Syrian Arab Republic
Damascus University Publications
Open-Learning Center
The Departmen Of Translation

THE SOUNDS OF ENGLISH

Dr.HALA DALBANI

Damascus University

1428 - 1429
2007 - 2008

Introduction

The Sounds of English is a course book in phonetics. The objective behind teaching this course is to help learners **describe, produce** and **transcribe** the sounds of English so as to improve their pronunciation of the foreign language.

Who is this book for?

The Sounds of English is intended for foreign learners of English who are at an 'intermediate' level. The book can be used by students attending classes or by someone working alone.

The Sounds of English is not written for students who wish to study the American accent, but is mainly concerned with explaining how English is pronounced in the accent normally chosen as the Standard English spoken in England. It is the accent that is most often recommended for foreign learners studying British English. It has for a long time been identified as **RP (Received Pronunciation).**

What is the purpose behind the making of this book?

The main objective of ***The Sounds of English*** is to look into how the sounds of English are made. What do we do to produce each different sound? After examining each of the sounds separately, the book goes beyond that to examine other features of pronunciation that are important to making meaning too.

Because of the notoriously confusing nature of English spelling is particularly important to learn to think of English spelling in terms of phonemes rather than letters of the alphabet. And that is also one of the aims of ***The Sounds of English.***

Since this course is directed towards Arab learners, the important differences between Arabic and English sounds have also been highlighted.

How is this book organized?

The first part of the course is mainly concerned with identifying the phonemes of English. Unit one introduces the speech organs which are necessary for understanding where each sound is produced. Unit two deals with English consonants and units three and four deal with vowels. The second part of the book looks into other aspects of phonology especially those that go beyond the single phoneme and that are important to speech and pronunciation. Unit five introduces important concepts in phonology. Unit six deals with stress, rhythm and intonation, and the last unit concentrates on important aspects of connected speech.

How to use this book?

The Sounds of English is not a reference book but a course book, so it has to be studied in the order in which it has been presented.

Learners will find that in this course they have to learn a lot of new technical terms because phonetics uses a large number of such terms. However, to make things easier on the learner, when a new term appears in this book for the first time, it is printed in **bold** face. Another convention that is used in this book is that whenever words are used as examples they are printed in *italics* and whenever phonetic symbols are given they are enclosed between two slashes / / or two braces [ ].

UNIT ONE

The Contents of Unit One:

1.1. Phonetics and Phonology

Most languages have a fixed set of sounds that are used in speech the same way they have a fixed set of letters that are used in writing. The finite set of letters that we use when we write is called the **alphabet** and the finite set of phonetic sounds that we use when we speak is known as the **phonemic system**. Each of the distinctive phonetic sounds that is found in the phonemic system of a language is known as a **phoneme**. Whilst there are only 26 letters in the English alphabet, there are 44 phonemes or sounds (20 consonants and 24 vowels) in the English phonemic system. This big difference between the number of sounds or phonemes found in the English language and the letters that are used in writing them explains the variation between the way some sounds of English are written and the way they are pronounced, and hence justifies the need for the study of **phonetics** and **phonology**.

Phonetics is the field of study that looks into the characteristics of the sounds of human language. **Phonology** is the study of how these sounds come together to form systems or patterns that are specific to a certain language. Both phonetics and phonology are part of the wider field of **linguistics**, which studies language as a whole.

1.2 Articulatory Phonetics

There are three main areas that are studied within the field of phonetics:

a. **Articulatory phonetics** which is the study of the way speech sounds are produced (articulated) by the vocal organs.
b. **Acoustic phonetics** which studies how sounds are transferred from the speaker to the hearer as sound waves.
c. **Auditory phonetics** which deals with how we hear and perceive these sounds.

Since the purpose behind this course is to improve the pronunciation of students learning English, the main focus of this book will be on **articulatory phonetics**.

1.3. The Need to Study Phonetics

If you look at English spelling, it is easy to understand why there is a need to learn phonetics, In English, it is not always easy to know what sounds the letters stand for. The ordinary orthography, or spelling of English is often quite different from the alphabetic symbols that are used in writing.

Frequently, words that sound quite different are written similarly;
e.g t*ough*, th*ough*, tr*ough*, thr*ough*, thor*ough*.
All these words end in the letters *ough* yet, each of them is pronounced differently.

And the same single letter may represent different sounds:
e.g. d*a*d, f*a*ther, c*a*ll, vill*a*ge, m*a*ny
where /*a*/ in each of the above examples stand for a different vowel.

On the other hand, different letters may represent a single sound:
e.g. t*oo*, t*wo*, t*o*, thr*ough*, thr*ew*, cl*ue*;
f*ee*t, w*e*, m*ea*t, k*ey*, qu*ay*;
y*ou*, *ewe*, y*ew*;

sew, sow, so;
led, lead.

Similarly, the underlined letters in the words:
city, buzy, women, pretty, village all stand for the same vowel that occurs in the word sit.

A combination of letters too may represent a single sound :
e.g. shoot, character, physics, coat, prestige

Some letters also have no sound at all in certain words:
e.g. ghost, psychology, island, sword, debt, knot.

Clearly, for phonetic purposes we want a way of writing things down that avoids this sort of confusion and that is why phoneticians developed a system of symbols known as **phonetic symbols**.

1.4. Phonetic Symbols

To write we use alphabetic letters and to transcribe we use phonetic symbols. **Transcription** is the use of phonetic symbols to write down the way an utterance is pronounced. e.g. the word *educate* is **transcribed** as /edjʊkeɪt/. One obvious goal of phonetics is to be able to transcribe accurately any utterance in any language.

The symbols most commonly used in transcription are the ones recommended by the **International Phonetic Association**. This system, popularly known as the **International Phonetic Alphabet**, is the most widely used set of symbols. It includes all the sounds that are found in all the languages of the world. Both the association and the alphabet are known as the **IPA**. The following diagram presents all the IPA consonants. They are the consonants that are found in all the languages of the world.

THE INTERNATIONAL PHONETIC ALPHABET (revised to 1993)

CONSONANTS (PULMONIC)

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

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

In the following the phonetic symbols of the sounds that are found in English are given; twenty four consonants and twenty vowels. Each is given with an example of a word where it occurs.

pier /p/

beer /b/

tier /t/

deer /d/

gear /g/

fear /f/

veer /v/

sheer /ʃ/

hear /h/

leer /l/

rear /r/

mere /m/

near /n/

weir /w/

year /j/

cheer /tʃ/

jeer /dʒ/

base /s/

baize /z/

bathe /ð/

beige /ʒ/

bake /k/

wrath /θ/

wrong /ŋ/

feel /i:/

fil /ɪ/

fell /ɛ/

fall /ɔ:/

full /u/

fool /u:/

fail /ei/

foal /əu/

file /ɑi/

foul /ɑu/

foil /ɔi/

cat /a/

cot /ɔ/

cut /ʌ/

curt /ə:/

cart /ɑ:/

tier /iə/

tear /eə/

tour /uə/

about /ə/

1.5. Accents of English

English is spoken as a native language by over 377 million people around the world. Like Arabic or any other language, English varies according to social and geographic variation. This variation forms different **dialects.** We use the word **dialect** to refer to a variety of a

language which is different form others not just in pronunciation but also in vocabulary, grammar and word-order. For example, in the Arab world there are many different dialects like the Syrian dialect, the Lebanese dialect, the Jordanian dialect, the Palestinian dialect, the Iraqi dialect, the Egyptian dialect, … etc. Similarly, we have different dialects of English in English speaking countries. We also have different **accents**, but when we speak of accents, we mean only the differences in the dialect regarding **pronunciation**. An example on a difference in accent between Syrian and Egyptian dialects is found in the pronunciation of the name *Jamal*. In the Syrian accent the first sound or phoneme in the word *Jamal* is pronounced as /ʒ/ whereas in Egyptian accent the same phoneme is pronounced as /g/. Similarly, there are several accents of English but learners of English need not learn a specific local accent. The accent that they are taught is usually the one that is most often recommended for foreign learners studying British English. It has for a long time been identified as **Received Pronunciation (RP).**

1.5.1. Received Pronunciation (RP)

Received Pronunciation emerged as the prestige accent of English around the year 1400. This accent was in actual fact the speech of upper-class London. A modern-day form of this accent continues as the prestige accent of England. It is the accent not only of the British royal family and the nobility, but of the upper and upper-middle classes generally. It is the accent commonly used by BBC announcers. RP is also the accent used in teaching English to foreigners. This accent is known in linguistics by the name **Received Pronunciation (RP)**, where the term **received** is used in its nineteenth-century meaning of **'correct, proper'**. RP is not restricted to a certain geographic area but is spoken by individuals all over Britain yet it has little regional variation.

1.5.2. General American (GA)

On the other hand, People who want to learn American English are usually taught the accent that is known as **General American (GA)**. It is one of the accents of American English. The United States is a very large area with great accent variation. However, this variation is

not nearly so much as in Britain. Unlike Britain, there is no single prestige accent for the whole country; rather, each geographic region has a certain amount of social variation, although less than in Britain. **General American (GA)** is perhaps generally known as the accent used by radio and television announcers for the national American networks. Like RP, GA is the accent usually used in teaching an American accent to foreigners.

1.5.3. Some Differences between RP and GA:

Most differences among English accents lie in vowels and not in consonants. As far as differences in vowels are concerned, RP and GA can differ in certain ways: they can have different systems, like when RP has a vowel /ɒ/ (the vowel that we hear in the word *dot*) that is not found in GA and the RP /ɔ:/ (the vowel that we hear in the word *door*) is made somewhat higher than the GA /ɔ: /. Besides, the two accents can have the same system, but a specific word may have different sounds in each. For example, both RP and GA have the two vowels / ɑ / and /æ /; it just happens that the word "*fast*" has the vowel /ɑ/ in RP and the vowel /æ/ in GA. In the same GA speakers generally have trouble in producing the RP vowel /ɒ/, RP speakers usually have trouble imitating the GA pronunciation of the /t/ in the word *city* accurately. Another difference is the loss of the /r/ in RP at the ends of syllables: RP / kɑ/ '*car*', GA / kɑr/. This loss has affected the vowel system. The RP /ɜ/ usually corresponds to GA /ɜr/, and the schwa diphthongs /iə, ɛə, uə/ usually correspond to GA /ir, ɛr, ur/ in *near, hair, cure.*
As far as differences in consonants are concerned, GA has retained the older voiceless / ʍ / in words such as *which, where, when*; in RP, this sound has merged with /w /.

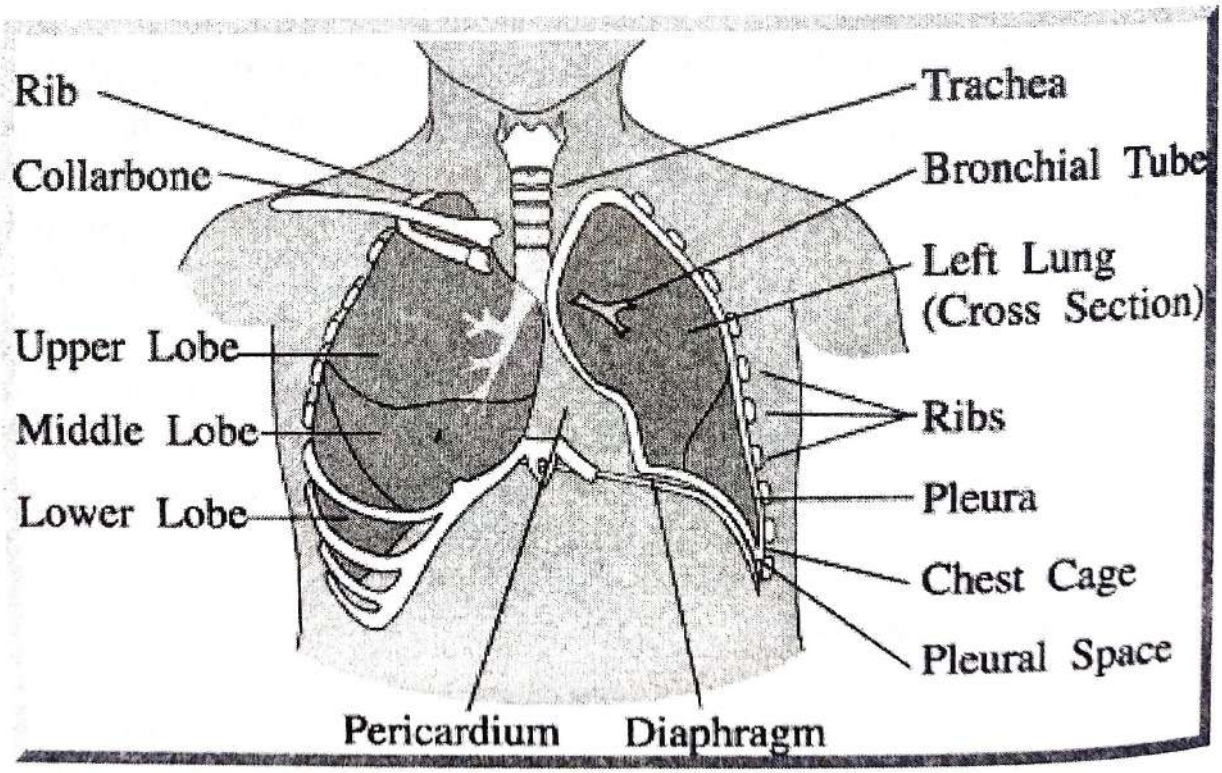
1.6. Speech Organs

All the sounds that we make when we speak are the result of muscles contracting. First of all, the muscles in the lungs that we use for breathing produce the flow of air that is needed for almost all speech sounds; muscles in the larynx too produce many different modifications in the flow of air from the chest to the mouth. After

passing through the larynx, the air goes through the vocal tract where a large and complex set of muscles contribute to producing changes in the shape of the vocal tract which in turn causes a change to the sound produced. In the end the air that was initiated in the lungs escapes into the atmosphere through the mouth and the nostrils.

