

# **English Phonetics**

**Suphakit Phoowong**

**Faculty of Humanities and Social Sciences**

**Buriram Rajabhat University**

**2014**

# **English Phonetics**

**Suphakit Phoowong**

**M.A. (Linguistics)**

**Faculty of Humanities and Social Sciences**

**Buriram Rajabhat University**

**2014**

## Preface

For eleven years, it has been being an outcome of my experiences in teaching the first year students in Bachelor's degree program in English at Buriram Rajabhat University (BRU). I have seen many different problems of the first year students' English pronunciation and I have kept on making an effort to do research on problems and guidelines on solving English students' pronunciation problems. This is intentionally the purpose of writing this textbook for the students who are taking the course of "**English Phonetics**". I am sure that it is useful for learners or students who are learning English phonetics or for those who are learning and teaching other related courses such as Linguistics, Introduction to Linguistics or English syntax. This textbook is divided into eight chapters organized according to the course description set by BRU and taught in my English Phonetics classes. Each chapter provides question reviews to express their idea and understanding. All eight chapters not only encourage English students to practice pronunciation skills but also help them develop listening and speaking skills.

Hopefully, this textbook will help learners or students to develop their pronunciation skills, use correct English, listen to and understand native speakers more or less, and they should be able to apply their knowledge in their daily life more correctly, efficiently and strategically than they were before.

Finally, I am very thankful to my senior lecturers, the heads of English program and Business English Program, and Buriram Rajabhat University that encourage me to write this textbook.

Suphakit Phoowong  
2014

## Table of Contents

		Pages
Preface.....		(1)
Table of Contents.....		(2)
List of Figures.....		(5)
Chapter 1	Speech sounds in English.....	1
	The speech sounds.....	1
	The production of speech sounds.....	2
	1. Phonetics.....	2
	2. Phonology.....	3
	Articulatory phonetics.....	3
	1. Vocal tract.....	3
	2. The articulators.....	4
	3. The organs of speech.....	6
	Summary.....	15
	Questions reviews.....	16
Chapter 2	The Description and Classification of Speech sounds.....	19
	Consonants.....	19
	1. The airstream mechanism.....	20
	2. Voicing.....	20
	3. Oral or Nasal (or Nasalized) sounds.....	20
	4. Place of articulation.....	20
	5. Manner of articulation.....	23
	6. The description of consonants.....	27
	Vowels.....	29
	1. Monophthongs.....	29
	2. The description of monophthongs.....	31
	3. Diphthongs.....	32
	4. The description of diphthongs.....	32
	5. Triphthongs.....	33

## Table of Contents (cont.)

		<b>Pages</b>
	Summary.....	34
	Questions reviews.....	35
Chapter 3	English Consonant Sounds.....	37
	Consonant sounds.....	37
	Producing consonant sounds.....	38
	Summary.....	76
	Question reviews.....	77
Chapter 4	English Vowel Sounds.....	79
	Vowel sounds.....	79
	1. Monophthongs.....	80
	2. Diphthongs.....	100
	Summary.....	114
	Question reviews.....	114
Chapter 5	The Syllable.....	117
	What is a syllable?.....	117
	Syllable structure.....	117
	Syllabic consonants.....	118
	Phonotactic patterns of English syllable.....	119
	Consonant clusters.....	121
	1. Initial consonant clusters.....	121
	2. Final consonant clusters.....	124
	Analysis of syllable structure.....	128
	1. Analysis of one-syllable words.....	128
	1. Analysis of two-syllable words.....	128
	Summary.....	128
	Question reviews.....	129
Chapter 6	Stress in English.....	131
	Stress in English.....	131
	1. Word stress.....	131

## Table of Contents (cont.)

		Pages
	2. Sentence stress.....	148
	Summary.....	152
	Question reviews.....	153
Chapter 7	Linking, Thought groups and Rhythm.....	155
	Linking.....	155
	1. Understanding vowels and consonants.....	156
	2. Types of linking.....	156
	Thought groups.....	159
	1. Reasons for making thought group division.....	159
	2. Grouping words in a thought group.....	159
	3. Examples of grouping thought groups.....	160
	Rhythm.....	161
	1. Rhythmic patterns.....	161
	2. Rhythmic pattern problems of sentence stress.....	162
	Summary.....	163
	Question reviews.....	163
Chapter 8	Intonation.....	165
	What is intonation?.....	165
	Tone language vs. Intonation in English.....	166
	Types of intonational meaning in English.....	167
	Pitch levels in English.....	167
	Tone groups.....	168
	Tonic syllable.....	170
	Basic intonation patterns.....	170
	1. Final intonation pattern.....	170
	2. Non-final intonation pattern.....	174
	Summary.....	177
	Question reviews.....	177
	Bibliography.....	179

## List of Figures

		Pages
Figure 1.1	The production of speech sounds.....	2
Figure 1.2	The main parts of the vocal tract.....	4
Figure 1.3	The articulators.....	4
Figure 1.4	The active articulators.....	5
Figure 1.5	The passive articulators.....	5
Figure 1.6	The source of air used in making sounds.....	6
Figure 1.7	The airstream mechanism: <i>egressive</i> and <i>ingressive</i> .....	7
Figure 1.8	The inside parts of the larynx from <i>front</i> to <i>back</i> .....	7
Figure 1.9	Open vocal cords (Voiceless sounds).....	8
Figure 1.10	Loosely-closed vocal cords (Voiced sounds).....	8
Figure 1.11	Tightly-closed vocal cords (glottal stops).....	9
Figure 1.12	The parts of pharyngeal cavity.....	10
Figure 1.13	The position of lips tightly held.....	10
Figure 1.14	The position of the <i>upper teeth</i> in contact with the lower lip.....	11
Figure 1.15	The position of the <i>upper teeth</i> in a light contact with the tip of tongue.....	12
Figure 1.16	The position of the <i>teeth ridge</i> in a light contact with the tip (blade) of tongue.....	12
Figure 1.17	Nasal tract blocked; oral sounds produced.....	13
Figure 1.18	Nasal tract open; oral tract blocked; <i>nasal sounds</i> produced.....	13
Figure 1.19	Nasal tract open; oral tract also open; <i>nasalized sounds</i> produced.....	14
Figure 1.20	State of the soft palate.....	14
Figure 1.21	The outline of organs of speech.....	15
Figure 2.1	Classifying English consonants according to the place of articulation.....	23
Figure 2.2	The plosive sounds in English.....	24
Figure 2.3	The affricate sounds in English.....	24
Figure 2.4	The nasal sounds in English.....	24

## List of Figures (cont.)

		Pages
Figure 2.5	The fricative sounds in English.....	25
Figure 2.6	The lateral sound in English.....	25
Figure 2.7	The frictionless continuant sound in English.....	25
Figure 2.8	The semi-vowel sounds in English.....	26
Figure 2.9	Classifying English consonant sounds according to manner of articulation.....	26
Figure 2.10	The vowel diagram.....	30
Figure 2.11	The vowel lip postures.....	31
Figure 2.12	Classifying English pure vowel sounds in terms of three factors...	32
Figure 3.1	Phonetic symbols of English Consonant sounds.....	38
Figure 3.2	The diagram for the sound /p/.....	38
Figure 3.3	The diagram for the sound /b/.....	40
Figure 3.4	The diagram for the sound /t/.....	41
Figure 3.5	The diagram for the sound /d/.....	43
Figure 3.6	The diagram for the sound /k/.....	44
Figure 3.7	The diagram for the sound /g/.....	45
Figure 3.8	The diagram for the sound /tʃ/.....	47
Figure 3.9	The diagram for the sound /dʒ/.....	48
Figure 3.10	The diagram for the sound /m/.....	50
Figure 3.11	The diagram for the sound /n/.....	51
Figure 3.12	The diagram for the sound /ŋ/.....	53
Figure 3.13	The diagram for the sound /l/: clear [l].....	54
Figure 3.14	The diagram for the sound /l/: dark [ɫ].....	55
Figure 3.15	The diagram for the sound /f/.....	57
Figure 3.16	The diagram for the sound /v/.....	58
Figure 3.17	The diagram for the sound /θ/.....	60
Figure 3.18	The diagram for the sound /ð/.....	61
Figure 3.19	The diagram for the sound /s/.....	63
Figure 3.20	The diagram for the sound /z/.....	65



## List of Figures (cont.)

		Pages
Figure 3.21	The diagram for the sound /ʃ/.....	66
Figure 3.22	The diagram for the sound /ʒ/.....	68
Figure 3.23	The diagram for the sound /h/.....	70
Figure 3.24	The diagram for the sound /r/.....	71
Figure 3.25	The diagram for the sound /w/.....	73
Figure 3.26	The diagram for the sound /j/.....	74
Figure 4.1	Phonetic symbols of English vowel sounds.....	80
Figure 4.2	Front vowel sounds.....	80
Figure 4.3	The diagram for making the sound /i:/.....	81
Figure 4.4	The diagram for making the sound /ɪ/.....	82
Figure 4.5	The diagram for making the sound /i:/.....	84
Figure 4.6	The diagram for making the sound /æ/.....	85
Figure 4.7	Central vowel sounds.....	86
Figure 4.8	The diagram for making the sound /ʌ/.....	87
Figure 4.9	The diagram for making the sound /ɜ:/.....	88
Figure 4.10	The diagram for making the sound /ə/.....	90
Figure 4.11	Back vowel sounds.....	92
Figure 4.12	The diagram for making the sound /ɑ:/.....	92
Figure 4.13	The diagram for making the sound /ɒ/.....	94
Figure 4.14	The diagram for making the sound /ɔ:/.....	95
Figure 4.15	The diagram for making the sound /ʊ/.....	97
Figure 4.16	The diagram for making the sound /u:/.....	98
Figure 4.17	Gliding vowel sounds towards [ɪ]:/eɪ, aɪ, ɔɪ/.....	100
Figure 4.18	The diagram for making the sound /eɪ/.....	101
Figure 4.19	The diagram for making the sound /aɪ/.....	102
Figure 4.20	The diagram for making the sound /ɔɪ/.....	104
Figure 4.21	Gliding vowel sounds towards [ʊ]:/aʊ, əʊ/.....	105
Figure 4.22	The diagram for making the sound /aʊ/.....	106
Figure 4.23	The diagram for making the sound /əʊ/.....	107

## List of Figures (cont.)

		<b>Pages</b>
Figure 4.24	Gliding vowel sounds towards [ə]: /ɪ ə, e ə, ʊ ə/.....	109
Figure 4.25	The diagram for making the sound /ɪ ə/.....	109
Figure 4.26	The diagram for making the sound /e ə/.....	111
Figure 4.27	The diagram for making the sound /ʊ ə/.....	112
Figure 5	An example of Syllable structure.....	118
Figure 6.1	Comparison of syllable-timed and stress-timed patterns.....	132
Figure 6.2	Comparison of stressed syllables with stress shift.....	135
Figure 6.3	The placement of the <i>primary</i> , <i>secondary</i> and <i>weak stresses</i> .....	137
Figure 6.4	Showing how weak and strong forms are pronounced.....	150
Figure 6.5	Showing weak form affected by the replacement of a vowel phoneme by either /ə/, /ɪ/, or /ʊ/.....	151
Figure 7.1	Showing the letters of English vowels and consonants.....	156
Figure 7.2	Showing the words ending and beginning with the letters and the sounds.....	156
Figure 7.3	Comparison of stress-timed and syllable-timed rhythm.....	162
Figure 8	Showing tone pitch in change of Cantonese and Thai languages...	166

# CHAPTER 1

## SPEECH SOUNDS IN ENGLISH

Regularly, we are in communication with sound. Without sound, communication can still go on by means of nodding a head, waving a hand, or drawing a picture, called *non-verbal communication*. Such communication can even be language without sound, that is, those who cannot hear use the language based on manual signals instead. Every language in communication, on the other hand, can still take place with sound, called *verbal communication*.--most of our messages we get from one to another were encoded in sounds and then decoded in meaning. Therefore, we can say that all languages in the world have spoken forms. Few languages have no written forms. In this chapter, we are going to focus on how speech sounds are described and how they are produced.

### **The speech sounds**

Language is a mainly used instrument of human communication. “Every language (Praromrat Jotikasthira, 1999: 1) has three important components: its grammar, its semantics (concerned with meaning), and its transmission systems (pronunciation for speech and orthography for writing).” It is clear that the language has an internal structure consisting of two sub-structures—sound and meaning. When speaking, we combine sounds together to make words meaningful. It is noted that because of a spoken language formed by sounds, the English language is examined with the sound system. To examine speech sounds, we can study how they are pronounced by the speech organs. Thus, it is very important to study English pronunciation through the functions of the various parts of these organs of speech.

## The production of speech sounds

How can we produce speech sounds? According to linguistics, we can find the way speech sounds are produced, which can be mainly divided into two sub-fields: **phonetics** and **phonology**.

### 1. Phonetics

“Phonetics (Zsiga, 2006: 13) studies how speech sounds are made, transmitted and perceived.” Phonetics is the study of the production, the transmission, and the perception of speech sounds, dealing with the characteristics of the specific sounds in a given language. In terms of phonetics, the study of human speech sound can be divided into three different ways: 1) **Articulatory Phonetics** is the study of how speech sounds are produced by the organs of speech; 2) **Acoustic Phonetics** is the study of how speech sounds are transmitted; and 3) **Auditory Phonetics** is the study of how speech sounds are heard. (See the figure 1.1)

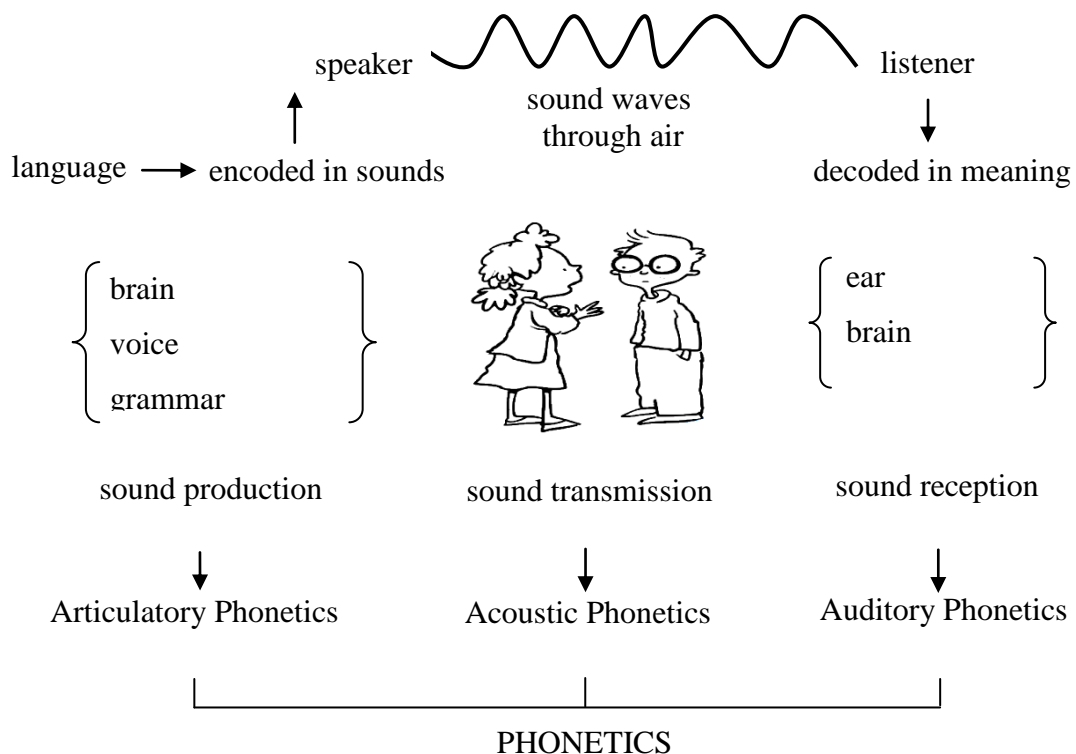


Figure 1.1 The production of speech sounds

Source: Pailin Yantrising (1999)

## 2. Phonology

“Phonology (Zsiga, 2006: 13) studies how languages organize sounds into different patterns.” Phonology is the study of different patterns of sounds in different languages, dealing with how sounds are combined together to form the different words. Thus, we can assume that “phonology is a grammar of phonetic patterns.” (<http://www.phon.ox.ac.uk/jcoleman/PHONOLOGY1.htm>).

According to the grammar of phonetic patterns, if the sounds are combined together with a grammatical sound order like this: /kɪp/, we will get a meaningful word: *kip* (sleep), but if they are combined together like this: /ɪkp/, we will get a meaningless word because of an ungrammatical sound order. However, if the sounds are rearranged like this: /pɪk/, we will get a meaningful word: *pick*, which means “to to choose somebody/something from a group of people or things” (Hornby, 2000: 990). Thus, we can assume that if some phonemes (vowel and consonant sounds), which mean “the smallest distinct sound units” (Matthews, 1997: 276), are organized with the differently grammatical patterns of sounds, we will get the differently meaningful words.

## Articulatory Phonetics

Primarily, our primary concern in this chapter is *Articulatory Phonetics*, in which the speech sounds can be easily examined and studied. The Articulatory Phonetics is one of three subfields in phonetics, dealing with how speech sounds are made by **the organs of speech**. All sounds we articulate when we speak (Roach, 2010) are the result of the flow of air coming up from the lungs and interfering with other speech organs. To study the production of speech sounds it needs to be familiar with the different parts of the vocal tract. These different parts are called **articulators**, which are now described.

### 1. The vocal tract

“The passage above the larynx through which air passes in the production of speech (Mathews, 1997: 397) is called **the vocal tract**.” “After passing through the larynx, the air (Roach, 2009: 8) goes through what we called the **vocal tract**, which ends at the mouth and nostrils; we call the part comprising the mouth the **oral cavity**

and the part that leads to the nostrils the **nasal cavity**.” Thus, it can be assumed that within the vocal tract there are mainly three connected cavities consisting of the **oral cavity**, the **nasal cavity**, and the **pharyngeal cavity**.

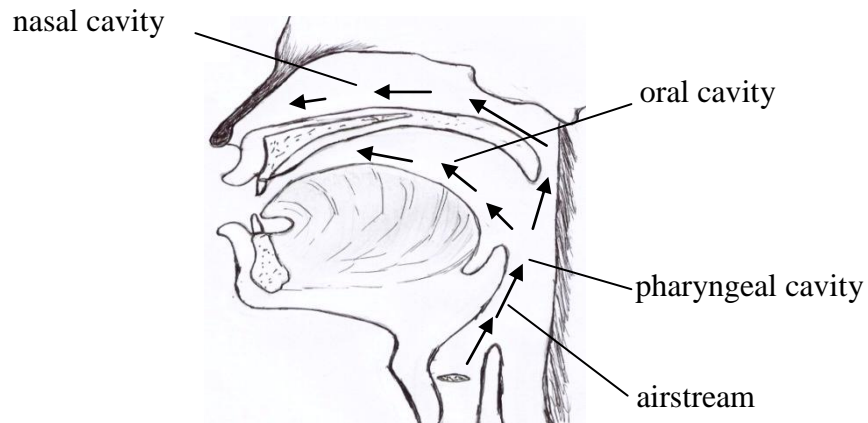


Figure 1.2 The main parts of the vocal tract

## 2. The articulators

“Any vocal organs used to form specific speech sounds: e.g., the upper and lower lips, as in the production of /p/ in *pit*, (Mathews, 1997: 26) are called the articulators.” Within the oral cavity, the articulators consist of the lower parts that are moveable and the upper parts that are immovable, which are mainly used to form speech sounds in English. Thus, the articulators can be assumed that there are two types, which are now described.

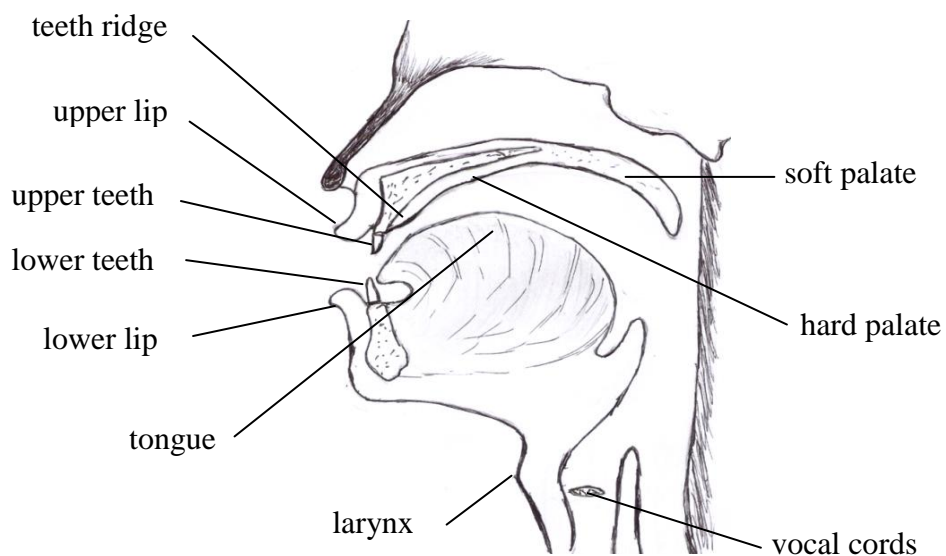


Figure 1.3 The articulators

## 2.1 The active articulators

The active articulators are the lower parts of the vocal cavity that are movable—comprising the lower lip and the tongue (tip, blade, front, center, back and root); these articulators can move to make contact with other articulators (passive articulators).

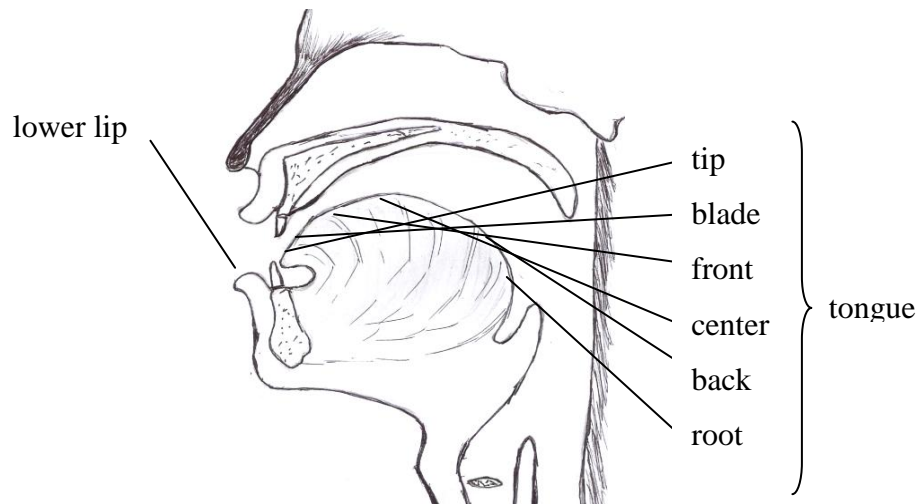


Figure 1.4 The active articulators

## 2.2 The passive articulators

The passive articulators are the upper parts of the vocal cavity that are immovable—comprising the upper lip, the upper teeth, the roof of the mouth (the teeth ridge, the hard palate and the soft palate), and the pharyngeal wall; these articulators cannot move to touch other articulators (active articulators).

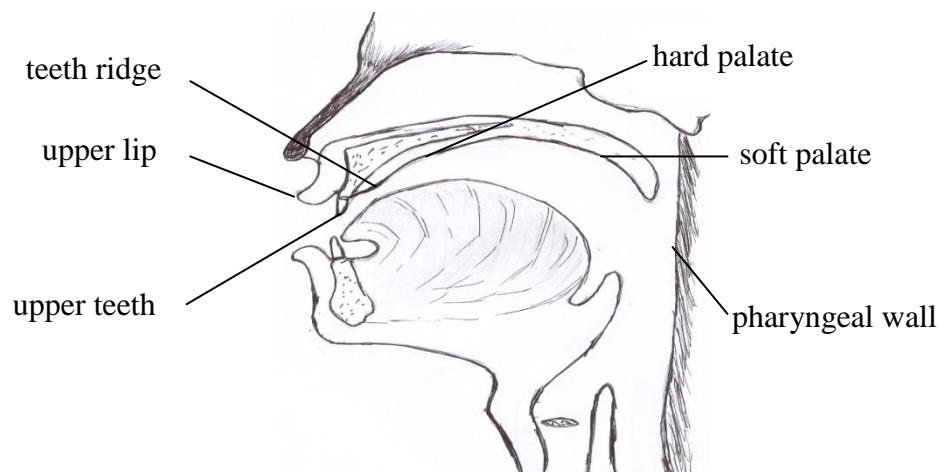


Figure 1.5 The passive articulators

### 3. The organs of speech

According to the articulatory phonetics, the articulators within the vocal tract consisting of active articulators and passive articulators, which are mainly used in the production of speech sounds, are called **the organs of speech**, which can be divided into three processes: *the airstream process*, *the phonatory process*, and *the articulatory process*.

#### 3.1 The airstream process

This process is the source of air used in making the sound—comprising **the lungs, the muscles of chest, and the trachea** (the windpipe). The function of the lungs (Sethi and Dhamija, 1999) is breathing under the action of the muscles the chest. When compressed by the muscle of chest, the lungs throw the air out, called *breathing out*; and when expanding, they draw the outside air in, called *breathing in*. In both cases, the airstream passes through the trachea.

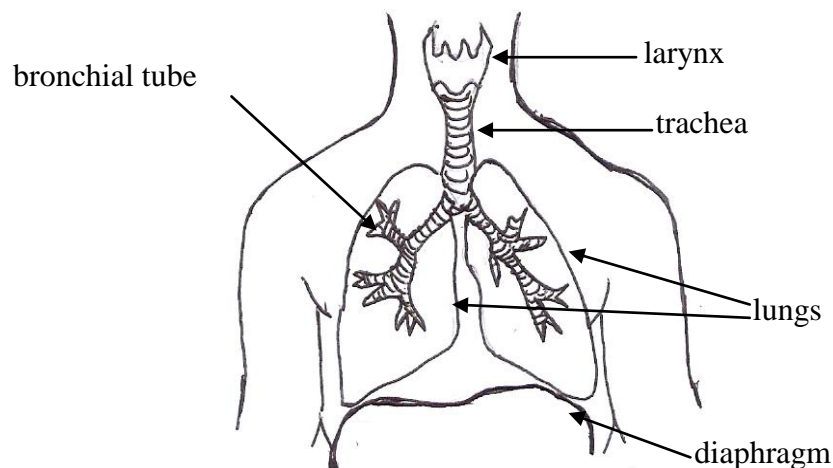


Figure 1.6 The source of air used in making sounds

From the airstream process, one thing to help produce speech sounds is airstream mechanism because we cannot produce the speech sounds without the movement of the airstream. Thus, it is necessary to study the airstream mechanism for the production of speech sounds. “This airstream mechanism initiated by the air from the lungs (Sethi and Dhamija, 1999: 2) is called **pulmonic egressive airstream mechanism** (pulmonic is the adjective form lungs, and egressive airstream means the stream of air going out of the lungs). English language and all other languages (also Thai language) use only the *pulmonic egressive airstream mechanism*.



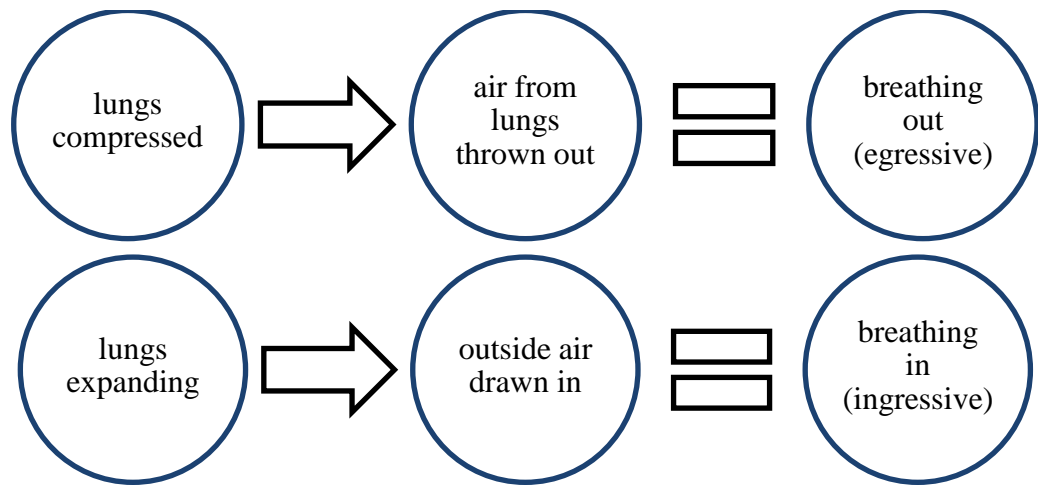


Figure 1.7 The airstream mechanisms: *egressive* and *ingressive*

### 3.2 The phonatory process

This process is the manner of vocal cords in the glottis used in making sound—comprising the **larynx** (voice box) and the **vocal cords**. “At the top of the trachea (Fasold and Connor-Linton, 2006: 14) is little box of cartilage, called the **larynx**,” whose front part is prominent in the neck, commonly known as **Adam’s apple**. Inside the larynx, there are two lip-like cartilages, which are horizontally situated from front to back, called the **vocal cords**. “At the back the vocal cords (Roach, 2010: 22) are attached to a pair of small cartilages called the arytenoids cartilages. If the arytenoids cartilages move, the vocal cords move too”, and they can be divided into three various positions, which are now described.

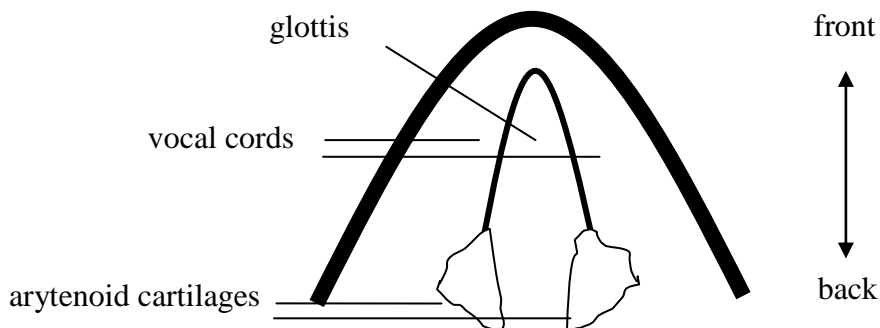


Figure 1.8 The inside parts of the larynx from *front* to *back*

3.2.1 The position of vocal cords in making the voiceless sounds: When we breathe normally, there is a wide opening between the vocal cords, called the **glottis**. When the vocal cords are widely open, they form a V-shaped opening across the larynx. Under such action, the air from the lungs can pass freely through the opened glottis without vibration. This is the position in making the **voiceless** sounds such as the initial sounds in the English words: *pot, ten, cat, chair, fan, thin, sun, sheet, hot*.

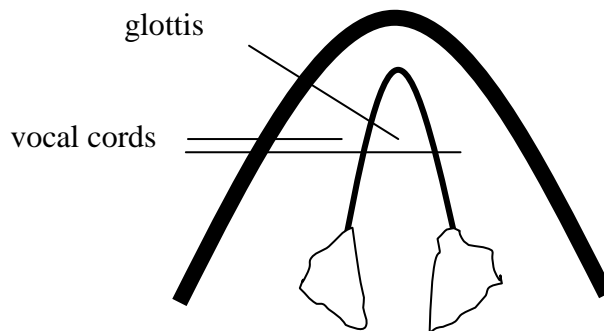


Figure 1.9 Open vocal cords (Voiceless sounds)

3.2.2 The position of vocal cords in making the voiced sounds: In making the voiced sounds, if the vocal cords are held loosely together, the air from the lungs passing through the narrow opening make the vocal cords vibrate. Such vibration causing 'hum' to the sounds produced is the position in making the **voiced** sounds such as the initial sounds in English words consonants: *bed, day, get, jail, man, no, red, late, van, this, zip, well*.

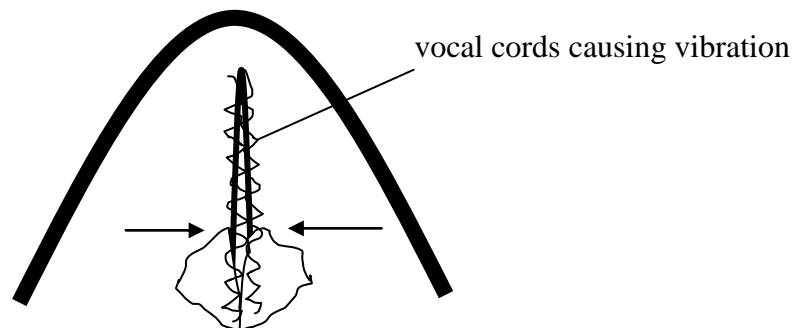


Figure 1.10 Loosely-closed vocal cords (Voiced sounds)

3.2.3 The position of vocal cords in making the glottal stops: When we eat food or drink water, the vocal cords are held tightly together to protect food or water from entering the windpipe. In the position of the closed glottis, the air from the lungs cannot pass through it. When the vocal cords are open suddenly, an explosive sound called **glottal stop** (also called **glottal plosive**) is produced. Such a glottal stop, resembling the sound of a mild cough, (Sethi and Dhamija, 1999: 4) may be found in a forceful articulation of words at beginning of a vowel sound as in some English words: *act*, *empty*, *uncle*. In some Englishmen's speech, a forceful articulation of the words can also occur at the end of sound **p**, **t**, or **k** as in the English words: *tip*, *let*, *back*.

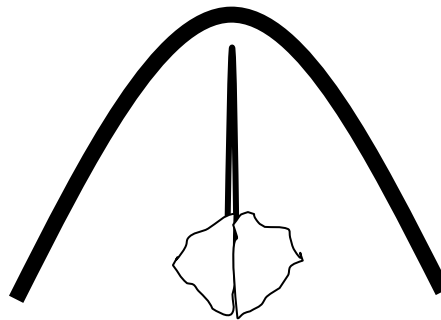


Figure 1.11 Tightly-closed vocal cords (glottal stops)

### 3.3 The articulatory process

Apart from both processes above, one important process that will help us produce speech sounds in English is the articulatory process. After the airstream from the lungs escapes through the windpipe in the neck, it comes up to the mouth. Within the mouth, it is further modified by various speech organs whose shapes in the vocal tract are very important factors in the production of speech sounds.

1.3.1 “The pharynx (Roach, 2009: 8) is a tube which begins just above the larynx. It is divided into two parts: one part being the back of the **oral cavity** and the other being the beginning of the way through the **nasal cavity**.” The shape and size of the pharyngeal cavity (Sathi and Dhamija, 1999) can be greatly contracted or expanded by the movement of the back of tongue, by the position of the soft palate, and by the raising or lowering of the larynx, each one affecting the quality of the sound produced.



Figure 1.12 The parts of pharyngeal cavity

1.3.2 The lips play an important role in producing certain sounds in English. The positions the lips are used in producing the sounds may be held together, kept in contact, or held apart in various ways, which are now described below:

1) If the lips are tightly held together, their position can be assumed in the following manners: (1) The lips are completely held together, called *bilabial stops*, as in producing the sounds /**p**/ and /**b**/ at the beginning of the words: ***p**ick*, and ***b**ig*; and (2) The lips are tightly pressed together by allowing the air to pass through the nose, called *bilabial nasal*, as in producing the sound /**m**/ at the beginning of the word: ***m**an*.

