Democratic and Popular Republic of Algeria
Ministry of High Education and Scientific Research University of Tlemcen

Faculty of Letters and Languages Department of English

Master Two- Language Sciences- Third Semester

Dr Boumediène BENRABAH

## Analysis of Linguistic Levels

## Preface

## PART ONE

## I. Phonological Level

### 1.1. Phonetics \& Phonology

### 1.1.1. Phonetics

1.1.1.1. Branches of Phonetics.
1.1.1.2. Types of Transcriptions
1.1.2. Phonology
1.1.3. Importance of Studying Phonetics and Phonology

### 1.1.4. Phonetics vs. Phonology

### 1.2. Redundancy \& Distinctiveness.

1.3. Double Articulation \& Co-articulation.
1.3.1. Double Articulation
1.3.2. Secondary Articulation.
(Practice \& Testing)

### 1.4. Intonation.

1.4.1. Labels of Intonation.
1.4.1.1. Intonation 1
1.4.1.2. Intonation 2.
1.4.1.3. Intonation 3.
1.4.2. Functions of Intonation.
1.4.2.1. Attitudinal Function
1.4.2.2. Accentual Function.
1.4.2.3. Grammatical Function.
1.4.2.4. Discourse Function.
(Practice \& Testing)
1.5. Aspects of Connected Speech.
1.5.1. Rhythm
1.5.2. Elision.
1.5.3. Linking.
(Practice \& Testing)
1.5.4. Assimilation.
(Practice \& Testing)

## PART TWO

II. Morphological Level
2.1. Free Morphemes
2.2. Bound Morphemes
2.3. Morphological description
III. Grammatical Level
$\qquad$3.1. Properties of Generative Grammar
3.2. Syntactic Description
3.3. Phrase Structure Rules
3.4. Transformational Rules
IV. Semantic Level
$\qquad$
4.1. Conceptual Meaning
..................................................
4.2. Associative Meaning
4.3. Semantic Features
4.4. Semantic Roles
(Practice \& Testing)
PART THREE
VI. Additional Phonetic Background Level
5.1. The Syllable
$\qquad$
5.1.1. Introduction
$\qquad$
5.1.2. Definition
5.1.2.1. Phonetically
5.1.2.2. Phonologically
5.1.2.3. Phoneme Sequences and Syllable Structure
5.2. Strong and Weak Syllables

$\qquad$
5.2.1. Introduction5.2.2. Types of Weak Syllables
$\qquad$5.2.2.1. The schwa /ə/.
$\qquad$5.2.2.2 Close Front and Close Back Vowels /i:/, /ı/, /u:/, /v/.5.2.3.2. Syllabic Consonants(Practice \& Testing)
5.3. Stress
5.3.1. Stress in Simple Words
5.3.1.1. The Nature of Stress
5.3.1.2. Levels of Stress.
$\qquad$
5.3.1.3. Placement of Stress
5.3.2. Stress in Two-syllable Words
.........................................................................
5.3.3. Stress in Three-syllable Words
5.3.4. Complex Words
5.3.4.1. Affixed Words
5.3.4.2. Compound Words.
5.3.4.3. Placement of Stress in these Words5.3.5. Word Class Pairs.(Practice \& Testing)
5.4. Weak Forms
5.4.1. Introduction5.4.2. Contexts
$\qquad$(Practice \& Testing)
Conclusion: Notes on the Programme
References
$\qquad$
Abbreviations and Acronyms.
Useful Data (diagrams and tables)

## Preface

In preparing this paper, there has been a clear intention to provide Master Two EFL students with a survey of what is known about language not only as a system of syntax and packages of lexical items but as a set of levels, all of which, constitute the basic components of human communication. In due course, Master Two students have supposedly acquired all-related concepts about language in its manifold manifestations during their under-graduate studies. However, given that these students (can) come from different universities and institutions all over the country, they need to level up their knowledge and acquisitions to the same rank and status in common. Even those who failed to reach a certain position of mastery in one of the linguistic levels already dealt with in previous years of graduation studies, could through the provided programme raise to the same level or status to become as good as others. All the same, this university course is meant to guarantee a rather similar exit profile for all Master Two EFL students in the sense to inculcate in them the same notions governing language use and usage.

There is no doubt, therefore, that any individual user of a language has moreorless a comprehensive 'unconscious' knowledge of how language works. But, linguistic approaches on language add further information through what is described by linguists and stimulate language learners to take a critical view of the effectiveness of the descriptions, the analyses and contrast them with individual intuitions. Arguably, such courses of language and about language give a holistic view of both the internal structure of language (its form) and the varied uses of language in human everyday uses (its function). For this and that, language learners should be encouraged to apply some of the analytic procedures presented in this paper or others to consider some of the similarities or discrepancies that may exist in the study of a native language, a second
language or a completely foreign one and mainly putting focus on different language-related issues.

As the outline shows evidence of different levels (phonology, syntax, morphology and semantics) of linguistics, the present paper is intended to bring continuation of the former programme(s) in which EFL learners were administered a whole chemistry of variables and concepts where different schools of linguistics have been largely presented through historical linguistic courses dealing with general linguistics and the main branches deriving from, such as: sociolinguistics, psycholinguistics, neurolinguistics and applied linguistics. In addition, to provide greater clarity and relevance, the present paper tries to incorporate many changes that reflect developments in linguistic analysis in relation to the nature of 'human' language first, then dealing with analysis of linguistic levels by analysing, comparing and contrasting the languages which students themselves are supposed to know, such as: Arabic, French and English in terms of structure, word-building, phoneme combinations and deeper phonological consideration shared between these languages. In this vein, it will be clearly established that if languages share the same phonetics properties, they can be different phonologically. Logically, cases of assimilation, elision, linking and many other aspects related to phonetics and phonology, like: distinctiveness and redundancy or intonation will show discrepancies and similarities between the existing languages in the Algerian community.

The paper incorporates a four-aspect study of language layers, split into three main parts. The first is a neat survey the main branches dealing with sounds of the language: phonetics and phonology. The first part; namely the phonological level, has gained the lion's share due to the importance of bringing Master II EFL students to appreciate all the sound manifestations in comparing and contrasting languages. It helps to clarify the shared phonetic properties that languages have in common and at the same time gives different aspects of sound
combinations whereby languages may differ. This strong focus on the phonological aspect over the other levels is meant to compensate the slimming down of the phonetic and phonology programmes to only two years (first and second undergraduate studies) with a very short time allotment of only one hour per week. Subsequently, EFL students will never come across the basic phonological aspects of the target language they are supposed to master.

The third part deals with the syllable and its structure, including the differentiation between strong and weak syllable. Then, it follows with a subpart describing the weak forms of the English language words showing how function words are used in different contexts, as opposed to content words. At the end of almost every course there is a set of exercises that help the students practise what they have already learned in courses.

As this handout is accessible to students with basic knowledge of the subject, we hope the different definitions and explanations provided are accurate, simplified and presented in a meaningful way, so that they will be of some help to learners of English for better and effective communication.

Part One

# Phonological Level 

Phonetics \& Phonology
Redundancy \& Distinctiveness
Double Articulation \& Co-articulation
Intonation
Aspects of Connected Speech

## Part One

## I. Phonological Level

### 1.1. Phonetics \& Phonology

1.1.1. Phonetics
1.1.1.1. Branches of Phonetics
1.1.1.2. Types of Transcriptions
1.1.2. Phonology
1.1.3. Importance of Studying Phonetics and Phonology
1.1.4. Phonetics vs. Phonology
1.2. Redundancy \& Distinctiveness
1.3. Double Articulation \& Co-articulation
1.3.1. Double Articulation

# 1.3.2. Secondary Articulation <br> (Practice \& Testing) 

1.4. Intonation
1.4.1. Labels of Intonation
1.4.1.1. Intonation 1
1.4.1.2. Intonation 2
1.4.1.3. Intonation 3
1.4.2. Functions of Intonation
1.4.2.1. Attitudinal Function
1.4.2.2. Accentual Function
1.4.2.3. Grammatical Function
1.4.2.4. Discourse Function
(Practice \& Testing)
1.5. Aspects of Connected Speech
1.5.1. Rhythm
1.5.2. Elision
1.5.3. Linking
(Practice \& Testing
1.5.4. Assimilation
(Practice \& Testing)

### 1.1. Phonetics \& Phonology

Among linguistic levels under study, we have morphology, syntax, semantics and phonology. Each level of analysis shows a façade of the language under study and its role in knowing the constituant properties of that language linguistically speaking.

One of the pre-requisites for any language learner is to learn about the phonological aspects of the target language. However, in the case of the English language, phonology represents the grey side of the learning process of the language be it learnt as a second language or as a foreign one. The case really matters because of the notorious aspect of the English language in terms of correspondence between spelling and pronunciation.

As a matter of fact, many EFL learners struggle finding their way to give a right acceptable pronunciation of certain words exposed to for the very first time; i.e., if the word has not been heard or uttered by another interlocutor, or being considered as a 'deja-vu' word, the EFL learner feels as being put in a trap to produce the right sound equivalence of the written word. The instances are manifold: tomb, comb, shepherd, enough, thorough, ewe, Leicester, Edinburgh, psychic, lamb, etc.

The present section tries to jointly link the utility of studying phonetics and phonology; and at the same time reveals some of the aspects of disparity between the two branches.

- If phonology is the study of the way sounds function in languages, including phonemes, syllable structure, stress, accent, intonation,
- Then, phonetics; on the other hand, is the study of the physical properties of human speech sounds, i.e., it describes the process of their physiological production.

The distinction between phonetics and phonology, however, is clearly stated below in the following table:

| Phonetics | Phonology |
| :---: | :---: |
| - Is a science concerned with the study of the sounds of speech acts and their mode of production <br> Its concern is more general since it deals with the description of all sounds' production of all languages and their physical properties | - Is a description rather interested in the relationships between the sounds of a language and how they form patterns It is rather more specific since it looks at the combination of sounds patterns in a given language |

Table 1.1 phonetics and phonology (adapted)

### 1.1.1. Phonetics

What is phonetics?
Phonetics is the scientific study of the sound (the phonic medium). Phoneticians are not interested in all possible sounds but only those produced by human speech organs and playing a role in human language and used in communication.

The phonic medium (sound) may be studied from three (3) points of view: articulatory, acoustic and auditory aspects

### 1.1.1.1. Branches of phonetics

Phonetics describes speech sounds from a three-dimensional aspect; i.e., from the initial production of sounds by the speaker, the travel of sounds (in the form of) waves, to the reception of these sounds by (the ears of) the listener. The three branches of phonetics are explained below as follows:
a. Articulatory Phonetics

This branch investigates and classifies speech sounds. It deals with how sounds are articulated (produced) by the speech organs. This includes the description of all the process of sound making from the very beginning of air accumulation in the lungs which constitute the reservoir of air. Needless to assert that air is the principal source of speech sound's production.
b. Acoustic Phonetics

It is concerned with describing the physical properties of the sound waves created by the activity of the speech organs. In other terms, the sound travels from the mouth of the speaker to the ears of the listener and this makes a potential link between production and perception.
c. Auditory Phonetics

It is concerned with the perception of speech sounds by the ears and the brain. The process of listening and comprehending a verbal utterance is tightly associated to the above mentioned branches where production and perception with favorable conditions of sound travel guarantee a permanent understanding between interlocutors (speakers and listeners).

### 1.1.1.2. Kinds of transcriptions

In using phonetic symbols, one can transcribe any word of any language. Transcription is the writing down of a spoken utterance using a suitable set of symbols (IPA). The latter is the standardized system of phonetic symbols; it stands for "International Phonetics Alphabet." It is a system created in 1888 by world phoneticians to ease the burden for language learners throughout the whole world in their process of learning and/or teaching of a language, be it
second or foreign. In its original meaning, the term 'transcription' implies converting written representations into phonetic symbols. There are two commonly used kinds of transcription:

- Broad phonemic transcription puts forward the phonemic representations of vowel and consonant sounds usually using slashes / /
- Narrow phonetic transcription refers to the allophonic transcription usually including the four details so far known as: aspiration, devoicing, velarisation and syllabic function of some consonants and typically used between square brackets [ ].


### 1.1.2. Phonology

Phonology is the other face of the same coin covering the overall representation of speech sounds. Clearly stated, phonology searches the possible combinations of phonemes sounds in a given language. It (phonology) looks at the possible distributions of (certain) sounds in different languages where some sounds cannot be found in certain positions as compared to other languages. A very simple example can be seen through the sound $/ 3 /$ in the beginning of English words, oppositely, the same sound is largely used in other languages like French or Arabic.

## Importance of Studying Phonetics and Phonology

If a mere immigrant lives in England for a period of time, he will speak the language of that country; if a professional football player signs his contract with a club there, he will be able to use the language at least for acceptable communication. So, why should other people (EFL students and teachers) bother studying phonetics and phonology? The reason behind is simple: to understand the way we write words with the sounds they represent. What is quickly apparent are a host of orthographic inconsistencies. This fact makes the English language being known by its 'notorious aspect' where spelling forms very often differ from the intended pronunciation. Examples are:

1. Sometimes different letters stand for the same sound
see, sea, scene, receive, thief amoeba, machine $\rightarrow$ /i:/
king, queen, car, pick, character, school $\rightarrow / \mathbf{k} /$
2. Sometimes the same letters can stand for different sounds, like:
sign, pleasure, resign
charter, character, machine
father, all, apple, about
any, age
3. Sometimes a single sound is spelled by a combination of letters, for instance:

Lock, that, book, boast, bee, shop, shepherd.
4. Sometimes a single letter stands for more than one sound, for example:

Exit, use
5. Sometimes letters stand for no sound, some illustrations are as follows:

Know, doubt, though, island, psychology, psychic, handsome

Below are very significant examples showing what really means to know about a language phonetically and phonologically. Some illustrations are as follows:

- Tone use

In Chinese language, for instance, the same word with in spelling may diverge in meaning according to the tone used.
$\{$ 'ma' $\rightarrow$ with rising tone (pitch) ma $\nearrow \rightarrow$ means 'mother'
$\{$ 'ma' $\rightarrow$ with falling tone (pitch) ma $\rangle \rightarrow$ means 'home'
$\Rightarrow$ tone in Chinese is distinctive, however, in English is redundant

- Phonetic features


## English <br> Vs

/b/ is a plosive, labial, voiced consonant
/b/ has three features
The words: 'pin' and 'bin'
e.g., [pın] \& [bın]

In English, this is distinctive
Meaning changes from voiceless [p] or voiced [b]
/b/ is a plosive, labial consonant
/b/ has only two features
the allocution: سبحان اله'
e.g., [supћænæ]

In Arabic, it is redundant
Meaning does not change from devoiced
[b] or voiceless[p]

- Elision: slurred or mute sounds

| English | Arabic | French |
| :---: | :---: | :---: |
| ./p'li:s/ $\rightarrow$ 'police <br> ./k'nemri/ $\rightarrow$ 'canary' | "قلنـا اهبطوا" <br> /kulnæ’hbitu: | $\begin{aligned} & . / \mathbf{p}^{\prime} \mathbf{I} \mathbf{t} / \rightarrow \text { 'petit'} \\ & . / 3^{\prime} \mathbf{v e} / \rightarrow \text { 'je vais' } \end{aligned}$ |

## - words ending and sound changes

1. Words ending in /ı/ or / i:/ tend to change into / $\mathrm{j} /$

In French: / səsi ${ }^{\mathbf{j}} \mathbf{e} \mathbf{~ m æ ~ s 3 : / ~ \& ~ / i l ~}{ }^{\mathrm{j}} \mathfrak{æ}^{\mathrm{j}} \mathbf{u n} / \rightarrow$ ('ceci est ma sœur'\& 'il y'a une')
2. Words ending in $/ v /$ or $/ \mathbf{u}: /$ tend to change into / w/

In English: /gəu w'aut/ \& /tu: w'i:zı/ $\rightarrow$ ('go out' \& 'too easy')
In French: /u: w'e/ $\rightarrow$ ('ou est')

- Assimilation and sounds influence

| English | French | Arabic (Algerian) |
| :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { e.g., 'dogs' } \\ & \text { /dpgz/ } \end{aligned}$ | e.g., 'sage femme' /sæSfæm/ | e.g., نتُها 'it's hers' /ntæћhæ/ |

### 1.1.3. Phonetics vs. Phonology

The present section seeks to catch some of the discrepancies between the speech sounds as provided through the two phone mediums, namely: phonetics and phonology. In simple terms, the contrastive study between phonetics and phonology leads to acknowledge a down-to-earth reality where the same speech sound is analysed differently via the two studies.