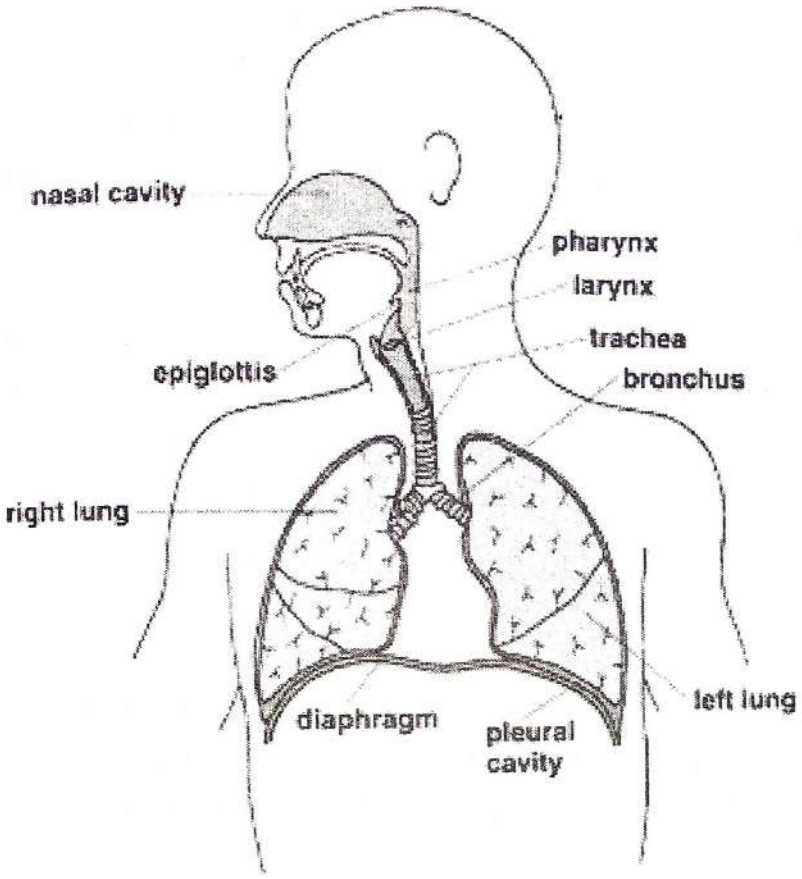
In order to learn how the sounds of speech are produced it is necessary to become familiar with the different **speech organs** and more specifically with the different parts of the **vocal tract** each of which is called an **articulator**. In what follows a description of the speech organs is given:

(1) The **lungs:** They are two and they are cone-shaped. They are made up of air sacks in which the oxygen in the fresh air we breathe in is exchanged for the carbon dioxide in the blood. When the lungs expand, air goes in and when they are compressed, the air goes out. Without the lungs the **pulmonic airstream** necessary for speech production will not be initiated.



(2) The **trachea**: In the lungs, there are many small tubes. These tubes join together repeatedly forming larger tubes until they end up in

two large tubes one in each lung called **bronchi**. One **bronchus** comes out of each lung. They both merge into a single tube known as the **trachea**. The trachea serves as a tube to carry the air out of the lungs.



The **larynx (voice box)**: It rests on top of the trachea. Its front part is known as **'Adam's apple'** and it sticks out in front. The **vocal folds** lie inside the **larynx**, just behind Adam's apple. Speech sounds produced in the larynx such as the whispering /h/ are sometimes referred to as **laryngeals**.

(4) The **vocal folds:** They are two horizontal bands of ligaments and muscles lying across the air passage in the larynx. They can open and close acting as a valve for air coming from the lungs. The opening between the vocal folds is called the **glottis** and sounds produced there are called **glottals** or laryngeals (because the vocal cords are situated within the larynx). The **glottal stop** /ʔ/ and the whispering /h/ are both examples of this type of sound. Besides, the **voicing** of certain sounds is made in the glottis too. More specifically, the vocal folds can be adjusted in various ways:

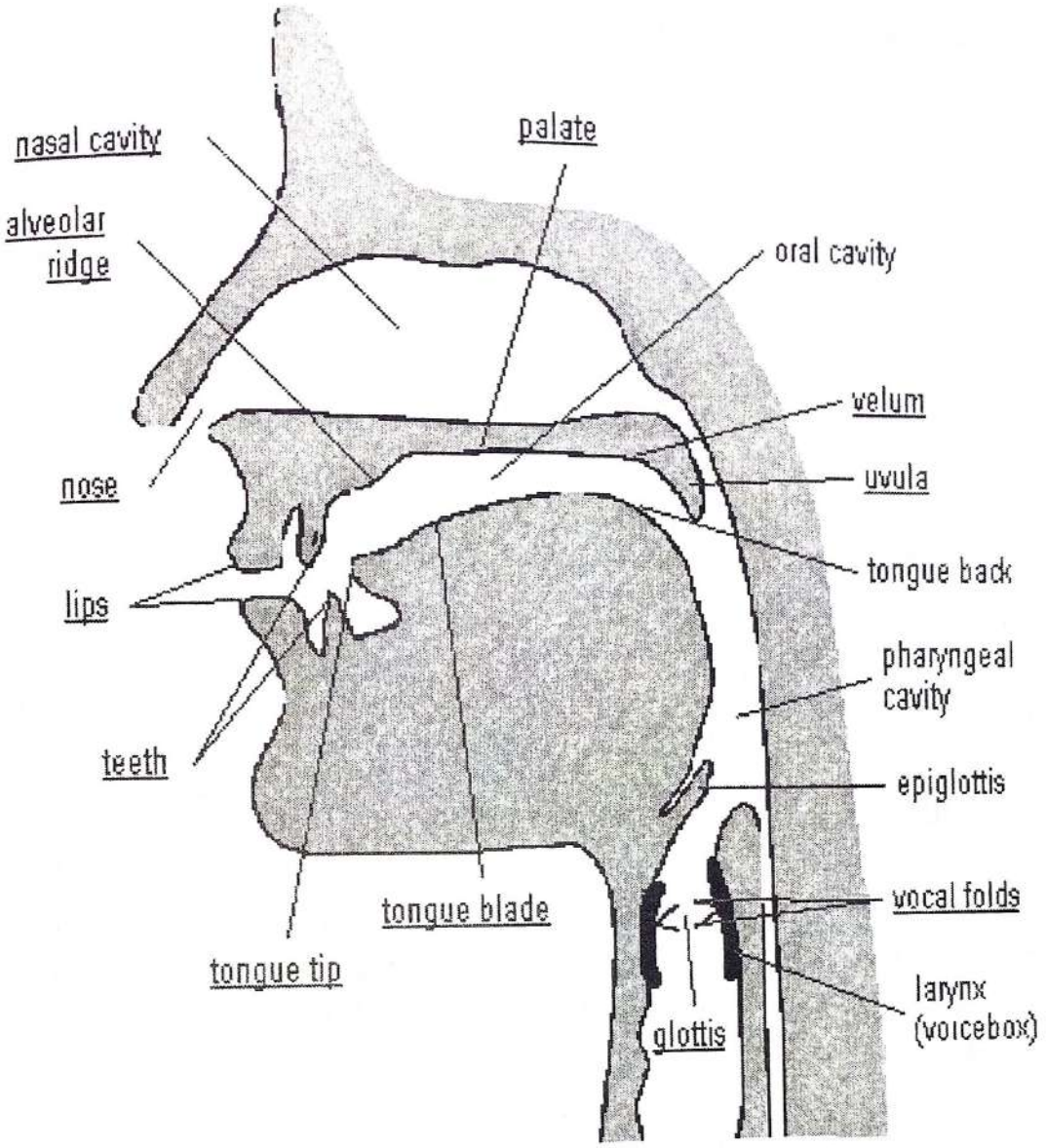
a. Hold your breath with your mouth open and close your vocal folds so that the air coming from the lungs is compressed below this closure. In this case the vocal cords are touching each other, they are stiffened and there is no space in between to allow the air to escape, i.e. the glottis is closed and offers resistance just like any other articulator producing a plosive. When the glottis is opened the compressed air rushing through produces a sound called the **glottal stop** /ʔ/ which is the Arabic hamza 'ء'

b. The glottis is held wide open and the vocal cords are stiffened and kept apart so they do not obstruct the flow of air in the mouth or nose. When the air is driven through this narrow gap with sufficient energy, it produces friction and the sound produced is a **whispering /h/.**

c. When vocal cords are relaxed yet brought close together and air is made to pass through these tiny little gaps in between the cords, the airsteam that passes through is not a steady stream. It goes in a series of jerks and thus the cords vibrate. This vibration results in what is known as **voice** or **voicing**. It is a feature of all vowels and some consonants like /v/, /z/, /d/.

d. When vocal cords are relaxed, soft and not stiffened, the glottis remains wide open and the air passes freely. This is the case that we have when we **breathe** or when we produce **voiceless sounds**.

(5) The **pharynx** or what is commonly known as the throat is a tube that begins just above the larynx. It is about 7 cm long in women and about 8 cm in men, and at its top end it is divided into two parts, one part being the back of the mouth and the other being the beginning of the way through the nasal cavity. If you look in your mirror with your mouth open, you can see the back of the pharynx. Sounds produced in the pharynx are known as **pharyngeals.** In English there are no pharyngeals but in Arabic there are the / ħ / which is the Arabic ح and / ʕ / which is the Arabic ع .



Cross Section of the Human Head Showing the Main Areas Associated with Speech Articulation

(6) The **oral cavity** and it consists of upper and lower articulators.

a. The **lips:** They are important in speech. They can be pressed together like when we produce the sounds /p/ and /b/ or /m/. Such sounds are called **bilabial.** The lower lip can also be brought into contact with the teeth as in /f/ and /v/. Sounds with lip-to-teeth contact are called **labiodentals.** Lips can also be rounded to produce the lip-shape for vowels like /u:/.

b. The **teeth:** They also play a part in the making of certain sounds. The tongue is in contact with the upper side teeth for many speech sounds. Sounds made with the tongue touching the front teeth are called **dentals**. /ð/ and /θ/ are examples of dentals.

c. The **alveolar ridge:** It is situated between the top front teeth and the hard palate. You can feel its shape with your tongue. Its surface is really much rougher than it feels, and is covered with little ridges. Sounds made with the tongue touching the alveolar ridge such as /t/ and /d/ are called **alveolars**.

d. The **hard palate:** It is often called the "roof of the mouth". You can feel its smooth curved ,surface with your tongue. Sounds produced here are called **palatals**. /j/, the initial sound in the word 'yes' is an example of a palatal in English.

e. The **velum** or the **soft palate:** It allows air to pass through the nose and through the mouth. In speech it is often raised so that air cannot escape through the nose. It is one of the articulators that can be touched by the tongue. When we make the sounds /k/ and /g/ the tongue is in contact with the lower side of the velum, and we call these **velar** consonants.

f. The **uvula:** It is the long thin structure at the rear of mouth which hangs down from the velum. Sounds produced there are called **uvular** consonants. e.g. the sounds /q / which is the Arabic ق and /ɢ/ which is the Arabic غ and the French /χ / which is the sound heard at the end of the word *lettre* in French, and /ʁ/ which is the sound heard at the beginning of the words *rouge* or *rose* in French. There are no uvulars in English.

g. The **tongue:** It is a very important articulator involved in the production of almost all sounds and it can be moved into many different places and different shapes. It is usual to divide the tongue into different parts. The parts of the tongue are usually referred to as tip, blade, front, back and root. The use of the word front seems rather strange at first, because it is not at the front part of the mouth but rather middle part of the tongue.

(7) The **nasal cavity**: Although there is practically nothing that we can do with the **nose** or the **nasal cavity**, yet the **nasal cavity** is a very important part of the organs of speech particularly with regard to the production of the **nasal** consonants /m/, /n/, and /ŋ/.

The articulators described above are the most important ones used in speech, but the **jaws** are also articulators though they themselves cannot make contact with other articulators, but we certainly move our lower jaw in speech.

UNIT TWO

The Contents of Unit Two:

2.1. Two Basic Categories of Sound

In studying articulatory phonetics, phoneticians divide sounds into two categories: **segments** and **suprasegmentals.** The study of segments comprises the study of **vowels** and **consonants**. The study of suprasegmentals involves the study of sound components other than consonants and vowels such as **stress, pitch, intonation**, and **length** of sounds. In the following section, we shall be focusing on the study of sound **segments**.

2.2. Segment Phonetics: Consonants and Vowels

Sound segments that are found in all the languages of the world are of two types: vowels and consonants. **Vowels** include sounds like those in the words ee, oh, eye, ooh, ah; they are made with no major obstruction in the vocal tract so that air passes from the larynx through the mouth fairly easily. **Consonants**, such as /p, n, g, s, l/, involve some type of major obstruction or constriction in the vocal tract. Consonants are produced when the airstream from the lungs is either completely blocked, partially blocked or when the opening is so narrow that the air escapes with audible friction.