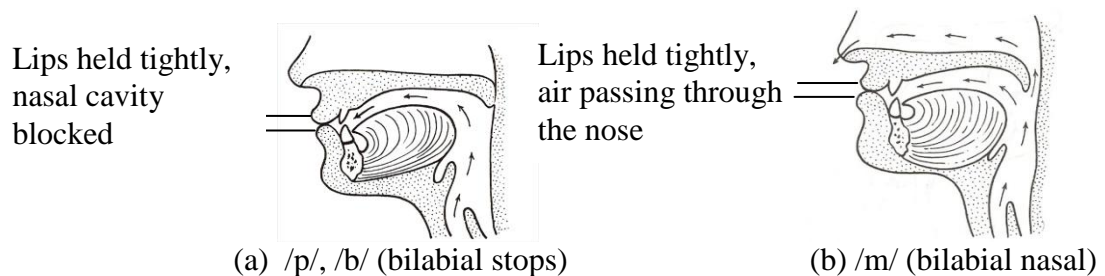


Figure 1.13 The position of lips tightly held

(Sethi & Dhamija, 1999: 93 & 103)

2) If the lips are held apart, their positions (Varshney, 1995) may be described in the following manners:

2.1) The lips are held apart in a spread position as in the vowel sound /i:/ in the word *free*.

2.2) The lips are held in a neutral position, lowering the lower

jaw as in the vowel sound /e/ in the word *met*.

2.3) The lips are held in an open position, in which they are held wide apart without rounding, as in the vowel sound /ɑ:/ in the word *far*.

2.4) The lips are held in a high rounded position as in the vowel sound /u:/ in the word *food*;

2.5) The lips are held in a low rounded position as in the vowel sound /ɒ/ in the words *pot*, and

2.6) The lips held in a rounded position produce the initial consonant sound /w/ in the word *win*, called *labio-velar*.

1.3.3 The teeth consisting of *upper teeth* and *lower teeth* are shown at the front of the mouth, just behind the lips, described as follows:

1) If the *upper teeth* are in contact with the lower lip, the sounds /f/ and /v/ at the beginning of the words *fan*, and *van* are produced, called *labio-dental*.

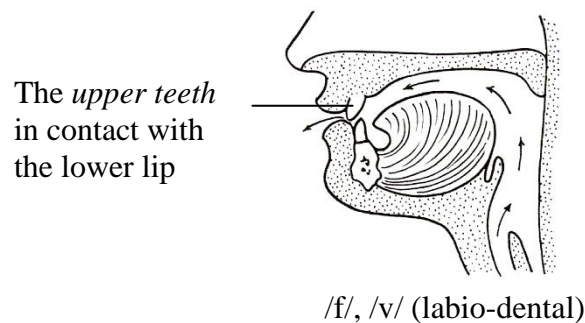


Figure 1.14 The position of the *upper teeth* in contact with the lower lip (Sethi & Dhamija, 1999: 109)

2) If the upper (front) teeth are in a light contact with the tip of tongue, the sounds /θ/ and /ð/ at the beginning of the words *think*, and *that* are produced, called *dental*.

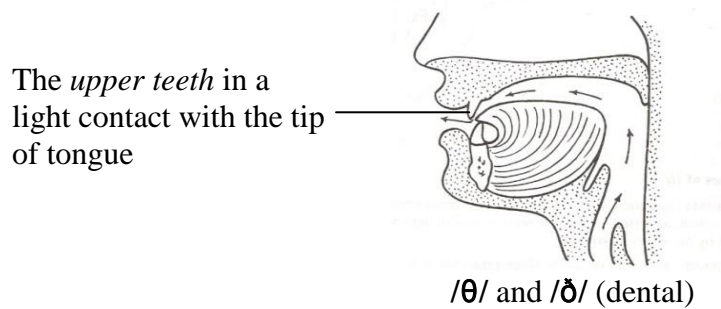


Figure 1.15 The position of the *upper teeth* in a light contact with the tip of tongue (Sethi & Dhamija, 1999: 110)

1.3.4 The teeth ridge (also called the **alveolar ridge**) is just behind the upper teeth. We can feel its surface with the tip of tongue. The sounds made with the tip (blade) of tongue touching the teeth ridge as in the sounds /t/, /d/, /n/, /l/, /s/, /z/ at the beginning of the words *ten*, *day*, *no*, *let*, *sip*, and *zip* are called **alveolar**.

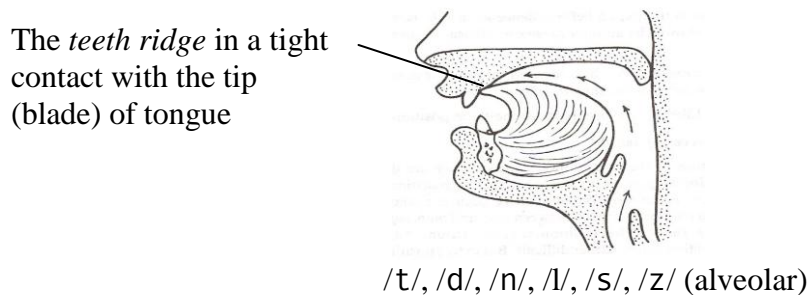
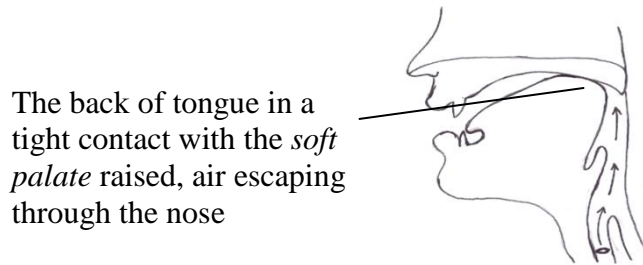


Figure 1.16 The position of the *upper teeth* in a light contact with the tip of tongue (Sethi & Dhamija, 1999: 96)

1.3.5 The hard palate (also called *the roof of the mouth*) is formed by a hard bony structure, lying immediately behind the teeth ridge. We can feel its smooth curved surface with the front of tongue. The sound made with the front of tongue touching the hard palate as is the sound /j/ at the beginning of the word *yes* is called **palatal**.

1.3.6 The soft palate (or velum) is the muscular flap that can be raised to touch the pharyngeal wall, blocking the nasal cavity so that air cannot pass through the nose. We can use the back of tongue to feel its surface at the back of the mouth.

When the soft palate is raised, air cannot escape through the nose; it can escape only through the mouth, and therefore, the sounds produced in this state of the soft palate are called *oral* sounds. The sounds made with the back of tongue touching the soft palate as in the sounds /k/, /g/ at the beginning of the words *key* and *get* are called *velar stops*.



/k/, /g/ (**velar stops**).

Figure 1.17 Nasal tract blocked; oral sounds produced

When it is lowered, the air can pass through the nose, and therefore, the sounds produced in this state of the soft palate are called *nasal* sounds. The sound made with the back of tongue touching the soft palate, allowing air to escape through the nose such as /ŋ/ at the end of the word *sing* is called *velar nasal*, and the sound made with the lips tightly held together, allowing the air to escape through the nose as in the sound /m/ at the beginning of the word: *my* is called *bilabial nasal*.

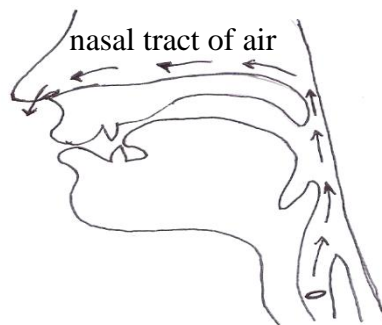


Figure 1.18 Nasal tract open; oral tract blocked; *nasal sounds* produced

Herein if there is no closure at any point in the oral tract and in the nasal tract, air can pass through the mouth as well as the nose. The sounds at the same time made, allowing air to escape through both the mouth and the nose are called *nasalized sounds*, as in the English words *hand* and *man*.

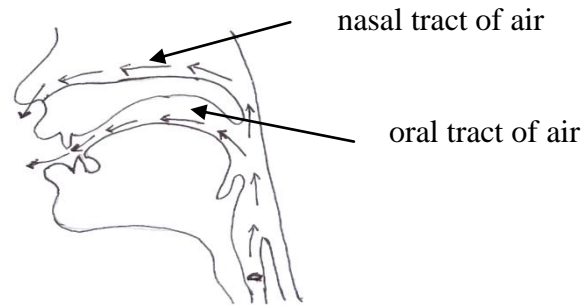


Figure 1.19 Nasal tract open; oral tract also open; *nasalized sounds* produced

We can summarize the state of the soft palate, which is (Sethi & Dhamija, 1999) represented below:

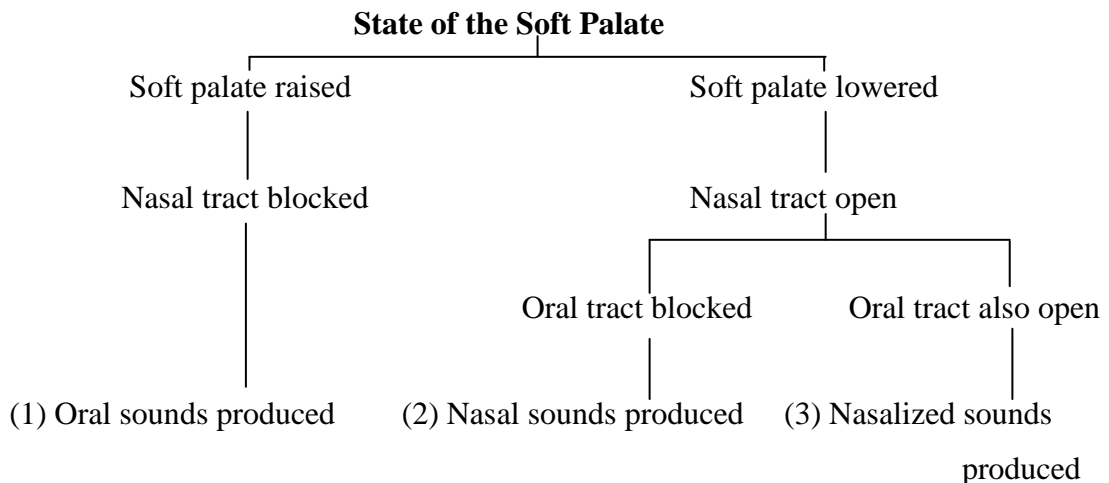


Figure 1.20 State of the soft palate

Source: Sethi & Dhamija (1999)

1.3.7 At the lower end of the soft palate there is a small appendage hanging down that is known as the **uvula**.

1.3.8 The most flexible organ of speech is known as the **tongue** (see the figure 1.4) which has the specific names for different shapes and positions forming the lower surface of the vocal tract. The **tip** and **blade** of the tongue are the most mobile parts. Behind the blade is what is technically called the **front** of the tongue. The remainder of the body of the tongue may be divided into the **center**, which partly



beneath the hard palate and partly beneath the soft palate, the **back**, which is beneath the soft palate, and the **root**, which is opposite the back wall of the pharynx.

As all mentioned above, we can summarize the outline of organs speech used in the production of speech sounds as follows:

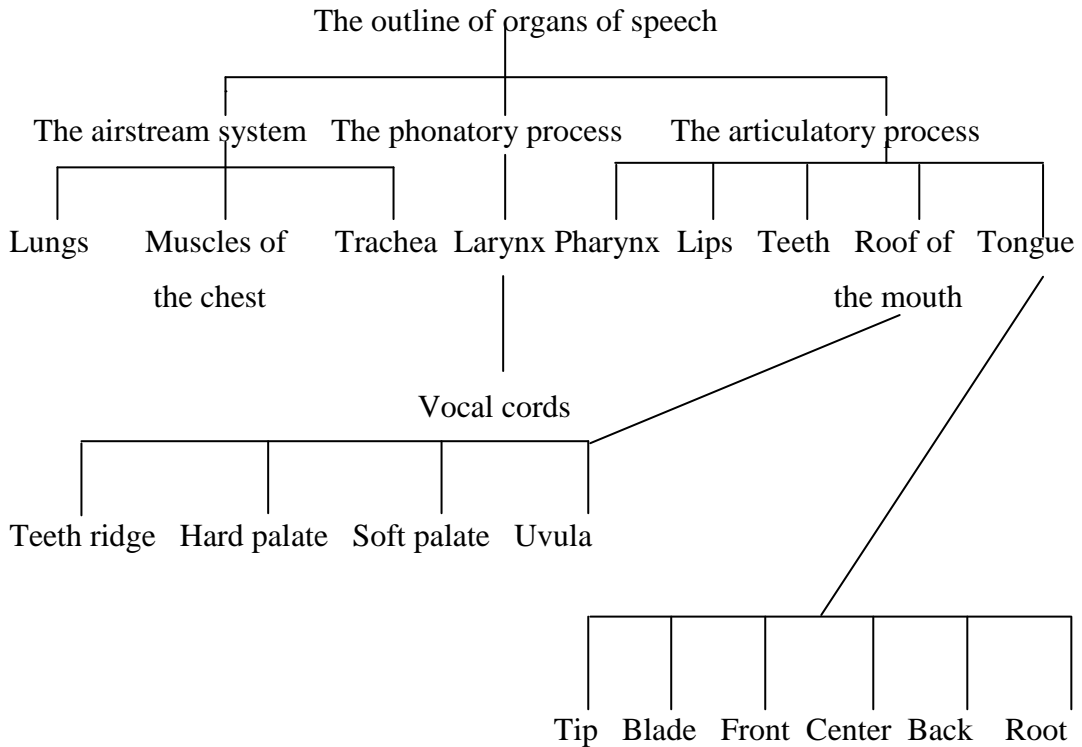


Figure 1.21 The outline of organs of speech

Source: Sethi & Dhamija (1999)

## Summary

In the production of speech sounds, as all mentioned above, we can summarize that the study of how speech sounds are produced can be mainly divided into two different ways: **Phonetics** is the study of how speech sounds are made, transmitted and perceived; and **Phonology** is the study of how languages organize sounds into different patterns.

According to Phonetics, we can say that the speech sounds can be studied and examined through three different ways: 1) **Articulatory phonetics** is the study of how speech sounds are produced by the organs of speech; 2) **Acoustic phonetics** is the

study of how speech sounds are transmitted, and **Auditory phonetics** is the study of how speech sounds are heard as well as mediated by ear, auditory nerve and brain.

In terms of the articulatory phonetics, we can conclude that it is the study of how speech sounds are produced by **the organs of speech**, mainly divided into three processes: 1) **The airstream process** is the study of how air are produced in making the sound; 2) **The phonatory process** is the study of how vocal cords in the glottis function in making sound; and 3) **The articulatory process** is the study of how speech sounds are produced within the mouth, modified by various speech organs whose shapes in the vocal tract are very important factors in the production of speech sounds. Inside the vocal tract, there are two articulators that can be used to form sounds: 1) **The active articulators**: *lower lip, lower teeth and tongue*; and 2) **the passive articulators**: *upper lip, upper teeth, teeth ridge, hard palate, soft palate, and uvula*.

### Question reviews

Answer the following questions.

1. What is Phonetics and what are its main subfields?
2. What are the differences between phonetics and phonology?
3. What are organs of speech? Explain their processes briefly as follows:
  - 3.1 The airstream process
  - 3.2 The phonatory process
  - 3.3 The articulatory process
4. What is the organ of speech that is the most flexible?
5. What is the airstream mechanism initiated by the air moving out from the lungs, mainly used for the production of speech sounds, called?
6. What is the front part of the larynx that is prominent in the neck commonly called?
7. Describe the characteristics of the vocal cords according to their position briefly as follows:
  - 7.1 Voiceless sounds
  - 7.2 Voiced sounds
  - 7.3 Glottal positive sounds

8. What is the difference between voiceless sounds and voiced sounds?
9. Explain the state of soft plate with the following topics briefly:
  - 9.1 oral sounds produced
  - 9.2 nasal sounds produced
  - 9.3 nasalized sounds produced
10. Summarize the parts of oral tracts in the following:
  - 10.1 Draw the facial diagram of the part of vocal tracts.
  - 10.2 Identify the names of active articulators and passive articulators.

# CHAPTER 2

## THE DESCRIPTION AND CLASSIFICATION OF SPEECH SOUNDS

In chapter 1 we discussed how speech sounds are produced. Normally, when we produce speech sounds, we intend them to be transmitted and heard. In this chapter we will talk about the classification of speech sounds in the articulatory terms that we can describe how the organs of speech act in order to produce given sounds. The sounds we will classify are ‘**consonants**’ and ‘**vowels**’ that are best classified in terms of their articulation respectively.

### **Consonants**

What are consonants? And how are they classified and described? Do you know the answers? Phonetically, consonants (Crystal D., 1991) can be defined as “the sounds made by closure or narrowing in the vocal tract so that the airflow is either completely blocked, or so restricted that audible friction is produced.”

In order to produce consonants, the airstream through the vocal tract must be obstructed in some way. Consonants can therefore be classified by the articulations of speech sounds consisting of 1) **the airstream mechanism**; 2) **voicing**; 3) **the place of articulation**; and 4) **the manner of articulation**. We can classify and describe them by answering the following questions:

1. Is the airstream given by lungs or by other organs?
2. Is the air forced out or drawn inwards?
3. Do the vocal cords vibrate or not?
4. Is the soft plate raised or lowered?
5. At what place does the articulation occur?
6. What is the manner of articulation?

(Sethi and Dhamija, 1999)

### 1. The airstream mechanism

From the questions (1) and (2), for all the sounds of languages, the airstream is given by the lungs, and the air is forced *out*. Such action is called *pulmonic egressive airstream mechanism*. In producing English consonants, the air is forced out from the lungs.

### 2. Voicing

From the question (3), if the vocal cords vibrate, the sound is **voiced**; if they do not, it is **voiceless**. They are as follows:

2.1 Voiced: There are 15 consonant sounds: /b,d, g, dʒ, m, n, ŋ, l, v, ð, z, ʒ, r, w, j/

2.2 Voiceless: There are 9 consonant sounds: /p,t, k,tʃ, f,θ, s,ʃ, h/.

### 3. Oral or Nasal (or Nasalized) sounds

From the question (4), if the soft palate is raised, only **oral sounds** can be produced; if it is lowered, there is no such closure, and therefore either **nasal** or **nasalized sounds** can be produced.

### 4. Place of articulation

From the question (5), the place of articulation is determined by the passive (upper) articulator and active (lower) articulators. In this section, we discuss the major places of articulation, which are now described.

4.1 Bilabial: /p/, /b/, /m/

The active articulator is *the lower lip* and the passive articulator *the upper lip*. When we produce /p/, /b/, /m/ as in *pick* /pɪk/, *buy* /baɪ/, and *man* /mæn/, we articulate by bringing both lips together. These sounds therefore are called bilabial.

4.2 Labio-dental: /f/, /v/

The active articulator is *the lower lip* and the passive articulator *the upper teeth*. When we produce /f/ and /v/ as in *fan* /fæn/ and *van* /væn/, we articulate these sounds by touching the bottom lip to the upper teeth. These sounds are therefore called **labio-dental**, *labio-*referring to lips and *dental* to teeth.

#### 4.3 Dental: /θ/, /ð/

The active articulator is *the tip or blade of the tongue* and the passive articulator *the upper teeth*. When we produce /θ/ and /ð/, which in ordinary spelling these sounds are represented by *th*, as in *think* /θɪŋk/ and *that* /ðæt/, we articulate these sounds by touching the tip of the tongue to the upper teeth. These sounds are therefore called **dental**. To articulate these sounds; however, some speakers insert the tip of the tongue between the upper and lower teeth, called **inter-dental** (between the teeth).

#### 4.4 Alveolar: /t/, /d/, /n/, /s/, /z/, /l/

The active articulator is *the tip or blade of the tongue* and the passive articulator *the teeth ridge*. When we produce /t/, /d/, /n/, /s/, /z/, and /l/ as in *ten* /tɛn/, *die* /daɪ/, *night* /naɪt/, *sip* /sɪp/, *zip* /zɪp/, and *lie* /laɪ/, we articulate these sounds by raising the tip of the tongue or the blade of the tongue to the teeth ridge or almost to the teeth ridge. These sounds are therefore called **alveolar**. You should feel your tongue touch or almost touch the teeth ridge as you produce the first sounds in these above-mentioned words.

#### 4.5 Post-alveolar: /r/ (BrE)

The active articulator is *the tip of the tongue* and the passive articulator *the back of the teeth ridge*. When we produce /r/ as in *red* /rɛd/, we articulate this sound by using the tip of the tongue to tap against the teeth ridge (or just behind it) several times. It is the commonest variety of the **r**-sound in British English accent. This sound is therefore called **post-alveolar**.

#### 4.6 Retroflex: /r/ (AmE)

The active articulator is *the tip of the tongue* and the passive articulator *the back of the teeth ridge*. When we produce /r/ as in *right* /raɪt/, we articulate this sound by curling the tip of the tongue back behind the teeth ridge. In that case the /r/ is called a **retroflex** sound. In general, the variety of this **r**-sound is found in the American English accent. Speakers who pronounce /r/ in the middles or at the ends of words may also have retroflex consonants with the tip of the tongue raised in *bird* /bɜːrd/ and *hear* /hɪər/.

## 4.7 Palato-alveolar: /tʃ/, /dʒ/, /ʃ/, /ʒ/

The active articulator is *the tip, blade and front of the tongue* and the passive articulator *the teeth ridge, and hard palate*. The sounds /tʃ/, /dʒ/, /ʃ/, and /ʒ/ as in *chair* /tʃeə/, *jail* /dʒeɪl/, *shop* /ʃɒp/, and *vision* /ˈvɪʒən/ are produced by the simultaneous articulators, that is, the tip of your tongue may be down behind the lower front teeth, or it may be up near the teeth ridge, but the blade of your tongue is close to the teeth ridge, and the front of the tongue is always raised towards the hard palate. These sounds are therefore called **palato-alveolar**.

## 4.8 Palatal: /j/

The active articulator is *the front of the tongue* and the passive articulator *the hard palate*. When we produce /j/ as in *yes* /jes/, we articulate this sound by raising the front of tongue to a point on the hard palate just behind the teeth ridge. This sound is therefore called **palatal**.

## 4.9 Velar: /k/, /g/, /ŋ/

The active articulator is *the back of the tongue* and the passive articulator *the soft palate*. The sounds /k/, /g/, and /ŋ/ as in *king* /kɪŋ/, *got* /gɒt/, and *sing* /sɪŋ/ are produced by raising the back of the tongue to the soft palate or **velum**. These sounds are therefore called **velar**.

## 4.10 Glottal: /h/

The articulators for the glottal sounds are the two *vocal cords*. The sound /h/ as in *house* /haʊs/ is produced by an obstruction, or a narrowing causing friction, but not by vibration, between the vocal cords. Its sound is from the flow of air through the open glottis. This sound is therefore called **glottal**.

## 4.11 Labio-velar: /w/

The articulators are *the two lips and the back of the tongue* and the passive articulator *the soft palate*. The sound /w/ as in *wet* /wet/ is produced by making the lips rounded, and at the same time the back of the tongue is raised towards the soft palate or velum. This sound is therefore called **labio-velar**.

Active articulators	Passive articulators	Places of articulation	Consonant sounds
lower lip	upper lip	bilabial	/p/, /b/, /m/
lower lip	upper teeth	labio-dental	/f/, /v/
tip or blade of tongue	upper teeth	dental	/θ/, /ð/
tip or blade of tongue	teeth ridge	alveolar	/t/, /d/, /n/, /s/, /z/, /l/
tip of tongue	back of teeth ridge	post-alveolar	/r/ ( <i>BrE</i> )
tip of tongue curled back	back of teeth ridge	retroflex	/r/ ( <i>AmE</i> )
tip, blade, front of tongue	teeth ridge and hard palate	palato-alveolar	/tʃ/, /dʒ/, /ʃ/, /ʒ/
front of tongue	hard palate	palatal	/j/ (y)
back of tongue	soft palate	velar	/k/, g/, /ŋ/
glottis (vocal cords)	glottis (vocal cords)	glottal	/h/
lower lip and back of tongue	upper lip and soft palate	labio-velar	/w/

Figure 2.1 Classifying English consonants according to the place of articulation

Source: adapted from Sethi & Dhamija (1999)

### 5. Manner of articulation

From the question (6), the manner of articulation specifies the types of closure or narrowing involved in the production of a sound. The principal terms for these particular types of closure or narrowing, all of which are required in the description of English consonants as follows:

#### 5.1 Plosives : /p/, /b/, /t/, /d/, /k/, /g/

There is a complete closure of articulators so that the airstream cannot escape through the mouth. The air blocked behind the closure explodes when the closure is suddenly released, e.g. the sounds /p/, /b/, /t/, /d/, /k/, and /g/.

These sounds are called **plosives** (are also called **stops** because the air are stopped completely in the oral tract for a brief period).



Manner of articulation:		plosives		
Place of articulation:		bilabial	alveolar	velar
Voicing:	voiceless	/p/	/t/	/k/
	voiced	/b/	/d/	/g/

Figure 2.2 The plosive sounds in English

## 5.2 Affricates: /tʃ/, /dʒ/

There is a complete closure followed immediately by a gradual release. As in the case of plosives, the sounds /tʃ/ and /dʒ/ that are produced by a complete closure followed suddenly by a gradual release are called **affricates**.

Manner of articulation:		affricates		
Place of articulation:		palato-alveolar		
Voicing:	voiceless	/tʃ/		
	voiced	/dʒ/		

Figure 2.3 The affricate sounds in English

## 5.3 Nasals: /m/, /n/, /ŋ/

There is a complete closure in the oral tract only; the nasal tract remaining open. The sounds /m/, /n/, and /ŋ/ are produced by a complete closure in the oral tract; the soft palate is lowered and the air flows freely through the nose. These sounds are therefore called **nasals**.

Manner of articulation:		nasals		
Place of articulation:		bilabial	alveolar	velar
Voicing:	Voiced	/m/	/n/	/ŋ/

Figure 2.4 The nasal sounds in English

## 5.4 Fricatives: /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, /h/

There is a close approximation of two articulators so that airstream escaping through narrowing is so partially obstructed that it causes audible friction. The sounds /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, and /h/ are produced when the air passes through a narrow gap between two articulators, it causes audible friction. These sounds are therefore are called **fricatives**.

Manner of articulation:		fricatives				
Place of articulation:		Labio-dental	dental	alveolar	palato-alveolar	glottal
Voicing:	voiceless	/f/	/θ/	/s/	/ʃ/	/h/
	voiced	/v/	/ð/	/z/	/ʒ/	

Figure 2.5 The fricative sounds in English

### 5.5 Lateral: /l/

There is a partial closure between one or both sides of the tongue and the roof of the mouth.) There is obstruction of airstream at a point along the center of the oral tract with a partial closure, so that the airstream can escape on one or both sides of the tongue and it can pass continuously. This sound is therefore called **lateral**.

Manner of articulation:		lateral
Place of articulation:		alveolar
Voicing:	voiced	/l/

Figure 2.6 The lateral sound in English

### 5.6 Frictionless continuant (or Approximant) : /r/

There is an intermittent closure: a narrowing is made in the mouth but the narrowing is not quite enough to cause friction. In producing the sound /r/ the articulators do not come so close together; there is no audible friction. The sound in which there is no stoppage in the oral tract is continuant. This sound is therefore called **frictionless continuant**, now more often called an **approximant**.

Manner of articulation:		lateral
Place of articulation:		post-alveolar
Voicing:	voiced	/r/

Figure 2.7 The frictionless continuant sound in English

### 5.7 Semi-vowels: /w/, /j/

There is a narrowing is made in the mouth but the narrowing is not quite enough to cause friction. Semi-vowels are rapid vowel glides within the same syllable in much the same way as diphthongs are. In this case, they function as consonants; there are two sounds: /w/ and /j/ produced with little or no obstruction of the airstream in the mouth. The articulations represent only rapid glides to a following vowel: Thus, /w/ in *wet* is a glide starting from /u:/ region and /j/ in *yes* is a glide starting from /i:/ region. These sounds are therefore called **semi-vowels**. These sounds are sometimes called **Glides** (เสียงเลื่อน).

Manner of articulation:		semi-vowels	
Place of articulation:		labio-velar	palatal
Voicing:	voiced	/w/	/j/

Figure 2.8 The semi-vowel sounds in English

As mentioned above we can summarize the classification of the consonants in English on the basis of the manner of articulation as shown here:

Manner of articulation	Structure involved	Consonant sounds
Plosives	Complete closure in mouth, air cannot escape through the mouth	/p/, /b/, /t/, /d/, /k/, /g/
Affricates	Complete closure in mouth, then followed suddenly by gradual release	/tʃ/, /dʒ/
Nasals	Complete closure in mouth, air passes freely through nose	/m/, /n/, /ŋ/
Fricatives	Narrowing, resulting audible friction	/f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, /h/
Lateral (approximant)	Partial closure in the centre of mouth, air passes over sides of tongue	/l/
Frictionless continuant (approximant)	Slight narrowing, not enough to cause friction	/r/
Semi-vowels (glides)	Slight narrowing, not enough to cause friction	/w/, /j/

Figure 2.9 Classifying English consonant sounds according to manner of articulation

Source: adapted from Sethi & Dhamija (1999)

## 6. The description of consonants

At the beginning of this chapter, we can describe some of consonant sounds in the terms listed in six points in the form of questions. Under each of those six points, we now attempt to give the description of some consonants as follows:

### 6.1 The sound /p/

The sound /p/ represented by the letter *p* in English word *pick* can be described under six points as shown here:

6.1.1 The airstream is *pulmonic*.

6.1.2 The air is forced out. The airstream is *egressive*.

6.1.3 The vocal cords do not vibrate. The sound is *voiceless*.

6.1.4 The soft palate is raised. The sound is *oral*, not *nasal*.

6.1.5 The passive articulator takes place at *the upper lip*. The active articulator is *the lower lip*. The sound is *bilabial*.

6.1.6 There is a complete closure in the mouth. The sound is therefore called *plosive*.

### 6.2 The sound /k/

The sound /k/ represented by the letter *c* in the English word *cat* can be described under six points as shown here:

6.2.1 The airstream is *pulmonic*.

6.2.2 The air is forced out. The airstream is *egressive*.

6.2.3 The vocal cords do not vibrate. The sound is *voiceless*.

6.2.4 The soft palate is raised. The sound is *oral*, not *nasal*.

6.2.5 The passive articulator takes place at *the soft palate*. The active articulator is *the back of the tongue*. The sound is therefore called *velar*.

6.2.6 There is a complete closure in the mouth. The sound is therefore called *plosive*.

### 6.3 The sound /tʃ/

The sound /tʃ/ represented by the letter *ch* in English word *chair* can be described under six points as shown here:

6.3.1 The airstream is *pulmonic*.

6.3.2 The air is forced out. The airstream is *egressive*.

6.3.3 The vocal cords do not vibrate. The sound is *voiceless*.

6.3.4 The soft palate is raised. The sound is *oral*, not *nasal*.

6.3.5 The passive articulator takes place at *the teeth ridge* and *the hard palate*. The active articulator is *the tip, blade* and *front of the tongue*. The sound is therefore *palato-alveolar*.

6.3.6 There is a complete closure in the mouth, followed immediately by a gradual release. The sound is therefore *an affricate*.

#### 6.4 The sound /n/

The sound /n/ represented by the letter *n* in the English word *know* can be described under six points as shown here:

6.4.1 The airstream is *pulmonic*.

6.4.2 The air is forced out. Therefore, the airstream is *egressive*.

6.4.3 The vocal cords vibrate. The sound is therefore *voiced*.

6.4.4 The soft palate is lowered. The sound is therefore *nasal*, not *oral*.

6.4.5 The articulation takes place at the teeth ridge. The active articulator is *the tip or blade of the tongue*. The sound is therefore *alveolar*.

6.4.6 There is a complete closure in the mouth; the air passes out through the nose only. The sound is therefore a *nasal*.

In four descriptions given above, we have seen that the answers to questions (1) and (2) are *pulmonic* and *egressive*. With regard to all English sounds we can take these two answers. Besides, for the answer to question (4) the soft palate is raised or lowered—oral or nasal sounds. Thus, in the classification and the description of English consonant sounds, questions (1), (2), and (4) need not be asked.

It is possible to answer questions (3), (5) and (6) in just three term labels to English consonants—*voicing*; *place of articulation*; and *manner of articulation* as follows:

/p/ as in <i>pick</i>	=	voiceless bilabial plosive
/k/ as in <i>cat</i>	=	voiceless velar plosive
/tʃ/ as in <i>chair</i>	=	voiceless palato-alveolar affricate
/n/ as in <i>know</i>	=	voiced alveolar nasal

## Vowels

Phonetically, vowels (David, 1991) can be defined as the sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible friction. In such a way, vowels are a tone or a “hum”, produced from the glottis, with the vocal cords normally vibrating (because vowels are normally voiced.). In this section, English vowels can be classified into monophthongs, diphthongs, and triphthongs.

### 1. Monophthongs

A monophthong is a pure vowel sound. In classifying the pure vowel, we can describe it in terms of three factors: 1) **the tongue height**—*high, mid, low*; 2) **the part of the tongue raised**—*front, central, back*; and 3) **the lip-position**—*rounded, and unrounded: spread, neutral*.

#### 1.1 The tongue height

The body of the tongue can be moved up or down within the mouth, but only up or down to a certain point, in order to produce vowels. There are three terms of the tongue-height classified as follows:

1.1.1 High—body of the tongue is moved up.

1.1.2 Mid—body of the tongue is raised between *high* and *low*.

1.1.3 Low—body of the tongue is moved down.

#### 1.2 The part of the tongue raised

The body of the tongue can also be moved toward the front or back of the mouth and the imaginary part where the front and the back are supposed to meet, called the centre, classified as follows:

1.2.1 Front—body of the tongue is moved forward.

1.2.2 Central—body of the tongue is raised between *front* and *back*.

1.2.3 Back—the body of the tongue is moved backward.

The vowels produced when the front of the tongue is raised forward are, therefore, called the *front vowels*; those produced when the central part of the tongue is raised (between the front and the back) are called the *central vowels*, and

those produced when the back of the tongue is raised backward are called the *back vowel*.

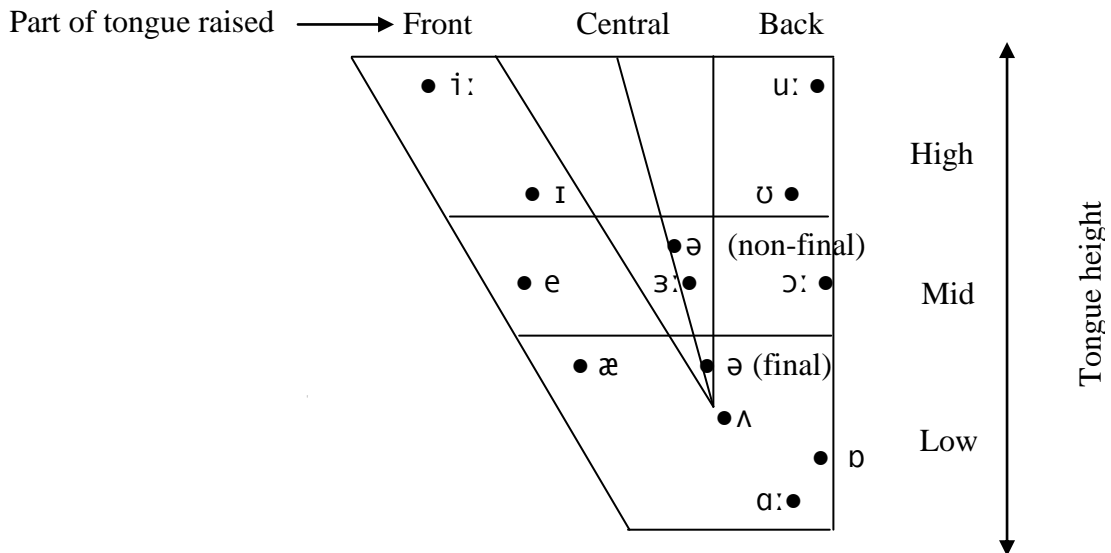


Figure 2.10 The vowel diagram

Source: adapted from Sethi & Dhamija (1999)

### 1.3 The lip-posture

Although the lips have different shapes and positions, they can be assumed that they have only two possibilities in the positions (Roach, 2010) as follows:

1.3.1 Rounded—the lip postures have rounded shapes, that is, they are brought towards each other and pushed forwards, e.g. /ʊ/ as in *foot*, /u:/ as in *food*, /ɒ/ as in *got*, and /ɔ:/ as in *short*.