In brief, the present section puts the two phonic studies in the following sphere of definitions:

- Phonetics is concerned with speech and its physical properties
- Phonology is concerned with the structure and function of these sounds in conveying meaning

Trubetzkoy, one of the founders of the Prague School of Linguistics, wrote (1930:10):
"It is the task of phonology to study which differences in sound are related to
differences in meaning in a given language, in which way the discriminative elements are related to each other, and the rules according to which they may be combined into words and sentences"

Thus, "A phonetic study tells how the sounds of a language are made and what their acoustic properties are. A phonological study tells how these sounds are used to convey meaning"

Both phonetic and phonological studies refer to the inventory of segments in a language; but as pointed out by Edward Sapir (1925: 16-18) "two languages can have the same inventory of phonetic segments but have very different phonologies"
e.g. German English
‘salz’ / zalts / 'salts’ / so:lts /
$\rightarrow$ The two words in both languages end with equivalent sound sequences / t s/; but. their consideration differs from one language to another one because of some phonological or distributional aspects of certain sounds. As a matter of fact, the two sequences are contrastively viewed as follows:

## a. In English

The sequence 't s' of the word 'salts' is considered as two independent consonant sounds by English speakers for two reasons:
1- The singular form is known as 'salt' $\rightarrow$ ' s 'is an additional segment ( linguistically defined as: inflectional bound morpheme)
2- The sequence 'ts' is not found in initial position in English words, unlike: / d3 ,t $\mathrm{f} /$ $\Rightarrow S o$, ' $t \underline{s}$ ' as ' $t$ ' + 's' fits the pattern or structure of the (English) language
b. In German

The sequence 't s.' in the German language can be found in initial position and it is spelt as ' $z$ ' as it can be found also at final position. So, the German speakers analyse (mentally) the sequence't s' as one segment [ts] as opposed to the instance mentioned above in the English language as two separate segments or allophones [ t ] and [s]

Likely, the two pronunciations of 'ts' - in English and in German- are identical phonetically. Thus, a purely phonetic study would miss distinction, i.e., it is in a phonological study that the difference between [t s] and [ t ] is captured. In other terms, in English, we have two phonological segments $/ \mathbf{t /}$ and $/ \mathrm{s} /$ occurring in sequence; however, in German- in addition to $/ \mathbf{t} /$ and $/ \mathbf{s} /$ - there is a phonological segment $/ \mathrm{t} /$

### 1.2. Double Articulation \& Co-articulation

In the present section, we will shed some of the light on the possible interferences that may occur when certain sounds are produced in a particular sequence with parallel or simultaneous articulation belonging to the same rank (whereby, double articulation); otherwise, we will be dealing with another type of articulation, namely: subordinary or secondary articulation which induces automatically that another primary articulation has already been performed.

In specifying vowel sounds, we need to mention two places of interference, namely: the tongue and the lips; since for every tongue position, we may have two or more lip positions, e.g., [i]and [ ${ }^{\mathrm{j}}$ ]

In consonants too, we may have to specify two places of interference. These two places will identify a sequence of articulation relevant to either a double of sounds sharing the same rank (both plosives and both fricatives) or secondary articulation where a primary articulation is felt first to be followed simultaneously by another articulation, hence, secondary articulation. They are exposed clearly below as follows:

### 1.3.1. Double Articulation

In $\left[\mathrm{P}^{\wedge} \mathrm{K}\right] \rightarrow$ two places at which the air stream is blocked (lips and velum). However, when both stops (plosives) are realized simultaneously, the resulting sound is different in $[\mathrm{P}]$ and $[\mathrm{K}]$ separately: e.g., the sequence $[\mathrm{PK}] \rightarrow$ in 'upkeep' meaning "maintenance"

Sounds, such as: $\left[\mathrm{k}^{\wedge} \mathrm{p}\right]\left[\mathrm{g}^{\wedge} \mathrm{b}\right] \rightarrow$ occur in 'Igbo language'.
This double articulation is a labio-velar one with an equal interference (bilabial/ velar) going on the same time. Such sounds are not commonly found in English or in French and in Arabic either.

One double articulation we may hear in English is a glottal stop with the fortis stops [p,t,k] in words, like: 'super- letter- lucky' or in French: 'maintenant'

To resume, double articulation requires that two structures shall be of equal rank, e.g., "stop+stop" or "fricative+fricative"; otherwise, we will be dealing with subordinary articulation, i.e., one primary, the other secondary

### 1.3.2. Secondary Articulation

An obvious example of primary/secondary articulation is the production of the sound $/ \mathrm{s} /$ with close lip sounding $\Rightarrow$ this includes an alveolar stricture as primary step and a lip stricture as a secondary action. That peculiar simultaneous stricture provides:
a labialized-alveolar fricative sound [ $\mathrm{s}^{\mathbf{w}}$ ] in the word 'swim' $\rightarrow\left[\mathrm{s}^{\mathbf{w}}\right.$ wIm]
a labialized- alveolar plosive [ $\mathrm{t}^{\mathbf{w}}$ ] in the word 'twin' $\rightarrow$ [ $\mathrm{t}^{\mathbf{w}}$ win $]$
Also in the so-called 'dark ' l ' as in 'feel' or 'bottle' or 'cold' $\Rightarrow$ the tongue tip forms a complete closure at the alveolar ridge and at the same time, the back of the tongue is raised high towards the soft palate, we get [ $\dagger$ ]

Here, the alveolar closure is primary and the open velar articulation is secondary
In Arabic, four sounds represented by the letters/ $/$ / ف, ط, ط, / are said to be velarized as the back of the tongue is raised back high towards the velum (secondary articulation)

These sounds are represented as follows:

| Arabic sounds | Phonetic symbols |
| :--- | :--- |
| $\boldsymbol{u}$ | $[\mathrm{s}]$ |
| $\dot{\boldsymbol{\omega}}$ | $[$ đ $]$ |
| $\dot{b}$ | $[\mathrm{~T}]$ |
| $\dot{b}$ | $\left[\mathrm{~d}_{\star}\right]$ |

They can represent minimal pairs when identified as allophones in Arabic specifically or phonologically. E.g., بـسمـة _ بـســة $\Rightarrow$ [b'æsmæ] vs. [b'æsmæ]

| Examples of minimal pairs | Transcriptions |
| :---: | :---: |
| صم | [sumún] <br> [sumun] |
| دل <br> ضل | $\begin{aligned} & {\left[d ə^{\prime} \mid æ\right]} \\ & {[\text { d æ } \mid æ]} \end{aligned}$ |
| طل تل | $\begin{gathered} {\left[t æ^{\prime} \mid æ\right] .} \\ {\left[t ə^{\prime} \mid\right. \text { tæ] }} \end{gathered}$ |
| ذل <br> ظل |  |

## Practice \& Testing

- Question One:

Given that a phonetic study tells how the sounds of a language are made and what their acoustic properties are; and that a phonological one explicates how these sounds are used to convey meaning; this gives a thorough picture about the concerns of both phonetics and phonology. However, Sapir's view 'two languages can have the same inventory of phonetic segments but have very different phonologies' launches the debate otherly.

To what extent is Sapir's view significant in the case where two or more languages are brought to share some of the phonological aspects?

- Question Two:

From your experience learning (acquiring) languages, what types of middle ground aspects of phonology, like: elision, linking and/or others may these languages have in common

Using examples mainly from English, French and Arabic, provide a holistic view about the shared phonological phenomena

- Question Three

Could we do without elision, Intonation, and Weak and strong forms?

- Question Four

From your collected lectures, try to explain the role of studying linguistic levels analysis.

### 1.4. Intonation

The section in view looks upon the variations of tones humans use in their habitual production of speech sounds for communication. As known, the pitch used when speaking constantly changes to reveal numerous aspects of communicative properties and playing important roles in displaying messages. The present section is displayed under three labels: 'intonation I' which defines the term 'intonation' and the related elements as pitch, variation, etc. and also tries to illicit some of types and functions of commonly used tones. The second label goes under the title of 'intonation II' which describes the tone unit and its main components as the tonic syllable, the tonic stress; the third label is 'intonation III'. It will consider more complicated cases of tone structures where 'the tail' (one of the tone units) behaves differently in different situations

So, what is really a pitch?
Pitch: how high or low a sound is, necessarily under a speaker's control ( $1^{\text {st }}$ condition). A pitch difference must be perceptible ( $2^{\text {nd }}$ condition). Any unit of phonology or grammar should be contrasted with another item, as with 'pin' and 'bin'. ( $3{ }^{\text {rd }}$ condition)

So, these three conditions must be gathered for any sound unit analysis, otherwise the sound produced is of no linguistic significance.

### 1.4.1. Labels of Intonation

The labels represent a large description of tones and tone uses. They go under three distinguishing features sketched clearly as follows:

### 1.4.1.1. Intonation I

The first label attempts to unravel some of the complexities related to analysing a tone unit in its form and its possible functions. Relatedly to the above information, we need the answers of two plausible questions about the English language- the language we are supposed to learn and master for different communicative purposes. The questions are as follows:
-What can we observe when we study pitch variations?
-What is the linguistic importance of the phenomena we observe?
Simply put, these two questions provide much of the data in relation to i) form of intonation and ii) function of intonation. The answer to these two questions is exclusively reliant on the shortest piece of speech which is the 'syllable'. In return, a syllable constitutes what we call 'utterance'
e.g., two common one-syllable utterances are: 'yes' and 'no'

The overall behaviour of the pitch in these examples (yes-no) is tone. These answers can have different types of tones:
$\underline{\text { 1-moving [falling tone] } \Rightarrow \text { descending from higher to lower pitch } \downarrow ~}$ tone [rising tone] $\Rightarrow$ a movement from lower to higher pitch $\nearrow$

2-level [a steady, unnatural sounding] $\Rightarrow$ native speakers do not use

## tone

To represent tones, we use marks before the syllables:

| Level | (_yes) | (_no) |
| :--- | :--- | :--- |
| Falling | $(\boldsymbol{K}$ yes $)$ | $\left(\boldsymbol{K}_{\text {no }}\right)$ |
| Rising | $(\boldsymbol{\lambda}$ yes $)$ | $(\boldsymbol{\lambda}$ no $)$ |

N.b: there is no difference between high or low level that is why this 'level' tone is not used by native speakers and for other languages tone change is discriminative

In here, we deal with what we call 'tone languages' which is the case of many languages where the tone affects meaning, like: "Kono" (West Africa), "Chinese" (Peking District). However, the English language is not a tone language because meaning of utterances does not change by tone change, but it can provide functions to the message as signs of refusal, deny, and complete acceptance or invitation to carry discussion or the reverse yet. Hence, this peculiarity of tone use in English makes it difficult defining intonation

In English, we can distinguish two types of tones in use:
-Simple tones (level, fall, and rise)
-Complex tones [fall-rise] \& [rise-fall]
The 'fall-rise tone is quite frequently used and the 'rise-fall is less used among speakers of the English language. Nonetheless, circumstances where different tones are used within the very limited context of words 'yes' and 'no' said in isolation are not really exhaustive illustrations, but can provide a full branch of data clearing up the different uses and functions of the tones; be it simple or complex. Nonetheless, these (yes-no) examples will suffice in showing the grouping of functions as follows:

## Fall $\boldsymbol{K}$ yes $\boldsymbol{K}_{\text {no }}$

This tone is usually regarded as neutral. Answering with such a tone means that there is nothing to be said and or the fall tone gives an impression of 'finality'

1)     - A: do you know Jones Smith?

B: $\underline{\underline{k} y e s}$
....this kind of answer (tone) gives rather a feeling of finality and makes it difficult for A to continue. In here, B has shown a complete lack of interest to A's questioning and that 'there is no need to carry on speaking about the matter' even though the answer is positive (yes).
2) - A: Do you know that the exams are postponed?

B: $\underline{\underline{\boldsymbol{k}}}$
....this kind of negative answer (no) shows another time that there is no interest in wondering about the reason 'why' or about the next date 'when'. So, the fall tone carries a typical function of disinterest and/ or indifference to such matters and brings the idea of closing the communication

## Rise $\boldsymbol{\pi}$ yes $\boldsymbol{\lambda}_{\text {no }}$

Contrastively, this 'rising tone' conveys an impression that something more is to follow. Otherly, there is need to know more about the matter because the tone reveals a big interest to what a says and B's answer invites for continuing communication

- A: Excuse me?

B: Tyes
....the 'yes' answer with rising tone gives rather an invitation to continue the conversation. It is a kind of readiness to and willingness to adhere to the conversation initiated by A.

- A: do you know that the exams are postponed?


## B: $\boldsymbol{Z}$ no

....oppositely to the above answer for the same question, the interlocutor ' B ' responds vividly to A's question giving a serene sign of wonder about the fact raised through A's questioning. So, there is interest in wondering why, when......

## Fall-rise $\vee$ yes $\vee$ no

The fall-rise tone is used a lot in English with various functions. A fairy simple one is 'response with reservations' or as described as 'limited agreement'

- A: I have heard that it is a good school?

B: Vyes
....The answer to the question here provides certainly an agreement with certain reservations. In other terms, B's answer is a kind half-agreement giving an impression that B , though adhering to the view or fact, will go on explaining why he was reluctant to (completely) agree

- A: It is really an expensive record, is it?

B: Vno
....Almost in this context, at the same time, there is something conceded with reservation or hesitation. Though B is accepting the fact, but he is, in a way, not completely agreeing since he tries to continue his explanation with certain reservations later on.

## Rise- fall $\wedge$ yes $\wedge$ no

The rise-fall tone expresses strong feelings of approval, disapproval or surprise. In here, it is important to distinguish from other tones because each context reveals a different feeling regardless to 'yes' or 'no' answer either

- A: you would not do an awful thing like hat, would you?

B: $\wedge$ no
...such negative answer with that typical 'rise-fall' tone gives a hard disapproval and/ or tough surprise on the fact (rather accusation). So, there is a strong refusal of the claim showing surprise, refusal and complete shock

- A: Isn't the view charming?

B: $\wedge$ yes
....this positive 'rise-fall' tone confirms the state that the view is lovely. This kind of answer with that tone shows a complete approval of the claim

- A: I think you said it was the best so far

B: $\wedge$ yes
....Another time the tone used here reveals complete acceptance of the claim or rather the conclusion. So, both interlocutors agree on the pledge

## Level _--yes --no

This type of tone is used in rather restricted context. It is used generally with onesingle syllable utterance conveying the idea of something uninteresting or as a routine. In other terms, the speaker, using such a (neutral) tone, does not (is not requested to) express feeling when responding

- calling names on a list on the behalf of a teacher
-pupils responding to the call of names by the teacher
- Insurance questions
-yes/no answers to fill in the form
1.4.1.2. Intonation II A vivid example is in the word 'ma' in the Chinese language where the tone used can decide on the meaning:
ma ${ }^{7}$ $\qquad$ meaning $\Rightarrow$ "forest"
ma $\downarrow$ $\qquad$ meaning $\Rightarrow$ "split"

However, English is one of the languages that do not use tone in this way but for other purposes. Such languages (English included) are called 'intonation languages'.