To feel the difference between the production of vowels and consonants, try to say the vowel ee as in the word "see", you can feel that the air flows out of the mouth fairly freely. Now say a long /sssssss/, you will feel your tongue move closer to the alveolar

ridge for the /s/, making a partial closure causing the hissing noise which characterizes /s/. On the other hand, if you go from the /s/ to the ee sound, as in the word "seal", you can feel your tongue pulling away, allowing the air to pass out more freely.

In what follows the consonants found in English will be described.

2.3. Description of Consonants

In RP English there are twenty four consonants. They are usually classified along three dimensions:

1. **Voicing** or the state of the glottis, whether the sound is *voiced* or *voiceless*,
2. **Place of articulation**,
3. **Manner of articulation**.

2.3.1. Voicing

A sound is **voiced** if there is vocal fold vibration and it is **voiceless** if there is no vocal fold vibration. Vocal fold vibration occurs when the vocal folds are brought close together and they open and close very rapidly and regularly like when we produce the sounds /v/ /z/, but sounds like /f/ /s/ are made with the vocal folds apart with no voicing. To feel the difference between the voiced consonants and the voiceless ones, try to say a long /zzzzzzz/ with your hand holding your throat and feeling your Adam's apple, you should be able to feel the vibration. If you keep holding your throat and feeling your Adam's apple and say a long /sssssss/ instead, you will *not* feel the same vibrations that you felt with the /z/ sound.

Since the production of the voiceless consonants requires more muscular effort, they are called **fortis** consonants. **Lenis** consonants, on the other hand, are the voiced consonants which require less muscular effort.

2.3.2. Place of Articulation

As mentioned earlier, to produce a consonant there must be some kind of obstruction to the flow of the airstream somewhere in the vocal tract. When we describe the place of articulation we are in actual fact describing where the obstruction of the airstream occurs. More specifically, we are describing which of the lower articulators articulates with which of the upper articulators. For example, for a /d/, the tip of the tongue articulates against the alveolar ridge, but for a /g/, the back of the tongue articulates against the velum.

The vocal organs have been divided by phoneticians into two types depending on whether they are functionally active or not:

Active Articulators	**Passive Articulators**
lower lip	upper lip
the tongue (tip, blade, front, back)	upper front teeth
	alveolar ridge
	hard palate
	velum (soft palate)
	uvular

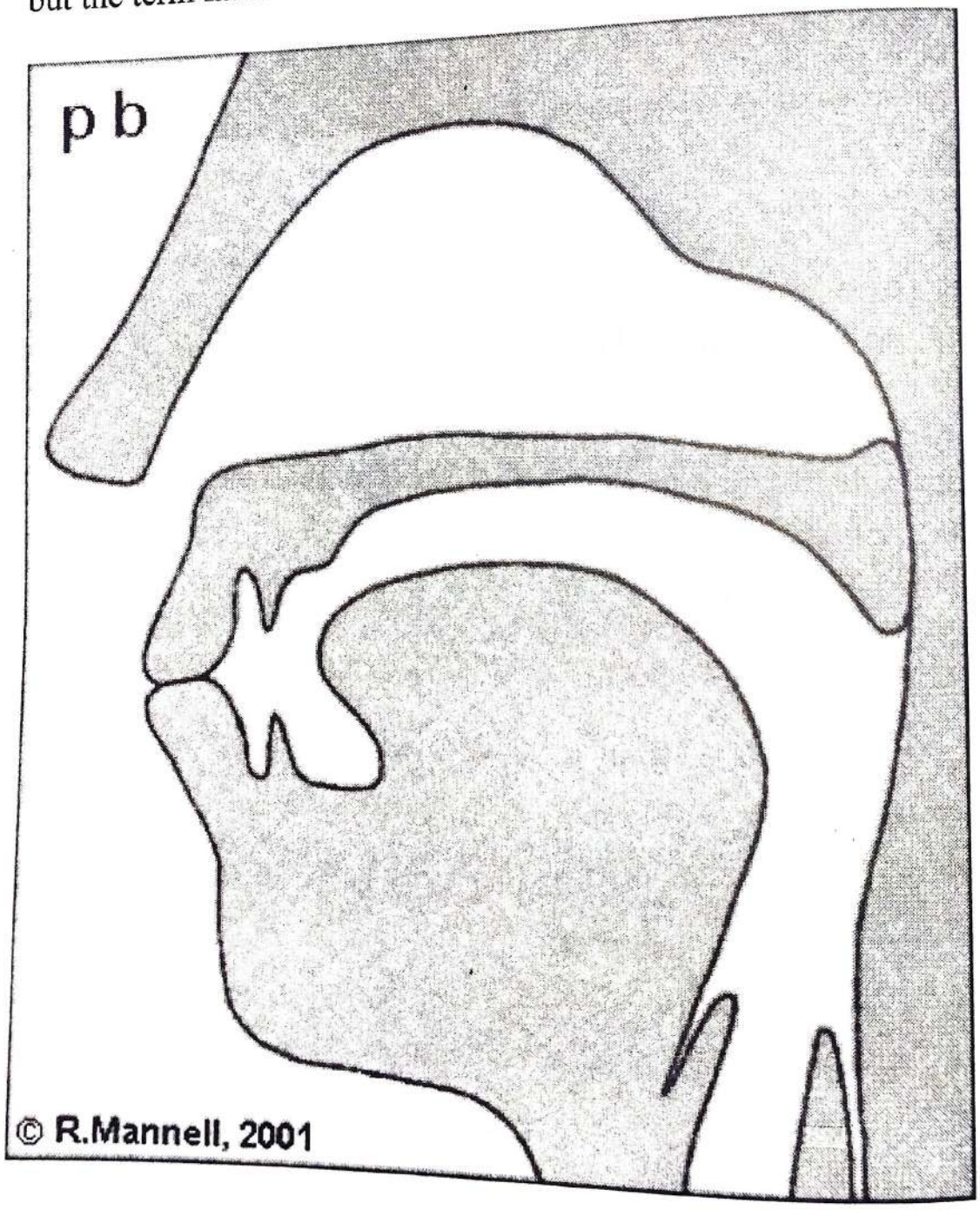
We can describe most places of articulation by giving just the name of the passive articulator as is clear in the following table:

Active Articulators	**Passive Articulators**	**Adjective**
Lower lip	Upper lip	Biblabial (b , m)
Lower lip	Upper teeth	Labiodental (f , v)
Tongue	Upper teeth	Dental (θ , ð)
Tongue	Alveolar ridge	Alveolar (t , d)
Tongue	Post alveolar area	Palato-alveolar (r)
Tongue	Hard palate	Palatal (j)
Tongue	Soft palate or Velum	Velar (k , g)
Tongue	Uvula	Uvular (q ,ɢ)

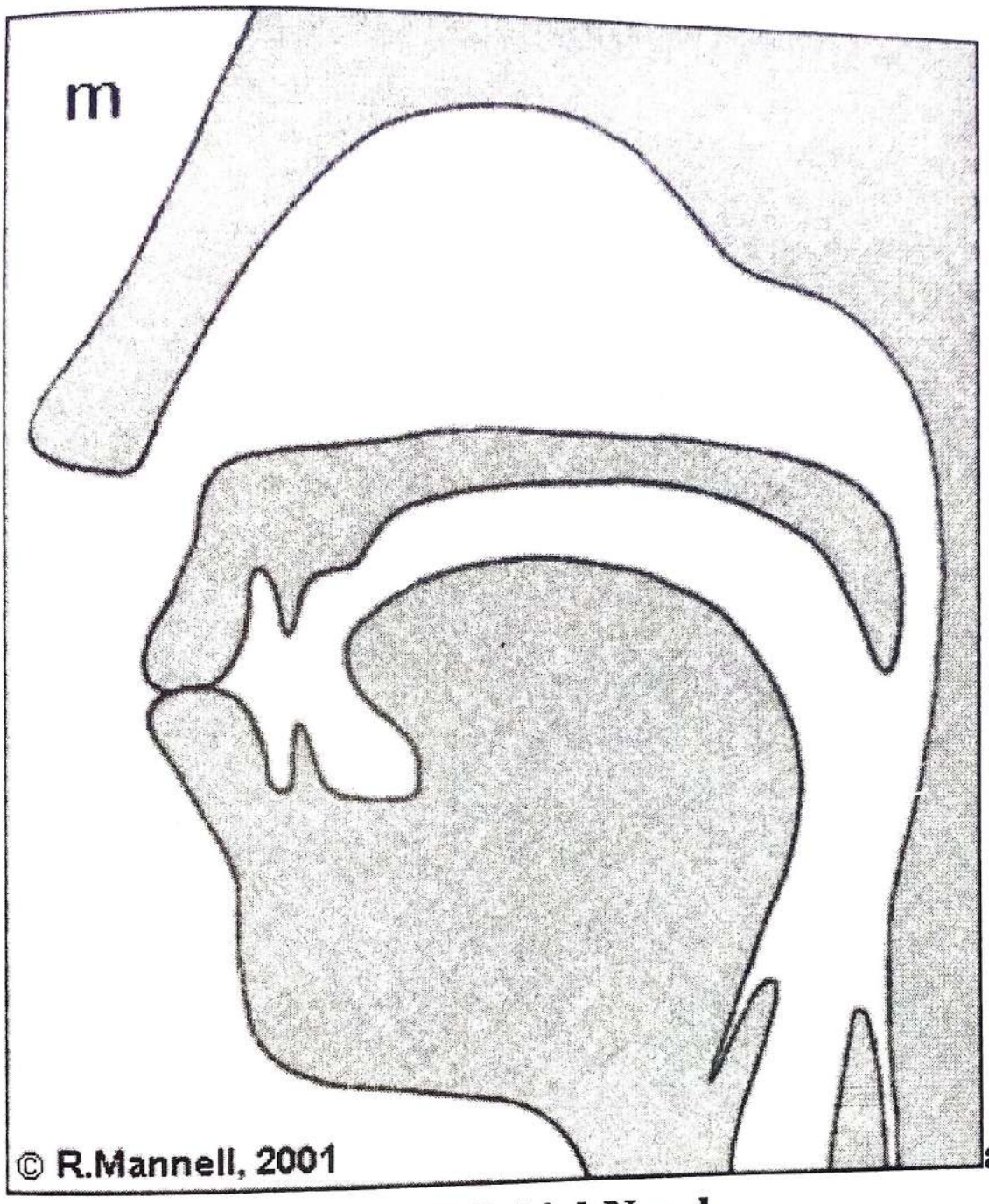
The different places of articulation are:
Bilabial, labiodental, dental, alveolar, palato-alveolar, palatal, retroflex, velar, uvular, epiglottal, pharyngeal, and laryngeal or glottal. In what follows each of these places shall be described in detail:

(1) Labials:

They are the consonants that are produced using the lips, or the lips and the teeth. They are of two types: **Bilabial** and **labiodental** sounds but the term **labial** is used to include both.



Bilabial-Stops



a. Bilabial-Nasal

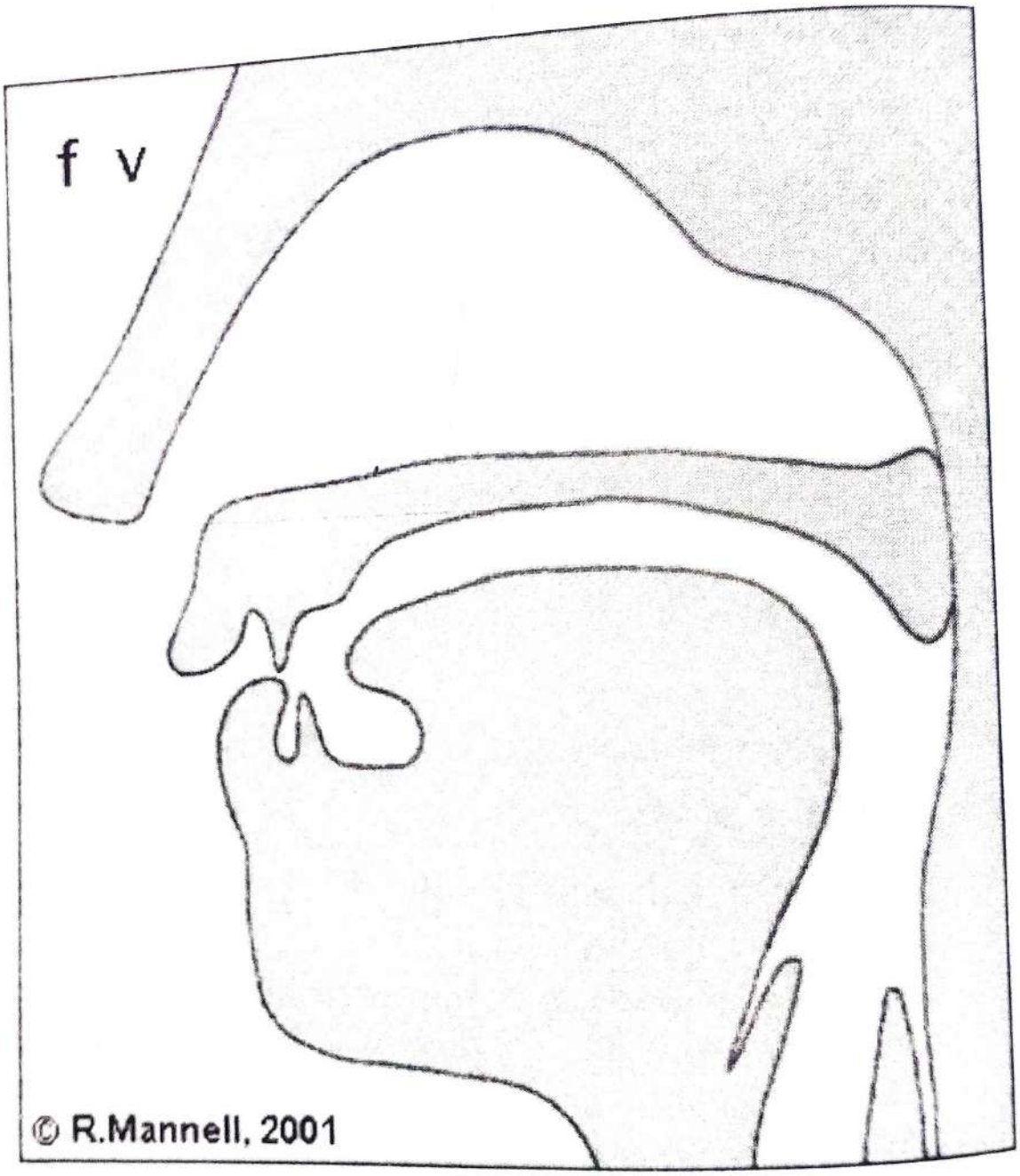
a. Bilabials: The **bilabial** sounds are produced when the lower lip articulates against the upper lip. The bilabials of English include /b , p , m/ as in the initial sounds of the words *pear, bear, mare*. The sounds /b , p , m/ are made by completely closing the lips. The sound /p/ is voiceless; /b , m/ are voiced. The initial sound of the word *we* /w/ is also a bilabial but it involves the velum too and thus it is classified separately as a bilabial-velar consonant. It shall be dealt with in more detail later.