1.3.2 Unrounded—the lip postures have no rounded shapes. The unrounded lip postures can be classified into two positions as follows:

1.3.2.1 Spread—they moved away from each other, as for smile, e.g. /i:/ as in *seat*.

1.3.2.2 Neutral—the lip postures are not noticeably rounded or spread, e.g. /ɜ:/ as in *shirt* and /ɑ:/ as in *car*.

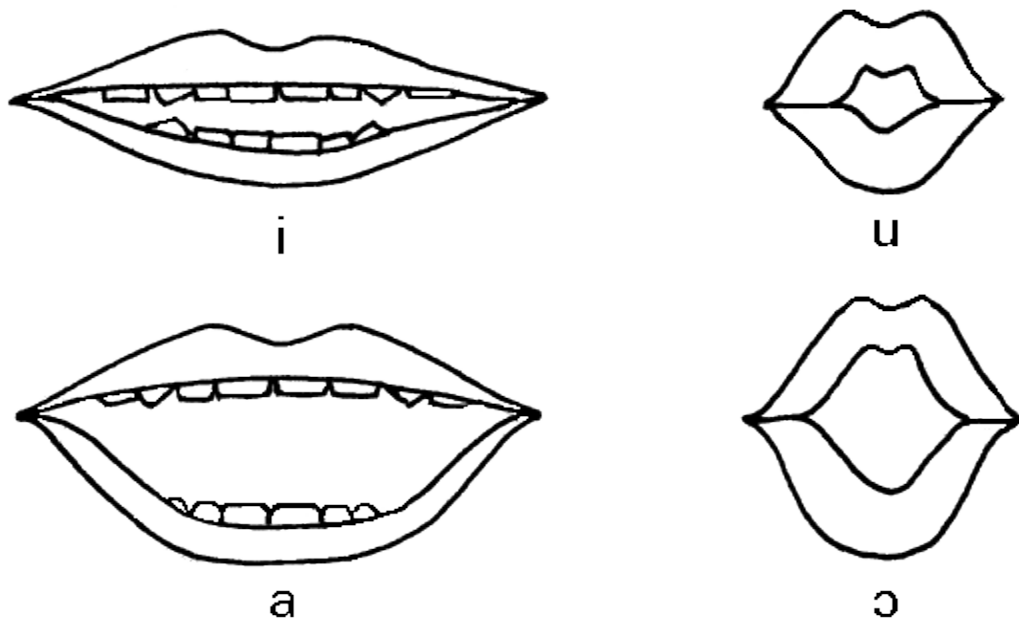


Figure 2.11 The vowel lip postures

Source: Mannell (2014)

## 2. The description of monophthongs

We can describe some of vowel sounds by using a four-term label, indicating the tongue height; the part of tongue raised; and the position of lips.

2.1 /u:/ in the English word **food**: *a high back rounded long vowel*

2.2 /æ/ in the English word **hat**: *a low front unrounded short vowel*

2.3 /e/ in the English word **set**: *a mid front unrounded short vowel*

2.4 /ɜ:/ in the English word **bird**: *a mid central unrounded long vowel*

To describe the vowel sound we mention (1) whether it is high or mid or low; (2) whether it is front or central or back, long or short; (3) whether lips are unrounded (spread or neutral), or rounded, and while the vowel is being pronounced. All English vowels are voiced. Therefore, for every vowel we must state that it is voiced.

We can summarize English pure vowel sounds, divided into seven short vowels: /ɪ/, /e/, /æ/, /ə/, /ʌ/, /ʊ/, /ɒ/ and five long vowels: /i:/, /ɜ:/, /u:/, /ɔ:/, /ɑ:/, in terms of three factors as shown here:



(2) The part of tongue raised	Front	Central	Back	
	(3) The lip-position			
(1)The tongue height	unrounded	unrounded	unrounded	rounded
high	i:			u:
	ɪ			ʊ
mid	e	ɜ:		ɔ:
		ə		
low	æ	ʌ	ɑ:	ɒ

Figure 2.12 Classifying English pure vowel sounds in terms of three factors

### 3. Diphthongs

Diphthongs (sometimes referring to **gliding vowels**) have continually moving tongue shape and changing sound quality. They are represented by two vowel symbols but counted as one unit. The two symbols represent the beginning and the end of the sound quality. The jaw, tongue and lips make a gliding movement from the first element of the diphthong to the second.

To pronounce the diphthong /aɪ/ in the English word **my**, for example, the tongue is, at first, raised to a point of a low front vowel /a/, and then it is gradually raised towards a point of a high front vowel /ɪ/. There are altogether 8 diphthongs in English, divided into three glides:

- 3.1 Three closing gliding vowels towards [ɪ]: /eɪ, aɪ, ɔɪ/;
- 3.2 Two closing gliding vowels towards [ʊ]: /aʊ, əʊ/; and
- 3.3 Three centring gliding vowels towards [ə]: /ɪə, eə, ʊə/

### 4. The description of diphthongs

Diphthongs are described by indicating the position of the tongue and the lips in the beginning and at the end of the glide. The descriptions of the diphthongs are given below.

#### 4.1 Closing gliding vowels towards [ɪ]: /eɪ, aɪ, ɔɪ/

4.1.1 /eɪ/ as in **pay**—closing gliding vowel, the glide begins at the position of /e/ and moves in the direction of /ɪ/. The lips are spread.

4.1.2 /aɪ/ as in **buy**—closing gliding vowel, the glide begins at the position of /ɑ:/ and moves in the direction of /ɪ/. The lips change from a neutral to a loosely spread position.

4.1.3 /ɔɪ/ as in **boy**—closing gliding vowel, the glide begins at the position of /ɔ:/ and moves in the direction of /ɪ/. The lips are open-rounded at the beginning and neutral at the end.

#### 4.2 Closing gliding vowels towards [ʊ]: /aʊ, əʊ/

4.2.1 /aʊ/ as in **now**—closing gliding vowel, the glide begins at the position of /æ/ and moves in the direction of /ʊ/. The lips are neutral in the beginning and weakly rounded in the end.

4.2.2 /əʊ/ as in **coat**—closing gliding vowel, the glide begins at the position of /ə/ and moves towards /ʊ/. The lips are neutral.

#### 4.3 Centring gliding vowels towards [ə]: /ɪə, eə, ʊə/

4.3.1 /ɪə/ as in **hear**—centring gliding vowel, the glide begins at the position of /ɪ/ and moves in the direction of /ə/. The lips are neutral in the beginning and rounded towards t

4.3.2 /eə/ as in **hair**—centring gliding vowel, the glide begins at the position of /e/ and moves towards /ə/. The lips are neutral in the beginning and rounded towards t

4.3.3 /ʊə/ as in **poor**—centring gliding vowel, the glide begins at the position of /ʊ/ and moves towards /ə/. The lips are weakly rounded at the beginning and neutral at the end.

## 5. Triphthongs

Triphthongs are the most complex English sounds of the types of vowels where there are two noticeable changes in quality during a syllable. It is rather difficult to pronounce and very difficult to recognize them, as in the English words *fire* and *shower* /'f aɪə/ and /ʃ aʊə/.

A triphthong (Roach, 2000: 24) is a glide from one vowel to another and then to a third, all produced rapidly and without interruption.

The triphthongs can be composed of the five closing diphthongs described in the last section, with /ə/ added on the end. Thus we get:

- 5.1 Gliding vowel /eɪ/ + /ə/ = /eɪə/  
 5.2 Gliding vowel /aɪ/ + /ə/ = /aɪə/  
 5.3 Gliding vowel /ɔɪ/ + /ə/ = /ɔɪə/  
 5.4 Gliding vowel /aʊ/ + /ə/ = /aʊə/  
 5.5 Gliding vowel /əʊ/ + /ə/ = /əʊə/

To identify these above-mentioned triphthongs, some example words are given here:

- /eɪə/ = 'player', 'layer',  
 /aɪə/ = 'fire', 'tire',  
 /ɔɪə/ = 'loyal', 'royal'  
 /aʊə/ = 'power', 'hour'  
 /əʊə/ = 'lower', 'mower'

## Summary

Speech sounds can be classified and described in the articulatory terms—the organs of speech. The best terms of classifying speech sounds are **consonants** and **vowels**.

Consonants are the sounds made by closure or narrowing in the vocal tract so that the airflow is either completely blocked, or so restricted that audible friction is produced. In the classification and description of English consonant sounds, there are just three terms that suffice it to say—**voicing**; **place of articulation**; and **manner of articulation**.

Vowels are the sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible friction. English vowels can be classified into 1) a **monophthong** or a pure vowel. In classifying and describing the pure vowel, we can describe it in terms of three factors: 1) **the tongue height**; 2) **the part of the tongue raised**; and 3) **the lip-position**; 2) a **diphthong** or a gliding vowel; and 3) a **triphthong**.

## Question reviews

1. What are consonants?
2. Describe the air-stream mechanism used in producing consonants.
3. Explain the difference between a voiced and a voiceless sound?
4. Give three examples of words in English in the following terms:
  - 4.1 bilabial sounds;
  - 4.2 alveolar sounds; and
  - 4.3 velar sounds from English consonants.
5. Describe the sounds: /f/ as in the word *friend* and /ʃ/ as in the word *shop* in the following terms:
  - 5.1 voicing
  - 5.2 place of articulation and
  - 5.3 manner of articulation
6. Give the phonetic symbols for the description of English consonants in the following terms:
  - 6.1 a voiceless dental plosive
  - 6.2 a voiced velar nasal and
  - 6.3 a voiced labio-dental fricative
7. What are vowels?
8. What is meant by the parts of the tongue raised—a *front* vowel; a *central* vowel; and a *back* vowel? Give examples for each.
9. What is meant by the lip-position—a *rounded* vowel and an *unrounded* vowel?
10. What is the difference between a *pure vowel* and a *diphthong*?

## CHAPTER 3

### ENGLISH CONSONANT SOUNDS

In the description and the classification of the English consonant sounds, we shall follow the classificatory system as explained in chapter 2. Therefore, the English consonant sounds will be described in terms of 1) voice or voicelessness, 2) the place of articulation, and 3) the manner of articulation. Such a description will be assigned to a three-term label for each consonant sound, such as the label *voiceless alveolar plosive* for the initial consonant sound in English word *talk*.

#### Consonant sounds

In English there are 24 consonant sounds listed below along with the examples that show their occurrence in the initial, medial, and final positions. A blank space in the table indicates the non-occurrence of a consonant sound in that position.

No.	Consonant	Initial	Medial	Final
1.	p	pen	spend	step
2.	b	back	rabbit	rub
3.	t	ten	stone	let
4.	d	day	under	head
5.	k	key	sky	talk
6.	g	go	forget	bag
7.	tʃ	chain	watches	teach
8.	dʒ	job	enjoy	large
9.	m	man	small	sum
10.	n	no	snake	run
11.	ŋ	-	link	sing
12.	l	late	slay	ball
13.	f	fan	refill	half
14.	v	van	review	live

No.	Consonant	Initial	Medial	Final
15.	θ	think	months	both
16.	ð	then	weather	clothe
17.	s	so	taste	bus
18.	z	zoo	amazing	is
19.	ʃ	shop	washes	fresh
20.	ʒ	-	vision	rouge
21.	h	hat	behind	-
22.	r	red	tree	car ( <i>AmE</i> )
23.	w	win	swim	-
24.	j	yes	new	-

Figure 3.1 Phonetic symbols of English Consonant sounds

## Producing consonant sounds

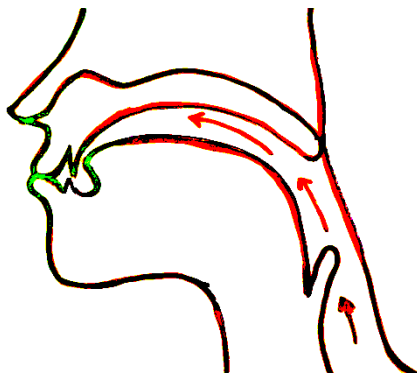
In this section the English consonant sounds will be described in terms of 1) voice or voicelessness, 2) the place of articulation, and 3) the manner of articulation as follows:

### 1.1 Bilabial plosives /p/, /b/

#### 1.1.1 Voiceless bilabial plosive /p/

In producing the sounds /p/, the soft palate is raised to close off the nasal tract. The airstream moving out from the lungs is blocked by the closure of the lips. There is a small explosion of the air when the lips open quickly. In the sound /p/, there is no voice from the throat, that is, the vocal cords are kept wide apart.

#### 1) Practice the sound /p/



- Close your lips tight.
- Push air forward in your mouth.
- Then open your lips quickly.
- Do not use your voice.

Figure 3.2 The diagram for the sound /p/

/p/ occurs in all the three positions in a word:

Initial	Medial	Final
<b>/p-/</b>	<b>/-p-/</b>	<b>/-p/</b>
pick	apple	tip
pill	supper	hip
pen	speak	top
park	appear	help
piece	sport	tap

“Pat put purple paint in the pool”.

## 2) Phrases and sentences with the sound /p/

Practice saying these phrases and sentences below.

2.1) **Please help!**

2.2) **Please pass the pepper.**

2.3) **Stop pushing!**

2.4) **Pick it up.**

2.5) **Pretty important**

2.6) on **purpose**

## 3) Spelling

The sound /p/ is spelled with the letter *p*:

**p** = pen, paper, people, stamp

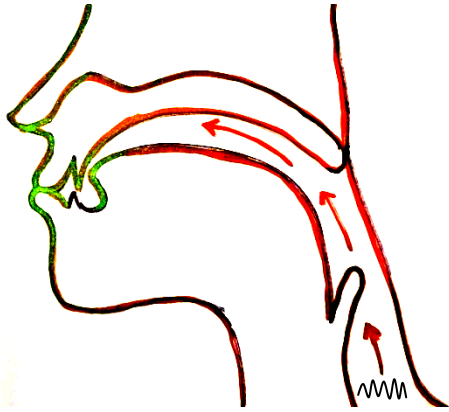
**pp** = happy, shopping, pepper, stopped

The letter p is silent in these words: **psychology, receipt, pneumonia, and cupboard.**

### 1.1.2 Voiced bilabial plosive /b/

Producing the sound /b/ differs from /p/ only with regard to voicing: for /p/ there is no voice from the throat, that is, the vocal cords do not vibrate, but for /b/, there is voice from the throat, that is, they vibrate.

## 1) Practice the sound /b/



First practice /p/.

Then use your voice to say /b/

Figure 3.3 The diagram for the sound /b/

/b/ occurs in all the three positions in a word:

Initial	Medial	Final
/b-/	/-b-/	/-b/
bag	about	job
bill	rabbit	rob
bad	forbid	mob
book	library	cab
boss	abbot	knob

“Bernie brought a big breakfast back to bed”.

## 2) Phrases and sentences with the sound /b/

Practice saying these phrases and sentences below.

2.1) I **b**ought a **b**ook.

2.2) It's a **b**ig **j**ob.

2.3) I'll **b**e right **b**ack.

2.4) I've **b**een **b**usy.

2.5) **B**obby's **b**irthday.

2.6) Is there a **b**aby **b**ird here?



## 3) Spelling

The sound /b/ is spelled with the letter *b*:

b = bad, about, table, job

bb = rabbit, robber, rubber, mobbed

The letter **b** is silent in these words: climb**b**, lamb**b**, comb**b**, doubt, and debt.

## 4) Word pairs

Practice saying the sounds: /p/ and /b/ in contrast.

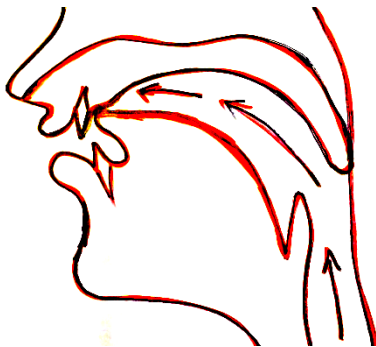
Sound 1: /p/	Sound 2: /b/
pie	buy
pear	bear
pill	bill
cap	cab
rope	robe

## 1.2 Alveolar plosives /t/, /d/

## 1.2.1 Voiceless alveolar plosive /t/

In producing the sound /t/, the soft palate is raised to close off the nasal tract. The airstream moving out from the lungs is blocked by the closure made between the tip of the tongue and the teeth ridge. There is a small explosion of the air when the closure is released quickly. In the sound /t/, there is no voice from the throat, that is, the vocal cords are kept wide apart.

## 1) Practice the sound /t/



Put the tip of your tongue behind your teeth ridge.

Push air forward in your mouth.

Then move your tongue away.

Do not use your voice.

Figure 3.4 The diagram for the sound /t/

/t/ occurs in all the three positions in a word:

Initial	Medial	Final
/t-/	/-t-/	/-t/
tick	maintain	wet
top	stop	lot
take	attend	bat
talk	doctor	sit
true	bottle	late

“Betty bought a tub of butter”.

## 2) Phrases and sentences with the sound /t/

Practice saying these phrases and sentences below.

2.1) What **time** is it?

2.2) What **about** you?

2.3) Just a **moment**. -

2.4) **Take it** easy!

2.5) Thanks! It's no **trouble at** all.

2.6) What's the **matter**?

## 3) Spelling

The sound /t/ is spelled with the letter *t*:

t = ten, time, try, twenty

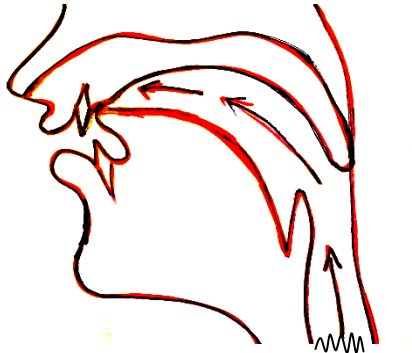
tt = better, letter, little, getting

The letter t is silent in these words: **often**, **listen**, **whistle**, **castle**, **ballet**, and **Christmas**.

### 1.2.1 Voiced alveolar plosive /d/

Producing the sound /d/ differs from /t/ only with regard to voicing: for /t/, there is no voice from the throat, that is, the vocal cords do not vibrate, but for /d/, there is voice from the throat, that is, they vibrate.

## 1) Practice the sound /d/



First practice /t/.

Then use your voice to say /d/.

Figure 3.5 The diagram for the sound /d/

/d/ occurs in all the three positions in a word:

Initial	Medial	Final
<b>/d-/</b>	<b>/-d-/</b>	<b>/-d/</b>
day	body	mad
dish	ladder	head
dry	sadly	bride
door	predict	card
date	candle	end

“David’s daughter didn’t dance but David’s dad did”.

## 2) Phrases and sentences with the sound /d/

Practice saying these phrases and sentences below.

2.1) That’s a good **idea**!

2.2) What’s the **date** **today**?

2.3) I **don**’t **understand**. -

2.4) How **do** you **do**?

2.5) I **didn**’t **do** it.

2.6) What’s her **address**?

## 3) Spelling

The sound /d/ is spelled with the letter *d*:

d = day, date, door, dick

dd = add, address, middle, sudden

## 4) Word pairs

Practice saying the sounds: /t/ and /d/ in contrast.

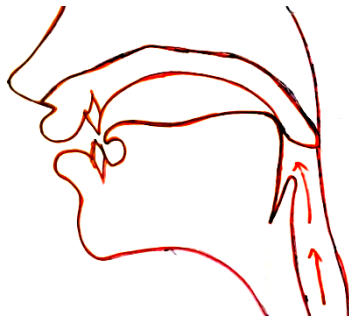
Sound1: /t/	Sound 2: /d/
time	dime
tore	door
try	dry
write	ride
cart	card

## 1.3 Velar plosives /k/, /g/

## 1.3.1 Voiceless velar plosive /k/

In producing the sound /k/, the airstream moving out from the lungs is blocked by touching the soft palate, which is raised to close off the nasal tract, with the back of the tongue. There is a small explosion of the air when the closure is released quickly. In the sound /k/, there is no voice from the throat, that is, the vocal cords are kept wide apart.

## 1) Practice the sound /k/



Touch the soft palate with the back of your tongue.  
Push air forward in your mouth.  
Then move your tongue away.  
Do not use your voice.

Figure 3.6 The diagram for the sound /k/

/k/ occurs in all the three positions in a word:

Initial	Medial	Final
/k-/	/-k-/	/-k/
king	sky	back
cook	occur	lick
cat	speaker	peak
chemist	school	stomach
keen	become	sick

“The king cooked the carrots and the queen cut the cake”.

## 2) Phrases and sentences with the sound /k/

Practice saying these phrases and sentences below.

2.1) **C**ome in.

2.2) **E**xcuse me.

2.3) **C**an I **c**all you **b**ack?

2.4) **T**hanks for **c**oming.

2.5) **C**ould you **k**ee**p** a **s**ecret?

2.6) **C**an I **a**sk a **q**uest**i**on?

## 3) Spelling

The sound /k/ is usually spelled with the letter *k*, *c* or *ck*:

k = king, key, walk, like

c = cat, call, correct, electric

ck = lack, back, clock, jacket

ch = school, chemistry, headache, stomach

x, xc = pronounced /ks/: six, next, extra,

excellent, excited

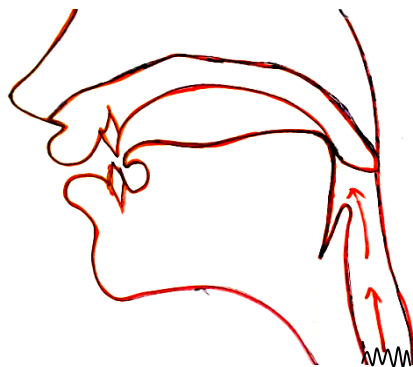
qu = usually pronounced /kw/: question,

quick, quiet, request

## 1.3.2 Voiced velar plosive /g/

The sound /g/ is produced in the same way as /k/. However, /g/ differs from /k/ only with regard to voicing: for /k/, there is no voice from the throat, that is, they do not vibrate, but for /g/, there is voice from the throat, that is, they vibrate.

## 1) Practice the sound /g/



First practice /k/

Then use your voice.

Figure 3.7 The diagram for the sound /g/

/k/ occurs in all the three positions in a word:

Initial	Medial	Final
<b>/g-/</b>	<b>/-g-/</b>	<b>/-g/</b>
game	bigger	bag
get	again	dog
gap	cigar	fag
grain	begin	log
give	ago	egg

“Grandma gave the guests eggs and frog’s legs”.

## 2) Phrases and sentences with the sound /g/

Practice saying these phrases and sentences below.

- |                                 |  |
|---------------------------------|--|
| 2.1) Let’s play a <b>game</b> . | 2.4) <b>Good</b> to you <b>again</b> . |
| 2.2) <b>Great</b> !             | 2.5) I’ve <b>got</b> to <b>go</b> .    |
| 2.3) Let’s <b>get</b> together. | 2.6) <b>Give</b> me a call.            |

## 3) Spelling

The sound /g/ is usually spelled with the letter g:

g	=	go, garden, again, dog
gg	=	bigger, egg, jogging, begged
gu	=	guess, guest, guitar
gh	=	ghost, spaghetti
x	=	pronounced /gz/: example, exactly,

## 4) Word pairs

Practice saying the sounds: /k/ and /g/ in contrast.

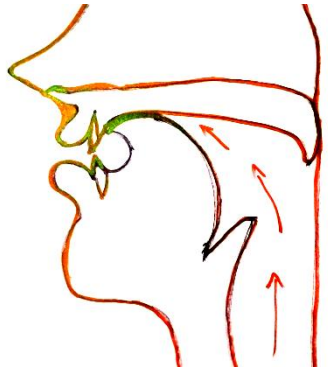
Sound 1: /k/	Sound 2: /g/
coat	goat
curl	girl
class	glass
back	bag
clock	clog

## 1.4 Palato-alveolar affricates /tʃ/, /dʒ/

### 1.4.1 Voiceless palato-alveolar affricate /tʃ/

In producing the sound /tʃ/, the soft palate is raised to close off the nasal tract. The airstream moving out from the lungs is blocked by touching the teeth ridge with the tip and blade of the tongue. At the same time, the front of the tongue is also raised towards the hard palate. The closure is released slowly with the blocked airstream flowing out with friction. The vocal cords are drawn wide apart, that is, they do not vibrate.

#### 1) Practice the sound /tʃ/



First practice /t/ and /ʃ/

Begin to make /tʃ/.

Then slowly move your tongue from the roof of your mouth.

Do not use your voice.

Figure 3.8 The diagram for the sound /tʃ/

/tʃ/ occurs in all the three positions in a word:

Initial	Medial	Final
/tʃ-/	/-tʃ-/	/-tʃ/
children	butcher	much
check	watching	which
cheap	reaches	catch
chain	picture	coach
choose	kitchen	beach

“Which child put chalk on the teacher’s chair?”

## 2) Phrases and sentences with the sound /tʃ/

Practice saying these phrases and sentences below.

2.1) **W**atch out!

2.2) How **m**uch is it?

2.3) I **c**hange my mind.

2.4) I'll have a **c**heese sandwich.

2.5) Any **q**uestions?

2.6) **W**hich one did you **c**hoose?

## 3) Spelling

The sound /tʃ/ is usually spelled with the letter *ch* or *tch*:

ch = chat, change, choose, teacher,

tch = watch, match, kitchen, catch

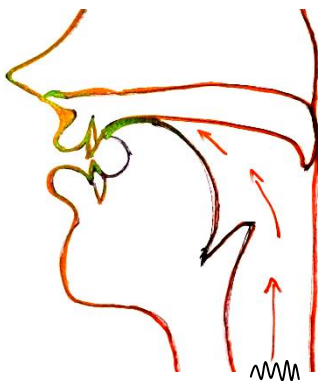
t = before *u*: nature, picture

ti = after *s*: suggestion, question

## 1.4.2 Voiced palato-alveolar affricate /dʒ/

The sound /dʒ/ is produced in the same way as /tʃ/. However, /dʒ/ differs from /tʃ/ only with regard to voicing: for /tʃ/, there is no voice from the throat, that is, the vocal cords do not vibrate, but for /dʒ/, there is voice from the throat, that is, they vibrate.

## 1) Practice the sound /dʒ/



First practice /tʃ/

Then use your voice to make /dʒ/.

Figure 3.9 The diagram for the sound /dʒ/



/dʒ/ occurs in all the three positions in a word:

Initial	Medial	Final
/dʒ-/	/-dʒ-/	/-dʒ/
gin	manager	bridge
jail	agency	edge
joke	passenger	large
jet	dangerous	village
just	injured	damage

“Ginger spilt orange juice on George’s jacket.”

## 2) Phrases and sentences with the sound /dʒ/.

Practice saying these phrases and sentences below.

- 2.1) I was **just** **j**oking.
- 2.2) The **judge** is crossing the **bridge**.
- 2.3) You don’t **change** a thing.
- 2.4) **George**’s in **j**ail.
- 2.5) I **enjoy** a new **j**ob.
- 2.6) I **graduated** from Technical **College**.

## 3) Spelling

The sound /dʒ/ is usually spelled with the letter *j*, *g* or *dge*:

j = joke, jail, job, enjoy  
g = before *e*, *i*, or *y*: college, general,

original, phonology

dge = knowledge, bridge, judge  
d = before *u*: individual, graduate, education

## 4) Word pairs

Practice saying the sounds: /tʃ/ and /dʒ/ in contrast.

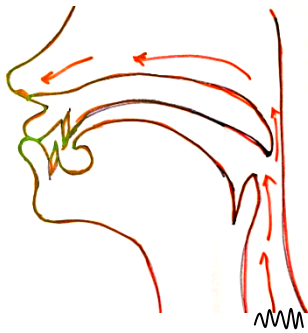
Sound 1: /tʃ/	Sound 2: /dʒ/
cheap	jeep
choke	joke
cheers	jeers
H	age
batch	badge

## 1.5 Velar nasals /m/, /n/, /ŋ/

### 1.5.1 Voiced bilabial nasal /m/

In the production of the sound /m/, a closure is formed at the lips; the soft palate is lowered to allow the airstream from the lungs to pass freely through the nose. There is voice from the throat, that is, the vocal cords vibrate.

#### 1) Practice the sound /m/



Close your lips.

Use your voice.

The sound /m/ comes through your nose.

Figure 3.10 The diagram for the sound /m/

/m/ occurs in all the three positions in a word:

Initial	Medial	Final
/m-/	/-m-/	/-m/
man	tomorrow	some
move	among	steam
make	remind	comb
mend	simple	room
match	remember	cream

“Mum made me move my models.”

#### 2) Phrases and sentences with the sound /m/

Practice saying these phrases and sentences below.

2.1) I change **my** mind.

2.2) **My** name is **Samson**.

2.3) I’**m** sorry.

2.4) **Sometimes**.

2.5) I don’t **remember**.

2.6) Is there a **swimming** pool near here?

### 3) Spelling

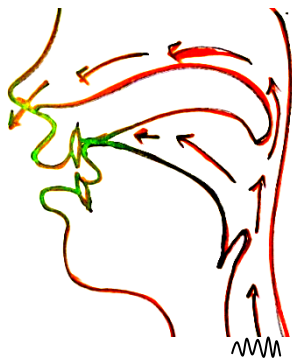
The sound /m/ is usually spelled with the letter *m*:

m	=	man, family, home, sum
mm	=	summer, swimming, yummy
mb	=	<i>b</i> is silent: comb, climb, lamb
mn	=	<i>n</i> is silent: column, autumn

#### 1.5.2 Voiced alveolar nasal /n/

In producing /n/, a closure is formed in the mouth between the tip of the tongue and the teeth ridge; the soft palate is lowered to allow the airstream from the lungs to escape freely through the nose. There is voice from the throat, that is, the vocal cords vibrate.

##### 1) Practice the sound /n/



Put the tip of your tongue on the roof of your mouth (teeth ridge) just behind your upper teeth.

Use your voice.

The sound /n/ comes through your nose.

Figure 3.11 The diagram for the sound /n/

/n/ occurs in all the three positions in a word:

Initial	Medial	Final
/n-/	/-n-/	/-n/
name	month	garden
noise	morning	station
near	money	mean
knee	until	warn
no	evening	sun

“There was no one on the moon on the ninth of June.”

## 2) Phrases and sentences with the sound /n/

Practice saying these phrases and sentences below.

2.1) Sorry. I **don't know**.

2.2) Wait a **minute**.

2.3) Give me your **new name**.

2.4) I'm **not** a student.

2.5) No. I **didn't**.

2.6) **Not now**.

## 3) Spelling

The sound /n/ is usually spelled with the letter *n*:

n	=	name, next, noise, downtown
nn	=	annoy, funny, dinner, beginning
kn	=	k is silent: know, knee, knock, knee
gn	=	g is silent: sign, foreign, design

The letter *n* is silent in these words: **autumn**, **column**.

## 4) Word pairs

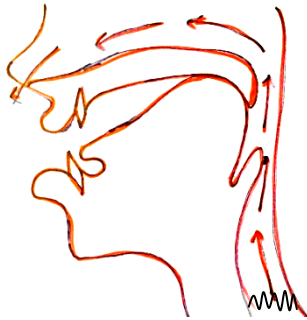
Practice saying the sounds: /m/ and /n/ in contrast.

Sound 1: /m/	Sound 2: /n/
me	knee
mail	nail
mine	nine
comb	cone
gum	gun

## 1.5.3 Voiced velar nasal /ŋ/

In the production of /ŋ/, a closure is formed in the mouth between the back of the tongue and the soft palate; the soft palate is lowered to allow the airstream from the lungs to flow freely through the nose. There is voice from the throat, that is, the vocal cords vibrate.

## 1) Practice the sound /ŋ/



Touch the back of the roof of your mouth (soft palate) with the back of your tongue.

Use your voice.

The sound /ŋ/ comes through your nose.

Figure 3.12 The diagram for the sound /ŋ/

/ŋ/ occurs only in the two positions in a word:

Medial	Final
/-ŋ-/	/-ŋ/
finger	sing
thank	strong
angry	something
function	along
think	wrong

“Young King Kong was stronger than strong.”

## 2) Phrases and sentences with the sound /ŋ/

Practice saying these phrases and sentences below.

- 2.1) I'm **hungry**
- 2.2) Is **something wrong**?
- 2.3) I **think** Frank is **wrong**.
- 2.4) She was **angry** with me.
- 2.5) Good **morning**.
- 2.6) The phone is **ringing**.

## 3) Spelling

The sound /ŋ/ is usually spelled with the letter *ng*:

ng	=	something, morning, ring, wrong
n	=	before /k/: bank, think, uncle, function
		before /g/: angry, hungry, English, single

## 4) Word pairs 1

4.1) Practice saying the sounds: /n/ and /ŋ/ in contrast.

Sound 1: /n/	Sound 2: /ŋ/
thin	thing
ban	bang
ran	rang
fans	fangs
wins	wings

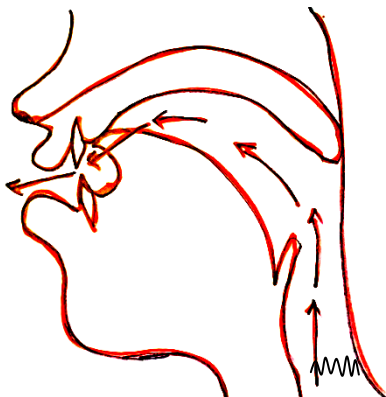
4.2) Practice the sounds: /ŋk/ and /ŋ/ in contrast.

Sound 1: /ŋk/	Sound 2: /ŋ/
think	thing
bank	bang
sink	sing
rink	ring

## 1.6 Voiced alveolar lateral /l/

In the production of /l/, the soft palate is raised to shut off the nasal tract. The tip of the tongue moves towards the teeth ridge; one or both sides of the tongue are lowered so that the airstream from the lungs can escape freely without friction through the side(s). There is voice from the throat, that is, the vocal cords vibrate.

## 1.6.1. Practice the sound /l/: Clear [l]

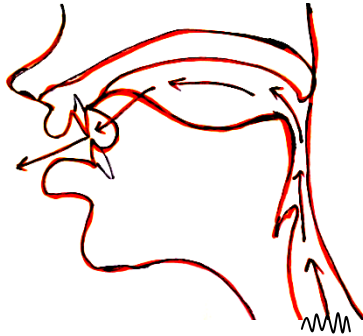


Put the tip of your tongue just behind your upper front teeth.

To make the sound /l/, the airstream from the lungs goes over the sides of your tongue and out of your mouth.

Figure 3.13 The diagram for the sound /l/: clear [l]

## 1.6.2 Practice the sound /l/: Dark [ɫ]



The sound /l/ is a little different at the end of a word or before a consonant. To say /l/, raise the back of your tongue toward the roof of your mouth. (soft palate).

Figure 3.14 The diagram for the sound /l/: dark [ɫ]

/l/ occurs in all the three positions in a word:

Initial	Medial	Final
/l-/	/-l-/	/-l/
late	delay	ball
lock	replay	bell
love	allow	build
low	telling	cancel
lie	million	self

“Clara’s really clever but Lilly’s a little silly.”

## 1.6.3 Practice the sound /l/

/l/ at the end of a word

bill  
pill  
ball  
bowl  
tall

/l/ before a consonant

help  
milk  
health  
build  
silk

## 1.6.4 Phrases and sentences with the sound /l/

Practice saying these phrases and sentences below.

- 1) Please **te**ll us the truth.
- 2) I **fe**el asleep.
- 3) **Le**t’s **pl**ay football.
- 4) Would you **li**ke some **mi**lk or tea?

5) **L**ook out!

6) I'll call you back **l**ater.

### 1.6.5 Word pairs 1

Practice saying the sounds: /n/ and /l/ in contrast.

Sound 1: /n/	Sound 2: /l/
night	light
no	low
nine	line
connect	collect
snow	slow

### 1.6.6 Word pairs 2

Practice saying the sounds: /n/ and /l/ in contrast.

Sound 1: /n/	Sound 2: /l/
ten	tell
pin	pill
bone	bowl
mine	mile

### 1.6.7 Spelling

The sound /l/ is usually spelled with the letter /l/:

l	=	letter, late, sleep, trouble
ll	=	pillow, tell, sell, kill

The letter *l* is sometimes silent when it comes before a consonant in these words: **t**alk, **w**alk, **h**alf, **c**ould, **y**olk, **c**alm, **p**alm.

