive pronouns
- Possessive Adjectives



- Conjunctions

The words that have only **strong** forms are:

- Nouns
- Main Verbs
- Adjectives
- Adverbs

Word Class	Word	Strong Form	Weak Form	Examples
<b>Articles</b>	a	/eɪ/	/ə/	It's a book /ɪts əˈbʊk/
	an	/æn/	/ən/	He ate an apple /hi: `eɪt ən `æpl/
	the	/ði:/	/ðɪ/	The eight of June /ðɪ `eɪt əv dʒu:n/
			<b>Before Vowels</b> /ðə/	The book's here /ðə `bʊks `hɪə/
			<b>Before Conson</b>	
<b>Auxiliary Verbs</b>	am	/æm/	/m/	I'm going to Delhi /aɪm `gəʊɪŋ tə
	are	/ɑ:/	/ə/	`deli/
	is	/ɪz/	/z/ or /s/	They're going /ðeɪ ə `gəʊɪŋ/
	was	/wɒz/	/wəz/	The lock's missing /ðə `lɒks
	were	/wɜ:/	/wə/	`mɪsɪŋ/
	be	/bi:/	/bɪ/	Was here there? /wəz i `ðeə/
	been	/bi:n/	/bɪn/	Were they here? /wə ðeɪ `hɪə/

	do	/du:/	/dʊ/ <b>Before</b> <b>Vowels</b>  /d/	That'd be nice /ˈðæt bi ˈnaɪs/ I've been here for for nine months /aɪv biŋ ˈhiə fə ˈnaɪn ˈmaɪnθs/
	does	/dʌz/	<b>Before</b> <b>Conson</b>  /dəz/	How do I know? /ˈhaʊ dʊ aɪ ˈnəʊ/ Do you smoke? /dʒʊ ˈsməʊk/ Does he know it? /dəz hi ˈnəʊ it/
	had	/hæd/	/həd/	Had I known it? /həd aɪ ˈnəʊn it/
	has	hæz/	/həz/  /əz/  /z/	Has he come? /həz i: ˈkʌm/ The bus has gone /ðə ˈbʌs əz ˈɡɒn/ John's come /ˈdʒɒnz ˈkʌm/
	have	/hæv/	/həv/  /əv/ or /v/	Have they arrived? /həv ðei əˈraɪvd/ I've visited Paris /aɪv ˈvɪzɪtɪd ˈpærɪs/
<b>Modal Verbs</b>	Must	/mʌst/	/məs/	I must go now /aɪ məs ˈɡəʊ ˈnaʊ/
	Can	/kæn/	/kən/	Can I go now? /kən aɪ ɡəʊ ˈnaʊ/
	Could	/kʊd/	/kəd/	Could I borrow your pen?  /kəd aɪ ˈbɒrəʊ jə ˈpen/
	should	/ʃʊd/	/ʃəd/	You should help him /ju: ʃəd ˈhelp ɪm/

<b>Prepositions</b>	at	/æt/	/ət/	I met him at the post office /aɪ `met ɪm ət ðə `pəʊst ɒfɪs/
	for	/fɔ:/	/fə/	I did it for my mother
	from	/frɒm/	/frəm/	/aɪ `dɪd ɪt fə maɪ `mʌðə/
	of	/ɒv/	/əv/	The letter's from my mother
	to	/tu:/	/tə/	/ðə `letəz frəm maɪ `mʌðə/  It's made of silver /ɪts `meɪd əv `sɪlvə/ He's gone to Rome /hɪz `gɒn tə `rəʊm/
<b>Conjunctions</b>	and	/ænd/	/ənd/	Over and above /`əʊvə ənd ə`bʌv/
	as	/æz/		Butter and jam /`bʌtə nd `dʒʌm/
	but	/bʌt/	/nd/ <b>Before</b> <b>Conson</b>  /əz/  /bət/	As soon as I can /əz `su:n əz aɪ `kæn/  Nothing but the truth /`nʌθɪŋ bət ðə `tru:θ/