/p/ *pet, creepy, loop*
/b/ *bet, lobby, rub*
/m/ *more, summer, loom*

b. Labiodentals: We have two **labiodental** sounds in English: /f/ and /v/ as in the initial sounds of the words *fat, vat*. When you make these, you will notice that your lower lip articulates against your upper teeth. /f/ is voiceless and /v/ is voiced.

/f/ *fun, daft, laugh*

/v/ *vet, movie, glove*



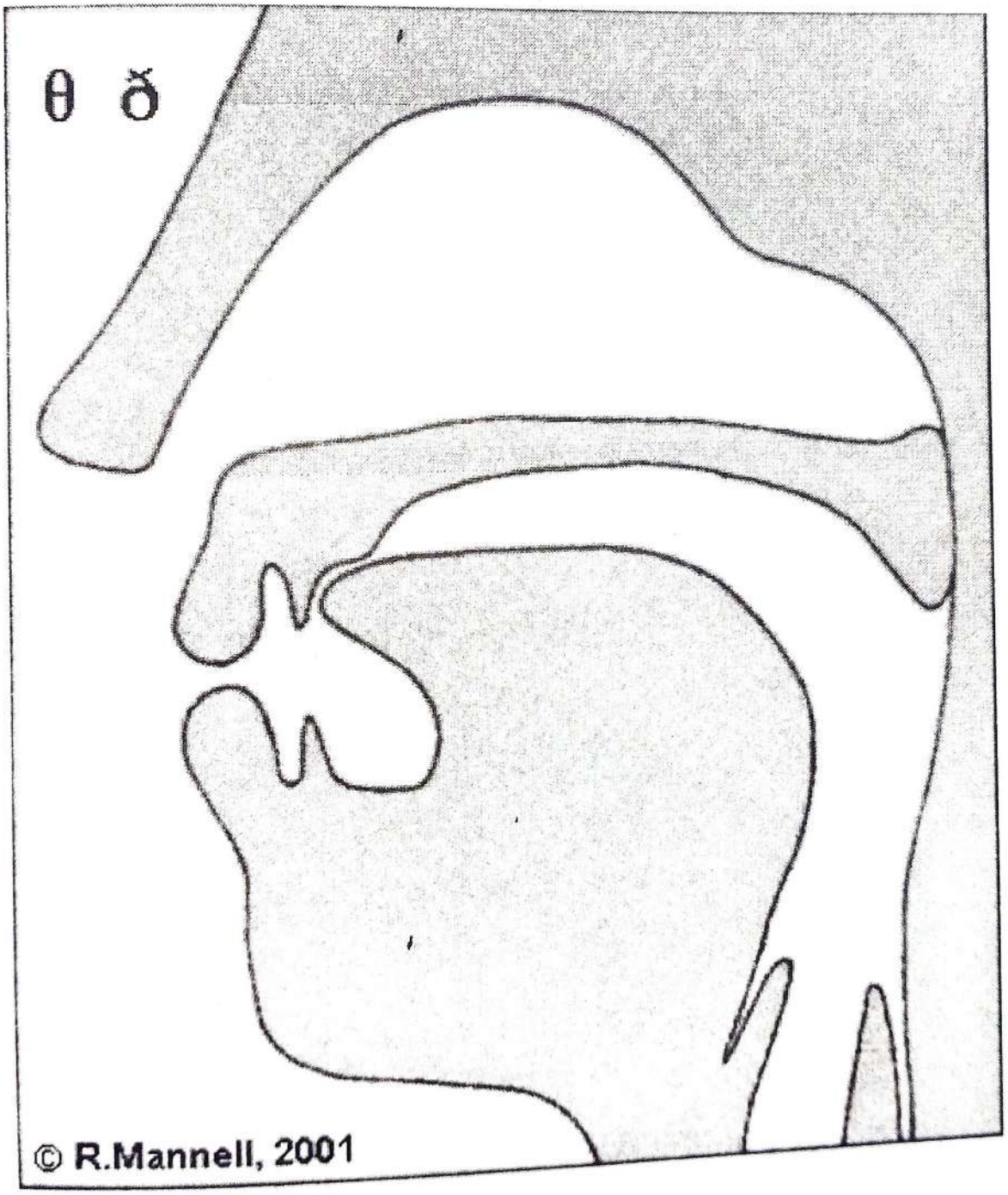
Labio-Dental Fricatives

(2) Dentals

These sounds are made when the tongue articulates against the upper teeth. Two **dental** sounds occur in English; both are normally written with the alphabetic letters 'th'. Say the words *thin* and *then* while you feel your adam's apple. You will feel the folds vibrating for *then*, but not for *thin*. The initial sound of *thin* is voiceless /θ/, but the corresponding one of *then* is voiced /ð/.

/ θ / *thin, ether, health*

/ ð/ *then, either, loathe*

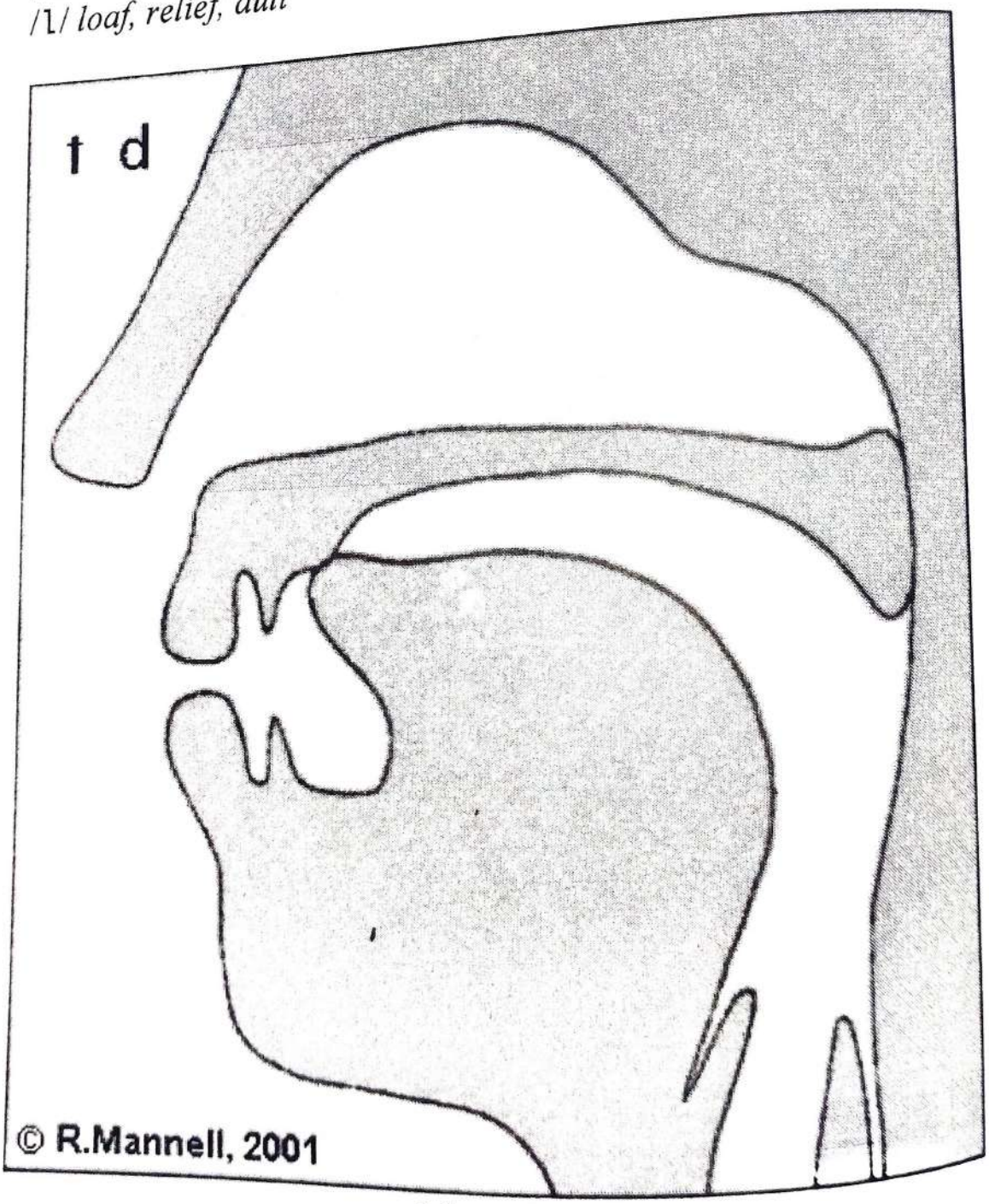


Dental-Fricatives

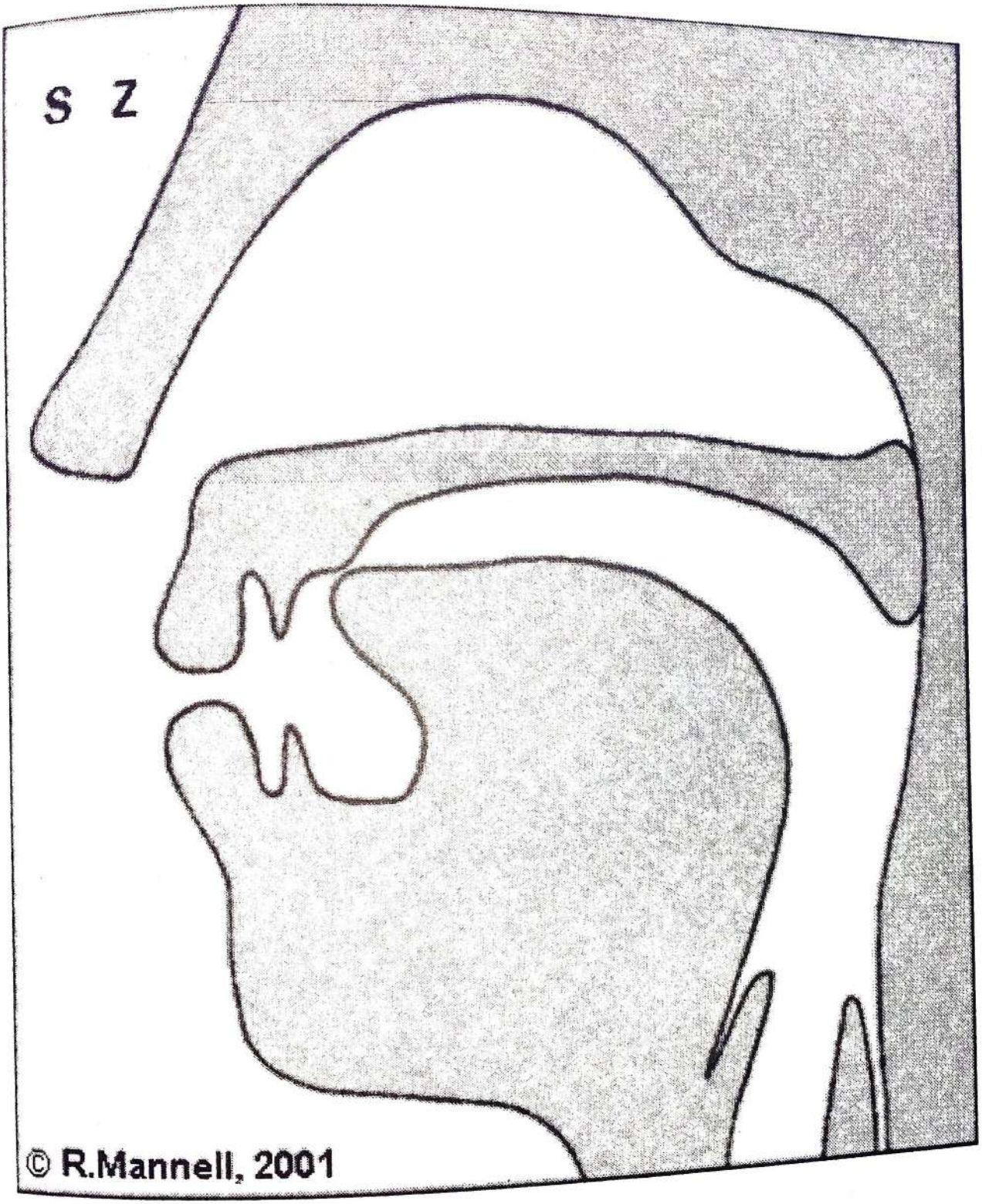
(3) Alveolars

These sounds are made when the tongue articulates against the alveolar ridge. The **alveolars** include more consonants in English than any other place of articulation: /t , d , s , z , n , l/. If you say the sentence 'Ed edited it', you will feel the tip of your tongue repeatedly hitting the alveolar ridge.