## a. Tone-unit

A tone unit is greater in size than a syllable. However, in its smallest unit can/may consist of a/one syllable or pore since we look at continuous speech in English utterances. Because if English was spoken in isolated monosyllables, it will be similar to those tone languages
e.g.,1. One-syllable utterance
you (we underline the syllable that carries a tone)

## e.g.,2. A three-syllable utterance

Is it ${ }^{7}$ you (the $3^{\text {rd }}$ syllable is more prominent: it carries a rising tone)
Other used terms are as follows:
-Tonic syllable $\Rightarrow$ nucleus
-Tonic stress $\Rightarrow$ nuclear stress
e.g.,3. VJhon is it $\nearrow$ you

## A tone-unit has a place in a range of phonological units that are in a hierarchical relationship:

## The Hierarchy



## The Structure of Tone-unit

The role of the tonic syllable is outstandingly important in the tone-unit. Each imple tone-unit has only one and only one tonic syllable. This is to mean that the tonic syllable is an obligatory component of the tone-unit (as the vowel is for the syllable)

The other components are:

## 1.The Head:



The rest of the tonic syllable (in e.g., 2) is called the 'head' $\Rightarrow$ the first syllable "'give" Has a stress mark and this is important to explain and define what is a head.

A head, then, is all that part of a tone-unit that extends from the first stressed syllable up to (but not including) the tonic syllable. i.e., if there is no stressed syllable, there cannot be a head of the tone-unit. So, in e.g., 2 "'give and me" are the head

Look at the following examples:

2.The Pre-head In contrast to the 'head', the 'pre-head' is composed of all the unstressed syllables in a tone-unit ad preceding the first stressed syllable. Thus, we find the pre-head in the two following situations:
-When there is no head (no stressed syllable preceding the tonic syllable)
e.g., in an ไhour

When there is a head
e.g., $\underset{\text { pre-head }}{\text { in a }} \frac{\text { 'little 'less than an }}{\text { head }} \downarrow \underset{\text { toni syllable }}{\text { hour }}$

## 3. The Tail

Another component of the tone-unit is the 'tail'. By definition, a tail is any syllable(s) between the tonic syllable and the end of the tone-unit. Look at the examples below:
$\checkmark$ Look at it
$\checkmark$ What did you say
$\checkmark$ Both of them were here

## As a conclusion, we may have globally, a tone-unit structure as follows:

| Pre-head | head | tonic syllable | tail |
| :---: | :---: | :---: | :---: |
| $\mathbf{P H}$ | $\mathbf{H}$ | $\mathbf{T S}$ | $\mathbf{T}$ |

To mark tone-units' boundaries in a spontaneous, longer stretch of speech:
a)- double vertical lines $\|$ to mark silent pauses (pause-type)
b)- single vertical line | to mark non-pause boundaries
> e.g. ||and then 'nearer to the vfront $\|$ on the $\backslash \underline{\text { left } \mid \text { there is a 'bit of } \backslash f o r e s t \mid}$ 'coming __'down to the $\searrow \underline{\text { waterside } \| \text { and then } a \text { bit of } a>\underline{\text { bay }} \|}$

## We can mark their structure as follows:



## N.b: The above passage contains five tone-units.

When necessary, to mark stress in a tail, we use a special symbol; a raise dot (.)
Tone is carried by the tonic syllable: intonation is carried by the tone-unit

The next section will provide a wide range of possibilities of tones or pitches in a simple tone-unit. Let us consider the matter in what follows.
-In a one-syllable utterance, the single syllable must have one of the five tones (falling, rising, fall-rise, rise-fall; level)
-In a tone-unit of more than one syllable, the tonic syllable must have of these tones.

- If the tonic syllable is the final syllable will not sound much different from that of a corresponding one-syllable tone-unit
e.g., $\nearrow$ here shall we sit $\nearrow$ here

However,
-if there are other syllables following the tonic syllable (i.e., there is a tail), we find that the pitch movement of the tone is not completed on the tonic syllable.
-If, for example, a tail follows a tonic syllable that has a rising tone, it will always be found that the syllable or the syllables of the tail will continue to move upwards from the pitch of the tonic syllable
1.
e.g., if the
word "what" is said on a rising tone $\Rightarrow \nearrow$ what, it might have a pitch movement that could be put into a diagram, like this:


## $\lambda$ what


2. e.g., if the word "why" is said with a falling tone $\searrow$ why, it is diagrammed like this:
$\qquad$

N.b: In case of a level tone, syllables following in tail will continue at the same level

### 1.4.1.3. Intonation III

## Review:

In what preceded (intonation 1 and 2), different types of tones were displayed; then the structure of the tone-unit was explained. For the latter, when the tonic syllable is followed by a tail, that tail continues and completes the tone begun on the tonic syllable with cases of rising and falling tone

Now, we consider more difficult cases of the following possibilities of pitches (tones) in complex tone-units. Let us consider what follows:

## -Fall-rise and rise-fall tones followed by a tail

The pitch movements of fall-rise and rise-fall tones are characterized by being often broken or distorted by the structure of the syllables they occur on
e.g., the pitch movement on $V^{\text {some }}$


## However,

-If we add a syllable, the 'fall' part of the 'fall-rise' is usually carried by the first syllable and the 'rise' part by the second
e.g., the pitch movement on $\vee$ some • men
$\qquad$


## But,

-If the continuity of the voicing is broken; however, the pitch pattern might be like this:


## And,

-If there is a tail of two or more syllables, the normal pitch movement is for the pitch to fall on the tonic syllable and to remain low until the last stressed syllable in the tail. The pitch, then, rises from that point up to the end of the tone-unit

## And,

-If there is no stressed syllable in the tail, the rise happens on the final syllable.
Here are some examples
I V might • buy it
I V might have thought of • buying it


Nb. Tonal rhyme: the tone pitch of $\mathrm{V}_{\underline{\text { some }}}$ * chairs is rhyming with $\mathrm{V}_{\mathbf{s o m e}}$ The same as: 'balloon' and 'moon'
a. V most of them

Vmost of it was for them
$\qquad$



With the rise-fall tone we find a similar situation
b.If the tonic syllable is followed by a single syllable in the tail, the 'rise' part of the tone takes place on the first (tonic) syllable and the 'fall' part is on the second

c. When there are two or more syllables in the tail, the syllable immediately following the tonic syllable is always higher and any following syllables are low
e.g., $\wedge$ beaut i ful
all of them went

thats a nice way to speak to your mo ther
$\qquad$


### 1.4.2. Functions of Intonation

A major question always looms largely among language users about the utility of intonation in speech delivery, hence comprehension or misunderstanding. The dichotomy in reverse is established when we acknowledge the plight of using tones in different languages.

Surely, the tone difference in a given utterance in certain languages is meaningdiscriminative (e.g., ma $\nearrow$ and ma $\downarrow$ ); however, in other languages, like: English, the variation in tone use does not change meaning but cleanly reveals certain functions that can add more information to the message. This is why the subsequent question is raised:

## -What would be lost if we were to speak without intonation?

In other terms: - each syllable said on the same level pitch,
Speech produced with no pauses,
Articulation done with no changes in speed or loudness!
$\Rightarrow$ This is a mechanical speech (a speech which is not human-related because of the absence of feelings, emotions and targeted intentions)

## Answer

Intonation makes it easier for a listener to understand what a speaker is trying to convey. Convergent to the idea of easing the burden of understanding messages, the use of intonation is meant to help listeners to make fewer efforts to work out what speakers mean by what they say. These functions are explained through different ways though complex. They are proposed as follows:

### 1.4.2.1. Attitudinal Function

It enables us to express emotions and attitudes as we speak, and this adds a special kind of meaning to spoken language. For example, the same sentence can be said in different ways; which may be labeled as: 'angry', 'happy', 'grateful', 'bored', and so on.

| Tone types | Attitudinal functions | Examples |
| :---: | :---: | :---: |
| . fall | Finality, definiteness | 'I'm absolutely certain |
| . rise | - General question <br> - Listing <br> - Invitation to continue <br> - Encouraging | 'Is it over' <br> ' red, brown, yellow or blue' <br> ' I don't get the idea' <br> 'you can do it' |
| . fall-rise | - uncertainty, doubt <br> - requesting | ' you may be right' <br> ' would you allow him' |
| . rise-fall | - surprise | 'you were first' |

Recapitulative table eliciting the major attitudinal functions of intonation

### 1.4.2.2. Accentual Function

It helps to produce the effect of prominence on syllables that need to be perceived as stressed. Also, it indicates the placing of tonic stress on a particular syllable which marks out the word to which it belongs as the most important in the tone-unit.

### 1.4.2.3. Grammatical Function

The listener is better able to recognize the grammar and syntactic structure of what is being said by using the information contained in the intonation.

A very good instance is the following sentence:
"Those who sold quickly made a profit" $\Rightarrow$ this sentence can be said in at least two different ways: $\Rightarrow \mid$ Those who sold quickly | made a profit |
$\Rightarrow$ |Those who sold | quickly made profit |
The matter is seen below:
a. A profit was made by those who sold quickly
b. A profit was quickly made by those who sold

### 1.4.2.4. Discourse Function

Through the use of this function of intonation, the listener is able to appreciate the following:
-What is to be taken as 'new' and what is 'already given'
-Suggestion of contrast or link with material in another tone-unit
-What kind of response is expected?

## Practice \& Testing

## Intonation

## -Activity one

The following sentences are given with intonation marks. Sketch the pitch within the lises below, leaving a gap between each syllable

- Which was the cheap one did you say
$\qquad$
$\qquad$
- only • want to taste it
$\qquad$
$\qquad$
She would have thought it was obvious
$\qquad$
$\qquad$
There wasn't even a piece of bread in the house
$\qquad$
$\qquad$
Now will you be-lieve me


## Activity two

This exercise is similar, but here you are given polysyllabic words and a tone; you must draw an appropriate pitch movement between the lines
-(rise) opportunity $\qquad$
$\qquad$
-(fall-rise) actually
-(fall) confidently $\qquad$
$\qquad$
(rise-fall) magnificent
-(rise) relationship $\qquad$
$\qquad$
-(fall-rise) afternoon $\qquad$
$\qquad$

## Activity three

In the following pieces of the dialogue you are given an indication in brackets of the feeling or attitude expressed. Put the appropriate intonation mark
-It looks nice for a $\backslash$ swim. Its rather cold (doubtful)
-Why not get a/car. Because I can't afford it (impatient)
-Ive lost my $\backslash$ ticket. You're silly then (stating the obvious)
-What times are the/buses. Seven o' clock seven thirty and eight (listing)
-She got eight ' $\backslash \underline{\text { A }}$ ' levels. Eight (impressed)
-Will the $\backslash$ children g o. Some of them might (uncertain)

## Activity four

The following sentences are given without punctuation. Underline the appropriate tonic syllable places and mark tone-unit boundaries where you think they are appropriate
(He wrote the letter in a sad way) he wrote the letter sadly
A-(it's regrettable that he wrote the letter) he wrote the letter sadly
B-Four plus six divided by two equals five
C-Four plus six divided by two equals seven

### 1.5. Aspects of Connected Speech

### 1.5.1. Rhythm

In simple terms, the word 'rhythm' signifies the regular intervals of time. This may happen in constant and usual situations, like: heart-beats, flashing-lights, a piece of music or any other customary (expected) pace of actions occurring with equal lap of time. Significantly, the English language is said to be rhythmical and that the rhythm is detectable in the regular occurrence of stressed syllables (and that only the regularity is relative).

From the above statement, one may assert the theory that English has a stress-timed rhythm which implies that stressed syllables will tend to occur at relatively regular intervals whether they are separated by stressed syllables or not; i.e., only stressed syllables are taken into account to evaluate the interval of time in English speech delivery and that only these (stressed) syllables constitute the unique parameter to making equal pauses regardless to the number of interfering unstressed syllables. Below a very good example clarifies the fact:

## e.g., 'walk'down the 'path to the 'end of the ca'nal

The stress-timed rhythm theory states that the times from each stressed syllable to the next ('walk to 'down; or 'down to 'path; or 'path to 'end; or 'end to ca'nal) will tend to be the same, irrespective of the number of intervening unstressed syllables. From no unstressed syllable to three intervening unstressed syllables, the interval of time remains the same and this can be felt exceptionally in oral productions and perceptions.

## N.b. So, if English is a "stress-timed" language like Russian and Arabic; other languages, like: French, Spanish and Yoruba are "syllable-timed" languages where all syllables have the same interval of time during their production

Back to the 'stress-timed' theory, we have a very good instance of the use of that assumption in the "foot" (a unit of rhythm in verse)
e.g., 'Walk | 'down the | 'path to the | 'end of the ca|'nal

The foot does not include all following unstressed syllables (without including any stressed syllables). The examples below show how the foot is used in different situations:
(S: strong; W: weak)


However, in the full utterance "twenty places"
"places" tends to carry stronger stress than "twenty"

| Twenty | places |  |  |
| :---: | :---: | :---: | :---: |
| $\swarrow$ | $\checkmark$ |  |  |
| W | $S$ |  |  |
| $\swarrow$ | $\searrow$ | $\nearrow$ | $\checkmark$ |
| Twen | ty | pla | ces |

## Other rhythmical effects:

a. Stress is altered according to context
$/$ Kəm'pækt/ $\Rightarrow$ but $\Rightarrow / ‘ k D m p æ k t ' d I s k /$
/彷:'ti:n/ $\Rightarrow$ but $\Rightarrow /{ }^{\prime} \boldsymbol{\theta}_{3}: \mathrm{ti}: n \boldsymbol{n}$ 'pless/
/West'minstə/ $\Rightarrow$ but $\Rightarrow /$ 'westmInstər'æbı/
b.Stress is altered according to speaking features:
-Rhythmically (public speaking)
-Arhythmically (without rhythm: hesitant or nervous)

### 1.5.2. Elision

In simple words nd under certain circumstances sounds disappear. Technically, a phoneme may be realized as zero or have a zero realisation or be deleted.

As for assimilation, elision is typical of rapid, casual speech. Producing elision is important for foreign learners to be aware that when native speakers of English talk to each other, quite a number of phonemes that the foreigner might expect to hear are not actually pronounced. The fact of eliding sounds has been put under the following governing rules summed up in the following examples:
-Loss of weak vowel after /p,t,k/

| Words | Transcriptions |
| :---: | :---: |
| potato | $/ \mathrm{p}^{\mathrm{h}}$ 'teItəu / |
| tomato | $/ \mathrm{t}^{\mathrm{h}}$ 'ma:təu / |
| canary | $/ \mathrm{k}^{\mathrm{h}}$ 'neIrI/ |
| perhaps | $/ \mathrm{p}^{\mathrm{h}}$ 'hæps / |
|  |  |
| today |  |

The vowel /ə/ in the first syllable of each word may disappear
N.b. the aspiration of the initial plosive takes up over
-Weak vowel /ə/ + /n, l, r/ becomes syllabic consonants

| words | Transcriptions |
| :---: | :---: |
| tonight | $/ \mathrm{t}$ næıt// |
| police | $/ \mathrm{p}, \mathrm{li:s} /$ |
| $-\quad$ correct | - |

-Avoidance of complex consonant clusters

Acts

| looked back | /lukt b bæk/ | $\Rightarrow / l u k b æ k /$ |
| :---: | :---: | :---: |
| scripts | /skrıp〕ts/ | $\Rightarrow / \mathrm{skr}$ Ips |

-loss of final /V/ in "of " before consonants
lots of them $\quad \Rightarrow$ / ldts ə ðәm /
waste of money $\Rightarrow /$ we Ist $\boldsymbol{\partial}$ mnn /

It is difficult to know whether 'contractions' of grammatical words are and /or should be regarded as examples of elision or not

Some illustrations are given below:
‘had’, ‘would': spelt 'd , $\Rightarrow$ pronounced /d/ (after vowels), /əd/ (after consonants)
'is', 'has': $\quad$ spelt ' $\mathbf{s}, \Rightarrow$ pronounced $/ \mathbf{s} /$ (after fortis consonants), /z/ (after lenis consonants) /zz/ (after/s, z, $\mathbf{~}, \mathbf{3}, \mathrm{t} \mathbf{~}, \mathrm{d} \mathbf{3} /$ )
'will': $\quad$ spelt ' Il , $\Rightarrow$ pronounced /I/ (after vowels)
$\Rightarrow$ pronounced [!] (after consonants)

- 'have': $\quad$ spelt 've $\Rightarrow$ pronounced $/ \mathbf{v}$ / (after vowels)
$\Rightarrow$ pronounced /əv/ (after consonants)
- 'not': $\quad$ spelt $\mathbf{n}$ 't $\Rightarrow$ pronounced $/ \mathbf{n t} /$ (after vowels)
$\Rightarrow$ pronounced /nt/ (after consonants)
- 'are': spelt 're $\Rightarrow$ pronounced /ə/ (after consonants)
$\Rightarrow$ pronounced /ər/ (after vowels)
N.B: there are $\Rightarrow / \partial^{\mathbf{r}}{ }^{\mathrm{r}}$ /: the linking $/ \mathrm{r} /$ may be used when a vowel follows.