<b>Pronouns</b>	He	/hi:/	/hɪ/ or /ɪ/	Is he here? /ɪz ɪ `hɪə/
	She	/ʃi:/	/ʃɪ/ or /ʃ/	She wanted to help me
	We	/wi:/	/wɪ/	/ʃ `wɒntɪd tə `help mɪ/
	us	/ʌs/	/əs/	We made a mistake /wɪ `meɪd ə mɪ `steɪk/ Tell us a story /tel əs ə `stɔ:ri/
<b>Others</b>	Some	/səm/	/səm/	Give me some money /ˌgɪv mɪ səm `mʌni/
	Sir	/sɜ:/	/sə/	Yes, sir /`jes sə/

**Note :**

A very important point to remember is that the weak forms of prepositions and auxiliary and linking verbs are **NOT** used when they occur at the end of a sentence.

The sentence: *Where are you from?*

Cannot end with the weak form / frəm/. It has to end with the strong form /**frɒm**/. Similarly, 'Who's coming?'/`hu:z `kʌmɪŋ/ --'I am' /aɪ æm/ (Note the strong form of am)

## Lecture 19: Assimilation

### 1. Definition of Assimilation

The most common aspect of connected speech is assimilation. Notice the pronunciations of the consonants at the word boundaries.

- ten mice /tenmaɪs/ pronounced as /te**mm**aɪs/
- good boy /gʊdbɔɪ/ pronounced as /gʊ**bb**ɔɪ/
- good girl /gʊdgɜ:l/ pronounced as /gʊ**gg**ɜ:l/
- credit card /kredɪtkɑ:d/ pronounced as /kredɪ**k**kɑ:d/
- that soup /ðætsu:p/ pronounced as /ðæ**ss**u:p/

Assimilation is a process whereby a sound (assimilated sound) is influenced by an adjacent sound (the conditioning sound) and becomes more similar to it. More specifically, assimilation occurs when a sound takes on the characteristics of an adjacent sound and so becomes more similar to it.

### 2. Types of Assimilation

Assimilation can be of several different types corresponding to the direction of assimilation, the extent of assimilation and the nature of change assimilated sounds undergo.

#### 2.1. Types according to the extent of assimilation

Assimilation can be partial or complete.

- **Complete assimilation:** occurs when the assimilated sound changes to become identical to the conditioned sound.

*ten mice* /te**mm**aɪs/      *good girl* /gʊ**gg**ɜ:l/      *that soup* /ðæ**ss**u:p/

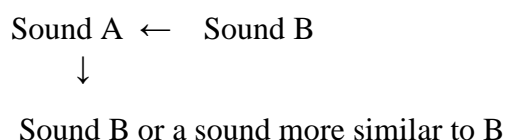
- **Partial Assimilation:** occurs when the assimilated sound changes to become the same as the conditioned sound.

*That girl* /ðæ**k**gɜ:l/      *Ten cars* /te**ŋ**kɑ:z/      *brown bear* /bra**ʊm**bɛə/

## 2.2. Types according to the direction of assimilation

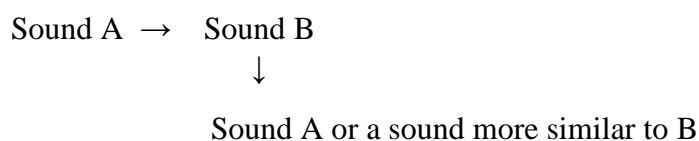
In English, there are three types of assimilation according to the direction of assimilation: Regressive assimilation, progressive assimilation and coalescence.

- **Regressive assimilation** is the most frequently occurring type of assimilation. It occurs when the assimilated sound precedes the conditioning sound :



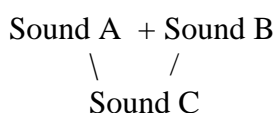
This type is also called right to left assimilation or anticipatory assimilation. All the examples above in 5.1.1. are examples of regressive assimilation.