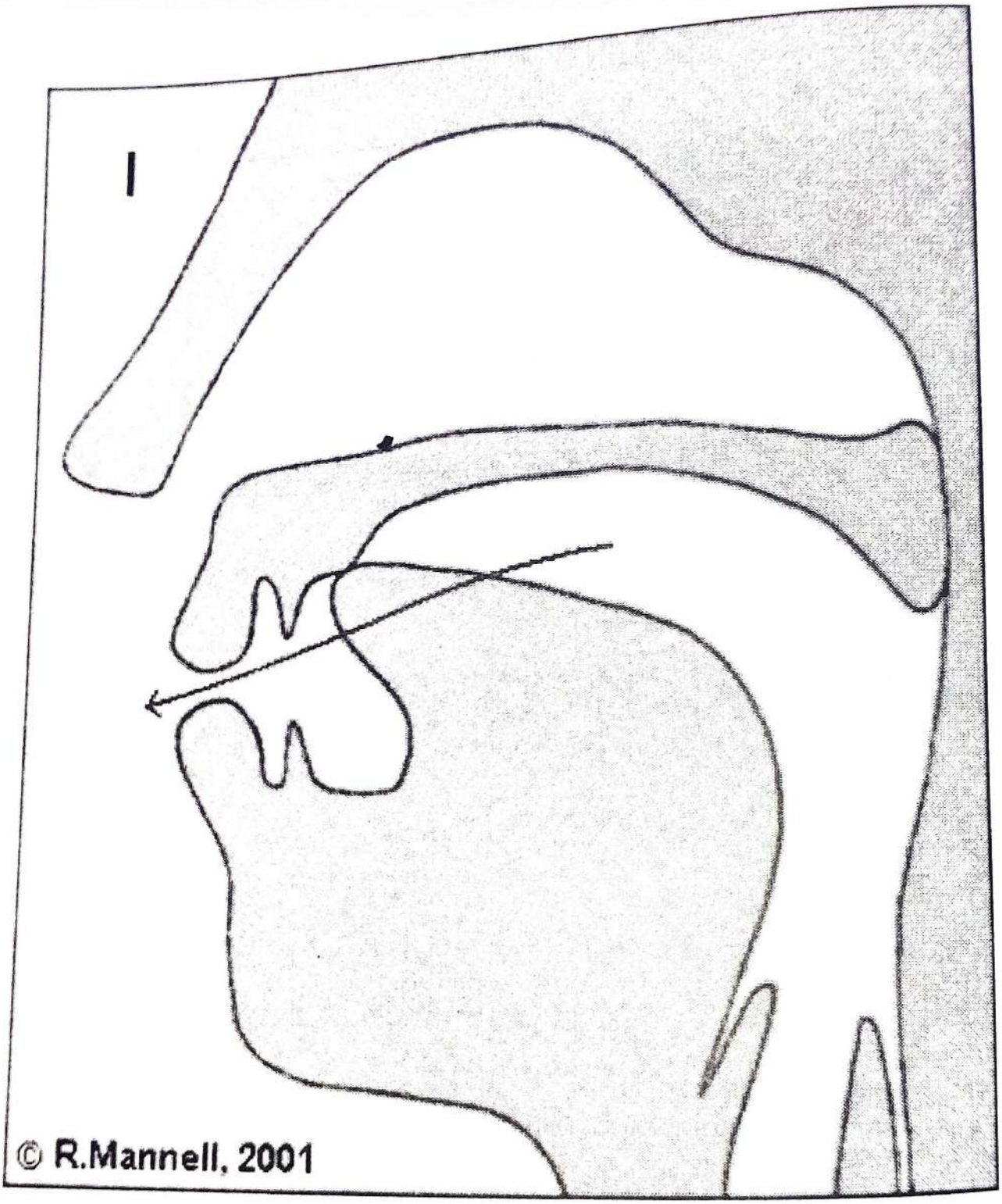
/t/ *top, return, missed*
/d/ *done, sudden, loved*
/s/ *see, messy, police*
/z/ *zoo, lousy, please*
/n/ *know, any, done*
/l/ *loaf, relief, dull*



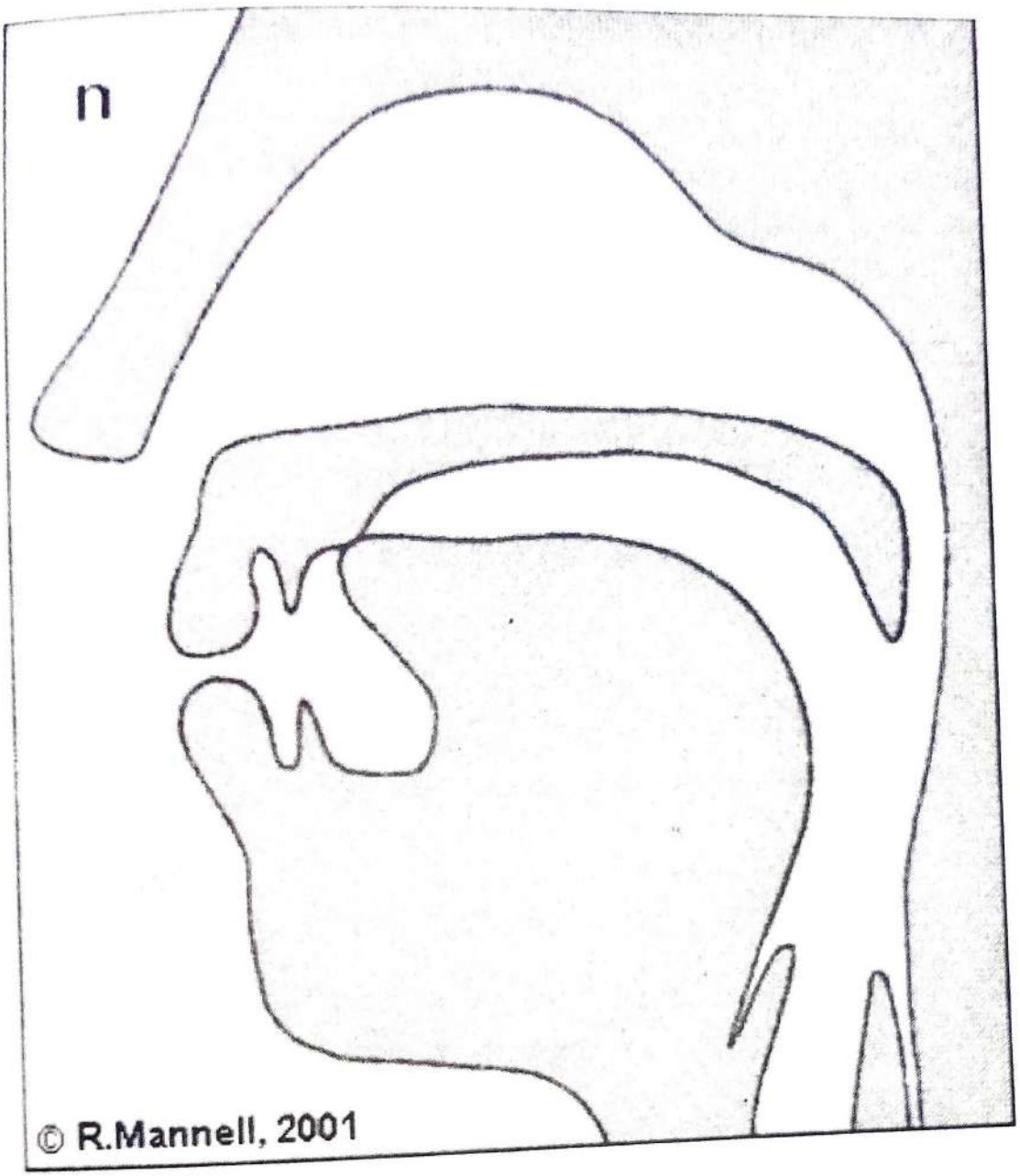
Alveolar-Stops



Alveolar-Fricatives



Alveolar-Lateral



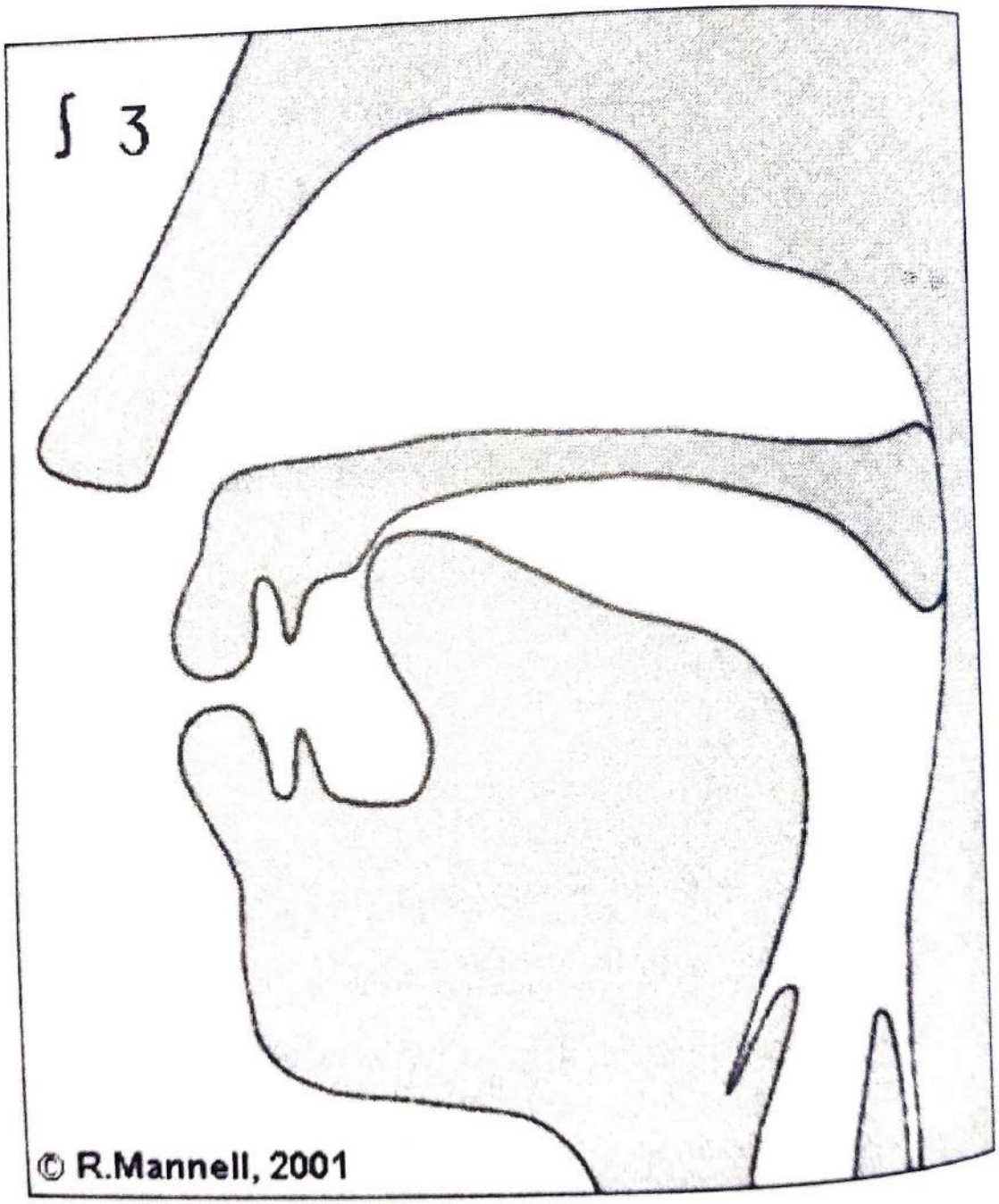
Alveolar-Nasal

(4) Palato-alveolars or Postalveolars

Palato-alveolar or **postalveolar** refers to the area at the rear of the alveolar ridge, bordering on the palate. The tongue is arched with the blade near the postalveolar area. English has four sounds in this area; /ʃ , ʒ , tʃ , dʒ/. /ʃ/ is the initial sound in the word *shop* and it is voiceless; the voiced variety of this sound is found in the middle of the word *measure*; it is symbolized as /ʒ/. Two other sounds are postalveolar and they are the initial sound in the word *chop*,

transcribed /t ʃ/, and the initial sound in *gem*, transcribed as /dʒ/. If you say *itching* slowly, you can probably feel the two separate sounds /t/ and / ʃ/ and also the /d/ and /ʒ/ of *edgy*. In actual fact, these two latter sounds are made up of two and they are called **affricates**.