## 1.7 Labio-dental fricatives /f/, /v/

### 1.7.1 Voiceless labio-dental fricative /f/

In producing /f/, the soft palate is raised to close off the nasal tract. The inner surface of the lower lip makes a light contact with the front upper teeth, leaving a narrow gap so that the airstream from the lungs can escape, making audible friction. There is no voice from the throat, that is, the vocal cords are wide apart.



## 1) Practice the sound /f/



Touch your upper teeth with your lower lip.  
Blow out air between your lip and teeth.  
Do not use your voice.

Figure 3.15 The diagram for the sound /f/

/f/ occurs in all the three positions in a word:

Initial	Medial	Final
/f-/	/-f-/	/-f/
fast	offer	life
fee	affair	cough
photo	after	staff
fit	laughter	graph
friend	profile	stiff

“Frank found four frogs laughing on the floor.

## 2) Phrases and sentences with the sound /f/

Practice saying these phrases and sentences below.

- 2.1) Have **fun**!
- 2.2) It's **five** after **four**.
- 2.3) Don't **forget**.
- 2.4) **Fill** out this **form**.
- 2.5) How do you **feel**?
- 2.6) Is it **far** from here?

## 3) Word pairs

Practice saying the sounds: /p/ and /f/ in contrast.

Sound 1: /p/	Sound 2: /f/
pan	fan
pull	full
peel	feel
copy	coffee
cup	cuff

## 4) Spelling

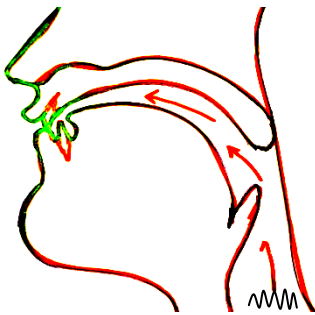
The sound /f/ is usually spelled with the letter *f*:

f	=	fix, first, funny, before
ff	=	staff, office, difficult, off
ph	=	phone, photograph, graphic, alphabet
gh	=	enough, laugh, rough, cough

## 1.6.2 Voiced labio-dental fricative /v/

The sound /v/ is produced in the same way as /f/. However, /v/ differs from /f/ only with regard to voicing: for /f/, there is no voice from the throat, that is, the vocal cords do not vibrate, but for /v/, there is voice from the throat, that is, they vibrate.

## 1) Practice the sound /v/



First practice the sound /f/.

Then use your voice to say /v/

Figure 3.16 The diagram for the sound /v/

/v/ occurs in all the three positions in a word:

Initial	Medial	Final
/v-/	/-v-/	/-v/
van	leaving	love
village	lived	five
vote	cover	of
verb	oven	move
vine	every	give

“Vera drove to Venice in a van.”

## 2) Phrases and sentences with the sound /v/

Practice saying these phrases and sentences below.

2.1) Thank you **v**ery much.

2.2) I don't believe it.

2.3) It's **v**ery expensive.

2.4) I've never been there.

2.5) Have a good time!

2.6) It's **ov**er now.

## 3) Word pairs 1

Practice saying the sounds: /b/ and /v/ in contrast.

Sound 1: /b/	Sound 2: /v/
ban	van
B	V
best	vest
boat	vote
cabs	calves

## 4) Word pairs 2

Practice saying the sounds: /f/ and /v/ in contrast.

Sound 1: /f/	Sound 2: /v/
fan	van
fine	vine
few	view
leaf	leave

## 5) Spelling

The sound /v/ is usually spelled with the letter v:

v = van, very, river, have, love

## 6) Unusual spellings: of

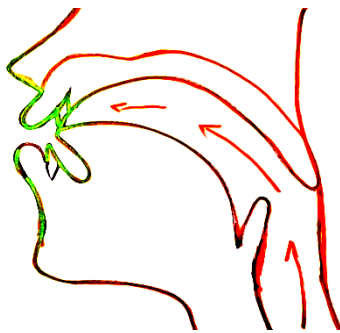
Words ending with the sound /v/ always add the letter e in the spelling. English words do not end in the letter v, such as *live*, *effective*, *receive*.

## 1.7 Dental fricatives /θ/, /ð/

### 1.7.1 Voiceless dental fricative /θ/

In the production of /θ/, the soft palate is raised to close off the nasal tract. The tip of the tongue makes a light contact with the inner surface of the upper front teeth, leaving a narrow gap so that the airstream from the lungs can escape, making audible friction. There is no voice from the throat, that is, the vocal cords are wide apart.

#### 1) Practice the sound /θ/



Touch inner surface of your upper front teeth with the tip of your tongue. (or Put the tip of your tongue between your front teeth.)

Blow out air between your tongue and upper teeth.

Do not use your voice.

Figure 3.17 The diagram for the sound /θ/

/θ/ occurs in all the three positions in a word:

Initial	Medial	Final
/θ-/	/-θ-/	/-θ/
think	nothing	south
thin	method	bath
three	something	death
theme	faithful	both
through	birthday	path

“Martha Smith’s an author and an athlete.”

#### 2) Phrases and sentences with the sound /θ/

Practice saying these phrases and sentences below.

2.1) Any**th**ing else?

2.2) No, **th**ank you.

2.3) I **th**ink so.

2.4) I’m **th**irsty.

2.5) Today is my **th**irthday.

2.6) I went there last **th**month.

## 3) Word pairs 1

Practice saying the sounds: /s/ and /θ/ in contrast.

Sound 1: /s/	Sound 2: /θ/
sick	thick
sum	thumb
sink	think
mouse	mouth
pass	path

## 4) Word pairs 2

Practice saying the sounds: /t/ and /θ/ in contrast.

Sound 1: /t/	Sound 2: /θ/
tie	thigh
tree	three
tanks	thanks
bat	bath

## 5) Spelling

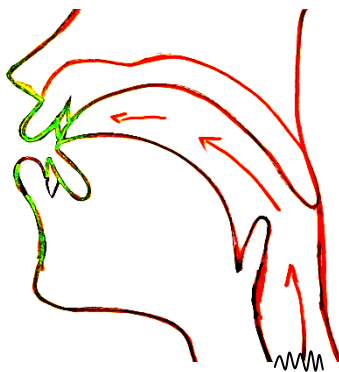
The sound /θ/ is spelled with the letter *th*:

th = thin, thousand, something, north

## 1.7.2 Voiced dental fricative /ð/

The sound /ð/ is produced in the same way as /θ/, except that in the production of /ð/ there is voice from the throat, that is, the vocal cords vibrate.

## 1) Practice the sound /ð/



First practice the sound /θ/.

Then use your voice to say /ð/.

Figure 3.18 The diagram for the sound /ð/

/ð/ occurs in all the three positions in a word:

Initial	Medial	Final
/ð-/	/-ð-/	/-ð/
then	rather	bathe
they	father	breathe
that	another	clothe
though	together	loathe
there	smoothly	teethe

“My father and mother live together with my other brother.”

## 2) Phrases and sentences with the sound /ð/

Practice saying these phrases and sentences below.

- 2.1) Who's **that** man?
- 2.2) What's **the** weather like?
- 2.3) Did **they** go **there** together?
- 2.4) **This** is brother, Dan.
- 2.5) My **father** and **mother**.
- 2.6) **They**'re over **there**.

## 3) Word pairs 1

Practice saying the sounds: /d/ and /ð/ in contrast.

Sound 1: /d/	Sound 2: /ð/
day	they
dare	there
doze	those
ladder	lather
breed	breathe

## 4) Word pairs 2

Practice saying the sounds: /z/ and /ð/ in contrast.

Sound 1: /z/	Sound 2: /ð/
closing	clothing
bays	bathe
breeze	breathe
tease	teethe

## 5) Spelling

The sound /ð/ is spelled with the letter *th*:

th = then, that, another, weather

## 1.8 Dental fricatives /s/, /z/

## 1.8.1 Voiceless alveolar fricative /s/

In the production of /s/, the soft palate is raised to close off the nasal tract. The tip and blade of the tongue makes a light contact with the teeth ridge, leaving a narrow groove so that the airstream from the lungs can escape, causing audible friction between the tongue and the teeth ridge. There is no voice from the throat, that is, the vocal cords are wide apart.

## 1) Practice the sound /s/



Touch your teeth ridge with the tip and blade of your tongue.

Put your tongue forward, behind your upper teeth.

Force air out over the tip of your tongue.

Do not use your voice.

Figure 3.19 The diagram for the sound /s/

/s/ occurs in all the three positions in a word:

<b>Initial</b>	<b>Medial</b>	<b>Final</b>
/s-/	/-s-/	/-s/
sit	master	false
seat	research	pass
sigh	hospital	since
seem	excite	purpose
same	absent	focus

“It’s six or seven years since Sydney’s sister sang that song.”

## 2) Phrases and sentences with the sound /s/

Practice saying these phrases and sentences below.

2.1) Sit down.

2.2) See you soon.

2.3) Let's see.

2.4) Speak slowly.

2.5) That's rather expensive.

2.6) I promise to be good.

## 3) Practice reading aloud:

**The Smile of s Snake**

“She speaks slowly and smokes special, expensive cigarettes. As she steps upstairs, her long skirt sweeps over her silver slippers. She is small and smart and sweet-looking. Her skin is like snow. “You have stolen my heart!” I once said stupidly, and she smiled. But when she smiled, she smiled the smile of a snake.”

(Baker, 1977: 100)

## 4) Spelling

The sound /s/ is usually spelled with the letter *s* or *c*:

s	=	son, soft, stop, yes
ss	=	pass, class, kiss, possible
c	=	before <i>e</i> , <i>i</i> , or <i>y</i> : nice, cent, city, bicycle
se	=	horse, house, promise, close (adjective)
sc	=	scene, science, scissors, muscle
x, xc	=	pronounced /k s/: six, next, excellent

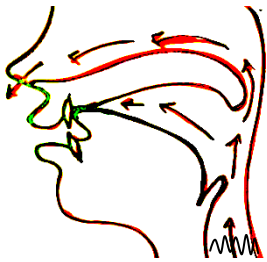
The letter *s* is silent in these words: island, aisle.

## 1.8.1 Voiced alveolar fricative /z/

The sound /z/ is produced in the same way as /s/, except that in the production of /z/ there is voice from the throat, that is, the vocal cords vibrate.



## 1) Practice the sound /z/



First practice the sound /s/.

Then use your voice to say /z/.

Figure 3.20 The diagram for the sound /z/

/z/ occurs in all the three positions in a word:

Initial	Medial	Final
/z-/	/-z-/	/-z/
zoo	busy	is
zip	cousin	prize
zone	hesitate	please
zebra	reason	close
zinc	dozen	buzz

“Zebras in zoos are like dolphins in pools.”

## 2) Phrases and sentences with the sound /z/

Practice saying these phrases and sentences below.

2.1) Whose is it?

2.2) Help, please!

2.3) It wasn't easy.

2.4) This is my dogs.

2.5) I was surprised.

2.6) He's got the first prize.

## 3) Word pairs

Practice saying the sounds: /s/ and /z/ in contrast.

Sound 1: /s/	Sound 2: /z/
Sue	zoo
sip	zip
bus	buzz
price	prize
lacy	lazy

## 4) Spelling

The sound /z/ is usually spelled with the letter *z* or *s*:

z, zz, ze	=	zoo, amazing, buzz, prize
s	=	easy, always, does, dogs
se	=	close (verb), please, these, rose
ss	=	dessert, possess, scissors
x	=	pronounced /gz/: example, exist,

## 1.9 palato-alveolar fricatives /ʃ/

## 1.9.1 Voiceless palato-alveolar fricative /ʃ/

The production of /ʃ/ resembles that of /s/: for both, the soft palate is raised to close off the nasal tract; the tip and blade of the tongue makes a light contact with the teeth ridge, leaving a narrow gap so that the airstream from the lungs can escape, causing audible friction between the tongue and the teeth ridge. But for /ʃ/, the front of the tongue is also raised at the same time in the direction of the hard palate. There is no voice from the throat, that is, the vocal cords are wide apart.

Some RP speakers use a slight lip-rounding for /ʃ, ʒ/ in all positions; other do so only when a rounded vowel precedes or follows them.

## 1) Practice the sound /ʃ/



First practice the sound /s/.

Then put the tip of your tongue up and back a little to make /ʃ/.

Figure 3.21 The diagram for the sound /ʃ/

/ʃ/ occurs in all the three positions in a word:

Initial	Medial	Final
/ʃ-/	/-ʃ-/	/-ʃ/
shop	fashion	wash
show	ashore	push
sure	fishing	cash
sheet	nation	English
shout	special	finish

“Sharon shouldn’t wash her shoes in the shower!”

## 2) Phrases and sentences with the sound /ʃ/

Practice saying these phrases and sentences below.

- 2.1) I'm not **sure**.
- 2.2) Let's go **shopping**.
- 2.3) What **sh**ould I do?
- 2.4) I **washed** my car.
- 2.5) I need some **information**.
- 2.6) I have a **sh**ower at six o'clock.

## 3) Word pairs

Practice saying the sounds: /s/ and /ʃ/ in contrast.

Sound 1: /s/	Sound 2: /ʃ/
Sue	shoe
seats	sheets
sell	shell
sign	shine
lease	leash

## 4) Spelling

The sound /ʃ/ is usually spelled with the letter *sh*:

sh	=	sheep, finish, show, English
ti	=	nation, conversation, initial, information
ci	=	special, delicious, musician, especially
ssi	=	profession, discussion, Russia

## 5) Unusual spellings:

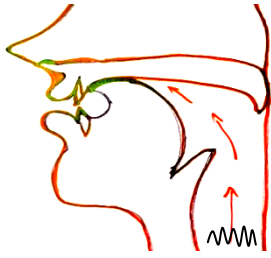
sure, tissue, **sugar**, **machine**, pressure, **champagne**,

**Chicago**, **ocean**

## 1.9.1 Voiceless palato-alveolar fricative /ʃ/

The sound /ʃ/ is produced in the same way as /f/, except that in the production of /ʃ/ there is voice from the throat, that is, the vocal cords vibrate.

## 1) Practice the sound /ʒ/



First practice the sound /ʃ/.

Then use your voice to say /ʒ/.

Figure 3.22 The diagram for the sound /ʒ/

/ʒ/ occurs only in all the two positions in a word:

Initial

Medial

/-ʒ-/

/-ʒ/

television

garage

pleasure

rouge

treasure

beige

collision

prestige

casual

potage

“She had a great vision of treasure in Malaysia.”

## 2) Phrases and sentences with the sound /ʒ/

Practice saying these phrases and sentences below.

2.1) What's your decision?

2.2) Thank you for lending me your measuring tape.

2.3) What's on television?

2.4) Is it a special occasion?

2.5) I usually wear casual clothes.

2.6) What is the cause of the explosion?

3) Practice saying the names of Television Tonight Show with the sound /ʒ/.

### Television Tonight on the Leisure Channel

6:00 PM	It's a pleasure Special guest: <i>the author of Decisions, Decisions</i>
6:30 PM	What's the Occasion?
7:00 PM	Movie: <i>Treasure Island</i>
9:00 PM	News: <i>An unusual collision</i>
9:30 PM	Casual Chic
10:00 PM	Trash to Treasure
10:30 PM	Measure Twice
11:00 PM	Destination: <i>Asia</i>
12:00 PM	Movie: <i>Invasion of the Martians</i>

(Baker & Goldstein, 2008: 122)

#### 4) Spelling

The sound /ʒ/ is usually spelled with the letter *s* or *ge*:

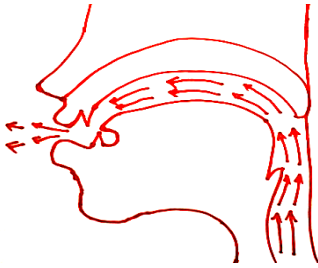
s	=	vision, decision, usually, measure
ge	=	garage, beige, rouge, potage

#### 5) Unusual spelling: seizure

##### 1.10 voiceless glottal fricative /h/

In the production of /h/, the soft palate is raised to shut off the nasal tract. The airstream from the lungs passes through a narrow glottis with audible friction. The positions of the tongue and the lips depend on the vowel following /h/. Thus, for /h/ as in *he/h i:/*, the front of the tongue is raised to the high position and the lips are spread. But for /h/ as in *who /hu:/*, the back of the tongue is raised to the high position and the lips are rounded. There is no voice from the throat, that is, the vocal cords are wide apart.

## 1) Practice the sound /h/



Open your mouth.

Push out a lot of air very quickly.

Do not use your voice.

Do not touch the roof of your mouth with your tongue.

Figure 3.23 The diagram for the sound /h/

/h/ occurs only in all the two positions in a word:

Initial

Medial

/h-/

/-h-/

hit

behind

high

unhappy

husband

perhaps

heart

ahead

house

comprehend

“Harry had a habit of helping hitch-hikes.”

## 2) Phrases and sentences with the sound /h/

Practice saying these phrases and sentences below.

2.1) May I **h**elp you?

2.2) I **h**ope so.

2.3) **H**ello! **H**ow are you?

2.4) What's **h**appening?

2.5) **H**ow **h**igh it is!

2.6) **H**ave you **h**eard?

## 3) Word pairs

Practice saying the sounds: (no /h/) and /h/ in contrast.

Sound 1: (no /h/)

Sound 2: /h/

eat

heat

old

hold

eye

high

air

hair

earring

hearing

## 4) Spelling

The sound /h/ is usually spelled with the letter *h*:

h = hope, how, behind, ahead

wh = who, whose, whole

The letter *h* is silent in these words: **hour, honest, oh, vehicle, heir, exhibit, rhythm**

## 1.11 Voiced post-alveolar approximant or frictionless continuant /r/

In the production of /r/, the soft palate is raised to close off the nasal tract; the tip of the tongue is held close to the rear part of the teeth ridge, leaving a narrow gap so that it is wide enough for the airstream from the lungs to flow through freely without causing any audible friction. There is voice from the throat, that is, the vocal cords vibrate.

## 1.11.1 Practice the sound /r/



Turn the tip of your tongue up as in the picture.  
Do not touch the roof of your mouth with your tongue.  
The sides of your tongue should touch your back teeth.  
Use your voice.

Figure 3.24 The diagram for the sound /r/

/r/ occurs in all the three positions in a word:

Initial	Medial	Final
/r-/	/-r-/	/-r <sup>1</sup> /
red	lorry	clear
real	secretary	share
read	arrest	before
right	surround	sure
rock	foreign	fear

“The rabbits raced right around the ring.”

<sup>1</sup> In British English accents, you only pronounce /r/ if there is a vowel sound after it, as in *far away* /fɑ:rəweɪ/, but not in *far* /fɑ:/ and *car* /kɑ:/. However, in American English accents, the /r/ is pronounced.

## 1.11.2 Phrases and sentences with the sound /r/

Practice saying these phrases and sentences below.

- 1) Are you **ready**?
- 2) All **right**.
- 3) It's **very** interesting.
- 4) I'm **really** sorry.
- 5) Do you **remember** his **real** name?
- 6) **Great**!

## 1.11.3 Word pairs

Practice saying the sounds: /l/ and /r/ in contrast.

Sound 1: /l/	Sound 2: /r/
long	wrong
light	write
pilot	pirate
glass	grass
cloud	crowd

## 1.11.4 Spelling

The sound /h/ is usually spelled with the letter *r*:

r	=	ready, right, really, row
rr	=	sorrow, sorry, tomorrow, correct

1.11.5 Other spellings: wrong, write, rhyme, rhythm

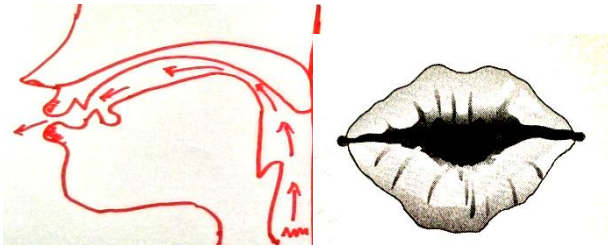
## 1.12 Semi-vowels /w/, /j/

## 1.12.1 Voiced labio-velar semi-vowel /w/

The production of /w/ is made by the back of the tongue assuming the position for the back high rounded vowel and then moving away immediately to the position of the following vowel sound. The lips are rounded when followed by a rounded vowel more than others. Thus, there is a much greater lip-rounding in words like *wool* and *war* than in words like *we* and *wait*. The soft palate is raised to shut off the nasal tract, and there is voice from the throat, that is, the vocal cords vibrate.



## 1) Practice the sound /w/



First practice the sound /u:.

Make your lips round and hard for /w/.

Quickly relax your lips.

Use your voice.

Figure 3.25 The diagram for the sound /w/

/w/ occurs only in all the two positions in a word:

Initial	Medial
/w-/	/-w-/
walk	twenty
why	sweat
wet	award
wild	question
wood	beware

“Windy went away twice a week.”

## 2) Phrases and sentences with the sound /w/

Practice saying these phrases and sentences below.

2.1) **W**hat **w**ould you like?

2.2) **W**here do you **w**ork?

2.3) **W**hat **l**angu**ag**es do you speak?

2.4) I go to see a dentist **o**nce a **w**ee**k**.

2.5) **W**ould you like to come with us?

2.6) Don't **w**orry.

## 3) Word pairs

Practice saying the sounds: /v/ and /w/ in contrast.

Sound 1: /v/	Sound 2: /w/
V	we
vet	wet
vest	west
vine	wine
veil	whale

## 4) Spelling

The sound /w/ is usually spelled with the letter *w*:

w = want, would, walk, war

wh = when, while, what, which

u = after the letter *q* and sometimes after the

letter *g* or *s*: question, quite, request, language, persuade

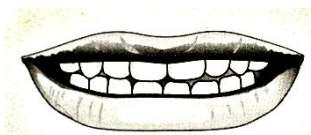
o = one, once, everyone

The letter *w* is silent in these words: write, wrong, wrist, answer, two, who, whole.

## 1.12.1 Voiced palatal semi-vowel /j/

The production of /j/ is made by the front of the tongue assuming the position for a front high vowel and then moving away immediately to the position of the following vowel sound. The lips are generally spread or neutral, but may become rounded if a rounded vowel follows as in *use* and *you*. The soft palate is raised to shut off the nasal tract, and there is voice from the throat, that is, the vocal cords vibrate.

## 1) Practice the sound /j/



First practice the sound /i:/.  
To say /j/, begin to make /i:/,  
but very quickly move your  
tongue to make the next sound. Use your voice.

Figure 3.26 The diagram for the sound /j/

/j/ occurs only in all the two positions in a word:

Initial	Medial
/j-/	/-j-/
yellow	stupid
year	huge
yes	pure
union	tune
yesterday	few

“We didn’t use Euros in Europe a few years ago.”

## 2) Phrases and sentences with the sound /j/

Practice saying these phrases and sentences below.

2.1) Can I **u**se your **co**mputer?

2.2) I've been here for a **fe**w years.

2.3) He was a **mu**sic **stu**dent.

2.4) Exc**u**se me!

2.5) Did **yo**u **u**se to live in **Ne**w **Yo**rk?

2.6) Do **yo**u listen to **po**pular **mu**sic?

## 3) Word pairs

Practice saying the sounds: /dʒ/ and /j<sup>2</sup>/ in contrast.

Sound 1: /dʒ/

Sound 2: /j/

Joke

yolk

Jam

yam

Jail

Yale

Jeers

years

Jess

yes

## 4) Spelling

The sound /j/ is usually spelled with the letter *y*: The sound /j/ is also often part of the pronunciation of the spelling *u*.

y = year, yellow, you, yet

u = pronounced /j u:/: use, usually, university,  
union, student, future, huge

i = after *n* or *l*: million, opinion, California, familiar

ew, iew, eu, eau = pronounced /j u:/: new, few, view, interview,  
Europe, beautiful

---

<sup>2</sup>In RP, the symbol /j/ is used instead of /y/. (/y/ is mostly used in American phonetic symbol)

## Summary

There are 24 English consonant sounds, described in terms of (i) voice or voicelessness, (ii) the place of articulation, and (iii) the manner of articulation. Such a description will be assigned to a three-term label for each consonant sound, such as the label *voiceless alveolar stop* (or *plosive*) for the initial consonant sound in English word *talk*.

Nine consonants are voiceless: /p, t, k, f, tʃ, ʃ, θ, s, h/, and the remaining fifteen voiced: /b, d, g, v, m, n, ŋ, dʒ, ʒ, ð, z, l, r, w, j/.

According to the place of articulation, the English consonant sounds fall into following groups:

Bilabial (3)	/p, b, m/
Labio-dental (2)	/f, v, /
Dental (Inter-dental) (2)	/θ, ð, /
Alveolar (6)	/t, d, n, l, s, z/
Post-alveolar (1)	/r/
Palato-alveolar (4)	/tʃ, dʒ, ʃ, ʒ/
Velar (3)	/j/
Glottal (1)	/h/
Labio-velar (1)	/w/ <sup>3</sup>

According to the manner of articulation, the English consonant sounds fall into the following groups:

Stops (6)	/p, b, t, d, k, g/
Affricates (2)	/tʃ, dʒ/
Nasals (3)	/m, n, ŋ/
Lateral (1)	/l/
Fricatives (9)	/f, v, θ, ð, s, z, ʃ, ʒ, h/
Approximant (Frictionless continuant) (1)	/r/
Semi-vowels (2)	/w, j/

---

<sup>3</sup> The consonant sound /w/ is produced under the *Velar* as well as *Bilabial*. Such production is called *Labio-velar*.

## Question reviews

1. Describe the following English sounds given below by identifying (1) voiced or voiceless, (2) the place of articulation and (3) the manner of articulation.

1.1 /f/ as in **fan**

1.2 /θ/ as in **think**

1.3 /s/ as in **sun**

1.4 /tʃ/ as in **chop**

1.5 /m/ as **man**

2. Give two pairs of words between the following two pairs of consonant sounds in contrast:

2.1 /n/ - /ŋ/

2.2 /tʃ/ - /ʃ/

2.3 /s/ - /θ/

2.4 /dʒ/ - /j/

2.5 /f/ - /v/

3. What is the initial (first) sound in the word “**moon**” is called?

4. What is the difference between /p/ and /b/ sounds?

5. What consonant sound is described as *voiced labio-velar*?

6. Give the phonetic symbols of the initial (first) consonant sounds of words and identify the terms of the place of articulation in each sound.

6.1. **they**

6.2 **show**

6.3 **yellow**

7. Give five words that end with a *voiced alveolar nasal* consonant sound.

8. Give five words that begin with a *voiced bilabial plosive* consonant sound.

9. What consonant sound is represented by the letter ‘**ph**’ in the word **phone**?

10. What consonant sound is represented by the letter ‘**ch**’ in the word **school**?

# CHAPTER 4

## ENGLISH VOWEL SOUNDS

As mentioned in chapter 2, it is the study of how English vowel sounds are described and classified. In this chapter it will be the study of how English vowel sounds are produced and how they are described. In English vowel sounds consist of monophthongs (pure vowels) and diphthongs (compound vowels). Such description and production will be assigned to a term label for each vowel sound, such as the label a *high front unrounded long vowel* for the vowel sound in English word *see*,

### Vowel sounds

There are 20 vowel sounds in English. These are listed below along with the examples that show their occurrence in the initial, medial, and final positions. A blank space in the table indicates the non-occurrence of a vowel sound in that position.

No.	Monophthongs			
	Phonetic Symbols	Position		
		Initial	Medial	Final
1.	i:	eat	seat	sea
2.	ɪ	it	sit	city
3.	e	end	lend	-
4.	æ	and	sand	-
5.	ɑ:	art	farm	far
6.	ɒ (ɑ:)AmE	on	hot	-
7.	ɔ:	all	caught	saw
8.	ʊ	-	put	-
9.	u:	ooze	choose	shoe
10.	ʌ	up	cup	-
11.	ɜ:	earn	turn	fur
12.	ə	about	police	actor

<b>Diphthongs</b>				
<b>13.</b>	eɪ	age	base	stay
<b>14.</b>	əʊ(ou) <i>AmE</i>	oak	joke	slow
<b>15.</b>	aɪ	ice	mice	my
<b>16.</b>	aʊ	out	shout	now
<b>17.</b>	ɔɪ	oil	boil	boy
<b>18.</b>	ɪə	ear	beard	Clear*
<b>19.</b>	eə	air	shared	hair
<b>20.</b>	ʊə	-	cured	poor

Figure 4.1 Phonetic symbols of English vowel sounds

Source: adapted from Sethi & Dhamija, (1999)

\*It is noted that /r/ is not pronounced in British Accent as in *clear* /kɪrə/ but in American Accent /r/ is pronounced as in *clear* /kɪər/.

### 1. Monophthongs

Monophthongs are simply single pure vowels. There are 12 monophthongs classified into four front vowel sounds: /i:, ɪ, e, æ/; three central vowel sounds: /ʌ, ɜ:, ə /; and five back vowel sounds: /ɑ:, ɒ, ɔ:, ʊ, u:/. These are now described and discussed in terms of 1) the tongue height, 2) the part of the tongue raised, and 3) the lip-position.

#### 1.1 Front vowel sounds: /i:, ɪ, e, æ/

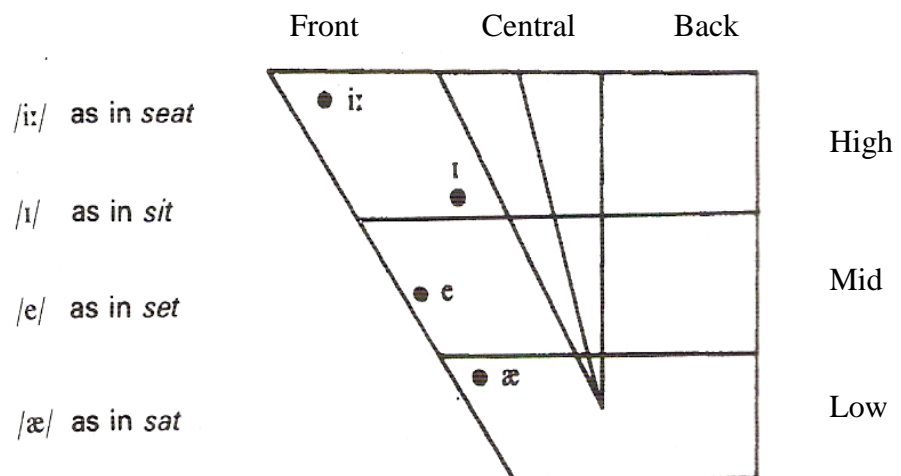


Figure 4.2 Front vowel sounds (Sethi and Dhamija, 1999: 66)

### 1.1.1 High front unrounded long vowel sound /i:/. • seat

In producing the sounds /i:/, the front of the tongue is raised to a height just below the high position (Figure 4.2); the lips are spread. It is a long vowel sound.

#### 1) Practice the sound /i:/.



Open your mouth very little to make the sound /i:/.

Spread your lips into a smile.

Push your tongue forward in your mouth.

/i:/ is a long sound.

Move your tongue up a little as you say it.

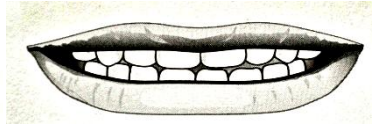


Figure 4.3 The diagram for making the sound /i:/

/i:/ occurs in all the three positions in a word:

Initial	Medial	Final
/i: -/	/- i: -/	/- i:/
eel	feel	see
each	meat	free
even	receive	key
eat	these	tea

“Steve keeps the cheese in the freezer.”

#### 2) Phrases and sentences with the sound /i:/.

Practice saying these phrases and sentences below.

2.1) Please to meet you.

2.2) I agree with you.

2.3) Can I speak to Lee, please?

2.4) Unbelievable!.

2.5) Could you repeat that, please?

2.6) Good evening.



## 3) Spelling

The sound /i:/ is usually spelled with the letter *e*:

ee	=	see, feel, three, cheese
ea	=	eat, tea, please, cheap
e	=	me, we, be, equal
e...e	=	(the second <i>e</i> is silent) evening, these,

complete

ie	=	piece, field, relief, siege
ei	=	receive, either, either,
eo	=	people
ay	=	quay
ey	=	key
i	=	visa, police, machine, ski

## 1.1.2 High front unrounded short vowel sound /ɪ/ • sit

To produce the sound /ɪ/, the rear part of the front of the tongue is raised to a height just lower than the position of the sound /i:/ (Figure 4.2); the lips are loosely spread; and it is a short vowel sound.

## 1) Practice the sound /ɪ/



First practice to make the sound /i:/

Then open your mouth a little more for the sound /ɪ/.

Do not spread your lips into a smile.

Pull your tongue down a little in your mouth.

/ɪ/ is a shorter, more relaxed sound than /i:/.

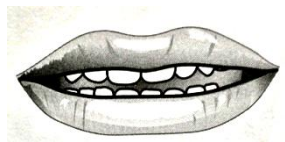


Figure 4.4 The diagram for making the sound /ɪ/

/ɪ/ occurs in all the three positions in a word:

Initial	Medial	Final
/ɪ-/	/-ɪ-/	/-ɪ/
it	fit	marry
ill	fill	holy
if	still	lady
enjoy	engine	simile

“Tim bit a bit of Kitty’s biscuit.”

## 2) Phrases and sentences with the sound /ɪ/

Practice saying these phrases and sentences below.

2.1) What time is it?

2.4) May I come in?

2.2) I think it’s interesting.

2.5) Wait for a minute.

2.3) Listen to this.

2.6) Where do you live

## 3) Word pairs

Practice saying the sounds: /i:/ and /ɪ/ in contrast.

Sound 1: /i:/

Sound 2: /ɪ/

sheep

ship

seat

sit

heel

hill

feel

fill

sleep

slip

## 4) Spelling

The sound /ɪ / is usually spelled with the letter *i*:

i = hit, sit, did, will

y = syllable, city, gym, symbol

ui = building, guilty

u = busy, minute (n)

ia = marriage, carriage

o = women

ey = monkey, money

### 1.1.3 Mid front unrounded short vowel sound /e/ • set

To produce the sound /e/, the front of the tongue is raised to a point about mid-way between the high and the low positions (Figure 4.2); the lips are loosely spread and a little wider than for /ɪ/. It is a short vowel sound.

#### 1) Practice the sound /e/



First practice to make the sound /ɪ/.

Then open your mouth a little more for the sound /e/.

/e/ is a short and relaxed sound.



Figure 4.5 The diagram for making the sound /e/

/e/ occurs in the two positions in a word only:

#### **Initial**

/e-/

any

egg

end

else

#### **Medial**

/-e-/

many

leg

lend

friend

“It’s best to rest, said the vet to the pet.”

#### 2) Phrases and sentences with the sound /e/

Practice saying these phrases and sentences below.

2.1) Are you ready?

2.2) Yes.

2.3) What’s the weather like?

2.4) It’s very expensive.

2.5) Help, please.

2.6) Let’s get ready.

#### 3) Word pairs

Practice saying the sounds: /ɪ/ and /e/ in contrast.

Sound 1: /ɪ/

bill

pin

chicks

wrist

spill

Sound 2: /e/

bell

pen

checks

rest

spel

## 4) Spelling

The sound /e/ is usually spelled with the letter *e*:

e	=	let, send, yes, spell
a	=	any, many,
ea	=	head, ready, health, jealous
ai	=	said, again
ie	=	friend
ue	=	guess, guest
u	=	bury
ei	=	leisure

## 1.1.4 Low front unrounded short vowel sound /æ/ • sat

To produce the sound /æ/, the front of the tongue is raised to a low position (Figure 4.2); the lips are in the neutral position and the mouth is more open than for /æ/. It is a short vowel sound.

## 1) Practice the sound /æ/



First practice to make the sound /e/.

Then open your mouth a little more for the sound /æ/.

/æ/ is a short sound.

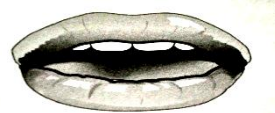


Figure 4.6 The diagram for making the sound /æ/

/æ/ occurs in the two positions in a word only:

Initial	Medial
/æ-/	/-æ-/
and	man
ass	sand
axe	lax
ant	sat

“The fat cat sat on the man’s black hat.”