- **Progressive assimilation:** It is also called perseverative assimilation or left to right assimilation. In this type, the assimilated sound follows the conditioned sound:



Examples of types of assimilation are the regular plural /s/vs/z/ alternation and the regular past tense /t/vs/d/in which the final consonant conditions the voiced/voiceless form of the suffix.

- **Coalescence (coalescent assimilation):** It is a type of reciprocal assimilation: two sound influence each other, they fuse completely and create a new sound. In other words, the first sound and the second sound in a sequence influence each other and mutually condition the creation of a third sound which features from both original sounds.



### Example:

*Could you help me:* /kʊd ju help mi / → /kʊdʒu help mi /

Here, the two sounds /d/ and /j/ influence each other and produce /dʒ/.

### 2.3. Types according to the Nature of the Sound Change

Assimilation involves a change in one or more features of a phoneme. According to the nature of this sound change, three main types of assimilation are distinguished: assimilation of place, assimilation of manner, assimilation of voicing. Coalescence is also considered a special type of assimilation in this classification.

- **Assimilation of Place**

Assimilation of place is the most common and the most frequently occurring type of assimilation in English. It occurs mainly when a word final alveolar /t, d, n, s, z/ assimilates to the place of the following consonant that is not alveolar whilst retaining the original voicing. Provided below are some rules of assimilation of place.

- /t,d,n / are replaced by bilabials before the bilabials /p,b, m/. more specifically,

/t / → /p/    *that pen / that boy / that man*

/d/ → /b/    *bad pain / red bag / good man*

/n/ → /m /    *ten players / brown bear / ten men*

- / t,d,n / are replaced by velars before the velars /k, g /. More specifically,

/t / → /k/    *that cup / that girl*

/d/ → / g /    *good concert / bad girl*

/n/ → / ŋ /    *ten cups / green grass*

- / s,z / are replaced by palato-alveolars before consonants containing a palatal feature

/ʃ, tʃ, dʒ, j /

/s / → / ʃ /    *this shirt / cross channel / this judge / this year*

/z/ → / ʒ /    *those young men / cheese shop/ those churches/ Has she?*

- /θ , ð/ may assimilate to /s,z/ before /s / in fast speech:

*bath salts / earth science / birth certificate / both sides / fifth set /*

*I loathe singing*

- When there are two alveolar stops at the end of a word, and they are followed by a word starting with a bilabial or velar, they can both assimilate.

*I can't go* / aɪ kən k ɡəʊ/

*Don't move!* /dəʊmp mu:v/

- **Assimilation of Manner**

In this type of assimilation, which is rare, the assimilated sound changes its manner of articulation to become similar to a neighbouring sound. In the sentence *Get some of that soup*, the expected normal pronunciation is /get sʌm əv ðæs su:p/ ; however, the pronunciation /ges sʌm əv ðæs su:p/ is heard in fast speech. In this pronunciation, the /t/ of *get* changes to /s/ before /s/ of *some* and /t/ of *that* changes to /s/ before /s/ of *soup*. Other examples :

*same night* pronounced as /seɪn naɪt/

*good night* pronounced as /ɡʊn naɪt/

- **Assimilation of voicing**

Assimilation of voicing takes place only in a limited way. More specifically, it occurs in set phrases. The latter are words that occur together on a very frequent basis, such as *have to* , *has to*, *used to* and *supposed to*. In this case, the following voiceless consonant /t/ affects the voicing of the previous sound and causes it to change its voicing from a voiced to a voiceless consonant.

- **Have to:** /hævtu:/ → /hæftə/ - **Has to:** /hæztu:/ → /hæztə/

*I have to go!* - *He has to go!*

- **Used to:** /ju:zd tu:/ → /ju:stə/

*He used to smoking.*

- **Supposed to:** /səpəʊ zd tu:/ → /s əp əʊstə/

*You were supposed to leave!* / j u wə səpəʊstə li:v/



## Lecture 20: Elision

### 1. Definition of Elision

Elision (also known as deletion or omission) is another important aspect of connected speech. It is a process whereby a sound is dropped in a certain context. More specifically, it is a process where one or more phonemes are ‘dropped’ within a word (word internal elisions) or phrase (at word boundaries), usually in order to simplify the pronunciation.