So, linking is another phonological aspect of the English language as it is explicitly sketched out below:

### 1.5.3. Linking

The most familiar case of linking in the English language is the use if linking ' $\mathbf{r}$ '. the phoneme ' $\mathbf{r}$ ' cannot occur in syllable-final position in RP, but when a word's spelling suggests a final ' $\mathbf{r}$ ' and a word beginning with a vowel follows, the usual pronunciation for RP speakers is to pronounce with ' $\mathbf{r}$ '

Examples:

- other elements /' $\Lambda$ ठə ${ }^{\mathbf{r}}$ elimənts/
- here are $/ \mathrm{hI} \boldsymbol{\theta}^{\mathbf{r}}$ ə/
- four eggs /'fD: $\mathbf{r}^{\mathbf{r}}$ egz /

Many RP speakers use 'r' to link words ending with vowels even when there is no junction from the spelling, as in:

Formula A／fD：mjələr ${ }^{\mathbf{r}}$ eェ／
Australia all out／D：stre $\operatorname{ll} \mathrm{IA}^{\mathrm{r}}$ aut／
Media event／＇mi：dIə ${ }^{\mathbf{r}}$ Ivent／

N．B－linking and intrusive＇ $\mathbf{r}$＇are special cases of juncture
Juncture：＂The manner of moving（transition）or mode of relationship between two consecutive sounds；a supra－segmental phonemic cue，by which a listener can distinguish between two otherwise identical sequences of sounds that have different meanings＂

The above definition of the concept＇juncture relates to that relation between one sound and others that immediately precede or follow；and the following examples clarify explicitly the linguistic phenomenon：

| 1．Might rain ．My train | ／mait rein／ <br> ／max tres $\mathrm{n} /$ |
| :---: | :---: |
| 2．All that I am after today | IS： 1 ðәt aım a：ftə tə＇de工／ |
| ．All the time after today |  |
| 3．He lies | ／hi：layz／ |
| ．Heal eyes | ／hi：l axz／ |
| 4．Keep sticking | ／ki：p stI kİ／ |
| ．Keeps ticking | ／ki：pst工 kİ／ |

## Practice \& Testing

Rhythm, elision \& linking

1. Divide the following sentences up in the feet, using the $\mid$ mark as a boundary symbol. If a sentence starts with an unstressed syllable, leave it out of consideration- it does not belong to a foot.
a. A bird in the hand is worth two in the bush
b.Over a quarter of a century has elapsed since his death
c.Computers consume a considerable amount of money and time
d.Most of them have arrived on the bus
e.Newspaper editors are invariably underworked
2. Try to draw tree diagrams of the rhythmical structure of the following phrases
A. Christmas present
B.Rolls Royce
C.Per food dealer
D.Rolls Royce rally event
3. The following sentences are given in spelling and in "slow, careful" phonemic transcription. Rewrite the phonemic transcription as a "broad phonemic" one so as to show likely assimilations, elisions and linking
a. One cause of asthma is supposed to be allergies
w $n \mathrm{n}$ kD: z əv æsømə Iz səpəuzd tə bi æləd3Iz
[]
b. What the urban population could use is better trains
wat ði 3:bən papjulex ${ }^{\text {© }}$ n kud ju:z Iz betə treInz
[
c.The acts particularly well in the first scene

Si ækts pətIkjuləlı wel In ðə f3:st si:n

### 1.5.2. Assimilation

When speaking in a rapid colloquial way with few gaps and without pausing, it is a fast rhythmic speech referred to as 'connected speech' which carries different processes, like: assimilation, elision, liaison and juncture.

Defining Assimilation:
Assimilation is a typical sound change process by which a sound is influenced by an adjacent one and so it changes to another one. It occurs mainly in rapid speech and less and less common in slow one. A common example definition is: When a phoneme of a particular word is realised differently as a result of being influenced by the realisation of another phoneme belonging to a neighbouring word, this is assimilation"

## We have two types of assimilation:

Progressive: $\mathbf{C i}$ (initial consonant) becomes like $\mathbf{C f}$ (final consonant)
Regressive: $\mathbf{C f}$ (final consonant) becomes like $\mathbf{C i}$ (initial consonant)

## Common Types of Assimilation in English

Let us consider the most observable type of assimilation which is the one related to place of articulation, then of manner and finally assimilation of voicing.

## 1. Assimilation of Place

Assimilation of place is the commonest and most frequent type of assimilation. It happens in some cases when a final consonant with an alveolar place of articulation is followed by an initial consonant with a place of articulation that is not alveolar. For example: 'that person' $\Rightarrow /$ бæt p3:sn/ becomes /ðæp p3:sn /. In here, /t/ which is an alveolar, plosive (stop) voiceless becomes /p/ which is still a stop and voiceless but bilabial and not alveolar. Examples of Common Assimilation of Place:
-/t/ changes to $/ \mathbf{p} /$ before $/ \mathbf{m}, \mathbf{b}, \mathbf{p} /$
Basket maker - mixed marriage -Great Britain - Cat burglar -Set price - neat people

- /d/changes to /b/ before $/ \mathbf{m}, \mathbf{b}, \mathbf{p} /$

Grand master- grand ma -Bad pain- ground plan -Red bag- blood bath
$-/ \mathbf{n} /$ changes to $/ \mathbf{m} /$ before $/ \mathbf{m}, \mathbf{b}, \mathbf{p} /$
Iron man- open market -Open book- chicken breast -Action planning- teen power
-/t/ changes to $/ \mathbf{k} /$ before $/ \mathbf{k}, \mathbf{g} /$

First class- cigarette card- short cut- Fat girl- cut glass- next goal
-/d/changes to /g/before $/ \mathbf{k}, \mathbf{g} /$
Hard cash- second coming- seed crown- Bad girl- closed game- bride groom
-/n/ changes to $/ \mathbf{y} /$ before $/ \mathbf{k}, \mathbf{g} /$

Open court- garden cress- Roman Catholic- Action group- main ground- broken glass
-/s/ changes to / / / before / $\mathbf{~}, \mathbf{j} /$

Bus shelter- nice shoes- this shift- This year- nice yacht- bless you
$-/ \mathbf{z} /$ changes to $/ \mathbf{z} /$ before $/ \mathbf{S}, \mathbf{j} /$
Cheese shop- these sheep- wise shepherd- Wise youngster- those years- breeze yard -/e/ changes to /s/ before /s/

Bath salts- birth certificate- Earth science- fourth season

## 2. Assimilation of Manner

Assimilation of manner of articulation of articulation is less noticeable. Generally speaking, the change is most likely to ward n 'easier' consonant (one which makes less obstruction to the air flow). For example, the expression "that side" $\Rightarrow / \partial æ t$ saId/, easily becomes /ðæs saェd/ where /t/ voiceless, alveolar stop (plosive) becomes /s/ voiceless, alveolar. Another example, 'good night' $\Rightarrow / \mathrm{gUd}$ nait/ becomes as such: / gun nait/ where /d/ voiced, alveolar oral stop becomes / $\mathbf{n}$ / voiced, alveolar nasal.

Below are some of rare cases of assimilation of manner:
-Final plosive /t/ becomes fricative /s/
 final sound /t / (W2 Ci affecting W1 Cf)
-Final plosive /t/ becomes nasal/n/
 final sound /t/ (W2 Ci affecting W1 Cf)
-Final plosive /d/ becomes nasal /n/
'good night' $/ \operatorname{gud}$ 【 nait/ $\Rightarrow / \operatorname{gun} \mathbf{n a I t} /$ the second word initial sound /n/ affecting the first word final sound /d/ (W2 Ci affecting W1 Cf)

However, from the same example provided above, we can have a progressive assimilation with the same place of articulation. These cases are shown below as follows:
-'In the’ $\quad \boldsymbol{C C i} \underline{\text { dental } / ð / ~ f o l l o w s ~ C f ~ n a s a l ~} / \mathrm{n} / \quad \Rightarrow /$ nn n̄/
Progressive assimilation of manner where the dental /ð/ becomes (is produced as) nasal/n/
-‘Get them’ $\Rightarrow \mathbf{C i}$ dental /ð/ follows Cf plosive/t/ $\Rightarrow /$ get tem/
Progressive assimilation of manner where the dental /ð/ becomes (is produced as) plosive /t/
-'Read these' $\Rightarrow \mathbf{C i}$ dental $/ ð /$ follows Cf plosive $/ \mathbf{d} / \Rightarrow /$ ri: $\underline{\mathbf{d}}$ :z/
Progressive assimilation of manner where the dental /ð/ becomes (is produced as) plosive /d/

## 3. Assimilation of Voicing

Assimilation of voice is also found but only in a limited way. Consider the different endings of "dogs"/dDgz/ and "cats"/kæts/and the past forms of the regular verbs such as: "kissed" /kIst/ and "sneezed"/sni:zd/.

Assimilation of voicing can only be regressive and in a very limited way. So it can be:
-Ci (lenis) and Cf (fortis):

Examples:
a. is she $\rightarrow /$ is $\int \mathrm{i} / \mathrm{b}$. bad cat $\rightarrow /$ bætkæt/ c. bad temper $\rightarrow /$ bætempə/
-Cf (fortis) and Ci (lenis): here a kind of "regressive" assimilation that occurs only among foreigners showing a strong foreign accent that must be avoided

An example is elicited below:
e.g., I like $\smile$ that $\smile$ black $\smile d o g$

Note: Assimilation can be in two forms:
-Morpheme boundary (within the single morpheme)
e.g., cats /s/ \& dogs /z/
-Word boundary (within two words)
e.g., has $\smile$ seen

Exercise One Transcribe the phrases below showing assimilation cases

## Have to

I have to go
She has to

## Used to

I used to live there

## Supposed to

You were supposed to leave

## Suffixes

Plural: funnels, beams, clothes, glasses, staffs
Verb ( $3^{\text {rd }}$ person): goes, tries, finishes, asks
Possessive 's': Alfred's comment, lice's world, cat's tail
Exercise Two: Identify the different assimilations in the following

| Coconut butter | old man | court martial | good boy |
| :--- | :--- | :--- | :---: |
| Command post | old boy | command module | first class |
| In camera | town crier | common market | pot plant |
| Pen pal | cold call | hard court | open prison |
| Highland cattle | field glasses | red carpet | rose show |
| Where's she? | Both sexes | dress shop | where's yours? |
| Space shuttle | fast motion | ground cover | cold cream |
| Custard pie | cotton belt | fourth summer | pin money |
| Down payment | white paper | queen mother | private parts |
| Human capital | had come | put by | old maid |
| Fifth sense | town clerk | slide guitar | question mark |

Exercise Three find examples of assimilation in the following examples of the existing languages you know

| English | French | Arabic |
| :--- | :--- | :--- |
| She has finished | Sage femme | Ba3ha "بعها"" (he sold it) |
| Big tape | Lourde tempete | Nta3houm "نتاعهم"" (unsanity) theirs) |
| Choose shake | Reve temps | Rijsoun"بشثها" "(sent it) |
| Smooth choice | Grande porte | Ba3atha |
| Others...... |  |  |

## Part Two

## PART TWO

## II. Linguistic Level

III. Morphological Level
IV. Grammatical Level
V. Semantic Level

## II. Morphological Level

2.1. Free Morphemes
2.2. Bound Morphemes
2.3. Morphological description
III. Grammatical Level
3.1. Properties of Generative Grammar
3.2. Syntactic Description
3.3. Phrase Structure Rules
3.4. Transformational Rules
IV. Semantic Level
4.1. Conceptual Meaning
4.2. Associative Meaning
4.3. Semantic Features
4.4. Semantic Roles
(Practice \& Testing)

## II. Morphology

### 2.1. Morphology and morphemes.

### 2.2. Free morphemes and Bound morphemes

### 2.2.1. Free Morphemes

2.2.2. Bound Morphemes

### 2.3. Morphological description.

### 2.1. Morphology and phonemes

Both concepts deal with form and the elements constituting the whole, language. Clear and concise literary and conceptual definitions are provided to define the scope and manifestations of the terms as follows:

Morphology: literally, means the $*$ study of forms* $\longrightarrow$ an investigation type that analyse all the basic elements which are used in Language. In other terms, a way of looking at linguistic forms in different Language or investing the elements of $\underline{\underline{a}}$ message, is generally known as *morphology*. And yet, what we have described as "elements" in the form of a linguistic message is more technically known as morphemes.

Morphemes: word-forms consist of a number of elements. For example, English word-forms such as (talks-talker-talked-talking) must consist of one element "talk" and a number of other elements such as (s-er-ed-ing). All these elements are described as morphemes.
*definition: So, a morpheme is a minimal unit of meaning or grammatical function
*exemplification: e.g., 1-"reopened" consists of 3 morphemes

1)     - minimal unit of meaning is (open)
2)     - minimal unit of meaning is (re) $\longrightarrow$ meaning "again"
3)     - minimal unit of grammatical function (ed) $\longrightarrow$ indicating (past tense)
e.g., 2-"tourists" 3 morphemes
4)     - minimal unit of meaning (tour)
5)     - minimal unit of meaning (ist) $\longrightarrow$ a person who does $s$. thing
6)     - minimal unit of gram. Function $(\mathrm{s}) \longrightarrow$ indicating "plural"

### 2.2. Free and Bound Morphemes

The examples given (reopened-tourists) can give a broad distinction between two types of morphemes:
a- Free morphemes: standing by themselves as single words. (open-tour)
b- Bound morphemes: typically attached to another form (er-ist-affixes-ed-s) So, all affixes in English are bound morphemes.
The free morphemes can be generally considered as the set of separate English word-forms, however, when used with bound morphemes, the basic word-form (root) is technically known as "stem"


## *exceptions: receive reduce repeat

We may recognize "re" as bound morpheme but "ceive- duce- peat" not as free morphemes

So, there are other considerations ad yet, a variety of technical terms:

## Bound stems $\&$ free stems


(Ceive-duce)
$\downarrow$


(Dress- care)
2.2.1. Free Morphemes: There are two categories
a- Lexical morphemes: A set of ordinary nouns, adjectives, adverbs and verbs containing a meaning $\longrightarrow$ Lexical morphemes
b- Functional morphemes: A set of functional/grammatical words such as conjunctions, prepositions, articles, pronouns, etc., having a function in the sentence.

Note: The free-lexical morphemes are said to be open-class of words because we can easily add new lexis to the language. However, free-functional morphemes are rather treated as closed class of words.

### 2.2.2. Bound Morphemes

The set of affixes (all bound morphemes) can be divided into 2 types:
a. Derivational morphemes: These are used to make new words in the language and are often used to make words of a different grammatical category from the stem (root).