/ʃ/ *share, assure, dash*
/ʒ/ (does not occur in word initial position), *vision, rouge*
/t ʃ/ *chance, itching, poach*
/dʒ/ *jam, edgy, edge*



Palato-alveolar-Fricatives

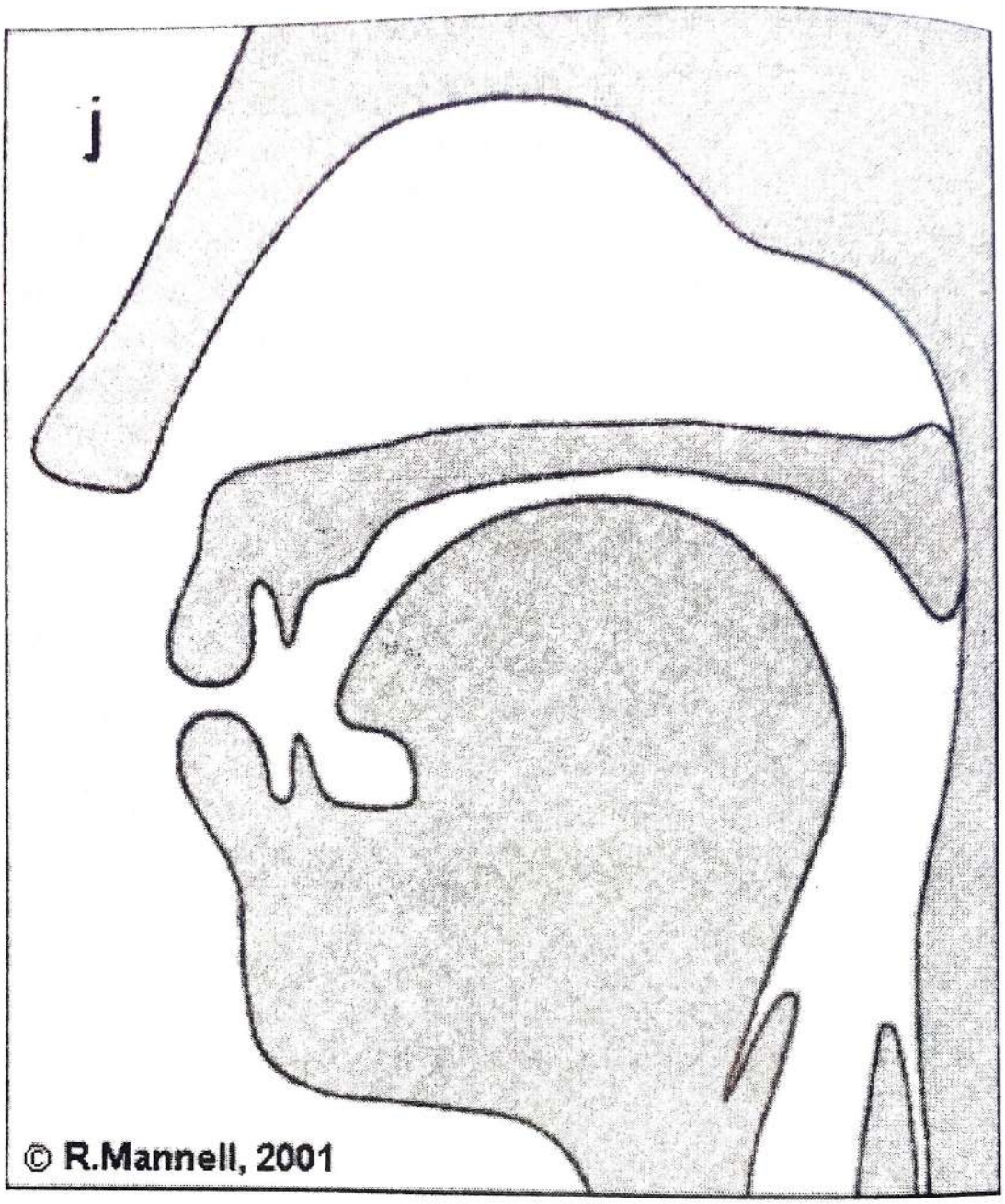
(5) Retroflex

The initial sound in *red* is called **retroflex** and it is symbolized by an upside down 'r' /ɹ/. This name is used because many people produce it by curling the tip of the tongue up and back towards the rear edge of the alveolar ridge. In making this sound the tip of the tongue does not actually touch the back of the alveolar ridge, but approaches it. Retroflex sounds are not found in English as such, but some postalveolar consonants tend to have a certain retroflex quality about them, for example the /r/.
/ɹ/ *run , red*

(6) Palatals

Palatals are made with the front of the tongue articulating against the palate. In practicing palatal sounds, you will find it helpful to anchor the tip of your tongue against the lower teeth. Doing this is not necessary in making palatals, but it helps prevent mistakes.

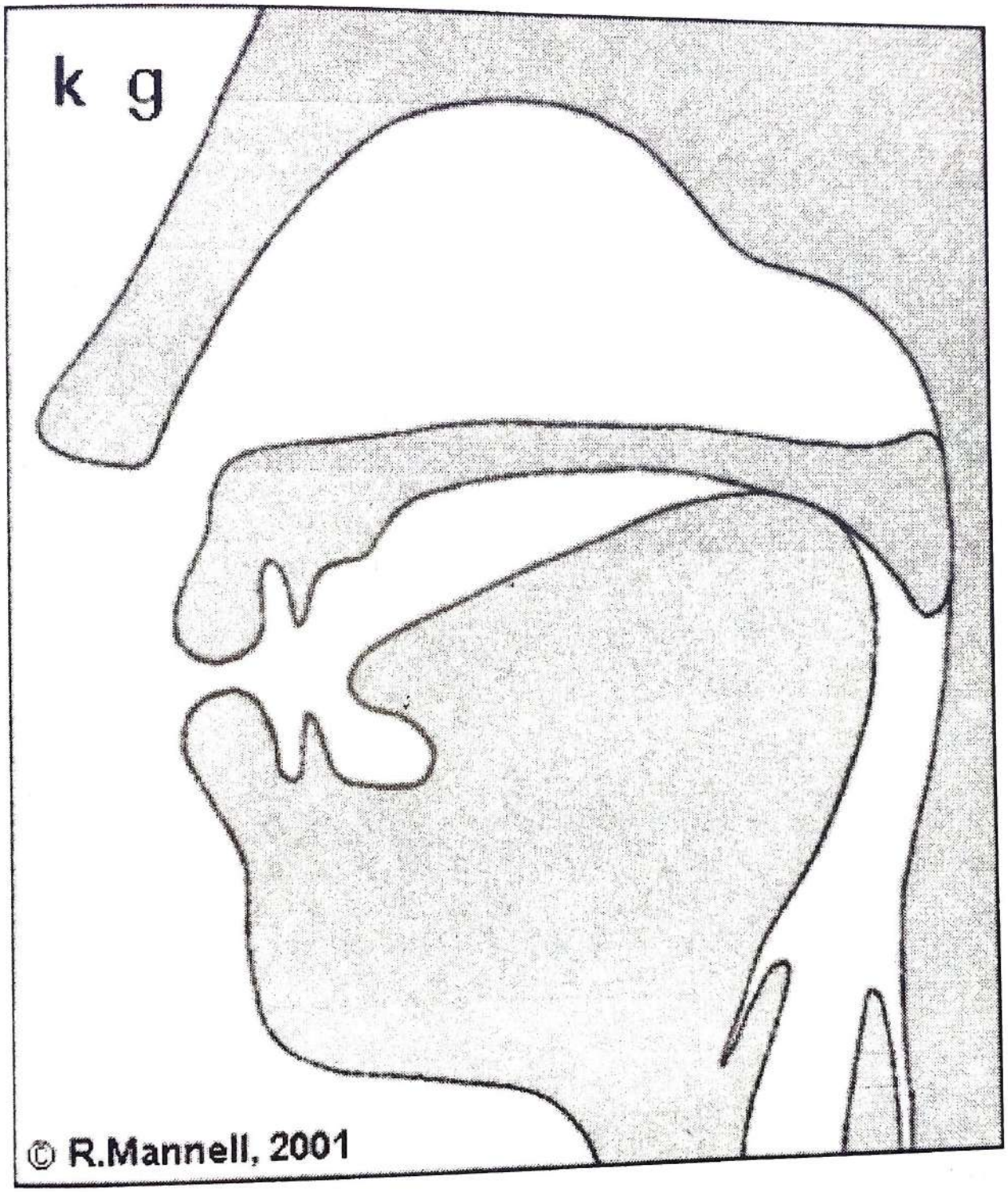
The only palatal sound in English is the sound /j/, the initial sound in the word *yes.*
/j/ *yet, onion*



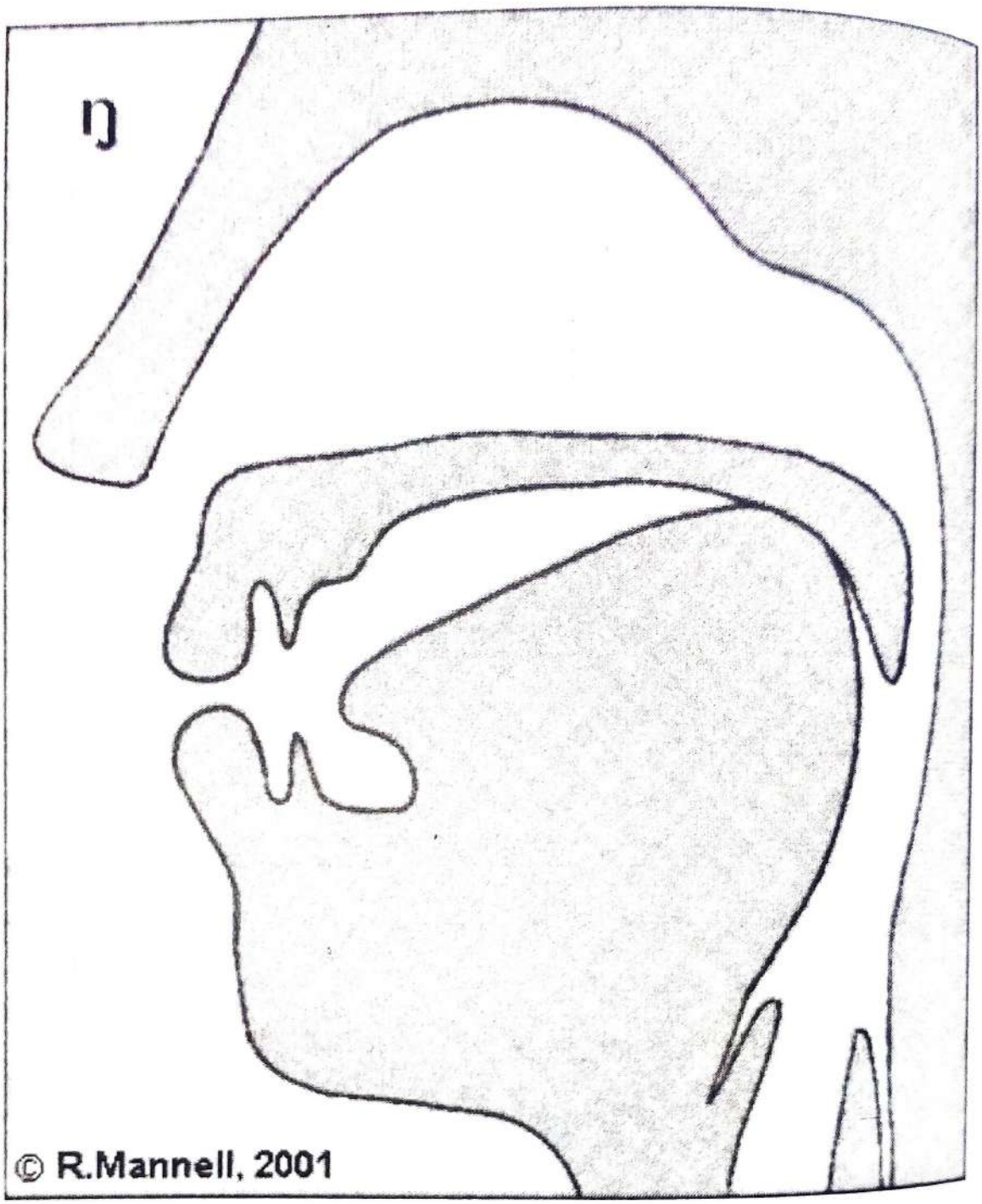
Palatal–Approximant

(7) Velars

Velar sounds are produced with the back of the tongue touching against the velum. In English the velars are /k , g , ŋ/. These are the final consonants in the words *sick, egg,* and *sing.*
/k/ *kit, locker, sock*
/g/ *gum, bugger, leg*
/ŋ / (does not occur in word initial position), *singer, bang*