## 2) Phrases and sentences with the sound /æ/

Practice saying these phrases and sentences below.

2.1) Thank you for your help.

2.2) What's happening?

2.3) I have a sandwich for breakfast.

2.4) Do you understand?

2.5) What's the matter?

2.6) Who's that man?

## 3) Word pairs

Practice saying the sounds: /e/ and /æ/ in contrast.

Sounds 1: /e/

Sound 2: /æ/

X

axe

pen

pan

men

man

left

laughed

said

sad

## 4) Spelling

The sound /æ/ is usually spelled with the letter *a*:

a = sat, hat, man, jacket

ai = plaid, plait

## 1.2 Central vowel sounds: /ʌ, ɜː, ə/

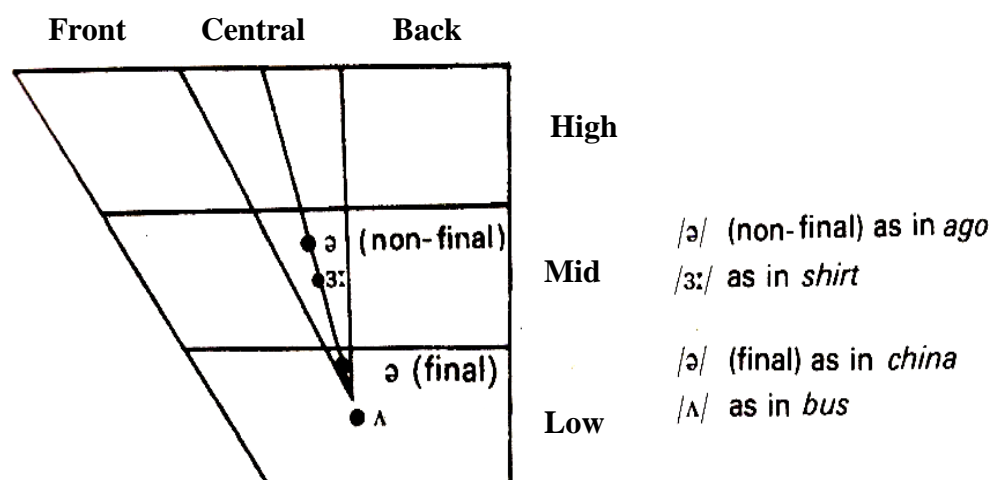


Figure 4.7 Central vowel sounds (Sethi and Dhamija, 1999:75)

### 1.2.1 Low central unrounded short vowel sound /ʌ/ • bus

During the production of the sound /ʌ/, the centre of the tongue is raised to a low position (Figure 4.6); the lips are neutrally open, with separation of the jaws. It is a short vowel sound.

#### 1) Practice the sound /ʌ/



First practice to make the sound /æ/.

Then close your mouth a little for /ʌ/.

Put your tongue back a little.

/ʌ/ is a short sound.



Figure 4.8 The diagram for making the sound /ʌ/

/ʌ/ occurs in the initial and medial positions in a word:

Initial	Medial
/ʌ-/	/-ʌ-/
up	cup
other	supper
uncle	front
us	wonder
utter	blood

“My mother’s brother’s my uncle; my uncle’s son’s my cousin.”

#### 2) Phrases and sentences with the sound /ʌ/.

Practice saying these phrases and sentences below.

1.2.1 What’s up?

1.2.2) Shut up!

1.2.3) How much is it?

1.2.4) Ouch! I cut myself.

1.2.5) What country are you from?

1.2.6) Do you have enough money?

## 1.3) Word pairs

Practice saying the sounds: /æ/ and /ʌ/ in contrast.

Sound 1: /æ/	Sound 2: /ʌ/
cap	cup
bag	bug
cat	cut
rag	rug
ankle	uncle

## 1.4) Spelling

The sound /ʌ/ is usually spelled with the letter *u* or *o*:

u	=	sun, just, cut, funny
o	=	money, monkey, colour, onion
ou	=	country, young, cousin, enough
oo	=	blood, flood
oe	=	does

## 1.2.2 Mid central unrounded long vowel sound /ɜː/ ● shirt

During the production of the sound /ɜː/, the centre of the tongue is raised between high and low positions (Figure 4.6); the lips are closely rounded. It is a long vowel sound.

## 1) Practice the sound /ɜː/

First practice to make the sound /ɔː/.

Then put your tongue forward and up a little.

/ɜː/ is a long sound.

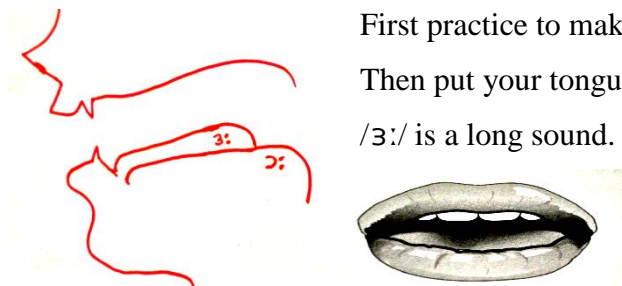


Figure 4.9 The diagram for making the sound /ɜː/

/ɜ:/ occurs in all the three positions in a word:

Initial	Medial	Final
/ɜ:-/	/-ɜ:-/	/-ɜ:/
earn	first	fur
earth	burn	occur
early	curl	prefer
err	turn	blur

“The girl heard the nurse work.”

## 2) Phrases and sentences with the sound /ɜ:/

Practice saying these phrases and sentences below.

2.1) Hurry up!

2.2) Happy birthday.

2.3) My father is hard-working.

2.4) I was the first person in here.

2.5) I walk to work.

2.6) Do you prefer hot or cold weather?

## 3) Word pairs 1

Practice saying the sounds: /ɔ:/ and /ɜ:/ in contrast.

Sound 1: /ɔ:/	Sound 2: /ɜ:/
four	fur
store	stir
torn	turn
shorts	shirts
ward	word

## 4) Word pairs 2

Practice saying the sounds: /ʌ/ and /ɜ:/ in contrast.

Sound 1: /ʌ/	Sound 2: /ɜ:/
shut	shirt
huts	hurts
bun	burn
bud	bird
gull	girl



### 5) Spelling

The sound /ɜ:/ is spelled many different ways:

er	=	person, term, prefer, certain
ir	=	bird, shirt, firm, girl
ur	=	turn, burn, hurt, surface
ear	=	earth, learn, heard, early
or (after w)	=	word, work, world, worship
our	=	journey, adjourn

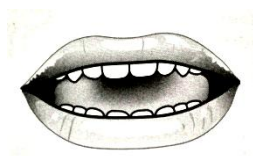
#### 1.2.3 Mid/Low central unrounded short vowel sound /ə/ • ago

In producing the sound /ə/, there are at least two positions—the *non-final* and the *final*. The non-final /ə/ is pronounced exactly the same way and at more or less the same place as the sound /ɜ:/. In that position, the sound /ə/ differs from the sound /ɜ:/ mainly in respect of length, /ə/ being a short vowel. The final /ə/, however, is made with the centre of the tongue raised just below the mid position (Figure 4.6). In both cases, the lips are neutrally positioned.

#### 1) Practice the sound /ə/



First practice to make the sound /ɜ:/



This is a long sound.

Then make it very short for /ə/.

/ə/ is a long sound.

Figure 4.10 The diagram for making the sound /ə/

/ə/ occurs in all the three positions in a word:

Medial	Medial	Final
/ə-/	/-ə-/	/-ə/
about	police	doctor
away	correct	sofa
allow	compare	theatre
ago	backward	favour

“I ate an apple and a banana in a cinema in Canada.

## 2) Phrases and sentences with the sound /ə/

Practice saying these phrases and sentences below.

2.1) What's the problem?

2.2) Can you say that again?

2.3) What about you?

2.4) That's excellent!

2.5) You're welcome.

2.6) I was hungry.

3) Practice using the sound /ə/ in words and syllables that are not important or unstressed.

Practice saying the sound: /ə/ in the following words or phrases:

3.1) a glass of water /ə 'glɑ:s əv 'wɔ:tə(r)/

3.2) mother and father /'mʌðər ənd 'fɑ:ðə(r)/

3.3) a cup of coffee /ə 'kʌp əv 'kɒfɪ/

3.4) at six o'clock /ət 'sɪksə'klɒk/

3.5) a book about China /ə 'bʊk ə'baut 'tʃaɪnə/

3.6) her sister's camera /hə(r)'sɪstə(r)z'kæmə(r)ə/

## 4) Spelling

The sound /ə/ can be spelled with any vowel letter:

a	=	again, about, banana, woman
e	=	open, problem, excellent, reference
i	=	possible, terrible
o	=	today, obtain, prolong
u	=	suggest, success, suspect (v), careful
ou	=	jealous, famous, dangerous
er	=	better, mother, singer, other, center
or	=	doctor, effort, governor, comfort
ur	=	surprise, surpass
ure	=	treasure, measure, feature
ia	=	special, musician, partial
ar	=	dollar, particular, beggar
re	=	centre, metre

1.3 Back vowel sounds: /ɑ:/ , ɒ , ɔ:/ , ʊ , u:/

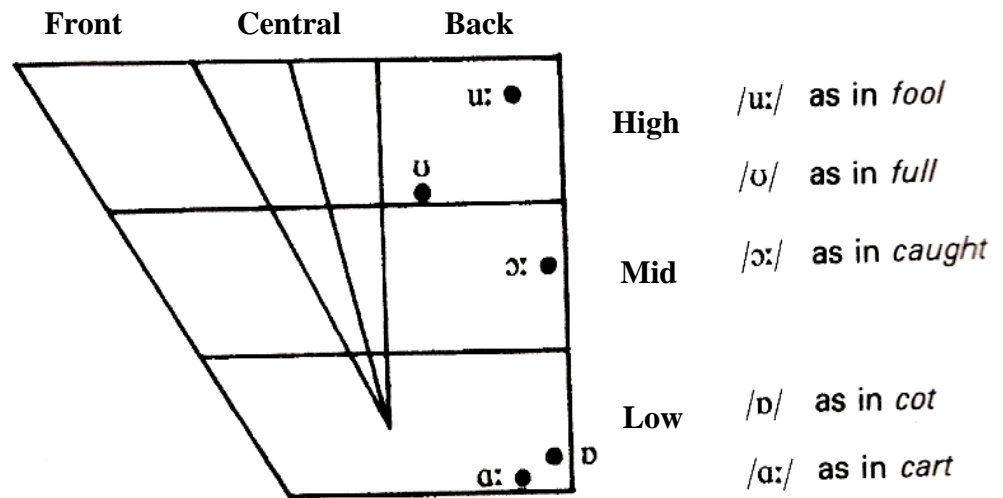


Figure 4.11 Back vowel sounds (Sethi and Dhamija, 1999:70)

1.3.1 Low back unrounded long vowel sound /ɑ:/ ● cart

To produce the sound /ɑ:/, the jaws are kept considerably separated; the lips are neutrally open; and a part of the tongue moving down and back is in the fully low position (Figure 4.10). It is a long vowel sound.

1) Practice the sound /ɑ:/



First practice to make the sound /æ/.



Then put your tongue down and back for the sound /ɑ:/.

Make your lips open neutrally.

/ɑ:/ is a long sound.

Figure 4.12 The diagram for making the sound /ɑ:/

/ɑ:/ occurs in all the three positions in a word:

Initial	Medial	Final
/ɑ: -/	/-ɑ: -/	/-ɑ:/
arm	calm	star
art	laugh	far
aunt	heart	bar
ask	starve	aha

“It’s hard to park a car in a dark car park.”

## 2) Phrases and sentences with the sound /ɑ:/' data-bbox="335 128 702 144"/&gt;

Practice saying these phrases and sentences below.

2.1) What a fast car!

2.2) She broke my heart.

2.3) We started in March.

2.4) Where's the bar?

2.5) It's getting dark.

2.6) Let's start.

## 3) Word pairs

Practice saying the sounds: /æ/ and /ɑ:/' data-bbox="351 348 769 366"/>

Sound 1: /æ/' data-bbox="415 373 525 390">	Sound 2: /ɑ:/' data-bbox="600 373 717 390">
cap	carp
hat	heart
cat	cart
ban	barn
match	march

## 4) Spelling

The sound /ɑ:/' data-bbox="411 545 876 562"/>

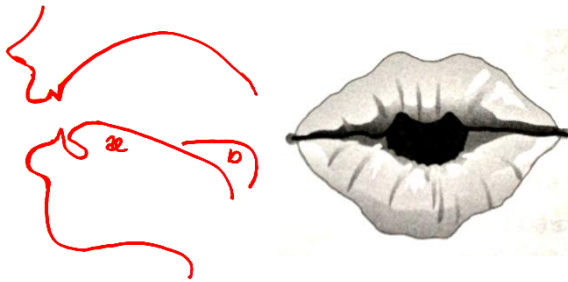
ar	=	arm, harm, art, farm
al	=	calm, half, balm, palm
a	=	ask, dance, bath, after*
au	=	aunt, laugh
ear	=	heart, hearth
er	=	clerk, sergeant
ah	=	ah

\*It is noted that the words: *ask, dance, bath, after* are pronounced as /æ/ in American accent but as /ɑ:/' data-bbox="176 741 847 782"/>

## 1.3.2 Low back rounded short vowel sound /ɒ/' data-bbox="290 789 730 806"/&gt;

During the production of the sound /ɒ/' data-bbox="176 813 876 881"/>

## 1) Practice the sound /ɒ/



First practice to make the sound /æ/.

Then put your tongue slightly back and bring your lips slightly forward.

Make your lips rounded slightly.

/ɒ/ is a short sound.

Figure 4.13 The diagram for making the sound /ɒ/

/ɒ/ occurs in the two positions in a word only :

Initial	Medial
/ɒ-/	/-ɒ-/
ox	fox
often	soft
October	quality
office	promise

“John wants to watch Walter wash the dog.”

## 2) Phrases and sentences with the sound /ɒ/

Practice saying these phrases and sentences below.

2.1) Let's go shopping.

2.2) No problem!

2.3) Stop!

2.4) What do you want?

2.5) What's wrong with you?

2.6) We've got what we want.

## 3) Word pairs

Practice saying the sounds: /æ/ and /ɒ/ in contrast.

Sound 1: /æ/	Sound 2: /ɒ/
hat	hot
cat	cot
cap	cop
sack	sock
ran	Ron

## 4) Spelling

The sound /ɒ/ is usually spelled with the letter *o* :

o	=	stop, job, clock, box
a (after /w/)	=	want, watch, wallet, wash
au	=	because, sausage, Australia
ou	=	cough, trough
ow	=	knowledge

## 1.3.3 Mid back rounded long vowel sound /ɔ:/. • caught

During the production of the sound /ɔ:/, the back of the tongue is raised between the high and the low positions (Figure 4.10); the lips are considerably more rounded than for /ɒ/. It is a long vowel sound.

## 1) Practice the sound /ɔ:/.



First practice to make the sound /ɒ/.

Then put the back of your tongue up a little.

Make your lips more rounded than for /ɒ/.

/ɔ:/ is a long sound.

Figure 4.14 The diagram for making the sound /ɔ:/

/ɔ:/ occurs in all the three positions in a word:

Initial	Medial	Final
/ɔ:-/	/-ɔ:-/	/-ɔ:-/
all	stall	law
ought	thought	jaw
organ	dawn	floor
awful	story	store

“Laura’s daughter bought a horse and called it Laura.”

## 2) Phrases and sentences with the sound /ɔ:/' data-bbox="335 132 702 148"/&gt;

Practice saying these phrases and sentences below.

2.1) Good morning.

2.2) One more, please.

2.3) Are you a reporter?

2.4) It was awful.

2.5) I've put the ball in the drawer

2.6) It's too warm to go walking.

## 3) Word pairs

Practice saying the sounds: /ɒ/ and /ɔ:/' data-bbox="360 356 780 375"/>

Sound 1: /ɒ/' data-bbox="415 381 527 398"/>

Sound 2: /ɔ:/' data-bbox="595 381 714 398"/>

cod

cord

cot

caught

pot

port

fox

forks

spots

sports

## 4) Spelling

The sound /ɔ:/' data-bbox="360 553 775 571"/>

a	=	all, tall, wall, talk
ar	=	warm, towards, war
au	=	cause, daughter, caught, caution
aw	=	saw, law, straw, yawn,
oa	=	broad
oar	=	board
or	=	or, nor, cord, born
ore	=	more, store, before
ou	=	ought, fought, thought, nought
our	=	four, court, pour

### 1.3.4 High back rounded short vowel sound /ʊ/ ● full

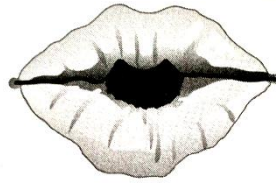
During the production of the sound /ʊ/, a part of the tongue is raised nearer to centre than to back just above the high position (Figure 4.10); the lips are closely but loosely rounded. It is a short vowel sound.

#### 1) Practice the sound /ʊ/



First practice to make the sound /ʊ/.

Then put the back of your tongue forward and up a little.



Make your lips rounded closely but loosely.

/ʊ/ is a short sound.

Figure 4.15 The diagram for making the sound /ʊ/

/ʊ/ occurs in the medial positions in a word only:

Medial	Medial
/-ʊ-/	/-ʊ-/
put	wood
push	should
wolf	woman
book	look

“That cook couldn’t cook if he didn’t look at a cook book.”

#### 2) Phrases and sentences with the sound /ʊ/

Practice saying these phrases and sentences below.

4.2.1) What are you looking for?

4.2.2) I couldn’t do it.

4.2.3) Look!

4.2.4) That’s a good book.

4.2.5) Who’s that woman?

4.2.6) Push it but don’t pull it.



## 3) Word pairs

Practice saying the sounds: /ɒ/ and /ʊ/ in contrast.

Sound 1: /ɒ/	Sound 2: /ʊ/
pot	put
cock	cook
god	good
lock	look
rock	rook

## 4) Spelling

The sound /ʊ/ is usually spelled with the letter *oo* or *u* :

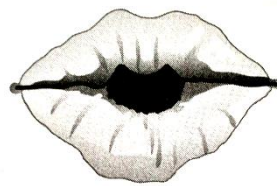
oo	=	book, look, good, foot
u	=	pull, push, put, sugar
ou	=	could, should, would,
o	=	woman

## 1.3.5 High back rounded long vowel sound /u:/ ● fool

During the production of the sound /u:/, the back of the tongue is raised to the high position (Figure 4.10); the lips are closely rounded. It is a long vowel sound.

## 1) Practice the sound /u:/

First practice to make the sound /ʊ/ again.



Then put your tongue up and back.

Make your lips rounded closely.

/u:/ is a long sound.

Figure 4.16 The diagram for making the sound /u:/

/u:/: occurs in all the three positions in a word:

Medial	Medial	Final
/u:-/	/-u:-/	/-u:/:
ooze	truth	shoe
oop!	student	true
-	rude	two
-	routine	blue

“Sue knew too few new tunes on the flute.”

## 2) Phrases and sentences with the sound /u:/:

Practice saying these phrases and sentences below.

2.1) Whose shoe is it?

2.2) What’s new?

2.3) See you soon.

2.4) Let me introduce you.

2.5) Excuse me.

2.6) I want to see a movie. Me, too.

## 3) Word pairs

Practice saying the sounds: /u:/: and /ʊ/: in contrast.

Sound 1: /u:/:	Sound 2: /ʊ/:
Luke	look
pool	pull
fool	full
suit	soot
stewed	stood

## 4) Spelling

The sound /u:/: is usually spelled with the letter *oo* or *u* :

oo	=	too, soon, school, choose
u	=	truth, music, usually, student
u...e	=	introduce, use, true
o	=	do, who, two, movie
o....e	=	move, shoe, lose, whose

ou	=	you, group, soup
ew	=	new, knew, grew, few
ough	=	through
ui	=	juice, fruit, suit
eau	=	beautiful

## 2. Diphthongs

As mentioned above the vowel sounds are single pure vowel sounds.

“Diphthongs (also called gliding vowel sounds) are (Andriyani, 2013) single vowel sounds when two vowel sounds are paired together in sequence.” In English there are eight diphthongs consisting of 1) three gliding vowel sounds towards [ɪ]: /eɪ, aɪ, ɔɪ/; 2) two towards [ʊ]: /aʊ, əʊ/, and 3) three towards [ə]: /ɪə, eə, ʊə/. These are now discussed below.

### 2.1 Gliding vowel sounds towards [ɪ]: /eɪ, aɪ, ɔɪ/

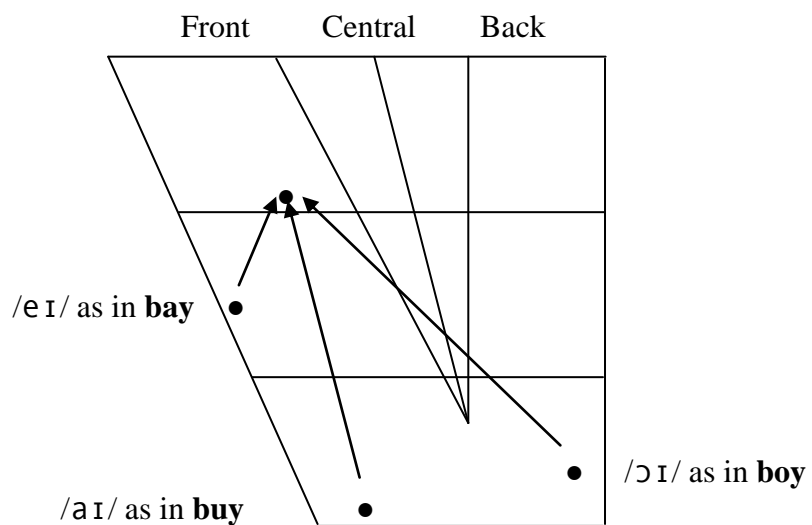


Figure 4.17 Gliding vowel sounds towards [ɪ]: /eɪ, aɪ, ɔɪ/

#### 2.1.1 The gliding vowel sound /eɪ/ ● bay

In producing the sound /eɪ/, the glide starts from a point of the mid front short vowel sound position and moves in the direction of /ɪ/ (Figure 4.16). The movement of the tongue goes with a slight high movement of the lower jaw. The lips are spread. It is a long vowel sound.

## 1) Practice the sound /eɪ/

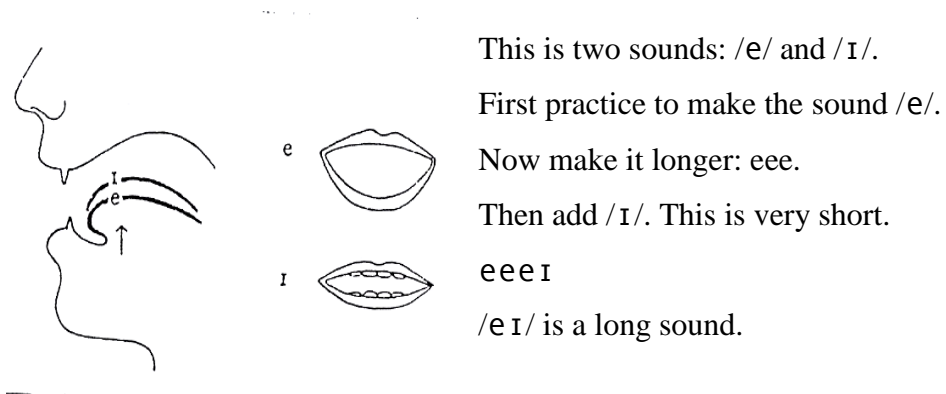


Figure 4.18 The diagram for making the sound /eɪ/ (Baker, 1977: 47)

/eɪ/ occurs in all the three positions in a word:

Medial	Medial	Final
/eɪ-/	/-eɪ-/	/-eɪ/
age	race	may
aim	brain	play
eight	take	weigh
acre	main	convey

“The rain in Spain falls mainly on the plain.”

## 2) Phrases and sentences with the sound /eɪ/

Practice saying these phrases and sentences below.

- |                        |                           |
|------------------------|---------------------------|
| 2.1) Sorry! I'm late.  | 2.4) Wait a minute.       |
| 2.2) What did you say? | 2.5) Have a great day!    |
| 2.3) OK.               | 2.6) That's a great name. |

## 3) Word pairs

Practice saying the sounds: /e/ and /eɪ/ in contrast.

Sound 1: /e/	Sound 2: /eɪ/
pen	pain
wet	wait
test	taste
pepper	paper
shed	shade

#### 4) Spelling

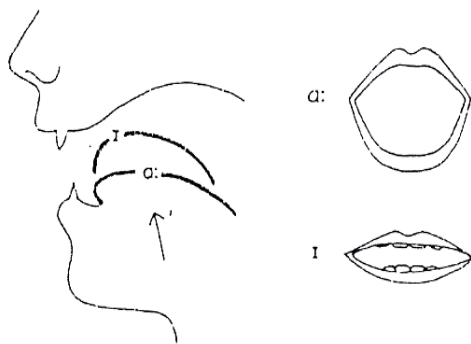
The sound /eɪ/ is usually spelled with the letter *a* :

a...e	=	name, take, page, lake
a	=	station, nation, bass (in music)
ai	=	aim, brain, train, wait
ay	=	say, way, pay, away
eigh	=	eight, weigh, neighbor
ea	=	great, break, steak
ey	=	they, grey, obey

#### 2.1.2 The gliding vowel sound /aɪ/ • buy

In producing the sound /aɪ/, the glide starts from a point slightly behind the low front position and moves in the direction of /ɪ/ (Figure 4.16). The movement of the tongue goes with an appreciable high movement of the lower jaw. The lips are in a neutral position at the beginning, but they gradually change to a loosely spread position. It is a long vowel sound.

##### 1) Practice the sound /aɪ/



This is two sounds: /a:/ and /ɪ/.

First practice to make the sound /a:/.

Make this sound long. aaa

Then add /ɪ/. This is very short.

/aɪ/ is a long sound.

Figure 4.19 The diagram for making the sound /aɪ/ (Baker, 1977: 50)

/aɪ/ occurs in all the three positions in a word:

Medial	Medial	Final
/aɪ-/	/-aɪ-/	/-aɪ/
ice	rice	fly
eyes	knight	high
item	fight	hi
idle	five	deny

“Nile crocodiles have the widest smile

## 2) Phrases and sentences with the sound /aɪ/

Practice saying these phrases and sentences below.

2.1) This is my bike. 2.4) I'm going for a drive with Nigel.

2.2) I had a nice time. 2.5) Hi. My name's Brian.

2.3) Goodnight. 2.6) Would you like some ice-cream

## 3) Word pairs

Practice saying the sounds: /ɑː/ and /aɪ/ in contrast.

Sound 1: /ɑː/	Sound 2: /aɪ/
bar	buy
star	sty
darn	dine
lark	like
cart	kite

## 4) Spelling

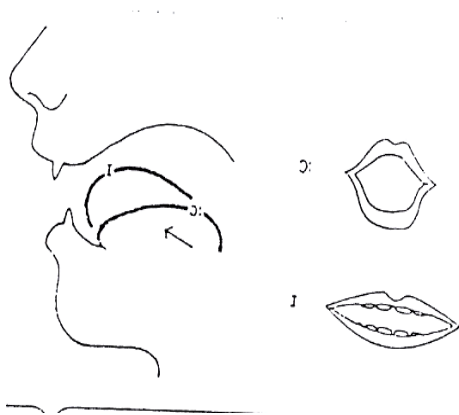
The sound /aɪ/ is usually spelled with the letter *i* and *y*:

i.....e	=	fine, file, time, ice
i	=	find, hi, item, Friday
igh	=	high, light, right, tonight
y	=	try, fly, my, why
ie	=	lie, die, tried,
ai	=	aisle
ei	=	height, neither, either
eye	=	eye
uy	=	buy, guy
ye	=	bye, dye

## 2.1.3 The gliding vowel sound /ɔɪ/ • boy

In producing the sound /ɔɪ/, the glide starts from a point of the low back positions and moves in the direction of /ɪ/ (Figure 4.16). The jaw movement is not as considerable as for the sound /aɪ/. The lips are open rounded at the beginning, changing to the neutral towards the end. It is a long vowel sound.

## 1) Practice the sound /ɔɪ/



This is two sounds: /ɔ:/ and /ɪ/.

First practice to make the sound /ɔ:/.

Now make it longer: ɔɔɔ.

Then add /ɪ/. This is very short.

ɔɔɔɪ

/ɔɪ/ is a long sound.

Figure 4.20 The diagram for making the sound /ɔɪ/ (Baker, 1977: 53)

/ɔɪ/ occurs in all the three positions in a word:

Media	Medial	Final
/ɔɪ-/	/-ɔɪ-/	/-ɔɪ/
oil	boil	boy
ointment	appointment	enjoy
oyster	poison	employ
-	coin	annoy

“Roy enjoys noisy toys.”

## 2) Phrases and sentences with the sound /ɔɪ/

Practice saying these phrases and sentences below.

2.1) Don't make a noise.

2.2) Do you enjoy it?

2.3) That noise is very annoying.

2.4) Please keep your voice down!

2.5) Do you have an appointment? -

2.6) Look! The water's boiling.

## 3) Word pairs

Practice saying the sounds: /aɪ/ and /ɔɪ/ in contrast.

Sound 1: /aɪ/	Sound 2: /ɔɪ/
buy	boy
ties	toys
pint	point
aisle	oil
file	foil

## 4) Spelling

The sound /ɔɪ/ is spelled with the letters *oi* and *oy*:

oi	=	voice, point, oil, noise
oy	=	joy, boy, toy, enjoy
uo	=	buoy

## 2.2 Gliding vowel sounds towards [ʊ]: /aʊ, əʊ/

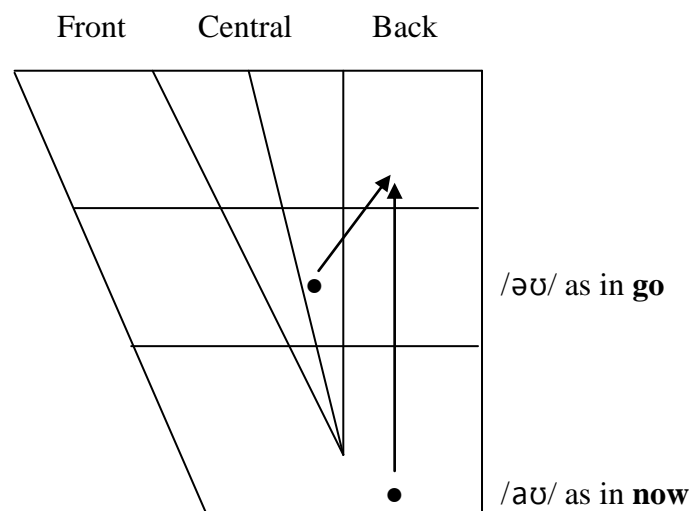


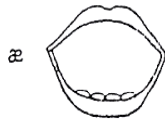
Figure 4.21 Gliding vowel sounds towards [ʊ]: /aʊ, əʊ/

## 2.2.1 The gliding vowel sound /aʊ/ ● now

In producing the sound /aʊ/, the glide starts from a point between the back and front low positions and moves in the direction of /ʊ/ (Figure 4.20). The jaw movement is as extensive as for the sound /aʊ/. The lips are neutral at the beginning of the glide, but become rounded towards the end. It is a long vowel sound.



## 1) Practice the sound /aʊ/



This is two sounds: /æ/ and /ʊ/.

First practice to make the sound /æ/.

Now make it longer: æææ.

Then add /ʊ/. This is very short.

æææʊ

/aʊ/ is a long sound.

Figure 4.22 The diagram for making the sound /aʊ/ (Baker, 1977: 57)

/aʊ/ occurs in all the three positions in a word:

Initial	Medial	Final
/aʊ-/	/-aʊ-/	/-aʊ/
out	count	now
owl	bounce	how
ounce	round	plough
oust	mouth	cow

“Mrs. Brown counted cows coming down the mountain.”

## 2) Phrases and sentences with the sound /aʊ/

Practice saying these phrases and sentences below.

2.1) Please sit down.

2.4) Ouch! You hit me.

2.2) Sit down and don't shout.

2.5) Put it down.

2.3) I'm going to downtown.

2.6) I found a mouse in  
the house.

## 3) Word pairs

Practice saying the sounds: /ɑ:/ and /aʊ/ in contrast.

Sound 1: /ɑ:/

Sound 2: /aʊ/

car

cow

bar

bow

bra

brow

grass

grouse

arch

ouch

#### 4) Spelling

The sound /aʊ/ is spelled with the letters *ou* and *ow*:

ou = round, out, sound about, house

ow = now, down, how, town

#### 2.2.2 The gliding vowel sound /əʊ/ • go

In producing the sound /əʊ/, the glide starts from a point at a central position almost midway between the high and the low positions and moves in the direction of /ʊ/ (Figure 4.20). The jaw movement is slight; the lips, which are neutral at the beginning of the glide, become rounded towards the end. It is a long vowel sound.

##### 1) Practice the sound /əʊ/

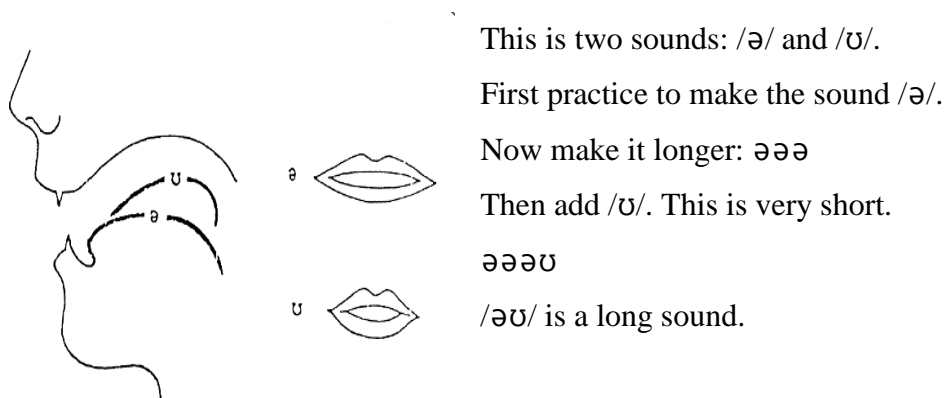


Figure 4.23 The diagram for making the sound /əʊ/ (Baker, 1977: 61)

/əʊ/ occurs in all the three positions in a word:

Initial	Medial	Final
/əʊ-/	/-əʊ-/	/-əʊ/
over	boat	go
open	fold	sorrow
oval	coat	know
own	ghost	so
owe	phone	though

“Rose knows Joe phones Sophie, but Sophie and Joe don’t know Rose knows.”

## 2) Phrases and sentences with the sound /əʊ/

Practice saying these phrases and sentences below.

2.1) Let's go home.

2.2) No.

2.3) How's it going?

2.4) OK.

2.5) Could you open the window?

2.6) Hello. My name's Joe

## 3) Word pairs

Practice saying the sounds: /ɔ:/ and /əʊ/ in contrast.