#### Examples:

Words/phrases	Transcription	Pronunciation with elision
<i>facts</i>	/fæktz /	/fæks /
<i>comfortable</i>	/kʌmfətəbl/	/kʌmftəbl/
<i>listless</i>	/lɪstles/	/lɪsles/
<i>Last night</i>	/lɑːstnaɪt/	/lɑːsnaɪt/
<i>Six students</i>	/sɪksstjuːdnts/	/sɪkstjuːdnts/
<i>Risked prison</i>	/rɪsktprɪzn/	/rɪstprɪzn/

The process is pervasive. It is normally unintentional (many native speakers may be unaware of the process or where it occurs), but it may be deliberate.

### 2. Common Cases of Elision in English:

#### - Weak forms elisions

- **h-dropping:** the most important case of elision associated with weak forms is h-dropping. The /h /of function words can be dropped but not at the beginning of an utterance or when stressed.

*Give her the book.* → /gɪvə ðə bʊk/

*Tell him the truth.* → /telɪm ðə truːθ/

*You could have performed better.* → /ju kʊdəv pəf ɪnd betə/

*It is his birthday today.* → /ɪtɪz ɪz bɜːθdeɪ tədeɪ/

**BUT** *His birthday is today.* → /hɪz bɜːθdeɪ ɪz tədeɪ/

*Then he went to the shop.* → /ðen i went tə ðə ʃɒps/

**BUT** *He went to the shop.* → /hi went tə ðə ʃɒps/

- **Loss of other consonants:** The consonants of *and, will, must, them* can also be elided when unstressed.

*John will have finished by now.* → /dʒɒn əl əv fɪnɪʃt baɪ naʊ /

*Tables and chairs.* → /teɪblz ən tʃeəz / *You must work hard.* → /ju məs wɜ:k hɑ:d /

**BUT** *You must eat more.* → /ju məst i:t mɔ: /

- **Consonant cluster reduction**

When two or more consonants come together, there is a tendency in English to simplify such a cluster by eliding one of them. Cluster reduction can occur in between as well as inside words and mainly involves the deletion of alveolar plosives. Some of the most common rules are provided below:

- When /t / or /d / occur second in a sequence of three consonants: *Next day* /nekst deɪ / → /neks deɪ /

*Raced back* /reɪst bæk / → /reɪs bæk /

*Mashed potato* /mæʃt pəteɪtəʊ / → /mæʃ pəteɪtəʊ /

*last chance* /lɑ: st tʃɑ:ns / → /lɑ: s tʃɑ:ns /

*kept quiet* /kept kwaɪt / → /kep kwaɪt /

*hold tight* /həʊld taɪt / → /həʊl taɪt /

*found five* /faʊnd faɪv / → /faʊn faɪv /

- In the sequence /-skt/, /k / rather than /t / is often elided. *Asked them* /ɑ:skt ðəm / → /ɑ:st ðəm /

*Desktop* /deskɒp / → /destɒp /

*Risked prison* /rɪsktprɪzn / → /rɪstprɪzn /

- Elision of final /t / or /d / is rare before / h /.

In the following examples, the alveolar plosives are more regularly retained:

*Kept hold, worked hard, East Ham, reached home, round here, raised hands*

- Final /t / or /d / followed by a word beginning with /j /are usually kept in a coalescent form.

*Helped you, liked you, lost you, left you, lend you, grabbed you, told you.*

- The /t / of the negative /-nt/ is often elided , particularly in disyllables (elision is less common in monosyllables), before a following consonant , sometimes before a vowel.