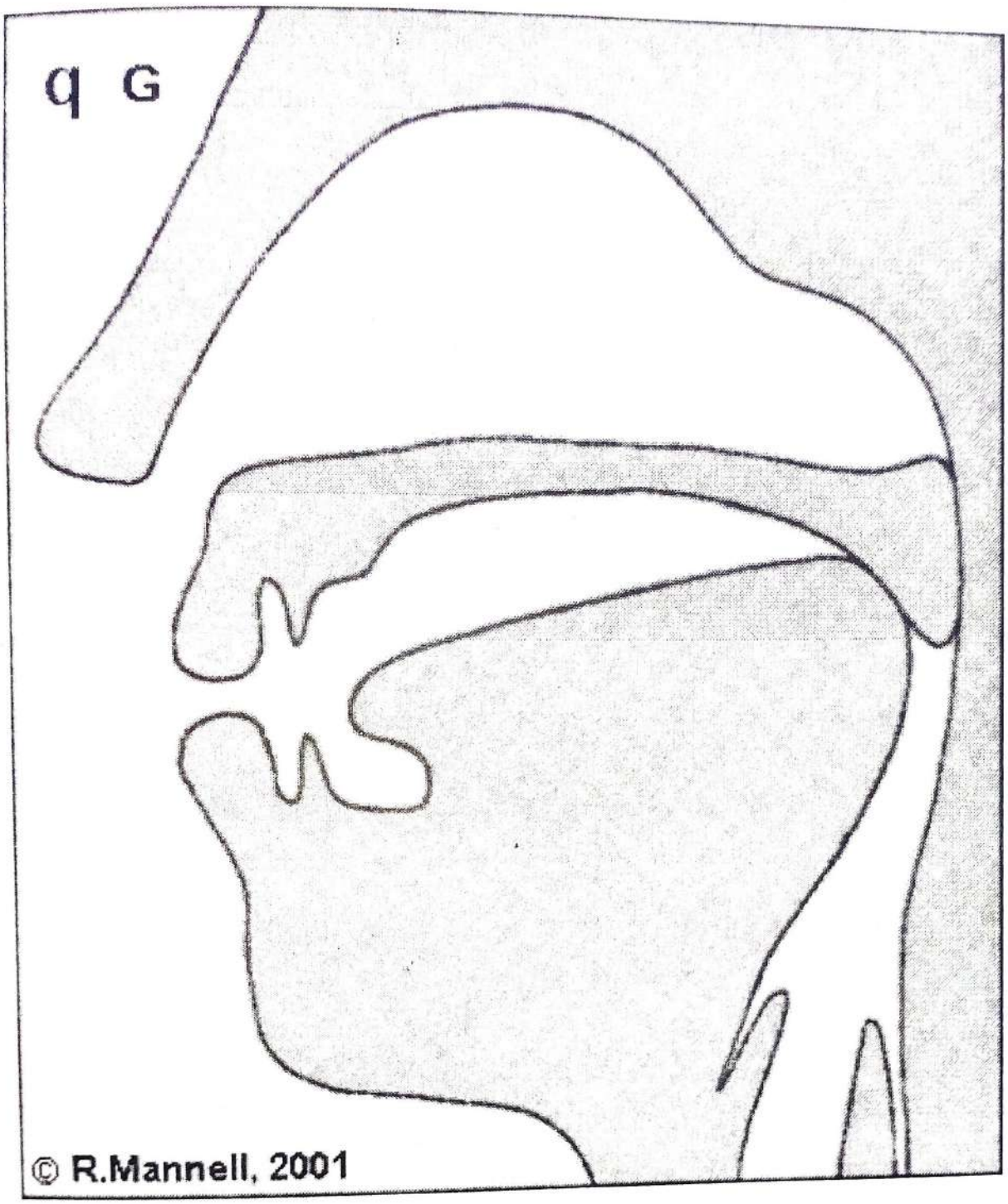
Velar–Stops



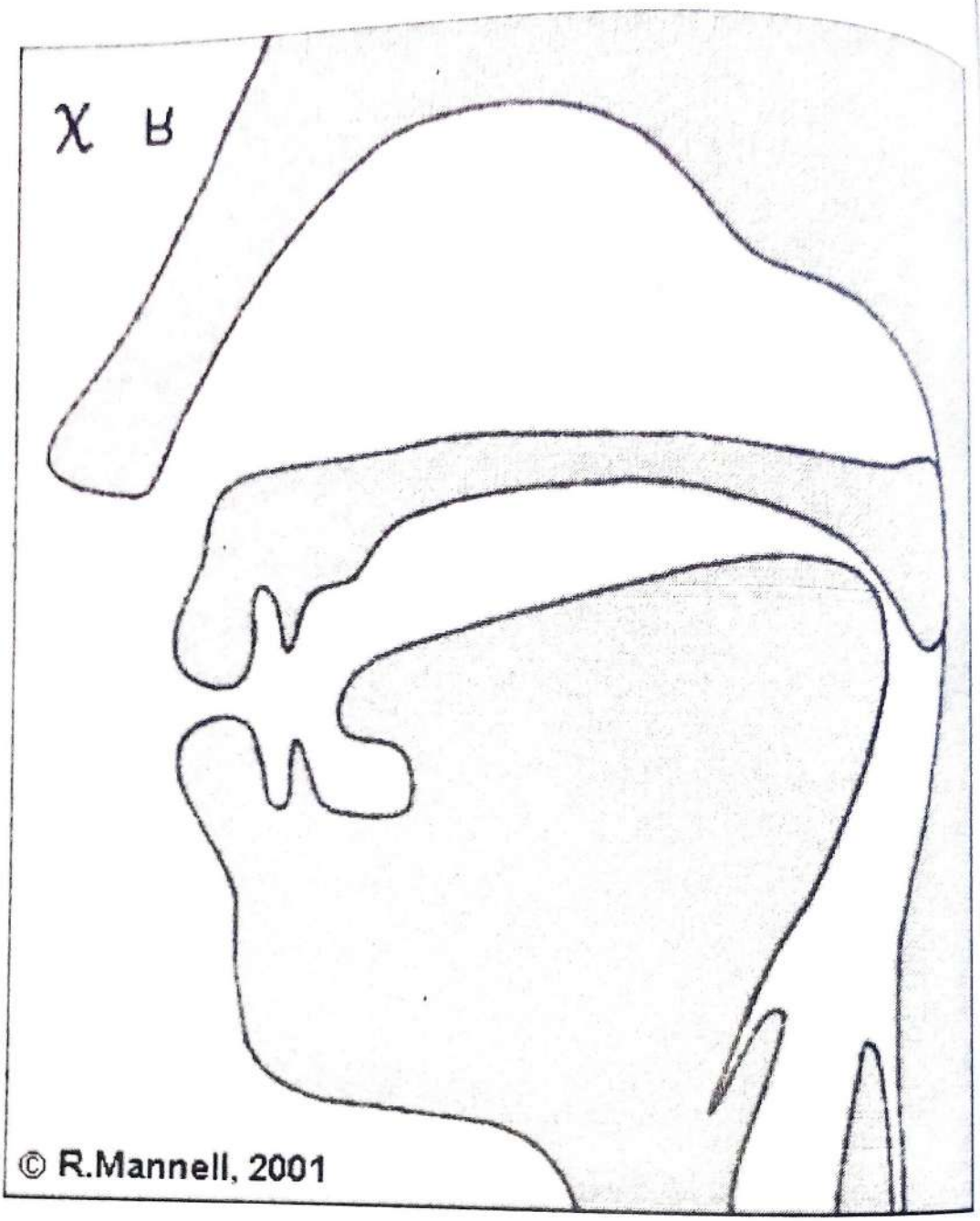
Velar-Nasal

(8) Uvulars

Uvulars are articulated even further back than velar consonants, with the very back of the tongue coming up to the uvula (the uvula is "that thing which hangs down at the back of our throats"). There are no uvular sounds in English, but the Arabic ق / q / and غ / ɢ / and the French 'r' sound are uvular.



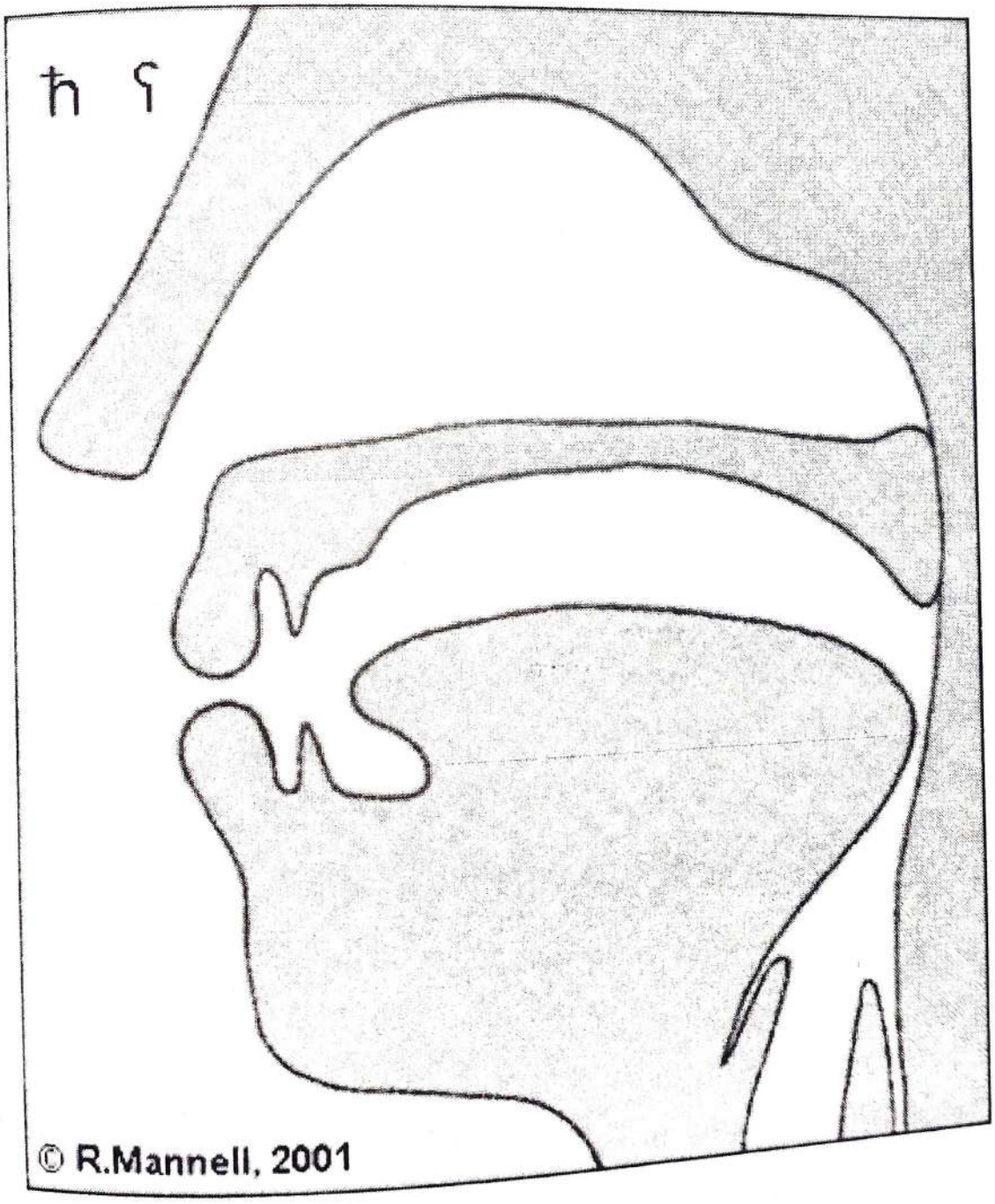
Uvular–Stops



Uvular-Fricative

(9) Pharyngeals

Pharyngeals are produced by constricting the pharynx, which is the region extending from the uvula down to the larynx (where the vocal cords are found). A strictly pharyngeal sound is produced with the root of the tongue, whereas an **epiglottal** is made with the epiglottis, i.e. that cartilage which prevents food from entering the trachea when one swallows. There are no pharyngeal or epiglottal sounds in English. However, in Arabic there are some pharyngeal sounds like /ħ/ which is the Arabic ح and /ʕ/ which is the Arabic ع .