Sound 1: /ɔ:/

Sound 2: /əʊ/

saw

sew

caught

coat

hall

hole

ball

bowl

walk

woke

## 4) Spelling

The sound /əʊ/ is usually spelled with the letter *o*:

o = go, told, open, so

o...e = home, joke, phone, those

oa = boat, road, goat, coast

ow = show, know, window, slow

oe = toe, Joe

2.3 Gliding vowel sounds towards [ə]: /ɪə. eə. ʊə/

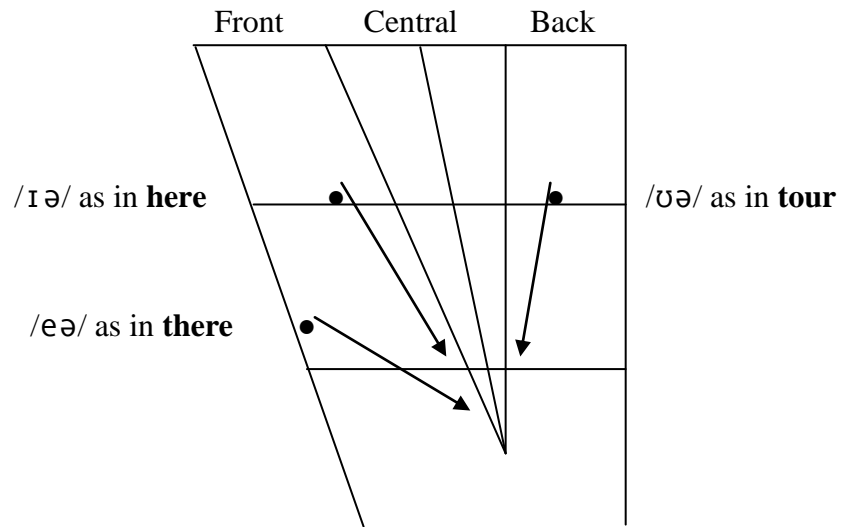


Figure 4.24 Gliding vowel sounds towards [ə]: /ɪə, eə, ʊə/

2.3.1 The gliding vowel sound /ɪə/ ● here

In producing the sound /ɪə/, the glide starts from a point just below the high front position and moves in the direction of /ə/ (Figure 4.23). The movement of the tongue goes with a slight closing movement of the lower jaw. The lips are spread. It is a long vowel sound.

1) Practice the sound /ɪə/



This is two sounds: /ɪ/ and /ə/.

First practice to make the sound /ɪ/.

Now make it longer: ɪ ɪ ɪ .

Then add /ə/. This is very short.

ɪ ɪ ɪ ə

/ɪə/ is a long sound.

Figure 4.25 The diagram for making the sound /əʊ/ (Baker, 1977: 66)

/ɪə/ occurs in all the three positions in a word:

Initial	Medial	Final
/ɪə-/	/-ɪə-/	/-ɪə/
era	serious	dear
ear	beard	appear
	theory	clear
	cheerful	here

“His beard has nearly disappeared into his beer.”

## 2) Phrases and sentences with the sound /ɪə/

Practice saying these phrases and sentences below.

- |                              |                              |
|------------------------------|------------------------------|
| 2.1) Can you hear me?        | 2.4) Let's have a beer here. |
| 2.2) That's a good idea.     | 2.5) Here you are.           |
| 2.3) He came here last year. | 2.6) It's not clear.         |

## 3) Word pairs

Practice saying the sounds: /i:/ and /ɪə/ in contrast.

Sound 1: /i:/	Sound 2: /ɪə/
E	ear
bee	beer
tea	tear
pea	pier
bead	beard

## 4) Spelling

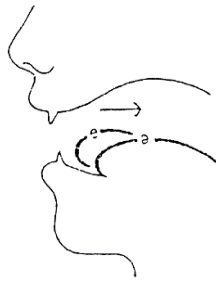
The sound /ɪə/ is spelled many different ways:

e	=	period, serious, zero, hero
ea	=	real, idea, theatre
ear	=	dear, clear, fear
ere	=	here, mere, severe
eer	=	deer, cheer, beer, sheer
eo	=	theory, theorem
eu	=	museum
io	=	period
iou	=	serious, impious

### 2.3.2 The gliding vowel sound /eə/ • there

In producing the sound /eə/, the glide starts from a point in the front, above the high position, and moves in the direction of /ə/ (Figure 4.23). The lips are neutrally open throughout. It is a long vowel sound.

#### 1) Practice the sound /eə/



This is two sounds: /e/ and /ə/.

First practise to make the sound /e/.

Now make it longer: eee.

Then add /ə/. This is very short.

eeeə

/eə/ is a long sound.

Figure 4.26 The diagram for making the sound /eə/ (Baker, 1977: 69)

/eə/ occurs in all the three positions in a word:

Initial	Medial	Final
/eə-/	/-eə-/	/-eə/
air	careless	compare
airport	shared	pear
heirs	scared	there
aeroplane	various	wear

“Sarah and Mary share their pears fairly.”

#### 2) Phrases and sentences with the sound /eə/

Practice saying these phrases and sentences below.

2.1) Where are you from?

2.2) There's nowhere to go.

2.3) It's over there.

2.4) It's not fair.

2.5) I want to share this chair.

2.6) Be careful!

## 3) Word pairs

Practice saying the sounds: /ɪə/ and /eə/ in contrast.

Sound 1: /ɪə/	Sound 2: /eə/
beer	bear
pier	pear
hear	hair
tear	tear
cheers!	chairs

## 4) Spelling

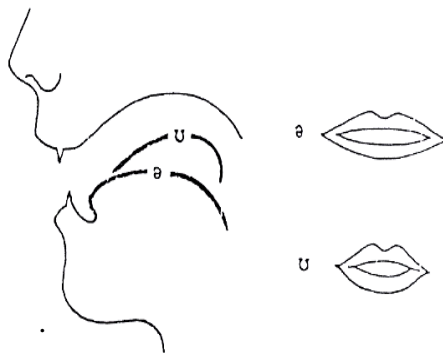
The sound /eə/ is spelled many different ways:

a	=	various, Mary
are	=	care, share, stare, beware
ear	=	bear, pear, wear, tear (v)
air	=	air, chair, fair, pair
eir	=	their, heir
ere	=	there, where, compere
ar	=	scarce

## 2.3.3 The gliding vowel sound /ʊə/ • tour

In producing the sound /ʊə/, the glide starts from the tongue position for /ʊ/ and moves in the direction of /ə/ (Figure 4.23). The lips are loosely rounded at the beginning of the glide and neutral at the end. It is a long vowel sound.

## 1) Practice the sound /ʊə/



This is two sounds: /ʊ/ and /ə/.

First practice to make the sound /ʊ/.

Now make it longer: ʊʊʊ.

Then add /ə/. This is very short.

ʊʊʊə

/ʊə/ is a long sound

Figure 4.27 The diagram for making the sound /eə/ (Baker, 1977: 70)

/ʊə/ occurs in the two positions in a word:

Medial	Final
/-ʊə-/	/-ʊə/
curious	poor
mural	sure
steward	casual
rural	manual

“You’re poor but I’m sure you’ll speak fluently.”

## 2) Phrases and sentences with the sound /ʊə/

Practice saying these phrases and sentences below.

- 2.1) Are you sure?
- 2.2) She can speak English fluently.
- 2.3) He’s very poor.
- 2.4) He is a tour guide.
- 2.5) Make sure you lock it.
- 2.6) This is an old manual typewriter.

## 3) Word pairs

Practice saying the sounds: /ɔ:/ and /ʊə/ in contrast.

Sound 1: /ɔ:/	Sound 2: /ʊə/
tore	tour
more	moor
Shaw	sure
moral	mural
pour	poor

## 4) Spelling

The sound /ʊə/ is spelled many different ways:

oor	=	poor, moor
our	=	tour
u	=	jury, rural, mural
ua	=	manual, casual
ue	=	fluent, influence, fuel
ure	=	sure, pure, cure



## Summary

In English, there are 20 vowel sounds: 12 are monophthongs or pure vowels, and the remaining eight, diphthongs.

The monophthongs can be divided into four front vowel sounds: / i:, ɪ, e, æ/; five back vowel sounds: /ɑ:, ɒ, ɔ:, ʊ, u:/, and three central vowel sounds: /ʌ, ɜ:, ə/. These /i:,ɑ: ɔ: u: ɜ:/ are long, and the rest short. Only four back vowels:/ɒ, ɔ:, ʊ, u:/ are rounded; all the other monophthongs are unrounded.

The diphthongs or gliding vowel sounds are single vowel sounds when two vowel sounds are paired together in sequence. In English there are eight diphthongs consisting of 1) three gliding vowel sounds towards [ɪ]: /eɪ, aɪ, ɔɪ/; 2) two towards [ʊ]: /aʊ, əʊ/, and 3) three towards [ə]: /ɪə, eə, ʊə/.

## Question reviews

- How many vowel sounds are there in English?
- What are monophthongs?
- Provide a four-term label: 1) high, mid, or low; 2) front, central, or back; 3) rounded or unrounded; and 4) short or long for each of the vowels contained in the following words:  
3.1 true    3.2 sad    3.3 pull    3.4 head    3.5 heart    3.6 food
- Give an appropriate vowel symbol for the vowel in each of the following words:  
4.1 blood    4.2 short    4.3 bet    4.4 look    4.5 bird  
4.6 hot    4.7 lose    4.8 play    4.9 home    4.10 hear
- How many of these vowel sounds are there in the words in each line?

The first line is done for you.

	/eɪ/	/aɪ/	/əʊ/	/aʊ/
5.1 snow    face    down    coach    slowly	1	0	3	1
5.2 neighbor    delay    age    dry    weigh				
5.3 road    trousers    mouth    shave    power				
5.4 drive    polite    type    right    brown				
5.5 although    complaint    round    bowl    main				

6. Give two pairs of words to distinguish between each of the following pairs of vowel sounds:

6.1 /e/, /æ/

6.2 /ɑː/, /ʌ/

6.3 /ɒ/, /əʊ/

6.4 /aɪ/, /ɔɪ/

6.5 /ʌ/, /ɜː/

7. Cite two words as examples for each of the following:

7.1 /ɔː/ spelt with aw

7.2 /ɪ/ spelt with u

7.3 /e/ spelt with ea

7.4 /æ/ spelt with a

7.5 /ʌ/ spelt with o

8. Which word contains as **high back rounded long vowel** sound?

8.1 shut

8.2 shot

8.3 shoot

8.4 short

8.5 shop

9. Which word contains the /ɒ/ sound?

9.1 soft

9.2 saw

9.3 caught

9.4 shor

9.5 cope

10. Choose the word that contains the /eɪ/ sound:

10.1 sat

10.2 base

10.3 small

10.4 get

10.5 head

# CHAPTER 5

## THE SYLLABLE

In general, when we study speech sounds, we discuss the ‘minimal contrastive unit’ of sound called the *phoneme*. Different sounds or phonemes can be arranged to form various meaningful words. Such words may have only one syllable or more than one syllable. Thus, a syllable is a unit of sound that contains one vowel sound. Although a syllable has only one vowel sound, it may contain one phoneme or more than one phoneme. In this chapter, we will discuss syllables, syllable structures and consonant clusters respectively.

### What is a syllable?

“A syllable is a phonological unit consisting of a vowel or other unit that can be pronounced in isolation, either alone or accompanied by one or more less sonorous units, e.g. [bʌŋ] and [tɪŋ] are successive syllables in *bunting*.” (Matthews, 1997: 366)

“A syllable refers to a unit of speech made up a vowel which can be preceded and /or followed by a consonant or a series of consonants.” (Busaba Kanoksilapatham, 2007: 63)

“Phones can be combined into larger units called syllables.” (Sumon Ariyapititpun, 2004: 85)

This means the units into which words are divided while pronouncing them are called ‘syllables’.

### Syllable structure

The syllable is a unit of pronunciation that consists of a vowel alone or of a vowel with one or more consonants. A vowel is the ‘*nucleus*’ or center and a consonant is a ‘*marginal element*’ in the syllable. The consonant at the beginning of a syllable is called ‘*releasing*’ consonant and at end of a syllable is called ‘*arresting*’

consonant. The marginal elements are not obligatory. These may occur either before the nucleus or after the nucleus, or some before and after the nucleus.

The word, for example, “**pick**” /pik/ consists of one syllable which consists of two marginal elements /p/ a releasing consonant and /k/ an arresting consonant and of a nucleus /i/, which is a vowel. Now if we represent the vowel in this syllable by the symbol V and the consonant by the symbol C, the syllable *pick* /pik/ will be represented by CVC, in which V is the nucleus element, and C’s are the marginal elements.

It is also possible to have a cluster of two or three consonants before and / or after the nucleus. For example in “**school**” /sku:l/, we have the cluster of two consonants/s/ and /k/ which is the first marginal element, which be represented by CCVC. Some syllables are made up of the nucleus alone, for example, “**eye**” or “**I**” /ai/, which be represented by V.

“The terminology of syllable (Crystal, 1980: 339) could be used as follows: 1) the opening segment of a syllable = the **onset (releasing)**; 2) the closing segment of the syllable = the **coda (arresting)**; and 3) the central segment of the syllable = the **nucleus or center.**”

**Example:** in the word: **cat**

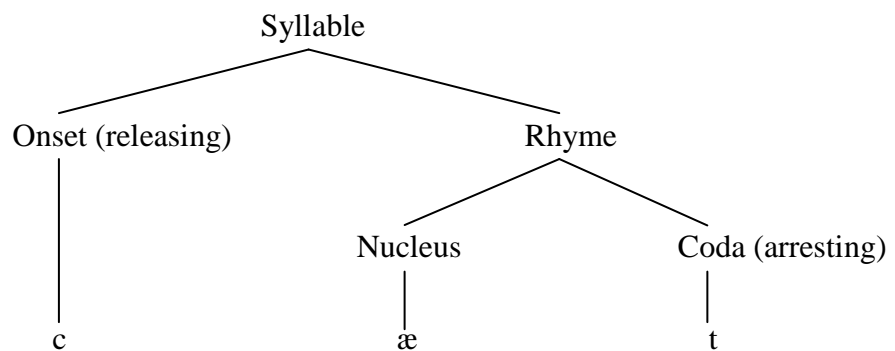


Figure 5 An example of Syllable structure (Matthews, 1997: 366)

### Syllabic consonants

We have seen that the vowel is the nucleus of a syllable, and the consonant occupies a marginal place in its structure. It might be argued that this is not always the case. There are syllables, of course, in which the nuclear place is occupied by certain consonants, but then, these consonants function like vowels.

Let us look at the English words *button* /'bʊtʌn/, *bottle* /'bɒtl/, and *rhythm* /'rɪðm/. It is generally agreed that each of these words has two syllables, and not one. Their syllable division is shown as /'bʊ-tʌn/, /'bɒ-tl/, and /'rɪ-ðm/. Here /-tʌn/, /-tl/, and /-ðm/ constitute independent syllables by themselves without any intervening vowel. In such cases, the sounds /n/, /l/, and /m/ are said to form the nucleus, and are called **syllabic** consonants, that is, they represent the vowel element in the syllable structure.

Additional examples are: *prism* /'prɪ.zm/, *sudden* /'sʌ.dn/, *table* /'teɪ.bl/, and *subtle* /'sʌ.tl/. When /m/, /n/, and /l/ function as syllabic consonants, they are generally marked, in a slightly narrower transcription, with the diacritic [ . ] as in ['prɪ.zm], ['sʌ.dn] and ['sʌ.tl].

### Phonotactic patterns of English syllable

In helping with representing the syllable structure, we use the symbols **V** standing for the vowel and **C** for the consonant element, respectively. Analyzed below are the possible phonotactic patterns of English syllable that we have in English.

1. V (CCC)	Pattern	Examples
	<b>V</b>	I /aɪ/ heir /eə/ a /ə/ or /eɪ/
	<b>VC</b>	an /æn/ all /ɔ:l/ ice /aɪs/
	<b>VCC</b>	ask /ɑ:sk/ and /ænd/ ink /ɪŋk/
	<b>VCCC</b>	asked /ɑ:skt/ ants /ænts/ ends /endz/

<b>2. C(CC)V</b>	<b>Pattern</b>	<b>Examples</b>
	<b>CV</b>	go /gəʊ/ no /nəʊ/ law /lɔː/
	<b>CCV</b>	try /traɪ/ play /pleɪ/ crow /krəʊ/
	<b>CCCV</b>	spray /spreɪ/ straw /strɔː/ screw /skruː/
<b>3. C(CC)VC(CC) Pattern</b>	<b>CVC</b>	cat /kæt/ boss /bɒs/ girl /gɜːl/
	<b>CVCC</b>	test /test/ tent /tent/ once /wʌns/
	<b>CVCCC</b>	masks /mɑːks/ text /tekst/ rests /rests/
	<b>CCVCC</b>	snacks /snæks/ brand /brænd/ spans /spænz/
	<b>CCVCCC</b>	trunks /trʌŋks/ brands /brændz/ stamps /stæmps/

<b>Pattern</b>	<b>Examples</b>
<b>CCVCCCC</b>	glimpsed /gɪmpst/ twelfths /twelfθs/
<b>CCCVC</b>	street /stri:t/ stream /stri:m/ spread /spred/
<b>CCCVCC</b>	strange /streɪndʒ/ screamed /skri:md/ strand /strænd/
<b>CCCVCCC</b>	sprints /sprɪnts/ strands /strænds/ strengths /streŋθs/

## **Consonant clusters**

A group of consonants without intervening vowels is called a ‘consonant cluster’ (also called a ‘consonant blend’). In English, for example, the groups /st/ and /mps/ are consonant clusters in the word *stamps*. A consonant cluster comes at the beginning of a word is an *initial* consonant cluster and a consonant cluster comes at the end of a word is a *final* consonant cluster.

### **1. Initial consonant clusters**

#### 1.1 The initial consonant clusters + /r/ or /l/.

The initial clusters of two consonant sounds start with plosive sounds or fricative sounds followed by /r/ or /l/. Let’s follow the examples below.

##### 1.1.1 Voiceless plosives + /r/ or /l/

1) /tr-/	: tree	train
2) /pr-/	: price	praise
3) /kr-/	: cry	crowd
4) /pl-/	: please	plain
5) /kl-/	: clock	clever

## 1.1.2 Voiced plosive + /r/ or /l/

1) /dr-/	: drag	drive
2) /br-/	: brown	bread
3) /gr-/	: grow	great
4) /bl-/	: black	blame
5) /gl-/	: glow	glorious

## 1.1.3 Voiceless fricatives + /r/ or /l/

1) /θr-/	: three	thread
2) /fr-/	: friend	frame
3) /fl-/	: flame	flower

## 1.2 The initial consonant clusters + /w/ or /j/

The initial clusters of two consonant sounds start with plosive sounds or fricative sounds or nasal sounds followed by /w/ or /j/. Let's follow the examples below.

## 1.2.1 Voiceless plosives + /w/ or /j/

1) /tw-/	: twin	twist
2) /kw-/	: quick	queen
3) /pj-/	: pure	purify
4) /tj-/	: tune	tube
5) /kj-/	: cure	cute

## 1.2.2 Voiced plosive + /w/ or /j/

1) /dw-/	: dwell	dwindle
2) /gw-/	: Gwen	
3) /bj-/	: beauty	beautiful
4) /dj-/	: during	duration
5) /gj-/	: gewgaw	



## 1.2.3 Voiceless fricatives + /w/ or /j/

1) /θw-/	:	thwart	
2) /hw-/*	:	what	when
3) /fj-/	:	few	future
4) /θj-/	:	thew	-
5) /hj-/	:	humid	human

\*It is noted that some American people (and British people) pronounce the words '**what**' and '**when**' without cluster sounds, e.g. what /wɒt/ and when/wen/.

## 1.2.4 Voiced fricatives + /w/ or /j/

/vj-/	:	view
-------	---	------

## 1.2.5 Nasals + /j/

1) /mj-/	:	mute	music
2) /nj-/	:	new	dew

## 1.3 The initial consonant clusters starting with /s/

The initial clusters of two consonant sounds start with /s/ followed by voiceless plosive, voiceless fricative, nasal, lateral or semi-vowel sounds and voiceless plosive sounds followed by /r/, /l/, /w/ or /j/. Let's follow the examples below.

## 1.3.1 /s/ + Voiceless plosives

1) /sp-/	:	spend	spare	spirit
2) /st-/	:	stay	stand	stout
3) /sk-/	:	sky	skill	scare

## 1.3.2 /s/ + Voiceless fricatives

1) /sf-/	:	sphere
2) /sθ-/	:	esthetic

## 1.3.3 /s/ + Nasals

1) /sm-/	:	small	smart
2) /sn-/	:	snap	sneer

## 1.3.4 /s/ + Semi-vowels

1) /sw-/	:	swear	swell
2) /sj-/	:	suit	super

## 1.3.5 /s/ + Semi-vowels

/sw-/	: swear	swell
-------	---------	-------

## 1.3.6 /s/ + Lateral

/sl-/	: slay	slow
-------	--------	------

## 1.3.7 /s/ + Voiceless plosives + /r/

1) /spr-/	: spring	sprout	spray
2) /str-/	: strong	string	strand
3) /skr-/	: screw	scrap	screen

## 1.3.8 /s/ + Voiceless plosives + /l/

1) /spl-/	: split	splash	spleen
2) /skl-/	: sclerosis		

## 1.3.9 /s/ + Voiceless plosives + /w/

/skw-/	: square	squid	squir
--------	----------	-------	-------

## 1.3.10 /s/ + Voiceless plosives + /j/

1) /spj-/	: spew	spume	sputum
2) /stj-/	: stew	studio	steward
3) /skj-/	: skew	scuba	skua

## 2. Final consonant clusters

The final consonant clusters are not necessarily the same as the initial consonant clusters. The grammatical endings make many more final consonant clusters such as –s endings, -ed endings and so on.

1.1 The final clusters of consonant sounds consist of the final consonant sounds + -s ending or -ed ending.

Final consonant sounds + -s endings		or	+ -ed endings	
1.1.1 /-p/	: step	/-ps/	: steps	/-pt/ : stepped
1.1.2 /-b/	: rob	/-bs/	: robs	/-bd/ : robbed
1.1.3 /-t/	: hat	/-ts/	: hats	— —
1.1.4 /-d/	: bed	/-dz/	: beds	— —
1.1.5 /-k/	: look	/-ks/	: looks	/-kt/ : looked
1.1.6 /-g/	: beg	/-gz/	: begs	/-gd/ : begged

1.1.7	/-s/	: pass	—	—	/-s t/	: passed
1.1.8	/-z/	: buzz	—	—	/-z d/	: buzzed
1.1.9	/-ʃ/	: mash	—	—	/-ʃ t/	: mashed
1.1.10	/-ʒ/	: rouge	—	—	/-ʒ d/	: rouged
1.1.11	/-tʃ/	: match	—	—	/-t ʃ t/	: matched
1.1.12	/-dʒ/	: wedge	—	—	/-dʒ d/	: wedged
1.1.13	/-m/	: time	/-mz/	: times	/-m d/	: timed
1.1.14	/-n/	: ban	/-nz/	: bans	/-n d/	: banned
1.1.15	/ŋ/	: belong	/-ŋz/	: belongs	/ŋ d-/	: belonged
1.1.16	/-f/	: laugh	/-fs/	: laughs	/-f t/	: laughed
1.1.17	/-v/	: move	/-vz/	: moves	/-v d/	: moved
1.1.18	/-l/	: call	/-lz/	: calls	/-l d/	: called
1.1.19	/-r/(AmE):	sneer	/-r/	: sneers	/-r d/	: sneered

1.2 The final clusters of consonant sounds are /l/ + other consonant sounds + -s endings or -ed endings.

/l/ + other consonant sounds + -s endings		or	+ -ed endings
1.2.1	/-lp/	: help	/-lps/ : helps /-lpt/ : helped
1.2.2	/-lb/	: bulb	/-lbz/ : bulbs — —
1.2.3	/-lt/	: belt	/-lts/ : belts — —
1.2.4	/-lk/	: milk	/-lks/ : milks /-lkt/ : milked
1.2.5	/-ld/	: hold	/-ldz/ : holds — —
1.2.6	/-lv/	: solve	/-lvz/ : solves /-lvd/ : solved
1.2.7	/-lm/	: film	/-lmz/ : films /-lmd/ : filmed
1.2.8	/-ln/	: kiln	/-lnz/ : kilns — —
1.2.9	/-ldʒ/	: bulge	— — /-ldʒd/ : bulged
1.2.10	/-ls	: pulse	— — /-lst/ : pulsed
1.2.11	/-lf/	: wolf	/-lvz/ : wolves

1.3 The final clusters of consonant sounds are /m/, /n/ or /ŋ/ + other consonant sounds + -s endings or -ed endings.

/m/, /n/ or /ŋ/ + other consonant sounds + -s endings or -ed endings		
1.3.1	/-mp/	: stamp /-mps/ : stamps /-mpt/ : stamped

1.3.2	/-mf/	: triumph	/-mfs/: triumphs	/-mft/: triumphed
1.3.3	/-nt/	: want	/-nts/: wants	— —
1.3.4	/-nd/	: hand	/-ndz/: hands	— —
1.3.5	/-nθ/	: month	/-nθs/: months	— —
1.3.6	/-ns/	: dance	— —	/-nst/: danced
1.3.7	/-nz/	: bronze	— —	/-nzd/: bronzed
1.3.8	/-ntʃ/	: lunch	— —	/-ntʃt/: lunched
1.3.9	/-ndʒ/	: change	— —	/-ndʒd/: changed
1.3.10	/-ŋk/	: thank	/-ŋks/: thanks	/-ŋkt/: thanked

1.4 The final clusters of consonant sounds are /m/, /n/ or /ŋ/ + and in turn followed by /s/ or /t/ + -s endings or -ed endings.

/m/, /n/ or /ŋ/ + /s/ or /t/ + -s endings          or          + -ed endings.

1.4.1	/-mps/	: glimpse	— —	/-mpt/: glimpsed
1.4.2	/-mpt/	: tempt	/-mpts/: tempts	— —
1.4.3	/-ŋks/	: jinx	— —	/-ŋkst/: jinxed
1.4.4	/-ŋkt/	: instinct	/-ŋkts/: instincts	— —

1.5 The final clusters of consonant sounds contain the final consonant sounds: /-s/, /-z/, /-t/ or /-d/ + -s endings or -ed endings.

/-s/, /-z/, /-t/ or /-d/ + -s endings          or          + -ed endings.

1.5.1	/-(r)ps/	: corpse	— —	— —
1.5.2	/-(r)ts/	: quartz*	— —	— —
1.5.3	/-(r)ks/	: Marx	— —	— —
1.5.4	/-ks/	: box	— —	/-kst/: boxed
1.5.5	/-lts/	: waltz*	— —	/-ltst/: waltzed
1.5.6	/-lks/	: Wilkes	— —	— —
1.5.7	/-ps/	: lapse	— —	/-pst/: lapsed
1.5.8	/-(r)lz/	: Charles	— —	— —
1.5.9	/-(r)pt/	: excerpt	/-(r)pts/: excerpts	— —
1.5.10	/-(r)st/	: burst	/-(r)sts/: bursts	— —
1.5.11	/-(r)nt/	: aren't	— —	— —

\* It is noted that the words as in waltz, quartz spelling with z are pronounced as /s/.

1.5.12 /-ft/ : lift /-fts/ : lifts — —

1.5.13 /-(r)ld : world /-(r)ldz/ : worlds — —

1.6 The final clusters of consonant sounds are /-s/ + other consonant sounds + -s endings or -ed endings.

1.6.1 /-sp/ : clasp /-sps/ : clasps /-spt/ : clasped

1.6.2 /-st/ : test /-sts/ : tests — —

1.6.3 /-sk/ : risk /-skʃ/ : risks /-skt/ : risked

1.7 The final clusters of consonant sounds are composed of adjective forms + suffix /-θ/ (th) to make noun forms and in turn followed by -s endings.

Adjectives	Singular nouns	plural nouns
1.7.1 deep	/-pθ/ : depth	/-pθs/ : depths
1.7.2 wide	/-dθ/ : width	/-dθs/ : widths
1.7.3 long	/-ŋθ/ : length	/-ŋθs/ : lengths
1.7.4 warm	/-(r)mθ/ : warmth	— —
1.7.5 strong	/-ŋθ/ : strength	/-ŋθs/ : strengths

1.8 The final clusters of consonant sounds are composed of cardinal numbers + suffix /-θ/ (th) to make ordinal number.

Cardinal + suffix /θ/ (th)	= Ordinal	+ -s endings
1.8.1 four + /θ/ (th)	/-(r)θ/ : fourth	/-rθs/ : fourths
1.8.2 five + /θ/ (th)	/-fθ/ : fifth	/-fθs/ : fifths
1.8.3 ten + /θ/ (th)	/-nθ/ : tenth	/-nθs/ : tenths
1.8.4 six + /θ/ (th)	/-ksθ/ : sixth	/-ksθs/ : sixths
1.8.5 twelve + /θ/ (th)	/-lfθ/ : twelfth	/-lfθs/ : twelfths
1.8.6 thousand + /θ/ (th)	/-ndθ/ : thousandth	/-ndθs/ : thousandths

## Analysis of syllable structure

As mentioned above, Syllable structure for pronunciation is a formula for the sounds pronounced, not for the letters.

### 1. Analysis of one-syllable words

As pronouncing each word in the list below, monitor your pronunciation and observe the CV sequence of sounds. The silent letters do not count in the analysis of syllable structure as in the word: *debt* /deɪt/ and digraphs count as only one C or V as in the word: *shop* /ʃɒp/: CVC and *boat* /bəʊt/: CVC.

### 2. Analysis of two-syllable words

We have seen that English words start up to three consonants at the beginning of a word and up to four at the end of a word. Such sequences of consonants are at the beginning or the end of a syllable, occurring together.

Compare the following examples given by Sethi & Dhamija (1999) below. /-nd/ in the word: **send** /send/: CVC is a consonant cluster because it forms parts of the same syllable, whereas /-mb-/ in the word: **number** /ˈnʌmbə(r)/ CVC.CV(C) is not a cluster since /-m/ and /b-/ belong to two different syllables: /-m/ is the arresting consonant of the first syllable, and /b-/ the releasing consonant of the second. Now, the consonants, like /m/ and /b/, which occur together in a word but form part of two different syllables, are called *abutting* consonants.

## Summary

A syllable is a unit of sound that contains one vowel sound. Although a syllable has only one vowel sound, it may contain one phoneme or more. The syllable is a phonological unit consisting of a vowel or other unit that can be pronounced in isolation, either alone or accompanied by one or more less sonorous units. A vowel is the ‘*nucleus*’ or center and a consonant is a ‘*marginal element*’ in the syllable. The consonant at the beginning of a syllable is called ‘*releasing*’ consonant and at end of a syllable is called ‘*arresting*’ consonant. The marginal elements are not obligatory. These may occur either before the nucleus or after the nucleus, or some before and after the nucleus. We use the symbols V standing for the vowel and C for the consonant element, where C is optional and V is obligatory. Analyzed above are the possible phonotactic patterns of syllable structure that we have in English.

## Question reviews

1. What is a syllable? Give examples.
2. What is meant by a syllabic consonant? Give examples.
3. What do you mean by 1) nucleus element and 2) marginal element in the syllable?
4. How many syllables are there in '**technology**'? Write its syllable structure.
5. What is a consonant cluster? Give examples from English of:
  - 5.1 an initial consonant cluster made up of two consonants.
  - 5.2 an initial consonant cluster made up of three consonants.
  - 5.3 a final consonant cluster made up of two consonants.
6. Divide the following words into syllables and mark the structure of each syllable.
  - 6.1 college
  - 6.2 suddenly
  - 6.3 director
7. Give five words each of the following consonant clusters and then attempt a phonemic transcription of the words.
  - 7.1 CC in the initial position
  - 7.2 CCC in the initial position
  - 7.3 CCC in the final position
8. Write the following words in phonemic transcription and point out the initial and /or final consonant clusters:
  - 8.1 glimpsed
  - 8.2 splashed
  - 8.3 strength
9. Supply three words to illustrate each of the following types of consonant cluster:
  - 9.1 Final cluster with 3 consonants
  - 9.2 Final cluster with 2 consonants
  - 9.3 Initial cluster with 3 consonants
10. Give two examples each of the following types of syllable:
  - 10.1 CVCCC
  - 10.2 CVCCCC
  - 10.3 CCVCCC

# CHAPTER 6

## STRESS IN ENGLISH

Do you know what stress in English is? To understand what native speakers speak, it is necessary to learn about stress in words, phrases, and sentences in English. The native speakers speak English by stressing in words, phrases, and sentences so naturally that they don't even know they are using it. One problem found in teaching English phonetics in Buriram Rajabhat University is that some students speak English without using stress in English. When native speakers or foreign lecturers speak English fast, students cannot understand what they speak because they use stress in words, phrases, and sentences. To find it easy to understand what the native speakers speak, we turn now to a discussion of **stress in English** consisting of **word stress** and **sentence stress** that will help learners or students to understand when the native speakers speak easily.

### Stress in English

According to Dale and Poms (2005: 84), “stress refers to the amount of volume that a speaker gives to a particular sound, syllable, or word while saying it. Stressed sounds and syllables are louder and longer than unstressed ones.” In English, stress is a syllable that is emphasized more than the others while a speaker is saying it. That is, there is only one stress to a certain syllable within words, called **word stress**, and to a certain word within sentences, called **sentence stress**.

#### 1. Word stress

In English, we do not say each syllable with the same force or strength. Try saying the following words to yourself: *important, development, understand*. All of them have three particular stressed syllables, and one of the syllables within each word has only one syllable that is louder or higher than the others: so, we get *imPORTant, deVELOPMENT, and underSTAND*. (The syllables symbolized in capitals are the stressed syllables.) We assume that word stress is a phonological feature by



which a syllable is heard to be more prominent than others. Thus, “word stress (EnglishClub, 1997-2015) is a magic key to understanding spoken English.” Every word in English has a stressed-syllable pattern shared between speaker and the listener. The ability to communicate in English successfully requires the ability to stress syllables correctly.

### 1.1 Problems of word stress

Let’s begin by examining why we accentuate the stressed syllables within words. The stressed syllables in English are essential parts of words for native speakers or those who use English in communication. When they listen to the speakers’ voice, they listen to the stressed syllables in each word. It is important to try recognizing the difference between stressed and unstressed syllables that are greater in English than in most other languages. “In classroom, learners whose first language is syllable-timed often have problems producing the unstressed sounds in a stress-timed language like English, tending to give them equal stress (British Council, 2006).” For example, some students in my class about learning English phonetics have got the problems of using stress in words because Thai language is syllable-timed. So, it is difficult to understand what the native speakers speak because English is a stress-timed language. So far, to correctly understand and communicate with native speakers, we have to learn about the syllables in English (as discussed in Chapter 5) concerning the stressed and unstressed syllables in words. Let’s compare the syllable-timed pattern in Thai and the stressed-timed pattern in English. (We can show stress with circles: each circle is a syllable and the bigger circle in the bold type shows which syllable has the stress.)

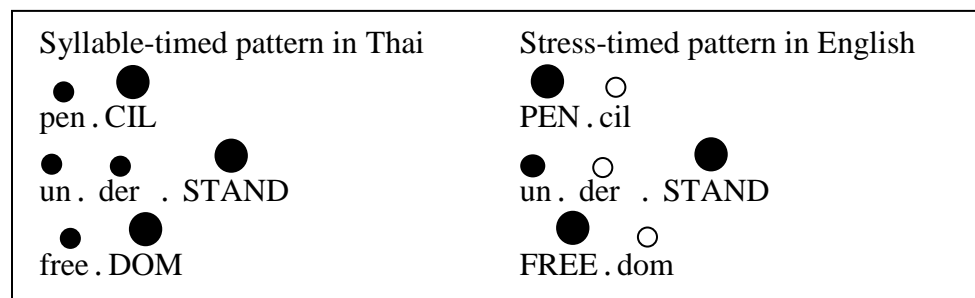

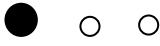



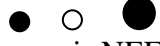


Figure 6.1 Comparison of syllable-timed and stress-timed patterns

As the problems of word stress mentioned above, Onnicha Geeratayaporn (2010:18) stated in her research on word stress problems that “the problem of English stress for Thais is the difference between the stress system of the Thai language and the stress system of the English language. That is, polysyllabic words in Thai usually have stress on the final syllable and stress placement also affects the meaning and the function of the words in Thai. While English polysyllabic words have a variety of stress placements, most are on the first syllable. This is different from Thai polysyllabic stress placement. While English polysyllabic words have a variety of stress placements, most are on the first syllable. This is different from Thai polysyllabic stress placement.” For example:

Thai polysyllabic words	English polysyllabic words
 โทรทัศน์ (โท - ระ - ทัศน์)	 in . stru . ment
 ศักดิ์ศรี (สัก - ศี)	 pro . TECT . ion
 บริการ (บอ - ริ - กาน)	 en . gi . NEER

“Benrabah (1997; Celce-Murcia; et al, 2013: 185) cites the following examples from the research studies on lexical stress: misplaced stress on *normally* (norMALLY) misheard as *no money*; misplaced stress on *written* (wriTTEN) misheard as *retain*; and misplaced stress on *secondary* (seCONDary) misheard as *country*. These findings suggest that lexical stress is important to teach—especially for those learners (for Thais) from syllable-timed languages that may have difficulty correctly placing stress in English words.” They also find it difficult when trying to emphasize syllables correctly, as shown here:

1. If they put the stress on the wrong syllable, e.g., **DE**sert /'dezət/ (dry barren region) will sound like **de**SSERT /di'zɜ:t/ (sweet foods).
2. If they stress every vowel in a word equally and forget to reduce vowels in unstressed syllables, e.g., **YE**Sterday /'jestədeɪ/ will sound like **YES** . TER . DAY. (Adapted from Dale & Poms, 2005)

## 1.2 Understanding syllables

“Syllables are the beats of a word. The center of a syllable is usually a vowel, which can be preceded or followed by consonants (Lane, 2005:130).” To understand word stress, we need to understand **syllables**. Every word stress in English is made from syllables. Each word has one or two or more syllables. Every syllable has at least one vowel or vowel sound. Let’s take a look at the words with the underlined syllables below and tap the syllables of these words on your fingers:

man	→	1 syllable	= 1 tap
receive	→	2 syllables	= 2 taps
prominent	→	3 syllables	= 3 taps
disappointed.	→	4 syllables	= 4 taps
university	→	5 syllables	= 5 taps



### 1.2.1 The stressed syllable

Celce-Marcia; et al (2013: 184) stated that “stressed syllables are most often defined as those syllables within an utterance that are longer, louder, and higher in pitch.” In such the definition, we can assume that the polysyllabic word has more than one syllable; the vowel in that syllable is longer or more prominent than the other vowels. When this happens, we can say that the syllable has a stress or that it is stressed. “Stressed syllables in English are usually held longer than unstressed syllables. They may also be louder and higher in pitch.” (Lane, 1993:108)

To give it stress, try this with the word: *morning*.