*You mustn't lose it* → / ju mʌsn lu:z it /

*Doesn't she know?* → /d ʌzn ʃi nəʊ /

*Wouldn't he come?* → / wʊdn ɪ kʌm /

*you mustn't overeat.* → / ju mʌsn əʊvər i:t /

*I won't do it.* → / aɪ wəʊndu : it /

- Clusters of word final /t /and word initial /t / or /d / are sometimes simplified in informal speech

*I've got to go.* → /aɪv ɡɒtə ɡəʊ /

*What do you want?* → / wɒdə ju wɒnt / (note also / wɒdzu wɒnt/

- **Loss of unstressed medial vowel (or syncope)**

In English a short, unstressed vowel / ə/ or /ɪ/ optionally drops out in some multisyllabic words following the strongly stressed syllable.

*potato* /pə'teɪtəʊ/ → /ptetəʊ/

*chocolate* /tʃɒkələt/ → /tʃɒklət/

*bicycle* /baɪsɪkl / → /baɪsɪkl

Other examples: *Battery/ camera /mystery/ aspirin /Vegetable /interesting / Emerald / Favourite / restaurant/ family/ traveller*

Elision occasionally occurs in two syllable words, which are reduced to the one syllable:

*Correct* /kə'rekt /→ /krekt

*Parade* / pə'reɪd /→ /preɪd /

*Police* /pə'li:s /→ /pli:s /

*Suppose* /sə'pəʊz/ → /spəʊz/

- **Elision of one of a boundary cluster of two consonants**

The elision of one of a boundary cluster of two consonants sometimes occurs in casual speech, but is usually considered as substandard.

*He went away.* → / hi wenəweɪ /

*I want to come.* → / aɪ wɒnə kʌm / (/ aɪ wɒntə kʌm / frequently occurs)

*Give me a cake.* → /gɪmi ə keɪk /

*Let me come in.* → /le mi kʌmɪn /

*Get me some paper.* → / gɛmi səm peɪpə /

- **Loss of unstressed initial vowel or syllable (or aphaesis)**

In highly informal speech, an unstressed vowel (particularly when followed by a continuant and preceded by a word-final consonant) or syllable is elided. This process is known as aphaesis:

Not alone /nɒt ələʊn / → /nɒt ləʊn /

Get another /get ənʌðə / → /get nʌðə /

Run along /rʌn ələŋ / → /rʌn ləŋ /

He was annoyed / hi wəz ənɔɪd / → / hi wəz nɔɪd /

Because /bɪkɒz / → / kɒz /

- **Loss of final /v/ in *of* before consonants**

This type of deletion is very common in English. The pronunciation of the preposition *of* can be reduced to the schwa before words with initial consonants.

*lots of money* / lɒts ə mʌni /

*lots of them* / lɒts ə ðəm /

*waste of money* / weɪst ə mʌni /

*hearts of palm* / hɑ:ts ə pɑ:m /

## Lecture 21: Linking

### 1. Definition of Linking

Linking (or Liaison) is another way to make adjustments in sounds at word boundaries in connected speech. It means the linking of words when they are used in connected speech. Particularly, it is the way in which the end of one word is linked to the following sound. Linking entails the smooth movement from the final sound of one word to the initial sound of the next. In some cases, this involves the addition of a sound that does not exist in the individual words. In other words, to help one word flow to the next, other sounds may be added.

Dog\_eat dog. / dɒgi:t dɒg / - Black\_and gray. / blækən greɪ /  
Blue\_wink / blu:ˈwɪŋk / - Be\_able / biːəbəl /  
My car\_is there. / maɪ kɑ:ˈrɪz / - how\_ˈold / haʊwəʊld /  
day\_in\_and day\_out / deɪ ɪnən deɪ ɔʊt /

### 2. Common Types of Linking

There are many kinds of linking: consonant to vowel linking, [j , w] linking , linking /r / and intrusive /r/.