Eg: good $(\operatorname{adj})+$ ness $=$ goodness $($ noun $)$
Care (noun) +less/ful =careful (adj) or "careless" (adj.)
The list of derivational suffixes (morphemes) is exhibited below:

 (operate), $\underline{\text { un (lock)..... }}$
b. inflectional morphemes: not used to produce new words they are used to indicate aspects of grammatical function of a word.
i.e. (singular vs. Plural) - (past tense/present)- (comparative/possessive).

There are 8 inflectional morphemes in English:
$\left\{\begin{array}{l}\text { Noun }+\mathbf{s}(\text { possessive }) \mathbf{s} \text { (plural) } \\ \operatorname{Verb}+\mathbf{s}\left(\text { present } 3^{\text {rd }} \text { person sing) ing (gerund), ed (past tense), en (verb (pp.) }\right. \\ \text { Adj }+\mathbf{e s t} \text { (superlative), er (comparative, }{ }^{*} \text { ) }\end{array}\right\}$

## Derivational vs. Inflectional

It is very necessary to mention the difference, in that:
*An inflectional morpheme never changes the grammatical category of a word
Eg: old/older (ad) $\longrightarrow$ both
*A derivational morpheme can change the grammatical category of a word.
Eg: teach $(\mathrm{v})+\mathrm{er} \longrightarrow$ teacher (noun)

Note1: er (comparative) $\longrightarrow$ old English: ra Er (a person/ an object that...) $\longrightarrow$ old English: ere

Note2: When both attached to the same word:
Word+ derivation+ inflection
Eg: $\underline{\text { teach }}+\underline{\underline{e r}}+\underline{\underline{s}}=$ teachers


Stem derive inflect

### 2.3. Morphological Description

Remember morphemes categories

| Morphemes | Free | Lexical |
| :--- | :--- | :--- |
|  |  | Functional |
|  |  | Derivational |
|  | Inflectional |  |

From the table above, the different categories of morphemes are explicitly exhibited to serve another time for a clear display of a sentence's components in terms of morphological description.

## Look now:

The girl's wildness shocked the teachers.


## *Problems in morphological description

Exercise1: True or false

1) Discreteness refers only to the difference in the sounds of the language.
2) Arbitrariness means that the linguistic signs are distinct from their meaning.
3) The number of sentences produced by each person is finite.
4) Morphology is concerned with the correctness and meaning of sentences.
5) A word may comprise more their one morpheme.

Exercise2: Classify the morphemes according to their type. (Draw a table):
The director- payer- walking- slowly- she sings- at school- arrangements- Cleaning and washing- the largest.

Exercise3: Write the morphological description of the following sentences:

1) They waited impatiently.
2) She dislikes doing the housework
3) It is the cheapest car
4) It rains heavily
5) He will stay at home

## III. Generative Grammar

### 3.1. Properties of Generative Grammar

### 3.2. Syntactic Description

### 3.3. Phrase Structure Rules

### 3.4. Transformational Rules

The word 'syntax' came originally from Greek and literally meant 'setting out together' or 'arrangement'. This is to say that syntax is defined as the study of structure and ordering of components within a sentence or simply called: syntax of the language.

## Generative Grammar

Attempt to produce a particular type of grammar have developed since the 1950's from the work of the American Linguist Noam Chomsky.

It was mainly meant to provide a very explicit system of rules specifying what combinations of basic elements would result in ill-formed sentences. This explicit system of rules, proposed, has much in common with mathematics. This mathematical point of view helps to explain the meaning of the term generative.

Eg: Algebraic expression: $3 x+2 y \quad \square \quad=35 \longrightarrow x=5 y=10$

The above probable results of (35.8. 15.....), are directly generated from applying the explicit rules and it will follow an endless set of results. So, if the sentences of a language can be seen as a comparable set, i.e. there may be a set of explicit rules called generative grammar which yield those sentences.

### 3.1. Properties of generative Grammar

In this case, the grammar will generate ("generative") all the well-formed syntactic structures (e.g., sentences) of the language and fail to generate any ill-formed structures. This is the "all and only" criterion (i.e. all the grammatical sentences and only the grammatical sentences).

The grammar will have a finite (limited) number of rules, but will be capable of generating an infinite number of well-formed structures. In this way, the productivity of language (i.e. the creation of totally novel, yet grammatical sentences) would be captured within the grammar.

The rules of grammar will also need the crucial property of recursion, that is, the capacity to be applied more than once in generating a structure:
E.g.1: a-Relative connection (that chased the cat- that killed the rat)
E.g.2: b- Specifying Location (the book was on table, near window, in hallway)

Note: In these grammar facts:

1)     - a sentence can have another sentence inside it or a phrase can have a phrase of the same type inside it (place)
2 ) - some superficially distinct sentences are closely related (place) and some superficially similar sentences are in fact distinct (relative connection: same structure but different meaning).

## Deep \& Surface structure

Two superficially distinct sentence structures
$\left\{\begin{array}{l}\text {-Charlie broke the window } \\ \text {-The window was broken by Charlie } \sqrt{\text { active vs. passive }} \\ \text { The distinction between them is a difference in their }\end{array}\right.$
a. Surface structure (syntactic form)

However, this difference in superficial form disguises the fact that the two sentences are very closely related, even identical; this level underlying similarity is called

## b. Deep Structure

The deep structure is an abstract level of structural organization. So, grammar must be capable of showing how a single underlying abstract representation can become different surface structures

Eg: Direct vs. Indirect $\longrightarrow$ active vs. Passive $\longrightarrow$ Comparative vs. Superlative.
Nevertheless, some other times the meaning is rather confused within a common structure, be it deep or surface. This creates ambiguity

## c. Structural Ambiguity

Two different deep structures:
a) - Annie had an umbrella and she whacked a man with it
b) - Annie whacked a man and the man happened to be carrying an umbrella
At the same surface structure $\longrightarrow a$ ) or $b$ )

## Annie Whacked a man with an ambrella

However, this sentence is structurally ambiguous (2 underlying interpretations having two different representations in the deep structure.
Eg: I shot an elephant in my pyjamas. (How he got in!!?)

## Different Approaches

This area of linguistic investigation is notorious.
a) Primacy of syntactic correctness
b) Necessity of semantic coherence

### 3.2. Syntactic Description



Parenthesis

## description

The green book (round brackets )
i.e. NP consists of an obligation article, obligatory noun and an optional adjective
(3)braces

$$
\left\{\begin{array}{l}\text { Or } \\ \text { Ourly brackets }\end{array}\right.
$$



It shows that only one element enclosed is chosen.
Eg: the woman or Cathy or she
Art $\mathrm{N} \quad$ proper noun pronoun

## Symbols



## Labelled Tree Diagrams



### 3.3. Phrase Structure Rules

The above tree-diagram can be viewed in two different ways:
$-1{ }^{\text {st }}$ view-a static representation as shown above.
$-2^{\text {nd }}$ view- a dynamic format as an alternative that can generate not only that one sentence, but a very large number of sentences with similar structures. This view is very appealing since it enables us to generate a large number of sentences.

## Illustration

With only a small number of rules, called "Phrase Structure Rules"
*Instead of: $\mathrm{S} \longrightarrow$ we can use


The rule is then read as: (a sentence consists of a noun phrase followed by a verb phrase)

In addition to generating structures, we can also have lexical rules eg: $\mathrm{N} \longrightarrow$ (boy, girl, dog...)
*Phrase structure rules which can be used to generate a large number of English sentences:

$\mathrm{N} \longrightarrow\{$ boy, girl, dog $\}$


Adj


So, these rules will generate the grammatical sentences below

1. The girl followed the boy
2. A boy helped the dog
3. The dog saw a girl
4. Mary helped George recently
5. George saw a dog yesterday
6. A small dog followed Mary
7. The small boy saw George with a crazy dog recently

Phrase Structure of more Complex sentences
The essence of recursion is to be able to repeat some symbols on the right side of the arrow: example
a- Mary helped George
b- Cathy thought Mary helped George
c- John said Cathy thought Mary helped George
*In here, to capture these structures in our rules we need to add:
Additions

$\mathrm{VP} \longrightarrow \mathrm{VS} \quad$ to recursive rules (very crucial)


### 3.4. Transformational Rules

One other feature of our phrase structure rules, we will generate all sentences with fairly fixed word order of the constituent.

Case (A) eg: Adverbs: always come at the end


George helped Mary yesterday Ad̛v.

But: $\operatorname{Eg}(2)$ Adverbs: at the beginning
Yesterday George helped Mary
We need: Transformational rules
Case (B) [ i-Doobie picked up the magazine
ii- Doobie picked the magazine up
In this sentence, we have a verb-particle: $\mathrm{V} \quad \mathrm{Vb} \longrightarrow$ part

## IV. Semantics

4.1. Definition
4.2. Conceptual vs. Associative Meaning
4.2.1. Conceptual Meaning
4.2.2. Associative Meaning
4.3. Semantic Features
4.4. Semantic Roles
4.4.1. Agent
4.4.2. Theme
4.4.3. Experiencer
4.5. Lexical Relations
4.5.1. Synonymy
4.5.2. Antonymy
4.5.3. Hyponymy
5.5.4. Homophony
5.5.5. Homonymy
5.5.6. Polysemy
5.5.7. Metonymy
5.5.8. Collocation

## VI. Semantics

### 4.1. Definition

Semantics is the study of the meaning of words, phrases and sentences. In semantic analysis, there is always an attempt to focus on what the words conventionally mean, rather than on what the speaker might want the words to mean on a particular occasion. This technical approach to meaning (this definition) emphasizes the objective and the general. It avoids the subjective and the local. Therefore, linguistic semantics deals with the conventional meaning conveyed by the use of words and sentences of a language.

### 4.2. Conceptual vs. Associative Meaning

When Linguists investigate the meaning of words in a language, they are normally interested in characterizing the conceptual meaning and less concerned with the associative or stylistic meaning of words.

### 4.2.1. Conceptual meaning

It covers those basic, essential components of meaning which are conveyed by the literal use of a word. Some of the basic elements of a word like 'needle' in English might include thin, sharp, steel, instrument. These components would be part of the conceptual meaning of needle.

### 4.2.2. Associative meaning

It deals with connotations attached_to a word, like: 'needle' which leads to 'painful'. This association is not treated as part of the conceptual meaning of the word. Another example is 'low calorie' meaning associatively' good for diet

It is never included within the basic conceptual meaning of the expression. The users of associative meanings are poets and advertisers

### 4.3. Semantic Features

To understand the nature of any language through a semantic approach is the consideration of what is 'odd'. The following examples (sentences) are well-structured sentences
a-The hamburger ate the man $-S \longrightarrow$ NP VP
b- NP
V
NP

So, the sentence above is syntactically good, but semantically odd. What is the source of the oddness?

## Answer:

The kind of nouns which can be subjects of the verb 'eat' must denote entities which are capable of eating. However, the noun 'hamburger' does not have this property (and man does); hence, the oddness of the sentence.

Departing from the above observation, we can generalize the crucial components of meaning which a noun must have when used as a subject. Such component may be "animate being". We can then take this component and use it to describe part of the meaning of words as either (+) plus animate or (-) minus animate.

So, this procedure is a way to analyse meaning in terms of:

## Semantic Features

Animate+/- human+/- male+/- adult+/-
The above features can be treated as the basic features involved in differentiating the meanings of words.
E.g., Instruction: Give the crucial distinguishing features of the meanings of this set of English words

|  | Table | Cow | girl | woman | Boy | Man |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Animate | - | + | + | + | + | + |
| Human | - | - | + | + | + | + |
| Male | - | - | - | - | + | + |
| Adult | - | - | - | + | - | + |

*For a noun to be used as a subject of a verb there should be characteristics (to characterize) with semantic features:

> The ___ is reading a book

$$
\mathrm{N} \text { (+human) }
$$

This approach then gives us the ability to predict what nouns would make the above sentence semantically odd.
E.g., (dog- tree- table....) are odd because (-human).
N.b: Still some problems may rise with some words (advice- threat- warning...)

## Problem:

Words recognized as containers or sets carrying meaning mainly. However, other components of meaning can be related to lexical words in terms of the relation they have in a given context or situation, hence having some semantic roles.

### 4.4. Semantic Roles

In here, instead of thinking of words as containers of meaning, we can look at words within the roles they fulfill in opposite situation described sentences.
E.g., The boy kicked the ball $\left\{\begin{array}{r}\text { verb (kick) describes action } \\ \text { NP (boy- ball) roles of entity }\end{array}\right.$

The boy (entity that performs an action) $\rightarrow$ Agent
The ball (entity that is affected by the action) $\rightarrow$ Theme

### 4.4.1. Agent

This entity constitutes a set of words which are typically humans and can be nonhuman forces:
E.g., the wind blew the ball away
*can be machines:
E.g., the car ran over the ball
*can be creatures:
E.g., the dog caught the ball
*can be used as instruments
E.g., eat with a spoon - write with a pen


### 4.4.2. Theme:

That particular entity denotes human entity


1)     - Experiencer: a noun phrase designating an entity as the person who has feeling-perception- state. So, when you see, know, enjoy; no action is performed. So, you are not an agent: you are in the role of 'Experiencer'

Eg: Did you hear $\underset{\text { Experiencer }}{\text { that noise }} \downarrow$
2) - Location: Another semantic role designating where an entity is in the description of the event.
E.g., on the table - in the room (role of location)
3) - Source: Where an entity moves from
4) - Goal: Where an entity moves to

Below are some semantic roles illustrated







### 4.5. Lexical relation

Till now, we have seen words treated as 'containers', or fulfilling 'roles'. However, these words can also have 'relationships'.

In every day communications, we tend to use meanings of words in terms of their relationships.
E.g., conceal $\longrightarrow$ the same as = hide

Shallow $\longrightarrow$ opposite to deep

In doing so, we are not characterizing the meaning of a word in terms of its component features, but in terms of its relationship to other words. Thus, we treat words in terms of their lexical relations, among which:

### 4.5.1. Synonymy:

Two or more forms with very closely related meanings which are often not always intersubstitutable in sentences
E.g., of synonyms $\longrightarrow$ pairs = broad-wide, hide- conceal, almost- nearly, cab- taxi, liberty- freedom, answer, reply
N.b $\qquad$ sameness in meaning $=$ not $\longrightarrow$ total sameness.
*Eg (1) I had only one answer correct $\longrightarrow$ 'reply' would sound odd.
*Eg (2) my father purchased a large automobile (formal)
My dad bought a big car (casual)

### 4.5.2. Antonymy

Two forms with opposite meanings
E.g., pairs: $\longrightarrow$ quick slow, big-small, long- short, rich- poor, happy- sad, hot-cold, oldyoung, male-female, true-false, alive-dead.

c- Reversive antonyms: do the reverse
Tie/ untie, enter/ exit, lengthen/ shorten
Raise/lower, pack/ unpack, dress/undress.

### 4.5.3. Hyponymy

The meaning of one form is included in the meaning of another.
Eg: daffodil-flower *dog-animal *poodle-dog *carrot-vegetable
So, the meaning of flower is included in daffodil or daffodil is a hyponym of flower.
When we consider hyponomous relations we look at hierarchical relation.
Living beings


Diagram above $\longrightarrow$ mimosa is a hyponym of flower


Plant is super ordinate
Hyponym means "a kind of".
Prototypes: is 'the best example of', in terms of resemblance
Eg: Ostrich, Penguin, pigeon, swallow
The last two are much closer to the prototype of 'bird'.
Eg: Furniture: chair, stool, bench
Clothes: shirt, shoes, cardigan
Vegetables: carrots, potato, tomato (fruit...)


### 4.5.4. Homophony

Two or more different written forms have the same pronunciation.
Eg: bare-bear, meat-meet, flour-flower, pail-pale, sew-so.