Make it longer:	M O R . ning
Make it louder:	MOR . ning
Make it higher:	MOR . ning

Let’s practice saying or pronouncing the stressed syllables which can fall on the first, middle or last syllables by making the stressed syllables in each word longer, louder, and higher, as shown here:

● ○ ○ AC . ci . dent	○ ● ○ pre . DICT . ion	○ ○ ● di . sap . PEAR
● ○ ○ MU . sic . al	○ ● ○ to . MA . to	○ ● mis . TAKE

### 1.2.2 The unstressed syllable

The unstressed syllables symbolized in the light circle in each word above are shortly and quietly pronounced. Lane (2005) stated in her book on Focus on Pronunciation that “in English, unstressed syllables are reduced and short. The vowel is usually pronounced /ə/ (known as ‘schwa’ that is a vowel heard in the unstressed syllable of a word that are spoken without stress) or /ɪ/, regardless of how it is spelled.” The alternation of long stressed syllables and reduced unstressed syllables is a key to natural-sounding English.” Let’s consider the vowel sound /ə/ occurring in the unstressed syllables in each word above again. This sound can be heard in the first syllable of *tomato* /tə'mɑ:təʊ/, in the second syllable of *disappear* /,dɪsə'piə(r)/, and also in the third syllable of *accident* /'æksɪdənt/.

### 1.3 Stress shift

Varshney (2000-2001: 106) stated that “words with the same stem do not keep the primary stress (stressed syllable) on the same syllable. The stress shift is quite normal in derivatives.” We accent only ONE syllable in each word. The stressed syllable in each word is not always the same syllable. So, the shape of each word is different. Let’s consider the following words below. (Each circle stands for a syllable and the bigger bold circle stands for a stressed syllable.)

Word	Shape	Phonetic transcription	Total syllables	Stressed syllable
Final (stem)	● ○	/'faml/	2	#1
finally	● ○ ○	/'faməli/	3	#1
Finality	○ ● ○ ○	/fai'næləti/	4	#2

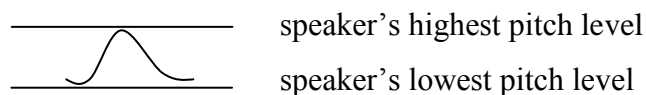
Figure 6.2 Comparison of stressed syllables with stress shift

From the figure 6.2, we can say that *final* is the stem (root) of *finally* and *finality* by adding the derivational suffixes: -ly and -ity. *Final* and *finally* are both stressed on the first syllable, while *finality* is stressed on the second. Compare the pronunciation of the second vowel in each word. We notice that when the vowel in the second syllable is unstressed, as in *finally*, it is pronounced as schwa /ə/. When this vowel is stressed, it is not pronounced as /ə/. So, the vowel in the second syllable that changes from /ə/ to /æ/, as in *finality*, is called stress shift.

### 1.4 Levels of word stress

Up to this point, we have talked about the syllables in terms of stressed syllable and unstressed syllables. In English, every word with two or more syllables always has only one stressed syllable, and the other syllables within a word are unstressed syllables (usually pronounced as schwa /ə/). However, Lane (1993: 111) stated that “words with three or more syllables may have both *primary stress* and *secondary stress*.” According to Celce-Murcia; et al (2013), English teaching texts and dictionaries for English learners mainly refer to only three levels of word stress: *strong*, *medial*, and *weak*. For purposes of teaching methods, there are three levels of word stress adhering to this general designation: *strongly stressed*, *lightly stressed* and *unstressed*. So, it is worth noting that there are at least three levels of word stress: *primary stress (strongly stressed syllable)*; *secondary stress (lightly stressed syllable)*, and *weak stress (unstressed syllable)*, as shown below.

1.4.1 *Primary stress* is a type of stress that has the strongest and highest pitch level. Each word has one syllable that is STRESSED. The other syllables in the word are UNSTRESSED. Roach (2010: 75) cites “the diagram of the pitch movement as shown below, where the two parallel lines represent the speaker’s highest and lowest pitch level. The prominence that results from this pitch movement, or tone, gives the strongest type of stress; this is called primary stress.”



Let us take a look at the word *about* /ə'baʊt/, where the primary stress always falls clearly on the last syllable and the first syllable is the weak stress (unstressed syllable). In the phonetic transcription, it is usually symbolized with a high stress mark ( ' ) before the syllable to indicate the highest stressed syllables in the following words:

police	/pə'li:s/	hospital	/'hɒspɪtl/
building	/'bɪldɪŋ/	computer	/kəm'pjʊ:tə(r)/
people	/'pi:pl/	difficult	/'dɪfɪkəlt/
today	/tə'deɪ/	salary	/'sæləri/

1.4.2 *Secondary stress* is “a type of stress that is weaker than primary stress but stronger than that of the first syllable of *about*; for example, consider the first syllable of the word *photographic* /,fəʊtə'græfɪk/ (Roach, 2013).” The secondary stress usually occurs in polysyllabic or longer words (but not every word) that may have three or more syllables, normally coming before the primary stress. In the phonetic transcription, it is usually represented with a low stress mark ( ' ) before the syllable to indicate lighter stressed syllables before the primary stress in the following words:

introduce	/,ɪntrə'dju:s/	instrumental	/,ɪnstrə'mentl/
interchange	/,ɪntə'tʃeɪndʒ/	contradiction	/,kɒntrə'dɪkʃn/
represent	/,reprɪ'zent/	independent	/,ɪndɪ'pendənt/
oversleep	/,əʊvə'sli:p/	understanding	/,ʌndə'stændɪŋ/

1.4.3 *Weak stress* is a type of stress that is weaker or softer or quieter than normal speaking pitch level, coming before or after the primary stress. The vowel in an unstressed syllable is usually either /ə/ or /ɪ/ (See the section 1.2.2). In the phonetic transcription, it is usually represented without stress mark.

For example:

policeman	/pə'li:smən/	college	/'vɪlɪdʒ/
yesterday	/'jestədeɪ/	orange	/'ɒrɪndʒ/
famous	/'feɪməs/	pocket	/'pɒkɪt/
breakfast	/'brekfəst/	village	/'vɪlɪdʒ/

Now, let us identify the pronunciation with *primary stress*, *secondary stress* and *weak stress* in the excerpted dictionary below.

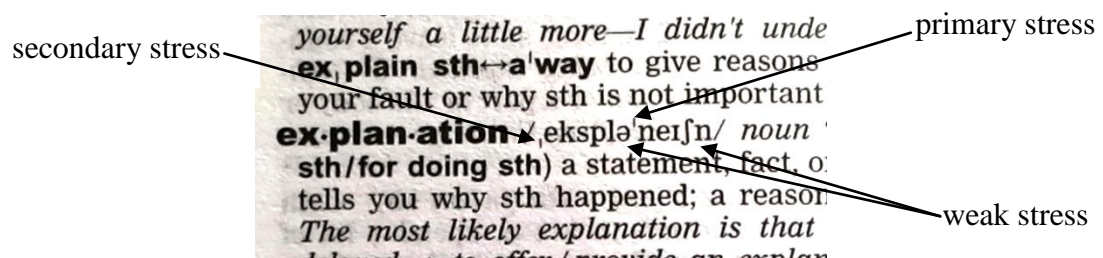


Figure 6.3 The placement of the *primary*, *secondary* and *weak stresses*

Source: Hornby (2000: 462)

### 1.5 Placement of word stress

In English, placing of stress on the right syllable is very important. Stress in words is not always on the same syllable, like in some languages. It is undeniable that learning how to stress in words is a large number of difficulties to non-native speakers, especially to some Thai students in my class who are studying English phonetic course. When learning a new word, they often ask a question: How can we know how to select the correct syllable to stress in an English word? “In order to decide on stress placement in an English word, it is necessary to use some or all of the following information (Roach, 2010: 76):

1. Whether the word is morphologically simple, or whether it is complex as a result either of containing one or more affixes (i.e. prefixes or suffixes) or of being a compound word.
2. What the grammatical category of the word is (noun, verb, etc.)
3. How many syllables the word has.
4. What the phonological structure of those syllable is.”

Students should also learn its stress pattern. If they learn a new word, make a note to show which syllable is stressed. If they do not know, they can look in a dictionary. All dictionaries give the phonetic transcription of a word (See the section 1.4.3).

### 1.6 General rules of word stress

In English, there are usually stress patterns in word stress; but it is not easy or perfect to say there are fixed rules to predict which syllable the stress falls. According to Proromrat Jotikasthira (1999: 30), “there are no exact rules for determining which syllable of a word should be stressed.” As a rule, “there are two very simple rules about word stress (EnglishClub, 1997-2015): 1) One word has only one stress. One word cannot have two stresses. If you hear two stresses, you hear two words. Two stresses cannot be one word. It is true that there can be a "secondary" stress in some words. But a secondary stress is much smaller than the main primary stress, and is only used in long words, and 2) we can only stress vowels, not consonants.”

Here are some general rules of word stress in English:

1.6.1 *Two-syllable words* generally have the primary stress on the first or the second syllable. Proromrat Jotikasthira (1999: 30) stated that “nearly 75% of two-syllable words are stressed on the first syllable.” The following observations can be of help.

1) *Two-syllable nouns* usually have the primary stress on the first syllable, e.g.:

apple	/ˈæpl/	table	/ˈteɪbl/
capture	/ˈkæptʃə(r)/	student	/ˈstjuːdnt/
mother	/ˈmʌðə(r)/	paper	/ˈpeɪpə(r)/

Exceptions, e.g., police /pəˈliːs/, hotel /həʊˈtel/),

2) *Two-syllable adjectives* usually have the primary stress on the first syllable, e.g.:

happy	/ˈhæpi/	hungry	/ˈhʌŋɡri/
active	/ˈæktɪv/	ugly	/ˈʌɡli/
useful	/ˈjuːsfl/	angry	/ˈæŋɡri/

Exceptions, e.g., correct /kəˈrekt/, alive /əˈlaɪv/

3) *Two-syllable verbs* usually have the primary stress on the second syllable, e.g.:

begin	/bɪˈɡɪn/	believe	/bɪˈliːv/
arrive	/əˈraɪv/	become	/bɪˈkʌm/
invite	/ɪnˈvaɪt/	allow	/əˈlaʊ/

Exceptions, e.g., open /ˈəʊpən/, enter /ˈentə(r)/, follow /ˈfɒləʊ/

4) *Two-syllable words used as both nouns and verbs* are pronounced with the stress on either the first or the second syllable. That is, if words are nouns, they are stressed on the first syllable, and if words are verbs, they are stressed on the second syllable, e.g.:

<u>nouns</u>		<u>verbs</u>	
record	/ˈrekɔːd/	record	/rɪˈkɔːd/
object	/ˈɒbdʒɪkt/	object	/əbˈdʒekt/
contract	/ˈkɒntrækt/	contract	/kənˈtrækt/

Exceptions, e.g., respect /rɪˈspekt/, witness /ˈwɪtnəs/ (n & v)



5) *Two-syllable reflexive pronouns* are usually stressed on the second syllable, e.g.:

myself	/maɪ'self/	yourself	/jɔ:'self/
himself	/hɪm'self/	themselves	/ðəm'selvz/
itself	/ɪt'self/	herself	/hɜ:'self/

6) *Two-syllable prepositions* are usually stressed on the second syllable, e.g.

beside	/bɪ'saɪd/	between	/bɪ'twi:n/
among	/ə'mʌŋ/	along	/ə'lɒŋ/
against	/ə'ɡenst/	behind	/bɪ'hɑɪnd/

1.6.2 *Words ending with the suffixes: -ic, -ical, -ible, -ian, -ial, -ious(-eous), -(s)ion, -(t)ion, -ity, -ify, -itive, -(t)ive, -meter, -graphy and -logy* normally have the primary stress on the syllables before these suffixes, e.g.:

1) The suffix: **-ic**

romantic	/rəʊ'mæntɪk/	historic	/hɪ'stɔrɪk/
semantic	/sɪ'mæntɪk/	statistic	/stə'tɪstɪk/
economic	/,i:kə'nɒmɪk/	domestic	/də'mestɪk/

2) The suffix: **-ical**

musical	/'mju:zɪkl/	electrical	/ɪ'lektɪkl/
physical	/'fɪzɪkl/	practical	/'præktɪkl/
historical	/hɪ'stɔrɪkl/	critical	/'krɪtɪkl/

3) The suffix: **-ible**

possible	/'pɒsəbl/	incredible	/ɪn'kredəbl/
audible	/'ɔ:dəbl/	flexible	/'fleksəbl/

4) The suffix: **-ian**

historian	/hɪ'stɔ:riən/	politician	/,pɒlə'tɪʃn/
musician	/mju'zɪʃn/	magician	/mə'dʒɪʃn/
vegetarian	/,vedʒə'teəriən/	Italian	/ɪ'tæliən/

5) The suffix: **-ial**

financial	/faɪ'nænjl/	memorial	/mə'mɔ:riəl/
artificial	/,ɑ:tɪ'fɪʃl/	commercial	/kə'mɜ:ʃl/
colonial	/kə'ləʊniəl/	substantial	/səb'stænjl/

6) The suffix: **-ious(-eous)**

delicious	/dɪ'liʃəs/	religious	/rɪ'li:dʒəs/
advantageous	/,ædvəntə'ʃi:ʒəs/	infectious	/ɪn'fektʃəs/
courageous	/kə'reɪdʒəs/	rebellious	/rɪ'beljəs/

7) The suffix: **-(s)ion**

occasion	/ə'keɪʒn/	discussion	/dɪ'skʌʃn/
comprehension	/,kɒmpri'hensjən/	cohesion	/kəʊ'hi:ʒn/

8) The suffix: **(t)ion**

invitation	/,ɪnvɪ'teɪʃn/	donation	/dəʊ'neɪʃn/
suggestion	/sə'dʒestʃən/	prediction	/prɪ'dɪkʃn/
examination	/ɪg,zæmɪ'neɪʃn/	promotion	/prə'məʊʃn/

9) The suffix: **-ity**

electricity	/ɪ,lek'trɪsəti/	ability	/ə'bɪləti/
personality	/pɜ:sə'næləti/	activity	/æk'tɪvəti/
community	/kə'mju:nəti/	purity	/'pjʊərəti/

10) The suffix: **-ify**

purify	/'pjʊərɪfaɪ/	qualify	/'kwɒlɪfaɪ/
classify	/'klæsɪfaɪ/	clarify	/'klærəfaɪ/
identify	/aɪ'dentɪfaɪ/	simplify	/'sɪmplɪfaɪ/

11) The suffix: **-itive**

acquisitive	/ə'kwɪzətɪv/	repetitive	/rɪ'petətɪv/
competitive	/kəm'petətɪv/	positive	/'pɒzətɪv/

12) The suffix: **-(t)ive**

detective	/dɪ'tektɪv/	attractive	/ə'træktɪv/
protective	/prə'tektɪv/	affective	/ə'fektɪv/
aggressive	/ə'ɡresɪv/	progressive	/prə'ɡresɪv/
impressive	/ɪm'presɪv/	expressive	/ɪk'spresɪv/

13) The suffix: **-meter**

parameter	/pə'ræmɪtə(r)/	barometer	/bə'rɒmɪtə(r)/
thermometer	/θə'mɒmɪtə(r)/	kilometer	/kɪ'lɒmɪtə(r)/

14) The suffix: **-graphy**

photography	/fə'tɒgrəfi/	geography	/dʒi'ɒgrəfi/
biography	/baɪ'ɒgrəfi/	radiography	/,reɪdi'ɒgrəfi/

15) The suffix: **-logy**

technology	/tek'nɒlədʒi/	biology	/baɪ'ɒlədʒi/
psychology	/saɪ'kɒlədʒi/	apology	/ə'pɒlədʒi/

1.6.3 Words ending with the suffixes: *-cy*, *-ize*, and *-ate*, generally have the primary stress on the third syllables before these suffixes counted from the end, e.g.:

1) The suffix: **-cy**

sufficiency	/sə'fɪʃnsi/	infancy	/'ɪnfənsi/
democracy	/di'mɒkrəsi/	tendency	/'tendənsi/
efficiency	/'ɪfɪʃnsi/	legacy	/'legəsi/

2) The suffix: **-ize**

modernize	/'mɒdənaɪz/	memorize	/'memərəɪz/
apologize	ə'pɒlədʒaɪz/	realize	/'ri:əlaɪz/
criticize	/'krɪtɪsaɪz/	recognize	/'rekəɡnaɪz/

3) The suffix: **-ate**

appreciate	/ə'pri:ʃiət/	abbreviate	/ə'bri:vɪət/
communicate	/kə'mju:nɪkət/	articulate	/ɑ:'tɪkjuleɪt/
activate	/'æktɪvɪt/	motivate	/'məʊtɪvɪt/

1.6.4 Words ending with the suffixes: *-ee*, *-eer*, *-ette* and *-ese* generally have the primary stress on these suffixes, e.g.:

1) The suffix: **-ee**

guarantee	/,ɡærən'ti:/	trainee	/,treɪ'ni:/
refugee	/,refju'dʒi:/	payee	/,peɪ'i:/
addressee	/,ædre'si:/	nominee	/,nɒmɪ'ni:/

2) The suffix: **-eer**

engineer	/,endʒɪ'nɪə(r)/	profiteer	/,prɒfɪ'tɪə(r)/
mountaineer	/,maʊntə'nɪə(r)/	pioneer	/,paɪə'nɪə(r)/

3) The suffix: **-ette**

cigarette	/,sɪgə'ret/	kitchenette	/,kɪtʃɪ'net/
novelette	/,nɒvə'let/	brunette	/bru:'net/

4) The suffix: **-ese**

Japanese	/,dʒæpə'ni:z/	Chinese	/,tʃaɪ'ni:z/
Vietnamese	/,vjetnə'mi:z/	Burmese	/bɜ:'mi:z/

## 1.7 The variety of word stress patterns

1.7.1 *One-syllable words—stressed* (The intonation should go down):

eat	↘	/ɪt/	ship	↘	/ʃɪp/
drink	↘	/drɪŋk/	sign	↘	/saɪn/
well	↘	/wel/	know	↘	/nəʊ/
watch	↘	/wɒtʃ/	sound	↘	/saʊnd/
boil	↘	/bɔɪl/	smile	↘	/smaɪl/

1.7.2 *Two-syllable words—stressed on the first syllable:*

O o	action	/'ækʃn/	O o	follow	/'fɒləʊ/
O o	fashion	/'fæʃn/	O o	moment	/'məʊmənt/
O o	also	/'ɔ:lsəʊ/	O o	lesson	/'lesn/

1.7.3 *Two-syllable words—stressed on the second syllable:*

o O	before	/bɪ'fɔ:(r)/	o O	behind	/bɪ'hænd/
o O	today	/tə'deɪ/	o O	accept	/ək'sept/
o O	begin	/bɪ'gɪn/	o O	between	/bɪ'twi:n/

1.7.4 *Three-syllable words—stressed on the first syllable:*

O o o		O o o	
difficult	/ˈdɪfɪkəlt/	excellent	/ˈeksələnt/
O o o		O o o	
energy	/ˈenədʒi/	memory	/ˈmeməri/
O o o		O o o	
operate	/ˈɒpəreɪt/	minister	/ˈmɪnɪstə(r)/

1.7.5 *Three-syllable words—stressed on the second syllable:*

o O o		o O o	
memorial	/məˈmɔːriəl/	example	/ɪɡˈzɑːmpl/ or /ˌzæm../
o O o		o O o	
exception	/ɪkˈsepʃn/	important	/ɪmˈpɔːnt/
o O o		o O o	
addition	/əˈdɪʃn/	infection	/ɪnˈfekʃn/

1.7.6 *Three-syllable words—stressed on the third syllable:*

o o O		o o O	
understand	/ˌʌndəˈstænd/	introduce	/ˌɪntrəˈdjuːs/
o o O		o o O	
engineer	/ˌendʒɪˈniə(r)/	personnel	/ˌpɜːsəˈnel/
o o O		o o O	
represent	/ˌreprɪˈzent/	disappear	/ˌdɪsəˈpiə(r)/

1.7.7 *Four-syllable words—stressed on the first syllable:*

O o o o		O o o o	
applicable	/ˈæplɪkəbl/	commentary	/ˈkɒməntri/
O o o o		O o o o	
educated	/ˈedʒuketɪd/	criticism	/ˈkrɪtɪsɪzəm/
O o o o		O o o o	
helicopter	/ˈhelɪkɒptə(r)/	capitalize	/ˈkæpɪtəlaɪz/

1.7.8 *Four-syllable words—stressed on the second syllable:*

o Oo o	grammatical /grə'mætɪkl/	o Oo o	certificate /sə'tɪfɪkət/
o O o o	intelligence /ɪn'telɪdʒəns/	o O o o	democracy /dɪ'mɒkrəsi/
o Oo o	particular /pə'tɪkjələ(r)/	o Oo o	activity /æk'tɪvəti/

1.7.9 *Four-syllable words—stressed on the third syllable:*

o o O o	instrumental /,ɪnstrə'mentl/	o o O o	emigration /,emɪ'greɪʃn/
o o O o	understanding /,ʌndə'stændɪŋ/	o o O o	contradiction /,kɒntrə'dɪkʃn/
o o O o	independent /,ɪndɪ'pendənt/	o o O o	comprehension /,kɒmpri'henʃn/

1.7.10 *Compound nouns (1)—the first part is given on the primary stress and the second one on the secondary stress.*

O o	O o	O o	O o
airplane	black-list	raindrop	teaspoon
/'eəpleɪn/	/'blæklist/	/'reɪndrɒp/	/'ti:pʊt/
O o	O o	O o	O o
daydream	lunchtime	lipstick	homework
/'deɪdrɪ:m/	/'lʌntʃtaɪm/	/'lɪpstɪk/	/'həʊmwɜ:k/
O o	O o	O o	O o
hotdog	housework	shorthand	doorbell
/'hɒtdɒg/	/'haʊswɜ:k/	/'ʃɔ:thænd/	/'dɔ:bel/

1.7.10 *Compound nouns (2)—if the modifying noun describes the characteristic and features of the head noun; the stress is placed on the second part.*

o o O	o o O	o o O	o O
bamboo soup	plastic hat	pumpkin pie	string beans
o O o	o o O	o O	o o O
brick building	iron gate	roast beef	gravel road

1.7.11 Compound nouns (3)—*If the modifying noun has an –ing form to describe the use of the noun or the property of the head noun, the stress is placed on the first part.*

O o o	O o o	O o o	O o o
chewing gum	dining room	walking stick	sleeping bag
O o o	O o o	O o o	O o o
walking stick	sailing boat	melting salt	waiting room
O o o	O o o	O o o	O o o
sitting room	smoking room	sleeping car	living room

1.7.12 Compound nouns (4)—*If the modifying noun has an –ing form and modifies a noun to describe the action being happening, the stress is on the head noun.*

o o O	=	Boat is sailing.
sailing boat		
o o O	=	Girl is working.
working girl		
o o O	=	Van is moving.
moving van		

1.7.13 Compound adjectives—for compound adjectives, the Primary stress is on the second part and the secondary stress is on the first part.

o o O o	o O o
absent-minded	good-looking
o O o	o O o
bad-tempered	hard-working
o O	o O
well-trained	handmade

1.7.14 *Compound verbs (1)*—compound verbs consisting of a noun and a verb usually have a primary stress on the first part and the secondary stress on the second part.

O o o	O o
baby-sit	daydream
O o	O o
lip-sing	sightsee
● o o	O o
window-shop	breast-feed

1.7.15 *Compound verbs (2)*—compound verbs which are made up of an adverbial prefix plus a verb have a primary stress on the verb and the secondary stress on the prefix.

o o O	o O
oversleep	outrun
o o O	o o O
undergo	interact
o o O	o o O
understand	overdo

1.7.16 *Two-word verbs*—two-word verbs can be used as nouns. The stress is usually on the first part for a noun and on second part for a verb.

<u>Nouns</u>	<u>Verbs</u>
Oo	o O
a setup (arrangement)	to set up (to arrange)
O o	o O
handout (giving sth to people)	to hand out (to give sth to people)
O o	o O
a look out (a high place from which to see better)	to look out (to be careful)







### 2.3 Weak and strong forms

With reference to the *structure words*, there are some common words in spoken English that have two contrastive pronunciations—the *reduced pronunciation* referred to as *weak form* whereas *the clear pronunciation* as *strong form*. The *weak forms* are much more commonly used than the *strong forms*. The *strong forms* are used only when the word has some special emphasis or is said on its own. So, it is extremely necessary to learn weak forms because many non-native speakers of English, who generally use only strong forms of these words in their pronunciation, fail to approximate to the characteristic rhythm of English. Take a look at comparing some examples of the unstressed (weak) and stressed (strong) forms of structure words below.

Structure words	Strong forms	Weak forms	Examples
of	/ɒf/	/əv/ or /ə/	A glass <i>of</i> water
to	/tu:/	/tə/	I'm going <i>to</i> downtown.
at	/æt/	/ət/	Look <i>at</i> that man.
and	/ænd/	/ənd/ or /ən/	Tom <i>and</i> Tim
from	/frɒm/	/frəm/	I come <i>from</i> England.
can	/kæn/	/kən/ or /kn/	<i>Can</i> I sit here?
an	/æn/	/ən/	I'd like <i>an</i> apple.
should	/ʃʊd/	/ʃəd/	What <i>should</i> I do?
him	/hɪm/	/(h)ɪm/	She like <i>him</i> .

Figure 6.4 Showing how weak and strong forms are pronounced

Almost all the weak form words are affected by the replacement of a vowel phoneme by either /ə/, /ɪ/, or /ʊ/ according to the following pattern:

Strong Form	Weak form	Example
/i:/	→ /ɪ/	me /mɪ/
/u:/	→ /ʊ/	to /tʊ/
/æ/	/ə/	at /ət/
/e/		them /ðəm/
/ɜ:/		her /hə(r)/
/ʌ/		but /bət/
/ɑ:/		are /ə(r)/
/eɪ/		a /ə/
/eə/		there /ðə/
/ʊ/		to /tə/

Figure 6.5 Showing weak forms affected by the replacement of a vowel phoneme by either /ə/, /ɪ/, or /ʊ/

## 2.4 Sentence stress patterns

In the sentence stress pattern below, the big circle [O] stands for a stressed syllable, and the small one [o] for an unstressed one.

### 2.4.1 Pattern 1: O o O

- 1) Thanks a lot.
- 2) Put it back.
- 3) Draw a line.

### 2.4.2 Pattern 2: O o o O

- 1) Come for a swim.
- 2) Where have you been?
- 3) What do you do?

### 2.4.3 Pattern 3: o O o o o O

- 1) She wanted me to go.
- 2) You only have to say.
- 3) I promised to be good.

## 2.4.4 Pattern 4: o O o O o O

- 1) She goes to work by bus.
- 2) I think he'll come at night.
- 3) We played a game of chess.

## 2.4.5 Pattern 5: o O o O o O o O

- 1) It's time he came to take us home.
- 2) I'll try my best to pass the test.
- 3) I think he ought to come in time.

## 2.4.6 Pattern 6: o O o o O o o O o o O

- 1) He says that he wanted to come in the day.
- 2) You turn to the left at the end of the street.
- 3) He tried up the files and then sent them by post.

## Summary

Word stress is the key to understanding spoken English. Every word is made from syllables. Each word has one, two, three or more syllables. Every syllable contains at least one vowel or vowel sound. Each word has one syllable that is **stressed**, while the other syllables in the word are **unstressed**. A multi-syllable word has a prominent syllable. This is called a **stressed syllable**. In English, there are at least three degrees of word stress: *primary stress*; *secondary stress*, and *weak stress*.

Sentence stress is the "music" of language. it gives **rhythm** or "beat" to English language for speaking and understanding spoken English. In sentence stress, some words in a sentence are stressed (loud) and other words are unstressed (weak). Sentence stress is accent on **certain words** within a **sentence**. Most sentences in spoken English have two types of words: *content words* (stressed words) and *structure words* (unstressed words). Rhythm in sentence stress is timing patterns among syllables in words. So, English is a **stress-timed rhythm**. That is, the speakers try to make the stressed syllables come at the same rhythm or time.

**Question reviews**

1. What is stress in English?
2. How many types of stress in English? What are they?
3. What is word stress?
4. What are the problems of Thai learners or students about word stress?
5. Try to find only one word that has the different stressed syllable pattern in each list by making a circle.

- 5.1 o O            behind, chicken, postpone, guitar, correct
- 5.2 O o            under, Japan, student, reason, handsome
- 5.3 o O o        exciting, telephone, tomorrow, October, injection
- 5.4 O o o        policeman, difficult, yesterday, politics, cinema
- 5.5 o o O o      information, supermarket, immigration, intonation,  
unemployment

6. What is sentence stress?
7. What types of words are stressed or unstressed in sentence stress?
8. Explain the rules for sentence stress in English briefly.
9. What is the difference between weak forms and strong forms?
10. Write these sentences in the correct sentences stress column below.
  - 10.1 The water's cold.
  - 10.2 Come and look.
  - 10.3 What do you want?
  - 10.4 It's cold and wet.
  - 10.5 Close the window.

O o o O	o O o O	O o O	O o O o

## CHAPTER 7

### LINKING, THOUGHT GROUPS, AND RHYTHM

As you learned in Chapter 6, native English speakers always put the emphasis on one stressed syllable in each word and on the content words in making the sentence rhythm to help listeners understand them. Putting the emphasis on the content words can help your listeners understand which words are most important and what you are saying. In fluent or rapid speech, words are often linked together smoothly and naturally without a break between them, which is the way that native English speakers normally do. Another way to help their listeners to understand them is making a pause and separating words into thought groups. These also help them make the rhythm smoothly and naturally while they are speaking English. Let's discuss these points below.

#### Linking

“Linking (Settle Learning Academy, 2008-2011) is the merging of multiple words together until they sound as if they are only one word.” When we say a sentence in English, we blend or link words together. Linking is very important in spoken English. If learners or students recognize and use linking, two things that they will find are 1) they will understand native English speakers more easily, and 2) native English speakers will understand them more easily.

Listen to the following sentence, and notice how words are linked together.

1. What can I help you?      /kə-naɪ/ + /hel-pju/
2. I like an apple.      /laɪ-kə-'næpl/
3. Come and sit down.      /kʌ-mənd/
4. May I come in?      /meɪ-jaɪ/ + /kʌ-mɪn/
5. May I go out?      /meɪ-jaɪ/ + /gəʊ-waʊt/

From the sentences above, “words within a speech unit (Hewings, 2007: 58) are usually said without a break in fluent speech. The sound at the end of one word is

linked to the sound at the beginning of the next so that there is a smooth connection between them.”

### 1. Understanding vowels and consonants

In linking, it is important to understand the difference between vowel sounds and consonant sounds. Here is a table of English vowels and consonants

vowels	a				e				i					o					u
consonants	b	c	d		f	g	h		j	k	l	m	n	p	q	r	s	t	
	v	w	x	y	z														

Figure 7.1 Showing the letters of English vowels and consonants

From the table above, there are 26 letters consisting of five vowels and 21 consonants. But the important thing that we recognize in linking is the **sounds**, not the letter. Often, the letter and the sound are the same, but not always. Here are some examples of comparing the letter and the sound (EnglishClub, 1997-2015):

play /pleɪ/	unit /'ju:nɪt/	honest /'ɒnɪst/
ends with the letter: y	begins with the letter: u	begins with the letter: h
ends with the sound: /eɪ/	begins with the sound: /j/	begins with the sound: /ɒ/

Figure 7.2 Showing the words ending and beginning with the letters and the sounds

### 2. Types of linking

There are basically two types of linking:

#### 2.1 Final consonant sound(C) + (V) Initial vowel sound

We link words ending with a *final consonant sound* to words beginning with an *initial vowel sound*. One practice technique which learners find helpful is to treat the final consonant sound of a word as though it were transferred to the next word, e.g.: Practice saying: *put it off* as though it were: *pu-ti-toff*. It should be noted, however, that though final consonant sounds are linked to words beginning with vowel sounds, they are not fully transferred in English.

Take a look at the examples of linking: C + V, as shown below:

#### 2.1.1 Linking with /p/ and /b/

Linking transcription

1) I hope it's clear.

/həʊ-pɪt/

2) Grab a handbag.

/græ-bə/



2.1.2 Linking with /t/ and /d/	Linking transcription
1) What <u>about</u> you?	/wə-tə/
2) He's a <u>friend of</u> mine.	/fren-dəv/
2.1.3 Linking with /k/ and /g/	Linking transcription
1) <u>Take a</u> seat, please.	/teɪ-kə/
2) Let's take the <u>dog out</u> .	/dɒ-gaʊt/
2.1.4 Linking with /tʃ/ and /dʒ/	Linking transcription
1) <u>Watch out</u> .	/wɒ-tʃaʊt/
2) You don't <u>change a</u> thing.	/tʃeɪn-dʒə/
2.1.5 Linking with /f/ and /v/	Linking transcription
1) <u>Half an hour</u> .	/hɑː-fə-'naʊə(r)/
2) <u>Have a</u> nice day!	/hæ-və/
2.1.6 Linking with /θ/ and /ð/	Linking transcription
1) I like <u>both of</u> you.	/bəʊ-θəv/
2) I'm going <u>with Eric</u> .	/wɪ-'ðe-rɪk/
2.1.7 Linking with /s/ and /z/	Linking transcription
1) It's <u>almost</u> four.	/ɪt-'sɔːlməʊst/
2) <u>Is it</u> cold?	/ɪ-zɪt /
2.1.8 Linking with /ʃ/	Linking transcription
1) I <u>wish I</u> could.	/wɪ-ʃaɪ/
2) The <u>fish is</u> good.	/fɪ-ʃɪz/
2.1.9 Linking with /m/, /n/, and /ŋ/	Linking transcription
1) <u>Come in</u> !	/kʌ-mɪn/
2) It's <u>an answer</u> .	/ɪt-sə-'nɑːnsə(r) or 'nænsə(r)/
3) <u>Bring it</u> to me.	/brɪ-ŋɪt/

## 2.1.10 Linking with /l/ and /r/      Linking transcription

1) Please fill in the form.      /fɪ-lɪn/2) Where are you going?      /weə-rə/

It should be noted that in section 1.1.10 “linking /r/ (Roach, 2010: 115) does not occur in syllable –final position in the BBC accent, but when the spelling of a word suggest a final /r/, and a word beginning with a vowel follows, the usual pronunciation is to pronounce with /r/, e.g., ‘here’/hɪə/ but ‘here are’/hɪə-rə/”.