#### 2.1. Consonant to Vowel Linking

A word ending with a consonant sound is linked to a word beginning with a vowel sound. This may involve a consonant at the end of one word moving to the beginning of the next word or being shared by both words.

an\_aim → / əneɪm / (it may sound like *a name* )

Pets\_enter → /petsentə/ (it may sound like *pet centre* )

**Other examples:** This\_is an\_apple → / ðɪsɪzənæpl/

keep\_on where's\_Ann where's\_Andrew think\_it\_over first\_of\_all  
look\_at\_it where's\_Ann not\_at\_all pick\_it\_up not\_as\_tall\_as

## 2.2. [j , w] Linking

When a word ending with a tense vowel or diphthong meets a word starting with a vowel, they are linked with a [j] or a [w] sound. If the lips are round (the case of high back vowels /u:, əʊ, aʊ/), a linking [w] is inserted and if they are spread (the case of /i:/, or a diphthong which finishes with /ɪ/), a linking [j] may follow.

Linking [j]	Linking [w]
Be <sub>j</sub> able Say it My <sub>j</sub> own Say <sub>j</sub> it They <sub>j</sub> often Toy <sub>j</sub> airplane My <sub>j</sub> arms The day <sub>j</sub> after	Though <sub>w</sub> I no <sub>w</sub> art blue <sub>w</sub> ink how <sub>w</sub> is too <sub>w</sub> old you <sub>w</sub> and me now <sub>w</sub> and them go <sub>w</sub> inside

### Other examples:

I really <sub>j</sub> appreciates your help!	
At least he <sub>j</sub> asked for permission /	Kids grow <sub>w</sub> up so quickly!
try <sub>j</sub> again after lunch. /	My car is very <sub>j</sub> old.
It's two <sub>w</sub> o'clock now. /	

## 2.3. Linking / r /

For speakers of non-rhotic accents (e.g. RP) /r/ is not pronounced unless it is followed by a vowel. While a speaker of a rhotic accent (American English) pronounces all r letters, a speaker of a non-rhotic accent does not pronounce the letter *r* or *re* before consonants or in word final positions:

Word	Non-rhotic pronunciation	Rhotic pronunciation
Read	/ri:d/	/ri:d/
Carry	/kæri/	/kæri/
Port	/pɔ:t/	/pɔ:rt/
Bore	/bɔ:/	/bɔ:r/
Boring	/bɔ:rɪŋ/	/bɔ:rɪŋ/

When words ending with the letter(s) *r* or *re* combine with words beginning with vowels, the /r/ is pronounced by the speakers of non-rhotic accents. Such an /r/ is called linking /r/. It is a phonological phenomenon that occurs when the speakers who do not pronounce the final *r* or *re* (speakers of non-rhotic accents) will add it when the next word begins with a vowel.

<b>Word</b>	<b>Word in connected speech</b>
Far / fɑ:/	Far away / fɑ:rəweɪ / (the /r/ here is Linking /r/)
More / mɔ:/	More ice / mɔ:raɪs / (the /r/ here is Linking /r/)

**More examples:**

after\_ all      better \_off      for\_ instance      more \_or less      four\_ eyes  
 under\_ age      here \_and there      a clever \_escape      a number\_ of

**2.4. Intrusive /r/**

A word ending in a vowel can be linked to a word beginning with a vowel by inserting an /r/ sound which is non-existent in the spelling of both words. This /r/ , which is historically unjustified, is called intrusive /r/. It usually occurs when the first word ends in the schwa or a centring diphthong. Less common is the insertion of /r/ after the non-high vowel /ɑ:, ɔ:/.

- the idea of →the idea[r] of /ðiɑɪdɪər ɒv/
  - law and order →law [r] and order /lɔ:rənɔ:də/
  - China is →China[r] is /tʃaɪnəɪz /
  - a banana and an apple →a banana [r] and an apple /əbənɑ:nənæpl/
  - Asia and Africa →Asia [r] and Africa /eɪzəɾənæfrɪkə /
  - Cuba and Brazil →Cuba [r] and Brazil /kju:bərəm bræzɪl /
  - papa and mama →papa[r] and mama /pəpɑ:rəm məmɑ:/
- (Note assimilation in the last two examples).