### 4.5.5. Homonymy

One form (written and spoken) has two or more unrelated meaning:

## Examples:



### 4.5.6. Polysemy

Relatedness of meaning of identical form and related by extension.
E. g., the word 'head' $\longrightarrow$ top of body, headline, company, school...
'Foot' $\longrightarrow$ person-table/chair, mountain
'Run' $\longrightarrow$ a person does, water does- colour does, nose does, Polysemy
Vs Hyponymy
-polysemic words in dictionary $\longrightarrow$ one entry
-two separate hyponyms $\longrightarrow 2$ different entries in dictionary

### 4.5.7. Metonymy

Another related aspect of meaning in terms of
$\left\{\begin{array}{l}\text { Container- content: can-juice bottle- coke } \\ \text { A whole- part: car- wheel house-roof } \\ \text { Representative- symbol: king- crown }\end{array}\right.$

So, thanks to familiarity that we understand the following

1. He drank the whole bottle
2. The white house announced
3. Filling up the car
4. Answering the door
5. Giving someone a hand

### 4.5.8. Collocation

Which word tends to occur with other words?
Hammer..... Nail
Table $\qquad$ chair

Salt.....pepper
Collocations are sorts of words which frequently occur together

## (Practice \& Testing)

## Practice: $\mathbf{n}^{\circ} 01$

(1)- What is the basic semantic relation between the following pairs of words?
*Shallow- deep *mature- ripe
*suite- sweet *Table- furniture
*single- married *move- run
(2)- How would you describe the oddness of the following sentences using semantic features?
a- The television drank my water
b- His dog writes poetry.
(3)- Identify the semantic roles of all the noun phrases in this sentence "With his new golf club, Fred watched the ball from the woods to the grassy area near the river and he felt good.
(4)- Which of the following opposites are gradable, non-gradable or reversive?
*Absent- present *high- low *full- empty *fail- pass
*fair- unfair *appear- disappear *know-ignore
(5)- How would you describe the oddness of the following sentences using semantic features?
a. The building slept for three hours.
b. A flower is violent.
c. The children made theories about language.
(6)- Identify the semantic roles of the noun phrases used in the following sentences
a- The politicians appreciated the result of the election.
b- John is rich.
c- She wrote a letter to her sister.
d- The boy sliced the cake with a knife.
e- The thieves were in the house when they heard the voice of the neighbor. One of them took a gun from drawer and shot the man.
(7)- What is the basic lexical relation between the following pairs of words?
*Answer- reply *man- woman
*Shakespeare- works *shallow- deep
Practice $\mathbf{n}^{\circ} 02$

1. What differentiate human Language from all other forms of signaling?
2. Contrast between communicative and informative signals.
3. Why only humans have the capacity to produce speech?
4. All creatures (apes, bees, dolphins.) are capable of communicating with their likes. Comment!
5. Can some of the human language properties be shared by other creatures in their communication?
6. To what extent are animals like human in communication?

## Practice $\mathbf{n}^{\circ} 03$

1. Say if these statements are true or false. Correct the false one:
a) Adverbs are composed of one free morpheme.
b) Human language users can discuss topics which are remote in space and time.
c) Arbitrariness means that the linguistic signs are distinct.
d) Functional morphemes indicate aspects of the grammatical function.
e) The verb "rescue" consists of only one morpheme.
2. Give the morphological description of the following sentence A full description of English morphology will have to take account of both historical influences and the effect of borrowed elements.
3. "Human language differs from all other forms of signaling and this makes it a unique type of communication system" Comment.

## Practice n ${ }^{\circ} 04$

1. Comment in no more than 12 lines
"The process of communication is not restricted to man. However, language is characterized by certain features that make it specific to the human being".
2. State if these statements are true or false. Then, correct the false ones
a) Some of the adverbs are composed of one free morpheme
b) Generative grammar focuses on the correctness of the syntactic form of sentences.
c) All inflectional morphemes are related to the identification of tenses
d) Linguistics deals only with the study of grammar which is considered as a reflection on language.
3. Write the morphological description of the following sentences
-Language plays an important role in the proceedings of the greatest international political gatherings

- Some pupils gathered data from their daily interactions and analyzed them with the help of their teachers
- The importance of poetry goes beyond the usual literary works of the ancient times


## Practice ${ }^{\circ} 05$

## 1. What kind of difference exists between the representation of simple sentences and that of complex ones?

2. How does generative grammar explain the relationship between sentences such as the ones below?
-The mechanic repaired the car.
-The car was repaired by the mechanic
3. Find out the semantic oddness of the following sentences and comment on each case using semantic features
a. The prisoner bought a bicycle to his son.
b. The mouse took the cheese.
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## 4. Represent the following sentences in a tree diagram

a. The thief broke the window down.
b. John saw a star with a telescope.
c. He said his brother supposed his friend said they bought a car
d. He took a bus to reach the place of the appointment

## PART THREE

## PART THREE

## VI. Additional Phonetic Background Level

5.1. The Syllable
5.1.1. Introduction
5.1.2. Definition
5.1.2.1. Phonetically5.1.2.2. Phonologically

$\qquad$
5.1.2.3. Phoneme Sequences and Syllable Structure
5.2. Strong and Weak Syllables
$\qquad$
5.2.1. Introduction

$\qquad$5.2.2. Types of Weak Syllables
$\qquad$
5.2.2.1. The schwa /a/
5.2.2.2 Close Front and Close Back Vowels /i:/, /ı/, /u:/, /v/

$\qquad$5.2.3.2. Syllabic Consonants(Practice \& Testing)
5.3. Stress
$\qquad$
5.3.1. Stress in Simple Words
$\qquad$
5.3.1.1. The Nature of Stress5.3.1.2. Levels of Stress
5.3.1.3. Placement of Stress5.3.2. Stress in Two-syllable Words
$\qquad$
5.3.3. Stress in Three-syllable Words.5.3.4. Complex Words
$\qquad$5.3.4.1. Affixed Words
5.3.4.2. Compound Words
5.3.4.3. Placement of Stress in these Words
5.3.5. Word Class Pairs.(Practice \& Testing)
5.4. Weak Forms
5.4.1. Introduction
5.4.2. Contexts
(Practice \& Testing)

### 5.1. The Syllable

### 5.1.1. Definition

The syllable is an important unit in phonetic and phonological studies (morphological as well). Syllables can be counted easily in a word or a sentence. But sometimes people disagree on the number of syllables in an utterance or a taperecorded text.


The syllable may be defined both phonetically and phonologically.
5.1.1.1 Phonetically: i.e. in relation to the way we produce syllables and to the way they sound (production and perception). From a phonetic point of view, a syllable consists of a centre with litte or no obstruction to the flow of air. The centre is comparatively louder, e.g. louder [ [ lavdə]. There are four types of syllables:

1- A minimum syllable: centre in isolation $>\mathbf{C}$ (a single vowel), also represented as $\mathbf{V}$ e.g. I [aI] - are [a :] - ago [ə `gər] - enough [I `nıf]

2- Onset + centre > OC (cons + vowel), also represented as $\mathbf{C V}$
e.g. car [ka:] - for [fə:] - suppose [sə `pəoz]

3- Centre + termination $>\mathbf{C T}$ (vowel + consonant), also represented as VC
e.g. at [æt] - aim [`erm] - ended [en `dıd]

4- Onset + centre + termination $>\mathbf{O C T}$ (cons + vowel + cons), represented as CVC

```
e.g. give [giv] - take [terk] - suppose [sə `pəoz]
```

The syllabic consonant makes up a special type as the centre appears in the syllabification of the consonant. It occurs mostly with $/ \mathrm{n} /$, / $1 /$, and /r/ (in rhotic accents). $/ \mathrm{m} /$ may occur less frequently as a syllabic consonant. e.g. nation ['neIfñ] syllable [’sıləblı].

Recent work in phonology has produced a more refined analysis of the syllable in which the vowel ( n ) followed by a coda $(\mathrm{T})$ is termed rhyme.


Fig. 1 The Components of an English syllable
5.1.1.2 Phonologically: we consider the possible combinations of phonemes. How do phonemes combine in English to make up syllables?

* A word can begin with only one vowel or one, two or three consonants (consonant cluster) and it ends with one vowel or one, two, three or even four consonants.


Fig. 2 Phoneme sequences in English words

[^0]
### 5.1.2.3. Phoneme Sequences and Syllable Structure

In every language there are restrictions on the sequences of phonemes. In English, for example, no word begins with the sequence zdr- . But, as mentioned above, there are words which begin with str- . Also, no word ends with the sequence `æh’ in English, but it does in Arabic especially in pause form (البينه-الإلة). In Standard Arabic, no word begins with a vowel or two consonants or ends with two vowels. Thus, there are restrictions on how phonemes in different languages are sequenced. In phonology, the analysis of the restrictions and regularities in a particular language is useful for the study of syllables.

As far as the phoneme sequence is concerned, it is possible to distinguish between many types of syllables. Among these types, two are considered to be important to learn about because most of the English common words are composed of these two types. These are known as open and closed syllables. To determine if a syllable is open or closed, it is necessary to look at the vowel. A closed syllable ends in a consonant and the vowel has usually a short vowel sound. An open syllable ends in a vowel. The vowel has usually a long vowel sound.


Fig. 3 Main two types of an English syllable

### 5.2. Strong and Weak Syllables

### 5.2.1. Introduction

One of the most noticeable features of the English language is that many syllables are weak. This is true for other other languages. So, how are they pronounced? Where do they occur? A major factor that determines whether a syllable is strong or weak is stress. But, elision and intonation are also closely related to the subject. Something that is important to take into consideration in the English language as well is that there are words with weak forms and strong forms;
e.g. I think he was `there. vs. Yes, he `was.


### 5.2.2. Types of weak syllables

Any strong syllable will have as its centre one of the vowel phonemes except the schwa $/ \partial /$. On the other hand, weak syllables can only have four types of centre as shown in the table below:

| Strong syllables | Weak syllables |
| :--- | :--- |
| -Any vowel phoneme except /a/ | -The vowel phoneme /a/ |
|  | -A close front unrounded vowel /i:/, /I/ |
|  | -A close back rounded vowel $/ \mathrm{u}: / \mathrm{L} / \mathrm{u} /$ |
|  | -A syllabic consonant |

Table 1: Centres of weak and strong syllables

Weak syllables are shorter and lower in intensity than the strong syllables, e.g. father [‘fa:ðə] the syllable [’fa: is longer and louder than the syllable ðə].

Compare / $\mathrm{I} /$ in 'little' and `receive': [ \({ }^{l l} \mathrm{ll}\) tl] \(]\) \(\longrightarrow\) a centre of a strong syllable \(\xrightarrow{\text { [rı`si:v] }}\) a centre of a weak syllable

Thus, the vowel phonemes /i:/, /I/ and /u:/, /v/ can be centres of weak syllables as they can be centres of strong syllables.

### 5.2.3. The schwa /o/

The vowel / $\partial /$ is the most frequently occuring vowel in English and it is always associated with weak syllables. In terms of quality, it is a mid vowel (between half close and half open) and a central vowel (between front and back). It is a lax vowel as it is articulated with no energy.

There are many different spelling forms in English which are realized as [ə].
1-Spelt with ' $a$ '
Strong form /ei/ or /æ/
Weak form / $/$ /, e.g. attend $/ \underline{\mathbf{o}}$ `tend/ - ago / \(\underline{\mathbf{o}}\) `gəv/ - character / kærəktə/
2-Spelt with 'ar'
e.g. particular /po `tikjolo/ - monarchy /'mpnoki/

3-Spelt with 'ate'
e.g. intimate /'intımat// - accurate /'ækjərgt/ (exception: private / praivit/)

4-Spelt with ' $o$ '

5-Spelt with 'or'

6- Spelt with 'e’

7-Spelt with 'er'

8-Spelt with 'u'
e.g. support /s으 `po:t/ - autumn /`o:təg

9-Spelt with 'ough'
Strong form:[əv, u:, $\Lambda, \mathrm{av}]$
Weak form:[ə], e.g. thorough / $\theta \wedge \mathrm{r} \boldsymbol{r} /$
10- Spelt with 'ous'
e.g. famous / fermors/ - gracious /'greI $\int \underline{\underline{\underline{a}}}$ s/

### 5.2.4. Close Front and Close Back Vowels /i:/, /ı/, /u:/, /v/

These two types of vowels are commonly found in weak syllables. In strong syllables, it is easy to distinguish between /i:/ and /i/ and between /u:/ and /v/, e.g. beat vs. bit $\rightarrow / b i: t /$ vs. /bit/. but, if we compare easy vs. busy; is it: `i:zı or `izzi: ? `bızı or `bızi:?

In other words, is it short [I] or shortened [i]? In fact, it depends on different accents and even in RP English the matter is not so clear. The same for the contrast as in $/ \mathrm{u}: /$ and $/ \tau /$, e.g. `I want to' $\rightarrow$ is it [to] or [tu]? [ v$]$ or shortened [u]? So, these two distinctions are neutralized in RP as Roach (2004: 241) says:
"In unstressed syllables occurring before vowels and in final position, contrasts between long and short high vowels are neutralised and short [i] and [u] occur (e.g. happy ['hæpi], throughout [ $\theta \mathrm{ru}$ 'avt])".

Shortened [i] is commonly found in function words in their weak forms: he, she, we, me, the, be...In their strong forms it would be [i:] > e.g. [hi `did it] vs. ['hi: did It ]

Shprtened [ u ] is commonly foundin function words in their weak forms: you, to , into, do, who,... In their strong forms it woud be [u:] > e.g. [ju`did it] vs. ['ju: did it].

### 5.2.5. Syllabic Consonants

When $/ \mathrm{l} /$, $/ \mathrm{n} /$ as well as $/ \mathrm{r} /$ (in rhotic accents) stand as the centre of the syllable, they are called syllabic consonants.
-Lateral release: cattle ['kætḷ] - trouble ['trıbḷ] - bottle ['bvtḷ] - channel ['tfænl!]
-Nasal release: threaten ['Өretn] - happen ['hæpən] or ['hapn] - seven [`sevən] or

-Syllabic 'ņ' never occurs after :l, tf, or d3, e.g. fallen ['folən] - kitchen ['kitfin] pidgin ['pıdзın]
-Syllabic ' $r$ ' is very common in rhotic accents such as American accents. E.g.particular [prrtikjəlr]

## Practise \& testing

1. How can we define the syllable phonetically? Illustrate with examples.
2. What can we say about the vowel schwa/a/ in the English language?
3. Describe the English syllable phonologically and illustrate
4. What are the different vowels that may occur in strong syllables?
5. State five different spellings realized as schwa

### 5.3. Stress

### 5.3.1. Stress in Simple Words

### 5.3.1.1. The Nature of Stress

Stress is relatively simple to describe because people feel they have an idea about the difference between stressed and unstressed syllables, e.g. father [`fa:ðə] about [ \(\partial\) `bavt]. But, what are the characteristics of stress?

There are two different ways of approaching the question: to consider what the speaker does and how the syllable sounds to the hearer. In other words, we can study stress from two points of view: production and perception.
*Production: a stressed syllable is produced with more muscular energy than an unstressed syllable.
*Perception: all stressed syllables have one characteristic in common: prominence. Four different factors make a stressed syllable more prominent than others. These are:


Loudness: A stressed syllable is louder than unstressed ones: e.g. [`laodə]
Length: A stressed syllable sounds longer than unstressed ones: e.g. ['bækwəd]
Pitch: It is related to the frequency of vocal cords vibrations. Placing a movement of pitch on a syllable (rising . falling ) ymakes it more prominent.

Quality: A syllable that contains a vowel different in quality from neighbouring vowels tends to be more prominent; e.g. [`elədzəbly] `eligible’= `suitable’ or `chosen’.