## 2.2 Final vowel sound (V) + (V) Initial vowel sound

We link words ending with a *final vowel sound* to words beginning with *an initial vowel sound*. To help learners to link vowel sounds to vowel sounds, a small *w* or *y* (*j*) is included with the linker, e.g.: *do-wɪt* or *I-yam sorry*.

Here again, to help to promote natural linking, Care should be taken, however, not to exaggerate the link to a full, strong *w* or *y* (*j*), resulting in *do-wit* or *I-yam sorry*.

Take a look at the examples of linking: V + V, as shown below:

## 2.2.1 Linking /w/      Linking transcription

1) How do I live?      /du\_waɪ/2) Go away!      /gəʊ\_wə'weɪ/

## 2.2.2 Linking y/ or /j/      Linking transcription

1) We all miss you.      /wi-ɹɔ:l/2) I am sorry.      /aɪ-ɹəm/

From the sentence above, it should be noted that 1) if our lips are **round** at the end of the first word with the final vowel sounds: /ʊ, u:, əʊ, aʊ, we insert a **w** sound as in *do-wɪ*, *too-weasy*, *so-wɪn* love, *ho-w*about, and 2) if our lips are **wide** at the end of the first word with the final vowel sounds: /i:, ɪ, eɪ, aɪ, ɔɪ/, we insert a **y(j)** sound as in *coffee-yor* tea, *we-y*all, *ma-y*ɪ, *m-y*arm, *bo-y*and girl.

## Thought groups

“Thought groups are meaningful phrases within a sentence. The words in a thought group are pronounced together, as a unit (Lane, 2005: 159).” In English, another way to speaking clearly and being understood is making a pause between groups of words in sentences (Elemental English, 2009-2015). Thought groups also help the listener identify the parts of a sentence. Consider the following sentence:

English learners need help to develop this skill / when they study pronunciation.//

or

English learners need help / to develop this skill / when they study pronunciation.//

The sentence above is quite long and thus a speaker cannot utter a long sentence in one breath. He/She utters groups of words in one breath; he/she pauses and then utters another group. The place where he/she stops or pauses is marked by a slant mark [/].

### 1. Reasons for making thought group division

When we speak, we often break up long sentences into smaller groups of words or thought groups, with a short pause between them. This makes it easier for listeners to follow what we’re saying. Summarily, when we pause in a sentence, it is usually for one of three reasons:

- 1.1 To give the listener time to understand your word.
- 1.2 To make the meaning clear.
- 1.3 To allow the speaker to take a breath when producing longer sentence.

### 2. Grouping words in a thought group

Actually, “there are no fixed rules for deciding which words to include in a thought group (Lane, 2005: 159).” If we do not pause much, it will be difficult for the listener to understand what we are saying. If we pause too often, the sentence can seem choppy, hard to understand and unpleasant to listen to. Look at two ways to group the words in the sentence below.

We’re going to work at a hotel in Pattaya.

We’re going to work at a hotel in Pattaya.

Generally, thought group (WebLearn, 2014) is divided into the following:

2.1 at the end of a *short sentence*

e.g: I am happy/

2.2 at the end of a *phrase*

e.g: because of his being late/.....

2.3 at the end of a *clause*

e.g: When you do exercises/.....

2.4 After a word when we leave a gap before uttering another word or at the end of a short sentence:

e.g: Henry/what are you doing?//

2.5 After a subordinate clause and after a main clause:

e.g: If you get the first rank,/I'll give you a prize//

2.6 Before a conjunction:

e.g: You are intelligent/but you are not honest//

2.7 Before a question tag:

e.g: She writes beautifully/doesn't she?//

2.8 At the end of quotation marks

e.g: "Joe!"//She shouted at her husband/"the truck is on fire!"//

2.9 At the end of a comma

e.g: "Hardly that,/Senior General,"//said our friend//

It should be note that a short pause is marked by a single slash [/], and at the end of sentence we use double slash [//] to show a longer pause, as shown below.

### 3. Examples of grouping thought groups

These are some examples of dividing a speech unit into thought groups.

#### 3.1 Example 1

"We have a great opportunity /at the moment/to encourage awareness of science/ among the public.// a recent opinion poll/ which was conducted earlier this year/ revealed that/80% of the population/ is interested in science.//In addition/, it shows/ a growing trust in scientists/ who make an important contribution/ to society.// however,/ the poll also showed/that few people/felt they know enough/about

science.//To develop understanding of science/ we need more public debate/ and we should be making science/ more interesting/ in school.”// (Martin Hewings 2007: 114)

### 3.2 Example 2

“Once upon a time,/ there was a beautiful princess /who lived in a big castle /with her father,/ the king, /and her mother,/ the queen.// Even though she had everything she asked for,/ she was not very happy.”// (Yoshida, 2012).

### 3.3 Example 3

My favourite thing to do/ on a sunny day/ is to go to the beach.// It takes about an hour/ from my house.// I have to get the train /and a bus,/ but it’s worth it.// Lots of my friends/ live near the beach,/ so it’s always the perfect way /to catch up /and enjoy the sunshine.// (Hewings, 2007: 144)

## Rhythm

Rhythm is timing patterns among syllables. However, the timing patterns are not the same in all languages. Regularly, English speech (Roach, 2010) is rhythmical, and the rhythm is detectable in the occurrence of stressed syllables.

### 1. Rhythmic patterns

To better understand the rhythmic pattern of English, let’s take a look at the similarity in stress patterns that occur in both words and simple sentences.

1.1 Rhythmic pattern:	● ○	○ ●
Word	<u>teacher</u>	<u>believe</u>
Sentence	<u>Do it.</u>	<u>It hurts.</u>
1.2 Rhythmic pattern:	○ ● ○	● ○ ●
Word	<u>prediction</u>	<u>introduce</u>
Sentence	<u>I like it.</u>	<u>What’s your name?</u>
1.3 Rhythmic pattern:	● ○ ● ○	● ○ ● ○ ○
Word	<u>understanding</u>	<u>international</u>
Sentence	<u>Harry saw it.</u>	<u>Come to Canada</u>

## 2. Rhythmic pattern problems of sentence stress

Dale and Poms(2005:91) stated in their book on *English Pronunciation: Made Simple* that “English sentence-level stress patterns may not be used the same way as in your language in English, specific words within sentence are emphasized or spoken louder to make them stand out.” Thus, learners or students whose first language (L1) as Thai can be described as syllable-timed rhythm often have problems in recognizing and then producing features of the second language(L2) as English such as *contractions*, *primary* and *secondary stresses*, and *weak stress*. Obviously, the rhythm in English is created by using *stressed* and *unstressed* syllables, known as *stress-timed rhythm*, while the rhythm in Thai is created by using nearly equal weight and time in all syllables, known as *syllable-timed rhythm*. These two languages, therefore, are very different in rhythm.

Take a look at the pictures, the left one represents the stress-timed rhythm created by using stressed and unstressed syllables (roosters represent stressed syllables and chicks represent unstressed ones), and the right one represents the *syllable-timed rhythm*, created by using nearly equal weight and time in all syllables (ducks represent the same length and weight that each syllable has).

1) Stress-timed rhythm (English)    2) Syllable-timed rhythm (Thai)

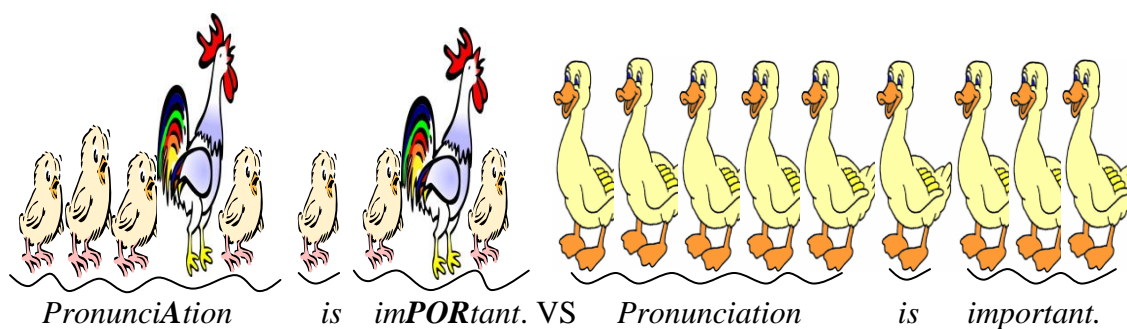


Figure 7.3 Comparison of stress-timed and syllable-timed rhythms

Source: Sherman ( 2015 ) ; DLTK's Sites (1998-2015)

## Summary

In connected speech, words are often linked together smoothly and naturally without a break between them, which is the way that native speakers normally do. Therefore, linking is very important in spoken English. There are two types of linking: *Final consonant sound > Initial vowel sound* (C+V) and *Final vowel sound > Initial vowel sound* (V+V). Another way to help the listeners to understand what we are saying is by making a pause and separating words into *thought groups*. By making a pause **into our speech**, we can divide longer sentences into two or more parts, or **thought groups**. In addition, rhythm is the patterning of stressed and unstressed syllables in words, phrases and sentences and gives the timing smoothly and naturally while we are speaking English.

## Question reviews

1. What is linking?
2. How many types of linking are there in spoken English?
3. Mark [ ͡ ] between the linking sounds in the following phrases and sentences.
  - 3.1 Come over here.
  - 3.2 A cup of tea
  - 3.3 In the afternoon
  - 3.4 Who are you?
4. What is thought group?
5. How many reasons do we pause in a sentence when we speak?
6. Divide each of the following sentences into **thought groups** by placing slashes [/] (short pause), and [//] (long pause) at pauses.

My favourite thing to do on a sunny day is to go the beach. It takes about an hour from my house. I have to get the train and a bus, but it's worth it. Lots of my friends live near the beach, so it's always the perfect way to catch up and enjoy the sunshine. (Hewings, 2007: 144)

7. What is rhythm?
8. What is the difference between a syllable-timed rhythm and a stress-timed rhythm?
9. Is English syllable-timed or stress-timed? Explain it briefly.
10. Give two examples of words and sentences by using the stress and rhythmic patterns.

## CHAPTER 8

### INTONATION

In connected speech, we talked about stressing in words and sentences, linking sounds to sounds, dividing words into thought group, and giving rhythm as we speak. All above can help Thai learners or students to understand what a native speaker is saying. In this chapter, we will discuss the *intonation*, which refers to the changing pitch of the voice when we speak. In normal speech, the pitch of our voice keeps on changing: now going up, now going down, and sometimes staying in steady or normal level. It is said that no language in the world is spoken on a monotone or on the same pitch of the voice all the time. Speaking without using pitch variations sounds like very unnatural or robotic. If Thai learners or students lose the ability to use intonation, it can be very difficult for them to sound like natural, and sometimes difficult for them to be understood. For now, we are going to concentrate on the intonation, as shown here.

#### **What is intonation?**

“Intonation is the melody of language, which refers to the patterning of high and low notes over sentences or phrases. The terms “intonation” and “pitch” sometimes mean the same thing; more often, “intonation” refers to the melody of sentences and phrases, while “pitch” refers to the note on a particular syllable.” (Lane, 2005: 216)

“Intonation is about how we say things, rather than what we say. Without intonation, it's impossible to understand the expressions and thoughts that go with words.” (Sabbadini, 2006)

“Intonation refers to the changing pitch of the voice, and that the pitch can be changed by changing the frequency of vibration of the vocal folds.” (Anne Knight, 2012: 229)

According to Prator and Roginett (1972), intonation is the rising and falling of the pitch of your voice as you speak. It is the tune of what you say. More especially, it is the combination of musical tones on which we pronounce the syllables that make



up our speech. Therefore, we could mark the intonation of sentences by writing them on something which resembles a musical staff as shown: *good morning*



From all above, it can be assumed that intonation is the musical pitch of the voice which refers to the high (rising) and the low (falling) voice when we speak over phrases or sentences. To understand the expressions or thoughts through words, it is possible to use the changing pitch of the voice while speaking.

### **Tone language vs. Intonation in English**

Many Asian languages, as well as Cantonese and Thai, are tone languages. When we speak in these languages, the pitch on which word a word is produced can change its meaning. Here are some two examples from Chinese and Thai, taken from tone pitch of the voice, in the IPA symbols.

Tone pitch in change	Cantonese	Thai
	/si/	/k <sup>h</sup> a/
High tone	silk	to engage in trade
Mid tone	to try	to get struck
Low tone	matter	galangal (a ginger-like root)

Figure 8 Showing tone pitch in change of Cantonese and Thai languages

(Anne Khigh, 2012: 228)

In English, intonation related to the changing pitch of the voice does not change the meaning of individual words while speaking with a rise, fall or fall-rise, regardless of the pitch on which it is produced. In tone languages as in Cantonese and Thai, the pitch of the voice can change the meaning of individual words. We will now investigate what effects pitch *does* have in English. Here we find that intonation influence meaning on longer stretches of speech.

## Types of intonational meaning in English

In English, there are four different ways in which intonation might give the meaning of utterance. These concern 1) how the speaker break their speech into intonation phrases, 2) the choice of accent position, 3) the choice of nuclear tone, and 4) the choice of key or register, referring to the pitch range of a particular intonation phrase. Summarily, the meanings we will consider have four main types as follows:

1. **Focus**—here we can change meanings by altering what is emphasized in a sentence.
2. **Attitude**—here we can signal our attitude to the utterance or to the listener, or we can signal our emotional state.
3. **Grammar**—here we can use intonation to mark out particular structures, and to indicate different types of utterance, such as statements and questions.
4. **Discourse**—here we use intonation to show where we are in our talk, such as whether we are planning to carry on speaking or are ready to let someone else speak. (Anne Khigh, 2012: 246)

## Pitch levels in English


Basically, there are three pitch levels in English: *Normal* pitch or level 2 is where the voice usually is, *High* pitch or level 3 is where the voice rises to indicate information focus, and *Low* pitch or level 1 is where the voice falls, usually at the end of sentences. There is also a *very high* pitch or level 4, used to express strong emotions such as surprise, anger, or fear. (The very high pitch will not be discussed in this text).

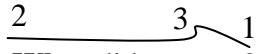
In most conversations the pitch of voice for statement, command, and WH question is basically the same- the voice starts at a normal (mid) pitch, rises to a high pitch, and then falls to a low pitch at the end of the sentence. With yes/no questions and requests, the pitch starts at normal and rises at the end of the sentence.

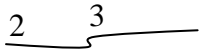
Look at these of some common intonation patterns below.

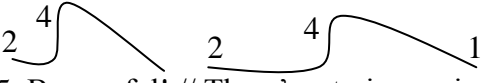
2     3     1

1. He's **sleeping**. (statement)

  
 2. **Give** me the **key**. (command)

  
 3. **What** did you **eat**? (Wh questions)

  
 4. Is he **sleeping**? (yes/no question)

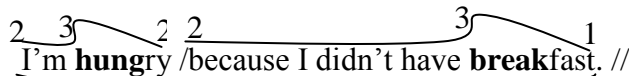
  
 5. Be careful! // There's a train coming.//

(Speakers also use a fourth level of pitch, a very high note, for emphasis)

## Tone groups

**Tone groups** (sometimes called *intonation groups*), which correspond to *thought groups*, refers to the intonation or pitch pattern (contour) over a group of words. A tone group usually consists of a stressed word with higher pitch than other words in the thought group. A short utterance quite often forms a single tone group, while a longer one is made up of two or more. While speaking, we divide long utterances into small groups of words, between which we pause.

Look at the following sentence:

  
 I'm **hungry** /because I didn't have **breakfast**. //

In this sentence, there are two tone groups, corresponding to the two thought groups. In the first thought group pitch rises at high level or level 3 on the first stressed syllable of the word *hungry* and falls back to normal level or level 2 on the second unstressed syllable, and again at high level or level 3 on the first stressed syllable of the word *breakfast*, then falls to low level or level 1 on the second unstressed syllable.

Some examples given below should make the concept of the tone group clear. The tone group boundary is indicated by a single slant line [/] for non-final intonation pattern and double slant line [//] for final intonation pattern.

1. 1. **Yes.**//

2. 2. **Of course!**//

3. 3. I'll come **tomorrow.**/

4. 4. Why don't you **help me?**//

5. 5. Would you like to drink coffee? or tea?//

6. 6. Give me a banana, / a pear / and an apple./

7. 7. I want to finish this work/ before he returns./

8. 8. Please do it now/ if you have time.//

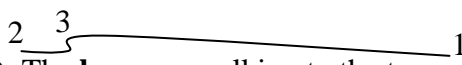
9. 9. They have plenty of time, / but we haven't / in spite of the holidays.//


### Tonic syllable


Within a tone group including more than one syllable, there is one syllable standing out or carrying a high pitch from amongst the rest of the syllables, usually owing to a major change in pitch. This kind of syllable is called the *nucleus* of the tone group, or the *tonic syllable*.

Most words in a tone group can carry the tonic syllable, depending on the meaning intended, although the usual position for this is at the end of utterance.

Compare the different emphases in the following sentence:

a1)  a1) The **boy** was walking to the town. (*The boy* not the girl was walking.....')

a2)  a2) The boy was walking to the **town**. (statement ....to *the town* not to somewhere )

a3)  a3) The boy was **walking** to the town. (...*walking* not running or not driving to.....)

### Basic intonation patterns

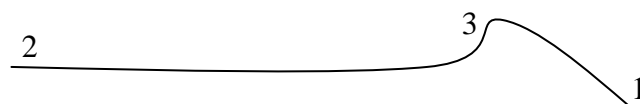
There are two common intonation patterns: (1) *final intonation pattern* and (2) *non-final intonation pattern*.

#### 1. Final intonation pattern

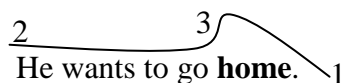
There are two final intonation patterns: 1) *final (rising-) falling intonation pattern* and 2) *final rising intonation pattern*.

##### 1.1 Final (rising-) falling intonation pattern

This final falling intonation pattern is used with a statement, a command, and a wh-question, an exclamation and single item utterance. The final falling intonation pattern is also called the 2-3-1 final falling intonation pattern. The numbers (as you see in section 10.3) refer to pitch levels two, three and one respectively. Pitch level 2 refers to a normal pitch, pitch level 3 a high pitch, and pitch level 1 a low pitch. The 2-3-1 final falling intonation pattern looks like this:



When you speak you start with the normal pitch level or pitch level 2, then your voice rises to a high pitch level or pitch level 3, and either steps or glides down to a low pitch level or pitch level 1. Look at the example below:


  
 He wants to go **home**.

Consider the following types of sentences:

*Final falling intonation* is common with:

1. Statements / Negative statements

1.1 The weather is hot.

1.2 My sister has a headache.

1.3 John is waiting in the office.

1.4 I don't have a car.

1.5 Mary didn't tell me the truth.

1.6 This answer is not correct.

2. Wh-questions

2.1 What time is it?

2.2 When did you get to the airport?

2.3 How long does it take to get

to their house?

2.4 Why are you laughing?

2.5 Who told you the news?

2.6 Where are you going?

3. Commands

3.1 Be quiet.

3.2 Stop shouting.

3.3 Turn on the fan.

3.4 Don't interrupt me.

3.5 Take off your coat.

3.6 Don't be late.

4. Exclamations

4.1 How beautiful!

4.2 How nice!

4.3 How wonderful!

4.4 What a lovely girl she is!

4.5 What a good idea!

4.6 What an idiot!

5. Single item utterances

5.1 tomorrow

5.2 airport

5.3 postman

5.4 yesterday

5.5 morning

5.6 Shirt

## 1.2 Final rising intonation pattern

This final rising intonation pattern is normally used with yes-no questions, statement intended to be a question, non-terminal tone group, requests, commands intended to sound like a request, wh-questions showing politeness, friendliness, warmth, personal interest, requests for repetition and addressing,. The final rising intonation pattern is also called *the 2-3 final rising intonation pattern*. The numbers (as you see in section 10.3) refer to pitch levels two and three, respectively. Pitch level 2 refers to a normal pitch and pitch level 3 a high pitch. The 2-3 final rising intonation pattern looks like this:



When you speak you start with the normal pitch level or pitch level 2, then your voice rises to a high pitch level or pitch level 3, and the syllable(s) which follow(s) the high pitch level or pitch level 3 must be pronounced on the high not too. Look at the example below:

$\overset{2}{\text{—}} \quad \overset{3}{\text{—}}$   
 Are you hungry?

Consider the following types of sentences:

*Final rising intonation* is common with:

### 1. Yes/No questions:

#### 1.1 Questions beginning with the auxiliary *do*

- Does she bring the book to class?
- Do you have a ticket?
- Did she give him five dollars?

#### 1.2 Questions beginning with the auxiliary *have*

- Have you seen him?
- Has he finished the test yet?
- Have you read the paper?

1.3 Questions beginning with the auxiliary *be*

- Are you singing a song?
- Is she working in the office?
- Was John studying English last semester?
- Were they taken to the hospital?

## 1.4 Questions beginning with the modal auxiliaries

- Can I help you?
- Could you tell me the time?
- Will you bring the flowers?
- May I borrow your pen?
- Shall we go for a walk?

1.5 Questions beginning with the verb *to be*

- Are you ready?
- Is the lecturer from London?
- Was he at home?
- Are you interested in English?

## 1.6 Statement intended to be a question

- You won't come?
- He isn't going?
- You don't want to lend me the book?

## 2. Non-terminal tone group - You haven't finished speaking.

2.1 If you don't come in time.....(I'll leave).

2.2 Whenever she calls on us.....(she creates problems).

2.3 Unless you decide to succeed.....(you can't succeed).

2.4 I'll inform you.....(if he comes)

## 3. Requests

3.1 Pass me the salt please.

3.2 Listen to me for a minute.

## 4. Commands intended to sound like a request

4.1 Close the door.

4.2 Don't disturb me at odd hours.

4.3 Don't be late.



## 5. Wh-questions showing politeness, friendliness, warmth, personal interest

5.1 How is your son?

5.2 What is your name child?

## 6. Request for repetition

6.1 What did you say?

6.2 Who did you say you went with?

6.3 Where did you say you found it?

## 7. Addressing

7.1 Miss Samson

7.4 Mr. John

7.2 Senator Jackson

7.5 Mr. Baker

7.3 General Johnson

7.6 Diana

**2. Non-final intonation pattern**

If a sentence is divided into two or more thought groups, each thought group has its own separate intonation pattern. There are three types of non-final intonation patterns: *(rising-) falling* or *2-3-1 non-final intonation pattern*, *(rising-) falling* or *2-3-2 non-final intonation pattern*, and *continuation rising* or *2-3 non-final intonation pattern*.

## 2.1 (Rising-) Falling or 2-3-1 non-final intonation pattern

2.1.1 This type of (rising-) falling or 2-3-1 non-final intonation pattern normally occurs when a long sentence (complex sentence) is separated by a colon (:), or a semicolon (;), the first thought group spoken with 2-3-1 non-final intonation pattern; whereas the second thought group has the 2-3-1 final intonation pattern:

1. I'll tell you the truth:/ it can't be done.// (2-3-1/2-3-1)

2. She must be angry; /she won't speak to them.// (2-3-1/2-3-1)

2.1.2 This type of 2-3-1 non-final intonation pattern also occurs in a tag question which is a statement followed by a short yes/no-question (called a tag). Tag questions can display either *final (rising-) falling* or *final rising* intonation patterns. Their meaning has difference depending on which of those patterns is used. The first thought group spoken with 2-3-1 non-final intonation pattern; whereas the second thought group with the tag question may be the 2-3 or 3-1 final intonation pattern:

1. You are hungry, /aren't you?// (2-3-1/2-3 patterns: speaker is unsure)
2. You are hungry, /aren't you?// (2-3-1/3-1 patterns: speaker expects agreement)

## 2.2 (Rising-) Falling or 2-3-2 non-final intonation pattern

2.2.1 This type of (rising-) falling or 2-3-2 non-final intonation pattern is used in a long sentence (complex sentence) separated by a colon (:), or a long sentence whose second part is closely related to the first one. The first thought group is spoken with 2-3-2 non-final intonation pattern; whereas the second thought group has the 2-3-1 final intonation pattern if it is a statement, but if it is a yes/no-question, the 2-3 final intonation pattern is used:

1. When the teacher reads your name, / you should answer.//
2. During your trip in Europe, /did you visit Germany?//
3. While their parents are away, / will they be in town?//

2.2.2 This type of (rising-) falling or 2-3-2 non-final intonation pattern is used in a long sentence (compound sentence) joined by connecting word such as *and*, *but*, *or*, *so*. The first thought group is spoken with 2-3-2 non-final intonation pattern; whereas the second thought group has the 2-3-1 final intonation pattern:

1. He went to the opera, /and saw a fine performance.//
2. The food wasn't good, /but I ate it.//
3. You must follow this diet strictly, / or you won't lose weight.//
4. My brother was sick, /so he didn't go to school.//

2.2.3 This type of (rising-) falling or 2-3-2 non-final intonation pattern is used in a long sentence (complex sentence) joined by subordinator such as *when*, *after*, *before*, *because*, *since*, *while*, *if*, *etc.* The first thought group is spoken with 2-3-2 non-final intonation pattern; whereas the second thought group has the 2-3-1 final intonation pattern:

1. The sky still looked dark / although the rain had ended.//
2. When you go skiing, / you should wear gloves.//
3. They came in the house /after finished playing.//

2.2.4 This type of (rising-) falling or 2-3-2 non-final intonation pattern is used for greetings. When the sentence is spoken in two thought groups, the first one is

spoken with 2-3-2 non-final intonation pattern; whereas the second one directed to someone by name usually has the 2-3 final intonation pattern:

1. Good morning, /Mrs Nelson.//
2. Good bye,/ Dr Smith.//
3. How do you do, /Mr Jones?//

2.2.5 This type of (rising-) falling or 2-3-2 non-final intonation pattern is used when the wh-questions are directed to someone by name; the question is pronounced with 2-3-2 non-final intonation pattern; whereas the name is spoken with the 2-3 final intonation pattern:

1. When are you leaving,/ Miss Samson?//
2. Why did you do it,/ Jane?//
3. How have you been,/ James?//

### 2.3 Rising or 2-3 non-final intonation pattern

2.3.1 This type of rising or 2-3 non-final intonation pattern is used when a sentence consists of two or more alternative s with *or*; the first all alternatives are pronounced with 2-3 non-final intonation pattern; whereas the final alternative is spoken with the 2-3-1 final intonation pattern:

1. Would you like coffee/ or tea?//
2. Do you want to go by train /or by bus?//
3. Does he like swimming,/ or boating,/ or skiing.//

2.3.2 This type of rising or 2-3 non-final intonation pattern is used for several items in affirmative or negative statement. The first words in a list are pronounced with 2-3 non-final intonation pattern; whereas the final ones are spoken with the 2-3-1 final intonation pattern. The final fall tells the listener the list is finished. This is common with phrases joined by a comma (,) and *and* .

1. I bought oranges,/ apples/ and bananas.//
2. She gave me a pen,/ a ruler,/ and a pencil.//
3. Give me a loaf of bread,/ two bottles of milk,/ and some raspberry jam.//

## Summary

In English, the *intonation* refers to the changing pitch of the voice as we speak, which normally goes on changing: now going up, now going down, and sometimes remaining in steady or normal level. No language in the world is spoken on a monotone all the time. Without intonation, Speaking English sounds like very unnatural or robotic. Basically, there are three pitch levels: *normal* pitch or level 2 is where the voice usually is; *high* pitch or level 3 is where the voice rises to indicate information focus; and *low* pitch or level 1 is where the voice falls, usually at the end of sentences. There are two common intonation patterns: 1) *final intonation pattern* and 2) *non-final intonation pattern*.

## Questions reviews

1. What is intonation?
2. What is the difference between tone language and intonation in English?
3. How many ways does the intonation concern the meaning of utterance?
4. Identify the main types of intonational meanings in English.
5. How many pitch levels of intonation are there in English? What are they?
6. What does tone group refer to? Give two examples of sentences concerning the tone group.
7. What is tonic syllable?
8. How many types of intonation patterns in English? What are they?
9. Identify the 2-31 pitch or 2-3 pitch (the 1= low pitch, the 2= normal pitch and the 3= high pitch) in the following phrases or sentences.
 

9.1 Well done.	9.4 Can I help you?
9.2 Mr. Jackson	9.5 How nice!
9.3 Where do you live?	9.6 Are you hungry?
10. Draw the intonation pattern lines, depending on each of thought groups. Then write the number of intonation patterns.
 

10.1 I'll come as soon as I can.
10.2 Would you like coffee or tea?
10.3 Give me a banana, a pear, and an apple

# Bibliography

ปรารมภ์รัตน์ โชติกเสถียร. (2537). ระบบเสียงภาษาอังกฤษ. กรุงเทพมหานคร: สำนักพิมพ์แห่ง  
จุฬาลงกรณ์มหาวิทยาลัย.

Andriyani, E. (2013). **What is a diphthong?**. [online]. Retrieved on June 17, 2015,  
from <http://www.slideshare.net/Andriyanieka12/5-diphthongs-21298452>.

Anne Knight, R. (2012). **Phonetics: A coursebook**. New York: Cambridge  
University Press.

Baker, A. (1995). **Ship or Sheep?: An Intermediate pronunciation course**.  
Cambridge: Cambridge University Press.

British Council. (2006). **Teaching English: Stress-timed**. [online]. Retrieved  
June, 15, 2015, from <https://www.teachingenglish.org.uk/article/stress-timed>.

Budsaba Kanoksilapatham. (2007). **Pronunciation in Action**. Nakhon Pathom:  
Silpakorn University Publishing House.

\_\_\_\_\_. (n.d). **Cartoon boy and girl talking**. [online]. Retrieved January 6, 2015,  
From <http://motor-kid.com/cartoon-girl-and-boy-talking.html>.

Celce-Murcia, M.; et al. (2013). **Teaching Pronunciation: A Course Book and  
Reference Guide**. 2<sup>nd</sup> Ed. Hong Kong: Cambridge University Press.

Dale, P. & Poms, L. (2005). **English Pronunciation: Make Simple**. New York:  
Pearson Education.

DLTK's Sites. (1998-2015). **Six little ducks**. [online]. Retrieved July 20, 2015, from  
<http://www.dltk-teach.com/rhymes/ducks/mlyrics2.htm>

Elemental English. (2009-2015). **Pausing within Sentences: English  
Pronunciation Lesson**. Retrieved August, 11, 2015, from  
<http://www.elementalenglish.com/pausing-thought-groups-english-pronunciation/>.

EnglishClub. (1997-2015). **Word Stress**. [online]. Retrieved June, 15, 2015, from  
<https://www.englishclub.com/pronunciation/word-stress.htm>.

EnglishClub. (1997-2015). **Word Stress rules**. [online]. Retrieved June, 15, 2015,  
from <https://www.englishclub.com/pronunciation/word-stress-rules.htm>.

- EnglishClub. (1997-2015). **Sentence Stress**. [online]. Retrieved June, 15, 2015, from <https://www.englishclub.com/pronunciation/word-stress-rules.htm>.
- EnglishClub. (1997-2015). **Vowels and Consonants for Linking**. [online]. Retrieved August 11, 2015, from <https://www.englishclub.com/pronunciation/linking-1.htm>.
- Fasold, R. & Connor-Linton, J. (2006). **An Introduction to Language and Linguistics**. Cambridge: Cambridge University Press.
- Hewings, M. (2007). **English Pronunciation in Use: Advanced: Self-study and classroom use**. Cambridge: Cambridge University Press.
- Hornby, A.S. (2000). **Oxford Advanced Learner's Dictionary of Current English**. Oxford: Oxford University Press.
- Kelly, G. (2013). **How to Teach Pronunciation**. Malaysia: Pearson Education Limited.
- Lane, L. (1993). **Focus on Pronunciation: Principles and Practice for Effective Communication, Student's Book**. New York: Longman Pearson Education
- Lane, L. (2005). **Focus on Pronunciation 3**. New York: Longman Pearson Education.
- \_\_\_\_\_. (n.d.). **Linguistics201: Articulatory phonetics**. [online]. Retrieved April 1, 2015, from [http://pandora.cii.wvu.edu/vajda/ling201/test2materials/articulatory\\_phonetics.htm](http://pandora.cii.wvu.edu/vajda/ling201/test2materials/articulatory_phonetics.htm).
- Mannell, R. (2014). **Phonetics and Phonology: Vowel lip postures**. Retrieved March, 15, 2015. [online]. From <http://clas.mq.edu.au/speech/phonetics/>
- Matthews, P.H. (1997). **Concise Dictionary of Linguistics**. New York: Oxford University Press.
- Onnicha Geeratayaporn. (2013). **Word stress problems: A case study of Thai undergratulate students at Sripatum University Majoring English Business Communication**. Bangkok: Graduate School, Kasetsart University.
- Oxford University Press. (2015). **Oxford Learner's Dictionaries**. [online]. Retrieved June 5, 2015, from <http://www.oxfordlearnersdictionaries.com>.
- Pailin Yantringing. (1999). **Phonetics to Develop English Listening and Speaking Skills**. English Program, Faculty of Humanities and Social Sciences, Nakhon Pathom Rajabhat University.

- \_\_\_\_\_. (n.d). **Phonetics vs. Phonology**. [online]. Retrieved January 6, 2015, from <http://www.phon.ox.ac.uk/jcoleman/PHONOLOGY1.htm>.
- Praromrat Jotikasthira. (1999). **Introduction to the English Language: System and Structure**. 2<sup>nd</sup>. Ed. Bangkok: Chulalongorn University Press.
- Prator, C. & Robinett, W. (1972). **Manual of American English Pronunciation**. New York: Holt, Rinehart, and Winston.
- Roach, P. (2010). **English Phonetics and Phonology: A practical course**. 4<sup>th</sup> Ed. Cambridge: Cambridge University Press.
- Sabbadini, M. J. (2006). **Intonation**. [online]. Retrieved August 15, 2015, from <http://www.teachingenglish.org.uk/article/intonation>
- Seattle Learning Academy. (2008-2011). **American English Pronunciation: Linking**. [online]. Retrieved August 10, 2015, from <http://pronuncian.com/Linking/>.
- Sethi and Dhamija. (1999). **A course in Phonetics and Spoken English**. 2<sup>nd</sup> Ed. New Delhi: Rajkamal Electric Press.
- Sherman, P. (n.d.). **Rooster\_crowing**. [online]. Retrieved July, 20, 2015, from [http://www.wpclipart.com/cartoon/animals/bird/bird\\_cartoons\\_2/rooster\\_crowing.png.html](http://www.wpclipart.com/cartoon/animals/bird/bird_cartoons_2/rooster_crowing.png.html)
- Sumon Ariyapitipun. (2004). **Introduction to Linguistics**. 2<sup>nd</sup>. Ed. Bangkok: Chulalongkorn University Printing House.
- Varshney, R. L. (2000-2001). **An Introductory Text Book of Linguistics and Phonetics**. Bareilly: Student Store.
- Verma, S. K. & Krishnaswamy, N. (2000). **Modern Linguistics: An introduction**. 11<sup>th</sup> Ed. India: Oxford University Press.
- WebLearn. (2014). **Stress and Pause in English**. [online]. Retrieved August 12, 2015, from [http://www.weblearn.in/stress\\_pause/](http://www.weblearn.in/stress_pause/)
- Wikipedia, the free encyclopedia. (July19, 2015). **Stress (Linguistics)**. [online] Retrieved July 23, 2015, from [https://en.wikipedia.org/wiki/Stress\\_\(linguistics\)](https://en.wikipedia.org/wiki/Stress_(linguistics)).
- Yoshida, M. (2012). **Suprasegmentals: Part 2**. [online]. Retrieved August 12, 2015, from <http://teachingpronunciation.pbworks.com/w/file/50962890/Suprasegmentals>.