## Exercises

### 1) Listen and repeat

1. We can wait for the bus.
2. How do the lights work?
3. There are some books I must read.
4. She took her aunt for a drive.
5. The basket was full of things to eat.
6. Why should a man earn more than a woman?
7. You ought to have your own car.
8. He wants to come and see us at home.
9. Have you taken them from that box?
10. It's true that he was late, but his car could have been broken down.
11. I shall take as much as I want.
12. Why am I too late to see him today?

### 2) a. Decide if the underlined words are likely to be in their weak form or strong form.

1. Where does she come from?
2. I read the newspaper as I'm travelling to and from work.
3. They'll be able to do it sooner than I can.
4. He wanted pie and ice cream, not pie or ice cream.
5. Is that your idea of a joke?
6. She can speak Spanish better than I can.
7. what's your dress made of?
8. A: Which did you order? Fish or meat? B: I ordered fish and meat. I am very hungry.
9. Even better than the real thing.
10. You should have used "and" between the last two names John and George.

### b. Repeat the sentences, paying attention to the appropriate form of function words.

### 3) Transcribe the following sentences, taking care to use the appropriate form of the function words.

1. I want her to park that car over there.
2. Of all the proposals, the one that you made is the silliest.
3. Jane and bill could have driven them to and from the party.
4. To come to the point, what shall we do for the rest of the week?
5. Has anyone got an idea where it came from.
6. Pedestrians must always use the crossings provided for them.
7. Each one was a perfect example of the art that had been developed there.



**4) a. Read the following sentences and try to spot the consonants which are likely to change when spoken fast.**

- a. Make sure everything in place, in case they arrive early.
- b. Instead of taking the bus, lets walk through Green Park and Hyde Park.
- c. That's the third person I've seen wearing a red coat this morning.
- d. Would you prefer eggs and bread or sausages and mashed potatoes.
- e. I spent half the year in Paris and the rest in Berlin.
- f. The only thing I keep in my handbag is a purse and a handkerchief.
- g. Careful on that street. There's a lot of bad guys there.
- h. there were eight girls and eight boys at the party.
- i. I'm not really a cat person. I much prefer dogs.
- j. The defendant pleaded not guilty.

**b. Listen and check your answers.**

**5) These sentences are written incorrectly. Listen and correct them. What comments can you make about them?**

1. I talk classes this morning.
2. I hate going to museums and arc galleries.
3. the sum burnt my neck.
4. have you ever tribe Belgian beer.
5. I got ache questions correct out of ten.
6. It was a bag question; nobody got the answer right.

**6) Listen to the following sentences and spot the cases of elision.**

1. Let's face the facts. This company is going bust quickly.
2. My landlady brought a new handbag the other day.
3. the first girl earned twenty pounds.
4. the second boy waited for half an hour.
5. I don't like fast food as a rule.
6. Raise both your hands slowly into the air.

**7) Show where you can join a word ending with a consonant to a word starting with a vowel sound. Then listen and practise saying the poem.**

There was an old man called Greg,  
Who tried to break open an egg.  
He kicked it around,  
But fell on the ground,  
And found that he'd broken a leg.

**8) Study the following transcriptions, and then decide which aspect of connected speech is present. Justify your answer.**

a- / hi wenθru:/

b- / ði eəriəri:z flʌdɪd/

c- /nɒtʃu: /

d- / senfræŋk ə kɑ:d /

e- / rɑ:ðə ðəŋgəʊ /

f- / wɪl mɪʃju /

g- / tə lendʒu wʌn /

i- / lets wɔ:k θru: gri:mprɑ:k /

j- / æd ə kɒmərə:ftəðæt/

k- / θæŋks fərevrɪθɪŋ /

l- / hi wəʊndu: ɪt /

m- / əʊvərəmerɪkə/

n- / bɒtl əwɔ:tə /

o- /gʊnnj

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