Generally, these four factors of prominence work together in combination, though one or two may be enough to make a stressed syllable more prominent

### 5.3.1.2. Levels of Stress

Up to this point, we have seen a simple distinction between stressed and unstressed syllables. But we have to recognize one or more intermediate levels of stress within the word. If we consider the word `around' [ \(\partial\) `raond], we feel that in the second syllable the pitch of voice doesn't remain level (-), but falls to lower pitch. We say that there is a pitch movement or tone and the syllable has got a tonic strong stress. This type of stress is aso called primary stress when opposed to another type of stress that is weaker, but stronger than that of an unstressed syllable. It is called secondary stress or non-tonic strong stress.

## Examples


(non-tonic strong stress) (tonic strong stress)

2- Anthropology [ヶæn日rə `pvləd3i] 3- Photographic [ffəutə `græfik]

These are three levels but a fourth level can be considered among unstressed syllables with $\partial, \mathrm{I}, \cup$ or a syllabic consonant, but are less prominent than other unstressed syllables, e.g. `poetic' [рәш `e tik] a little more prominent less prominent
although both of them are unstressed.

### 5.3.1.3. Placement of Stress

There is a certain difficulty to select and to place stress on the correct syllable particularly for foreigners. English is not one of those languages in which word stress can be decided simply in relation to the syllables as can be done, for example, in French (where the last syllable is usually stressed) or Polish (where the penultimate syllable is stressed) and Czech (where the first syllable is stressed).

English stress is so difficult to predict and the best way for stress placement is to learn how individual words are pronounced. However, there are rules of stress placement with of course many exceptions.

Recent work in generative phonology has yielded some rules to be stated. They are very complex with too many exceptions. The information to examine is:

- whether the word is morphologically single or complex,
- the grammatical category to which the word belongs (nouns, verbs, adjectives...), - the number of syllables of the word,
- the phonological structure of the syllable.


### 5.3.2. Stress in two-syllable words

One syllable lexical words are usually stressed in a sentence. For two-syllable words, the choice is simple:
a- Verbs: the basic rules are:
1- If the second syllable has got a short vowel or only one consonant, then the first syllable is stressed, e.g. `enter’ [`entə] - `open’ [`əupən] - exception: `follow’ [’fpləð].

2- If the second syllable has got a long vowel or a diphthong or two consonants, then the second syllable is stressed, e.g. `apply’ [ə `plar] - `attract' [ə `trækt] `insist' [in `sist] - `perfect' (as a verb) [pə `fekt].
b- Adjectives: same rules as for verbs.
-First syllable stressed: `lovely’ [‘1^vli] - `even’ [ $\mathfrak{i}: \mathrm{vñ}$ ] - except: `hollow’ [`hpləo] -Second syllable stressed: `correct' [kə `rekt] - `divine' [dı `vain] - `alive' [ə `laıv]. A few exceptions: `honest' ['pnist] - `perfect' (as an adjective) ['p3:fikt].
c- Nouns: the rules are different:

1- If the second syllable has got a short vowel, usually the first syllable is stressed, e.g. 'money’ ['mıni] - `product' ['prod kkt - `larynx’ [`lærıks].

2- If the second syllable has a long vowel or a diphthong, then that second syllable is stressed, e.g. `balloon' [bə `lu:n] - `escape' [Is `keip] - `design’ [di `zam].
d- Adverbs and Prepositions: same rules as verbs and adjectives.
e.g. `towards’ [tə `wo:dz] - `about' [ə `bavt] - `ago' [ə `gəঠ] - `today' [tə `deI].

### 5.3.3. Stress in three-syllable words

With three-syllable words, the rules are more complex.

## A-Verbs:

1- If the last syllable has got a short vowel or ends with not more than one consonant, then the penultimate syllable (immediately before the last one) is stressed, e.g. `encounter' [in `kavntə] - `determine' [dı `ts:min].

2- If the last syllable has got a long vowel or a diphthong or ends with more than one consonant, then that last syllable is stressed. e.g. `rentertain' [ento `tern] `resurrect' [rrezə `rekt]

NB the first syllable may have a secondary stress.
b- Nouns: nouns have different rules:

1- If the last syllable has got a short vowel or the diphthong [əv] and if the penultimate syllable has got a long vowel or a diphthong or ends with more than one consonant, then that middle syllable is stressed.
e.g. `disaster’ [dı `za:stə] - `mimosa’ [mı `məuzə] - `potatoes’ [pə `teItəuz].

2- If the final syllable has got a short vowel and the penultimate syllable has got a short vowel and ends with only one consonant, then the first syllable is stressed. e.g. `quantity’ ['kwpnt2ti] - `ministry’ [’mınıstri] - `cinema’ [`sınəmə] `emperor' [`empərə]

3- If the last syllable has got a long vowel or diphthong and/or ends with more than one consonant, then the first syllable is stressed and the last syllable is usually quite prominent and may have a secondary stress. e.g. 'stalagmite’ ['stæləg,mart] - `stalactite’ ['stælək, tart] - `intellect' ['intəlekt].
c- Adjectives: same rules as for nouns. e.g. `insolent' [`msolənt] - `opportune’ [’opətju:n].

### 5.3.4. Complex Words

There are two major types of complex words:


Compound words: ice cream ; housewife ; sugar-free

### 5.3.4.1. Affixed Words

Affixes:there are three possible effects on word stress:

1-The affix itsef is stressed, e.g. the prefix `semi' is stressed in the word `semicircle’ ['semiss:kl]] - the suffix `ality' is stressed in the word `perso`nality'.

Person [’p3:sñ] >> personality [ $\mathrm{rp3}$ :sə’nælati]
2-The word is stressed as if the affix was not there:

```
Pleasant [`pleznt] >> unpleasant [^n `pleznt]
Market [`ma:kıt] >> marketing [`ma : kıtıy]
3-Stress on the stem but shifted to another syllable:
Magnet [`mægnət] >> magnetic [mæg `netik]
-Suffixes carrying primary stress are:
`-ain': (for verbs only) entertain [,ent` `tem]
`-ee': refugee [rrefju `d3i:]
`-eer': engineer [,end3I `nı2]
`-ese': Japanese [_dzæpə `ni:z]
`-ette': cigarette [_sIgə `ret]
`-esque' picturesque [/prktfo` resk]
- Suffixes which do not affect stress placement are:
`-able': comfortable [`k^mftəbl\]
`-age’: anchorage [`æŋkərid3]
`-al': normal [`no:ml]
`-en': thicken [`0rkən]
`ful`: graceful [`greisfḷ]
`-ing`: amazing [0 `meIzIn]
`-ish’: Irish [`arrif]
`-less': homeless [`həumləs]
`-ly': huriedly [`h^rIdli]
`-ment': placement ['pleismənt]
```

```
`-ness’: goodness [`gudnəs]
`-ous’: poisonous ['porzənəs]
--fy’: glorify ['glo:rıfar]
--wise’: likewise [`larkwarz]
--y’: funny [‘f^ni]
-Suffixes that influence stress in the stem (root), i.e., stress remains in the stem but shifts to the last syllable (in the stem). These suffixes are:
`-eous’: advantage [əd vva:ntıd3] \(\rightarrow\) advantageous [^ædvən `teIdzəs]
`-graphy’: photo [`fəชtə๐] \(\rightarrow\) photography [fə `togrəfi]
`-ial’: proverb [‘provz:b] \(\rightarrow\) proverbial [prə `v3 :bial]
`-ic’:climate [`klaımət] \(\rightarrow\) climatic [klaı`mætik]
`- ion’: perfect [’ps:fikt] \(\rightarrow\) perfection [pə `fek \(\left.\int \frac{n}{n}\right]\)
`-ious’:injure [`ind3ə] \(\rightarrow\) injurious [in `dzvəriəs]
`-ty’: tranquil [`træりkwil] \(\rightarrow\) tranquillity [træy `kwiləti]
-ive’:reflex ['rıfleks] \(\rightarrow\) reflexive [ri`fleksiv]
```


### 5.3.4.2. Compound Words

Compound words are called so because both words can exist independently as English words. Sometimes, they are written as one word such as armchair - sunflower - policeman. Sometimes, they are written with a hyphen such as: ice-blue, and sometimes they are separated such as desk lamp.

Placement of Stress in these Words

1- If the first word is adjectival, stress is on the second.

- Loudspeaker [rlavd `spi:kə] - bad-tempered [,bad `tempəd] - cold-blooded [kəold `blıdid]. The first part may carry a secondary stress when the word is too long.

2- If the first word is not adjectival, stress is on the first word.

- Sunflower [`sınflavə]- suitcase [’su:tkess]

3- If both words function as adverbs, usually the second word is stressed

- North-East [no:0 `i:st]

4-If the first word is a number, stress is on the second one
-Second class [ sekend `kla:s]

5-If compounds function as verbs where the first word is an adverb and the second is a verb, stress is on the second word.

- downgrade [,daon `greId] - back-pedal [_bæk `pedl!]


### 5.4. Word Class Pairs

These are two-syllable words with identical spelling, but they differ in stress according to word class (noun vs. verb/adjective). Stress is on the second syllable of a verb and on the first syllable of a noun or adjective. The following list includes common examples of word class pairs (found in English as nouns and verbs).

| Word | Noun | Verb |
| :---: | :---: | :---: |
| Conduct | ${f0c197011-0d4c-496a-a986-a4bcfb56e5bd}dıkt \\ \hline Contrast & \({fd22e1641-511c-4238-9def-fa47a0620fcb}tra:st \\ \hline Subject & {f6b2b19bc-9fa6-4d4a-b795-34105015e585}dzekt \\ \hline Rebel & {f6a87124a-14d5-4174-966a-9cd948f9616f}bel \\ \hline Insult & {fdbfd4052-df8c-45ec-837a-06ce6e440765}sslt \\ \hline Object & {f420173c3-b34b-4165-9079-aca200533514}dzekt \\ \hline Desert & {ff84eee84-ae83-45e6-9fe1-ca8485017b3b}zs:t \\ \hline Record & {f06d4cdcf-2eb7-4a2b-bc6d-0155e0e00b85} }} \mathrm{k}$ : d |  |
| Export | `ekspo:t & Ik `spo:t |  |
| Permit | р3:mit | po `mit \\ \hline Protest & proutest & pro `test |
| Contract | `knntrækt & kən `trækt |  |
| Escort | `esko:t & I `sks:t |  |
| Import | `mpo:rt & Im `po:t |  |
| Present | `preznt & pri `zent |  |

## Table 1: Word-class pairs

## Practise \& testing

1. What makes English a rhythmical language?
2. In a compound word, which syllable should be stressed? Give examples
3. What is prominence? Illustrate
4. What is a 'tonic strong stress'?
5. What are word-class pairs? Illustrate
6. What is primary stress as opposed to decondary one? Illustrate

## 7. Transcriptions (Put stresses where necessary)

1. Phonemic : anger - professional - (to) permit - together - hanging universal - circulation - acceptability - English - absolutely eyebrows internal - economics - journalism - quantity - (a) rebel uncle - (to) desert - linguistics - over - psychology - twins - English.
2. Narrow phonetic: incredible - pleasant - peaceful - suppose - twelve cars - unexpected - broken-hearted - continues - twilight - cradlesong tenth-rate - positive - cold-blooded - prayers - particular - quiet - ten pounds - twig - closure - speakers - feeling - climate - churches - dogs.

### 5.5. Weak Forms

### 5.5.1. Introduction

There are a number of well-known English words (just about 40) that can be pronounced in two different ways called strong forms and weak forms.
eg: I [wəz] `there vs. Yes, I [`wdz]
These words belong to a category called grammatical words or function words (auxiliaries, modals, prepositions, conjunctions, articles, pronouns...) as opposed to lexical words or content words (verbs, nouns, adjectives, adverbs and question words).

Function words are frequently pronounced in their weak forms but only the strong form is acceptable in certain contexts.

### 5.2 Contexts

1- In the end of a sentence for auxiliaries, modals, and prepositions.
e.g. I'm `fond of [əv] `chips vs. It is `chips that I'm `fond of [pv].
e.g. Can [kən] I help you? Yes, you `can [kæn].

2-When two function words are contrasted (and thus emphasized).
e.g. The letter is `from [from] him not `to [tu:] him.

3-When a function word is given stress for emphasis.
e.g. You `must [mıst] decide now.

NB: Weak form words beginning with `h' (he, her, his, have) are pronounced with [h] in the beginning of a sentence. But, ' \(h\) ' is dropped elsewhere in the sentence. e.g. Her `car was `damaged [hə `ka: wəz`dæmıdzd].

I said her car was damaged [I `sed \(\partial\) `ka: wəz `dæmıd3d].

Strong form of `her’ > I said `her car not yours! [I sed `h3: `ka: not `jo:z]. e.g. He has done it! [hi \(\partial z\) `d $\Lambda n \mathrm{It}$ ] - I know he has. [aı `nəひ I `hæz].

- In weak forms, the general rule is the weakening of the realisation of the phoneme in question.

1- Difference of vowel sound, i.e,. any vowel becomes a schwa. $\mathrm{V} \rightarrow \quad[\partial]$
e.g. /bst/ $\rightarrow$ [bət] ; /hæv/ $\rightarrow$ [həv] ; /f っ:/ $\rightarrow$ [fə] .

2- Difference of vowel length, i.e. long vowel becomes short vowel $\mathrm{VV} \rightarrow \mathrm{V}$
e.g. / hi: $/ \rightarrow$ [hi] - /ju:/ $\rightarrow$ [ju]

3- Absence of sound 'h'. $h / \rightarrow[$ (Ø]

## 1- $\mathrm{v} \rightarrow[$ ə]

1-‘The’ /i: /, [ðə], e.g. shut the door [ $\int \Lambda t$ бə `də:]. Before vowels, eg.the end [ði `end]
2-‘A’/eI/, [ə], e.g.read a book [ri:d ə buk]. Before vowels, eg.an apple [ən `æpl] 3-‘And’ \(/ æ /\), [ənd], eg. come and see [‘kım ən (d) `si:] or [n] after t, d, s, z, $\int$ e.g. fish and chips ['fif ņ `tfips [yes and no] [`jes ņ `nəv] girls and boys [`g3:Z ņ `boız]

4-'But' $/ \mathrm{s} /$, [bət], e.g. it's good but expensive [rts `god bət iks`pensiv]
5-‘That’ /æ/, [ðət] (vs. demonstrative [‘ðæt], e.g. That's the thing that annoys me. [`ðæts ðə `Өıŋ ðət э`nəız mi].

6-‘Than’/e/, [ðən] e.g.: Better than ever [‘betə ðən `evə] 7-‘your’/ऽ:/, [jə], e.g. Take your time ['terk jə `taim]
NB before vowels ' $r$ ' is realized, e.g. on your own ['pn jər `əun] 8-‘Them'/e/, [ðәm], e.g. Leave them here ['li:vðəm `hıə]
9-‘Some' / $\Lambda /$, [səm], e.g. Have some more ['hævsəm `mo:] 10- 'There'/eə/,[ðə] , e.g. There should be a rule [ðə `〕od bi ə `ru:1] NB: before vowels: there is [ðər Iz] 11-‘Can’/æ/, could \(/ \mho / \rightarrow[ə]\) e.g. They can wait [’ðer kən `wert] You could have done it [ju kəd əv `d $\wedge \mathrm{n}$ it].

12- Have, has, had, $/ \mathfrak{æ} /$, [ə] e.g. Which one have you seen? ['witf `wın \(\partial v\) ju `si:n]
13- Am /æ/, are /a: /, was /o/, were /3:/ $\rightarrow[ə]$
e.g. He was here a minute ago [hi wəz `hır ə `mınıt ə`gə๐]

What am I doing? [‘wptəma`du:In] They were late [‘ðeı wo `leIt]
NB: In final position: æm, a:,wnz, w3:
e.g. They weren't as young as we were [ðer `wз:nt \(\partial \mathrm{z}\) `j $\wedge$ у $\partial \mathrm{Z}$ wi `wз:]

14- Shall $/ æ / \rightarrow\left[\int \partial 1\right]-\left[\int!\right]$; Should $/ v / \rightarrow\left[\int \partial \mathrm{d}\right]$
e.g. We shall need to hurry [wi $\int \frac{1}{\text { ` }}$ ni:d to `hıri]. You should do it [ju Jəd `du: It].

15- 'Must' $/ \Lambda /$, [məst], e.g. You must try [ju məs `trar] 16-‘At’/æ/, [ət], e.g. See you at lunch [‘si: ju ət `lıntf]
In final position: What are you looking at? [æt], e.g. [‘wdt $\partial$ ju `lukıy `æt]
17-‘Us’/ $\Lambda /$, [əs], e.g. all of us [’ว:1 əv әs]
18- 'From' /v/, [frəm]; I think it comes from outside [aı `Өıŋk it `kımz frəm avt'saıd] But in final position it is [from] ; Where do you come from? ['weə də ju `kım `from]

19-‘Of’ /p/, [əv], e.g. Most of all [‘məust əv `っ:l]. Final position: [’pv] 20-‘To'/u:/ [tə]; to go [tə `gəv] but: [tu] before vowels, e.g. to Algiers [tu `a:ldзıəz] 21-‘As’/æ/, [əz], e.g. As soon as possible [əz `su:n əz `pbsibļ] 22-'For' / \(:\) :/ [fə]; It's quite hard for me [rts `kwart `ha:d fə mi] ; It's quite hard for us [rts `kwart `ha:d fər əs].

23- do, does $/ \mathrm{u}: /, / \Lambda / \rightarrow[\mathrm{d} \partial$ ], [dəz], e.g. What do they want? ['wdt də ðeı `wpnt] Does it ring a bell to you? [`dəz it `rıy ə `bel to ju].
NB: before vowels [du] e.g., Do all people know? [du כ:l `pi:pl `nəv]
$2-/ v v / \rightarrow[v]$

1- She, we, he, me, be, the $/ \mathrm{i}: / \rightarrow$ [i], e.g. Who is she? ['hu: iz $\left.\int i\right]$
2- You, to, do $/ \mathrm{u}: / \rightarrow$ [u], e.g. What do you think? [`wpt də ju `Өıŋk]
3-/h/ $\rightarrow$ Ø
a- He, his, him, and her, e.g. What is his name? ['wbts IZ `neım]

Ask her to come [`a:sk ə to `kım]
b-Have, has, had e.g. We have finished [wi əv `finifd] NB: Auxiliaries and modals never have weak forms in the negative, e.g. She hasn't finished [ \([\mathrm{i}\) `hæzṇt `finıfd] ; No I can’t [’nəช aı `ka:nt] .

You shouldn’t have done that [ju `Judņt \(\partial v\) ` $\mathrm{d} \Lambda n$ ` ðæt].

## Practice \& testing

How are certain phonemes realized in function words? Explain with examples.

1. What makes a syllable prominent in English?
2. Transcribe the following sentences (weak form + stress); then comment on all aspects of connected speech.
a. Does she know where he comes from?
b. I knew that the man was locked in the office.
$\qquad$
c. We can call her as soon as we hear the news.
$\qquad$
3. What comment can you make on the pronunciation of 'for' in the following statements?
a. I have been looking for you.
b. It's her mother's necklace that she has been looking for
4. In what way are content words different from function words?
5. How are function words reduced in English?
6. Transcribe the following sentences (weak form + stress); then comment on all aspects of connected speech. What is the tone structure of the last utterance?
a. They have put their guns in the bright car over there.
b. A good-tempered woman would be more suitable for that job.
c. There are few things that nobody knows of.
d. Don't you think that it's $\checkmark$ high time he washed his car?
7. Transcribe the following sentences. Mark stress and use weak forms where necessary:
a. He'll have to run as fast as he can
b. There are things that can be done to help her out.
c. You don't have to tell us where he comes from?
8. Give a phonemic transcription of the following utterances
a. We can go there alone, can't we?
b. You should have taken that picture.
c. Don't you think that he'll drive us in his own car?
d. Ring me up as soon as you get back home
e. She often talked about those years
f. We can wait for the bus
g. There are some new books I must read
h. The basket was full of things to eat
i. You ought to have your own car
j. Have you taken them from that box?
k. I shall take as much as I want
9. How does this work?
m . She took her aunt for a drive
n. Why should a man earn more than a woman?
o. He wants to come and see us at home
p. It's true that he was late but his car could have broken down
q. Why am I too late to see him today?
r. Why do they like it?
s. I need that book
t. I think that we should improve quality of services a lot

## Conclusion: Notes on the Programme

The present paper was an attempt to encounter the main aspects of linguistic concerns of and about language. Focus was put exclusively on the phonic medium as being the principle component in human language communication and relatedly to the English language grey façade of sound decoding. The latter gives English a rather notorious aspect where spelling recognition and sound decoding should constitute the basic endeavour of any EFL learner and the rationale of any teacher or researcher in the field of ELT.

As shown through the main outline, the first part, "the phonological level", has been the most prominent in-depth concern on the paper. This is meant to help Master II EFL students better appreciate the importance of studying phonetics and phonology. Relatedly, such interest in the two sub-branches of linguistics will forge the would-be teachers in their future careers to distinguish between many of the concepts in relation to phonetics and phonology, to exalt their knowledge in concrete manner and elaborate positive attitudes towards the non-conformity between spelling and pronunciation. If successfully managed, future generations of EFL learners will benefit from such experiences when working on sound mediums of any language by comparing and contrasting all the aspects so far displayed in the paper

Yet, the paper has many shortcomings; among which audio-recordings which could be of paramount utility to clarify concepts and show discrepancies between sounds. Moreover, it has been so difficult to come to a precise and definite transcription with very detailed allophonic variations when swinging from one language to another.

## References

- Allen, W.S. (1970) Living English Speech. Longman, London
- Ball, M. J. (1997) Instrumental clinical phonetics. London: Whurr Publishers.
- Ball, M. J., Lowry, O. M. and EBooks Corporation limited (2001) Methods in clinical phonetics. London: Whurr Publishers. Available at: Ball, M. J., Muller, N. and Rutter, B. (2010) Phonology for communication disorders. New York: Psychology Press.
- Carlos Gussenhoven (2004). The phonology of tone and intonation. Cambridge: Cambridge University Press.
- Carlos Gussenhoven and Haike Jacobs (2011) Understanding phonology. 3rd ed. London: Hodder Education.
- Carr, Philip, (2013) English phonetics and phonology: an introduction. 2nd ed. Chichester, UK: Wiley-Blackwell.
- Catford, J. C., (2001) A practical introduction to phonetics 2nd ed. Oxford: Oxford University Press.
- Crystal, D. ((1985). Linguistics. Great Britain: Richard Clay (the Chaucer Press)
- Daniel Jones (1972) An outline of English phonetics. 9th ed. Cambridge: Heffer.
- David Crystal (1969) Prosodic systems and intonation in English. London: Cambridge University Press.
- De Lacy, P. V. (2011) The Cambridge handbook of phonology. Cambridge: Cambridge University Press.
- Dinnen, S. J. (1967). An Introduction to General Linguistics. New York: Holt, Rinehart and Winston, INC.
- Finch, G. (2003). Linguistic Terms and Concepts. London: Palgrave Macmillan
- Fromkin, V. (2001). Linguistics: An Introduction to Linguistic Theory. Oxford: Blackwell Publishing
- Handbook of the International Phonetic Association: a guide to the use of the International Phonetic Alphabet (1999). Cambridge: Cambridge University Press.
- Harrington, J. (2010) Phonetic analysis of speech corpora. Oxford: Wiley-Blackwell.
- Hewings, M. (2002) Pronunciation Tasks. A course for Preintermediate Students. C.U.P. Cambridge http://GLA.eblib.com/patron/FullRecord.aspx?p=351280.
- John Clark, J., Yallop, C. and Janet Fletcher (2007) An introduction to phonetics and phonology. 3rd ed. Malden, Mass: Blackwell Pub.
- Katamba, F. (1989) An introduction to phonology. London: Longman.
- Kent, R. D. and Read, C. (1992) The acoustic analysis of speech. San Diego: Singular Publishing Group.
- Knight, R.. A., (2012) Phonetics: a course book. Cambridge: Cambridge University Press
- Kuiper, K. and Allan, W.S. (2003). An Introduction to English Language. London: Macmillan Press LTD.
- Ladefoged, P. (1996) Elements of acoustic phonetics. 2nd ed. Chicago, Ill: University of Chicago Press.
- Ladefoged, P. (2001) A Course in Phonetics, 4th ed, Harcourt Brace
- Ladefoged, P. (2003) Phonetic data analysis: an introduction to fieldwork and instrumental techniques. Malden, Mass: Blackwell Pub.
- Ladefoged, P. (2005a) Vowels and consonants: an introduction to the sounds of languages. 2nd ed. Malden Mass: Blackwell Publishing.
- Ladefoged, P. (2011) A course in phonetics. 6th ed. Boston, Mass: Wadsworth/Cengage Learning.
- Lass, N. J., (1996) Principles of experimental phonetics. St. Louis: Mosby.
- Lass, R. (1984) Phonology: an introduction to basic concepts. Cambridge: Cambridge University Press.
- Laver, J. (1994) Principles of phonetics. Cambridge: Cambridge University Press.
- Lieberman, P. and Blumstein, S. E. (1988) Speech physiology, speech perception, and acoustic phonetics. Cambridge: Cambridge University Press.
- Lyons, J. (1995). Language and Linguistics: An Introduction. Great Britain: CUP
- M. Gareth Gaskell; consulting editors: Gerry Altman. [Et al.] (ed.) (2007) The Oxford handbook of psycholinguistics. Oxford: Oxford University Press.
- Martin J. Ball and Joan Rahilly (1999) Phonetics: the science of speech. London: Arnold.
- McMahon, A. M. S. (2002) An introduction to English phonology. Edinburgh: Edinburgh University Press.
- Michael Davenport and S. J. Hannahs (2010) Introducing phonetics and phonology. 3rd ed. London: Hodder Education.
- O’Connor, J. D. (1973) Phonetics. Harmondsworth: Penguin Books.
- O'Connor, J. D. and Arnold, G. F. (1973) Intonation of colloquial English: a practical handbook. 2nd ed. London: Longman.
- O’Connor, J. D. and Lewis, J. W. (1995) Studies in general and English phonetics: essays in honour of Professor J.D. O'Connor. London: Routledge.
- Odden, D. A. (2005) Introducing phonology. Cambridge: Cambridge University Press.
- Patricia Ashby (1995) Speech sounds. London: Routledge. Peng, B. L. (2013) Analyzing sound patterns: an introduction to phonology. Cambridge: Cambridge University Press.
- Pickett, J. M. (1980).The sounds of speech communication: a primer of acoustic phonetics and speech perception. Baltimore: University Park Press.
- Reetz, H. and Jongman, A. (2009) Phonetics: transcription, production, acoustics and perception. Malden, Mass: WileyBlackwell.
- Roach, P. (1992) Introducing Phonetics. England: Penguin English.
- Roach, P. (Peter J. (2009) English phonetics and phonology: a practical course. 4th ed. Cambridge, UK: Cambridge University Press.
- Rogers, H. (2000) The sounds of language: an introduction to phonetics. Harrow: Longman.
- Small, L. H. (1999) Fundamentals of phonetics: a practical guide for students. Boston: Allyn and Bacon.
- Spencer, A. (1996) Phonology: theory and description. Oxford: Blackwell Publishers.
- Trubetzkoy, N. S. (1969) Principles of Phonology. Berkley: University of California Press
- Van der Hulst, H. (ed.) (2014) Word stress: theoretical and typological issues. Cambridge: Cambridge University Press.
- Wells, J. C. (2006) English intonation: an introduction. Cambridge: Cambridge University Press
- Wells, J.C. (2000). The Longman Pronunciation Dictionary, $2^{\text {nd }}$ Ed, Longman. London
- Widdowson, H.G. (2000). Linguistics. Oxford: OUP
- Yule, G. (1997). The Study of Language. Cambridge: CUP


## Abbreviations and Acronyms

| alv | Alveolar | TU | Tone unit |
| :--- | :--- | :--- | :--- |
| Ar | Arabic | TS | Tonic syllable |
| $\mathrm{C}^{\mathrm{i}}$ | Initial consonant | H | Head |
| $\mathrm{C}^{\mathrm{f}}$ | Consonant | Pre-head |  |
| Con | English | PH |  |
| Eng | Rench |  |  |
| Fr | Pronunciation | Progressive |  |
| Reg | Short vowel |  |  |
| RP | Long vowel |  |  |
| Prog | V |  |  |
| VV |  |  |  |

Phonetic symbols

|  | Devoiced | - | Level |
| :---: | :---: | :---: | :---: |
| ł | Dark 1 | 1 | Falling |
| 1 | Syllabic 1 | / | Rising |
| ņ | Syllabic n | ^ | Rise-fall |
| w | Labialized | v | Fall-rise |
| $\mathrm{s}^{\text {w }}$ | Labialized s |  |  |
| $t^{j} d^{j}$ | Palatalized |  |  |

## Further readings

1. Burton-Roberts, Noel, Philip Carr and Gerary Docherty (eds) 2000. Phonological knowledge. Conceptual and empirical issues. Oxford: University Press.
2. Carr, Philip 1999. English phonetics and phonology. Oxford: Basil Blackwell.
3. Catford, J. C. 2001. A practical introduction to phonetics. 2nd edition. Oxford: University Press.
4. Crystal, David 2008. A Dictionary of linguistics and phonetics $6^{\text {th }}$ edition Blackwell Publishing.
5. De Lacy, Paul 2007. The Cambridge handbook of phonology. Cambridge University Press.
6. Fox, Anthony 2002. Prosodic features and prosodic structure. The phonology of supra-segmental. Oxford: University Press.
7. Gussmann, Edmund 2002. Phonology. Analysis and theory. Cambridge: University Press.
8. International Phonetic Assoc., 1999. Handbook of the International Phonetic Association. Cambridge: University Press.
9. Johnson, Keith 2002. Acoustic and auditory phonetics. 2nd edition. Oxford: Blackwell.
10. Keith Johnson (2012) Acoustic and auditory phonetics. 3rd ed. Malden, MA: Wiley-Blackwell. Available at: https://www.dawsonera.com/guard/protected/dawson.jsp?name=https://idp.gla. ac.uk/shibboleth\&dest=http://www.dawsonera.com/depp/reader/protected/exter nal/AbstractView/S9781444343076.
11.Ladefoged, Peter 2000. A course in phonetics. 4rd edition. New York: Harcourt Brace Jovanovich.
12.Ladefoged, Peter 2001. A course in phonetics. $4^{\text {th }}$ edition. University of California: Los Angeles.
13.Lass, Roger 1984. Phonology: an Introduction to basic concepts. Cambridge University Press.
11. McMahon, A. 2001. An introduction to English phonology. Edinburgh: University Press.
15.Iggy, R. and. Johnson, W. 1999. A course in phonology. Oxford: Basil Blackwell.


Figure 1.1 Human speech organs


Table 1.1 The English consonants

| Consonants | bilabial | labio- <br> dental | dental | alveolar | Palato- <br> alveolar | palatal | velar | glottal |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plosives | $\mathrm{p}, \mathrm{b}$ |  |  | $\mathrm{t}, \mathrm{d}$ |  |  | $\mathrm{k}, \mathrm{g}$ | $[\mathrm{r}]^{*}$ |
| Fricatives |  | $\mathrm{f}, \mathrm{v}$ | Ө, o | $\mathrm{s}, \mathrm{z}$ | $\int, 3$ |  |  | h |
| Affricates |  |  |  |  | $\mathrm{t} \int, \mathrm{d} 3$ |  |  |  |
| Nasals | m |  |  | n |  |  | y |  |
| Lateral |  |  |  | L |  |  |  |  |
| Approximants | w |  |  |  | r | j |  |  |


[^0]:    * These are the possible combinations of syllables, but there are a lot of restrictions.