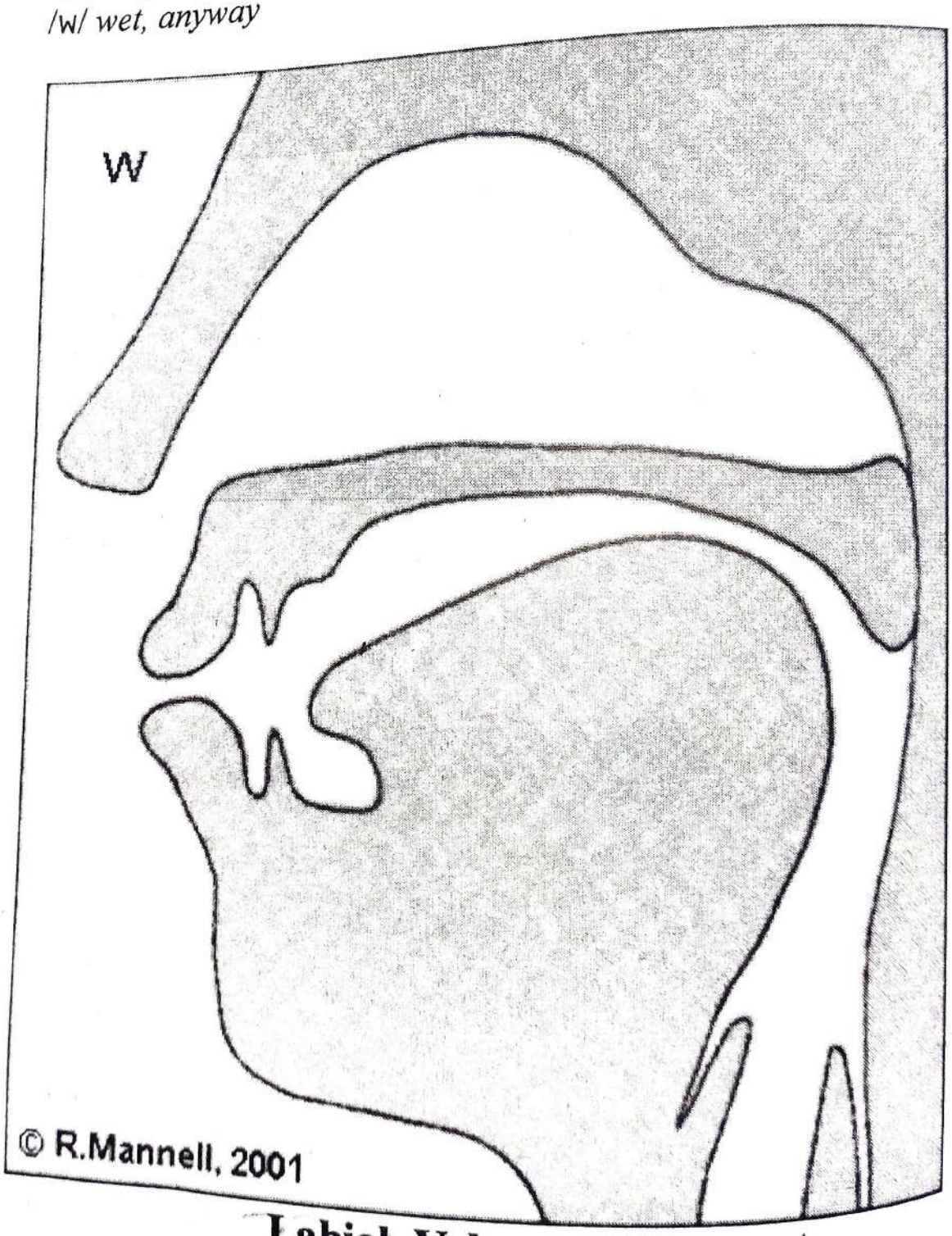


Pharyngeal-Fricative

(10) Labial-velar

The sound /w/ has a double place of articulation **labial-velar**, being both labial and velar. You can easily feel that the lips are rounded when making a /w/; this lip-rounding makes it labial. At the same time, you can feel that the back of the tongue is raised towards the velum, thus it is velar as well. This labial-velar /w/ is voiced. /ʍ/ is the voiceless equivalent of /w/ and it is found in GA accent in words like *where, when, anywhere.* It is made by producing a /h/ sound just before producing the /w/ sound.

/w/ wet, anyway



Labial–Velar Approximant

(11) Glottals/Laryngeals

Finally, **glottals** or **laryngeals** are made in the larynx at the level of the glottis. In English there are some glottal sounds. The normal /h/ sound is a voiceless glottal fricative, and the glottal stop /ʔ/ is also a voiceless glottal plosive. The glottal stop /ʔ/ is made by holding the vocal folds tightly together so that no air escapes. If you hold your breath with your mouth open, you will make a glottal stop like when you make the sound *Uh-oh.* However, The glottal stop /ʔ/ is not really part of the English phonemic system because it is only a variant of other phonemes like /t/ in certain circumstances in many varieties of English.

Having described the first two dimensions used in the classification of consonants; voicing and the place of articulation, the last dimension to be described is the manner of articulation. It is concerned with specifying the nature of the obstruction made.

2.3.3. Manner of Articulation

The manner of articulation is the degree and kind of constriction or obstruction of the airstream in the vocal tract. For example, in making a /t/, the tongue is raised to the alveolar ridge and momentarily seals off the vocal tract so that no air passes out. By contrast, during an /s/, we leave a gap between the articulators so that air continues to pass out. Notice that you can make a long, continuous /sssssss/, but not a long /ttttttt/.

The different manners of articulation are:
Plosives, Fricatives, Affricates, Nasals, Laterals, Approximants
In what follows each will be described separately:

(1) Stops/plosives

To make a **plosive** or a **stop** there are four phases:
Closure Phase: The articulators move to form a stricture or a closure such that no air escapes from the mouth.

Hold Phase: The compressed air is stopped from escaping.
Release Phase: The articulators used to form the closure are moved apart to allow air to escape.
Post-Release Phase: A period in which the escape of air may produce noise loud enough to be heard like a small explosion and hence the name plosives.

The English stops or plosives are six in number and they are: /p , b/, /t , d/, /k , g/. In making each of these pairs of stops, a complete closure is made either at the lips or at the alveolar ridge or at the velum as is clear in the table below. In each of these pairs, the first phoneme is voiceless and the second is voiced. There is one more voiceless plosive which is the glottal stop /ʔ/ but in English unlike Arabic it is not a phoneme as such but a variant of some phonemes. The **nasal stops** /m , n , ŋ/ are a special kind of stops or plosives which will be considered later on.

p and b are bilabial	p is voiceless bilabial plosive; b is voiced bilabial plosive
t and d are alveolar	t is voiceless alveolar plosive; d is voiced alveolar plosive
k and g are velar	k is voiceless velar plosive; g is voiced velar plosive
ʔ is glottal	ʔ is voiceless glottal stop

(2) Fricatives

Fricatives are made when the articulators are brought together but not sufficiently enough to make a complete closure, hence there will be a small opening through which the air will escape producing a hissing sound. They are called fricatives because the escaping air from this narrow passage is turbulent and produces a noisy friction-like sound, called **frication**. The fricatives in English are nine in number: /f , v/ /s , z/ /ʃ , ʒ/ /θ , ð/ and /h/. Each pair (with the exception of h) is articulated in the same place but one is voiced and the other is

voiceless. Refer to the table below for more details on the places of articulation and voicing of the English fricatives.

f and v are labiodental	f is voiceless labiodental fricative v is voiced labiodental fricative
θ and ð are dental	θ is voiceless dental fricative ð is voiced dental fricative
s and z are alveolar	s is voiceless alveolar fricative z is voiced alveolar fricative
ʃ and ʒ are palato-alveolar	ʃ is voiceless palato-alveolar fricative ʒ is voiced palato-alveolar fricative
h is glottal	h is voiceless glottal fricative

(3) Approximants

An **approximant** is a consonant in which the articulators approach each other but do not get sufficiently close to each other to produce a plosive. They are also made with a greater opening in the vocal tract than that of fricatives and thus frication is absent with approximants.

In English, this category comprises /r , j , w/. These are the initial sounds in the words *rule, use* and *wood.* In the articulation of /r/, for example, the tip of the tongue approaches the alveolar area in approximately the way it would for a /t/ or /d/ or /s/, but never actually makes contact with any part of the roof of the mouth. In RP English, /r/ only occurs before vowels and that is why RP is called a **non - rhotic** accent.

As far as their place of articulation, /r/ is post-alveolar, /j/ is palatal and /w/ is bilabial-velar. They are all voiced and /j , w/ are also known as **semi-vowels** or **glides** because they function as consonants, but phonetically they are moving vowels. Thus the articulation of /j/ is practically the same as that of the front close vowel [i:], but is very short and the articulation of /w/ is closely similar to the back close vowel [u:] and is again very short.

(4) Affricates

Affricates are sequences of plosive plus fricative. They begin as plosives and end as fricatives. The plosive and fricative must be **homorganic** which means that they are made with the same articulators.

There are only two affricates in English: /tʃ/ and /dʒ/. /tʃ/ is voiceless and /dʒ/ is voiced. They are both palato-alveolar. They are the initial and final sounds in the words *church* and *judge*, respectively. /tʃ/ is defined as a voiceless palato-alveolar affricate, and /dʒ /is defined as a voiced palato-alveolar affricate.

In the initial part of /tʃ/ or /dʒ/, the tip of the tongue is at the rear of the alveolar ridge. In the second part of the affricate, the tongue pulls away slightly from the roof of the mouth to form a fricative. The affricate /tʃ/ is regularly spelled 'ch' or 'tch' as in words like *church, child, and hitch*; /dʒ/ is usually spelled as 'j', 'g', or 'dg' as in *joke, gem, and trudge*. Note that although an affricate is a phonetic sequence, it functions as a single unit in English.

(5) Nasals

The sounds /m , n , ŋ/ are called **nasals** or **nasal stops**. The basic characteristic of a nasal consonant is that the air does not escape through the mouth because there is a complete closure at some point in the oral cavity. Instead, the air escapes through the nose. For this to happen, the soft palate or the velum must be lowered, hence there will be a velic opening, allowing the compressed air to pass out through the nasal passage. Usually the term nasal is sufficient, but if we need to be explicit, we can call /m , n , ŋ/ **nasal stops** and /b , p , t , d , k , g/ **oral stops**.

There are three nasals in English: /m , n , ŋ/. /m/ is bilabial, /n/ is alveolar and /ŋ/ is velar. All nasals in English are voiced. Therefore, there is no need to mention the state of the glottis when referring to an

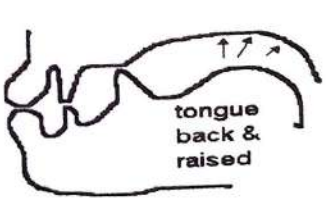
English nasal. /m/ is simply known as bilabial nasal, /n/ as alveolar nasal and /ŋ/ as velar nasal.

(6) Laterals

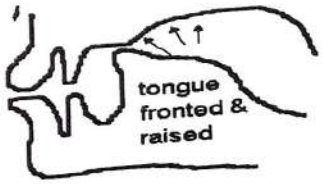
Laterals are sounds that are made with only the mid part of the articulators touching, but the passage of air through the mouth does not go in the usual way along the centre of the tongue. Instead, the air escapes along the sides of the tongue. The consonant /l/ which is the initial sound in the word *loom* is a lateral. Try making a long /lllllll/, you will be able to feel the tip of your tongue touching the alveolar ridge. Both sides of the tongue, however, are pulled down slightly from the roof of the mouth so that air escapes around the sides of the tongue.

/l/ is the only lateral sound in English. It is voiced and is simply known as alveolar lateral. In RP, the /l/ found before vowels (pre-vocalic) is called **clear** /l/ and the /l/ found after vowels (post-vocalic) is called **dark** /ɫ/. These two types of /l/ have quite different **realizations**. Clear /l/ has a quality rather similar to an [i] vowel, with the front of the tongue raised. Dark /ɫ/ has a quality rather similar to an [u] vowel, with the back of the tongue raised.

We say that the clear /l/ and the dark /ɫ/ are in **complementary distribution** because they will never occur in identical contexts. Clear /l/ always occurs before vowels, as the /l/ in the words *clear* and *law*, but dark /l/ always occurs after vowels, as the /l/ in the words *dull* and *fill*.



[ɫ]



[l]

The following table sums up all the characteristics of the consonants that are found in English:

Manner of Articulation		Point of Articulation					
		Bilabial	**Labio-dental**	**dental**	**Alveolar**	**Alveo-palatal**	**Velar**
Stops	**Voiceless**	/p/			/t/		/k/
	Voiced	/b/			/d/		/g/
Affricates	**Voiceless**					/ʃ/	
	Voiced					/ʒ/	
Fricatives	**Voiceless**		/f/	/θ/	/s/	/tʃ/	/h/
	Voiced		/v/	/ð/	/z/	/dʒ/	
Nasals		/m/			/n/		/ŋ/
Lateral					/l/		
Retroflex					/r/		
Semivowels		/w/				/j/	

UNIT THREE

The Contents of Unit Three:

3.1. Introduction

While **consonants** are sounds where the airstream from the lungs is either completely blocked, partially blocked or where the opening is so narrow that the air escapes with audible friction, **vowels** are continuous sounds in which there is no obstruction to the flow of air as it passes from the larynx to the lips. Another difference between consonants and vowels is that all vowels are voiced whereas consonants may be voiced or voiceless.

Vowel description has traditionally differed from consonant description. Consonants are described and classified according to their production: manner of articulation (e.g. stop, fricative); place of articulation (e.g. alveolar, palatal, velar, uvular); and voicing. Vowels, on the other hand, have traditionally been taught via the **Cardinal Vowel System**. This system does not belong to any language and is based on a set of auditory reference points. The vowels of any language are described in terms of how close they are to these reference points. Before we introduce the cardinal vowel system, it is important to define the concept of the **vowel limit**.

3.2. The Vowel Limit

When any part of the tongue is held very close to the roof of the mouth and lung air is expelled with medium or strong force, the sound

heard is that of a consonant. In producing a vowel, the tongue is kept at such a distance from the roof of the mouth that when the air is emitted and the vocal cords are in motion, there is no perceptible friction. Therefore, to produce a vowel, the tongue must not go higher than this distance which is known as the **vowel limit**, otherwise the sound produced is no more a vowel, but a consonant. Different vowels are produced by simply changing the shape of the tongue, while keeping it below the vowel limit.

3.3. Classification of Vowels

Vowels are produced by changing the following:
The shape of the tongue.
The shape of the lips.
The position of the velum.

3.3.1. Shape of Tongue

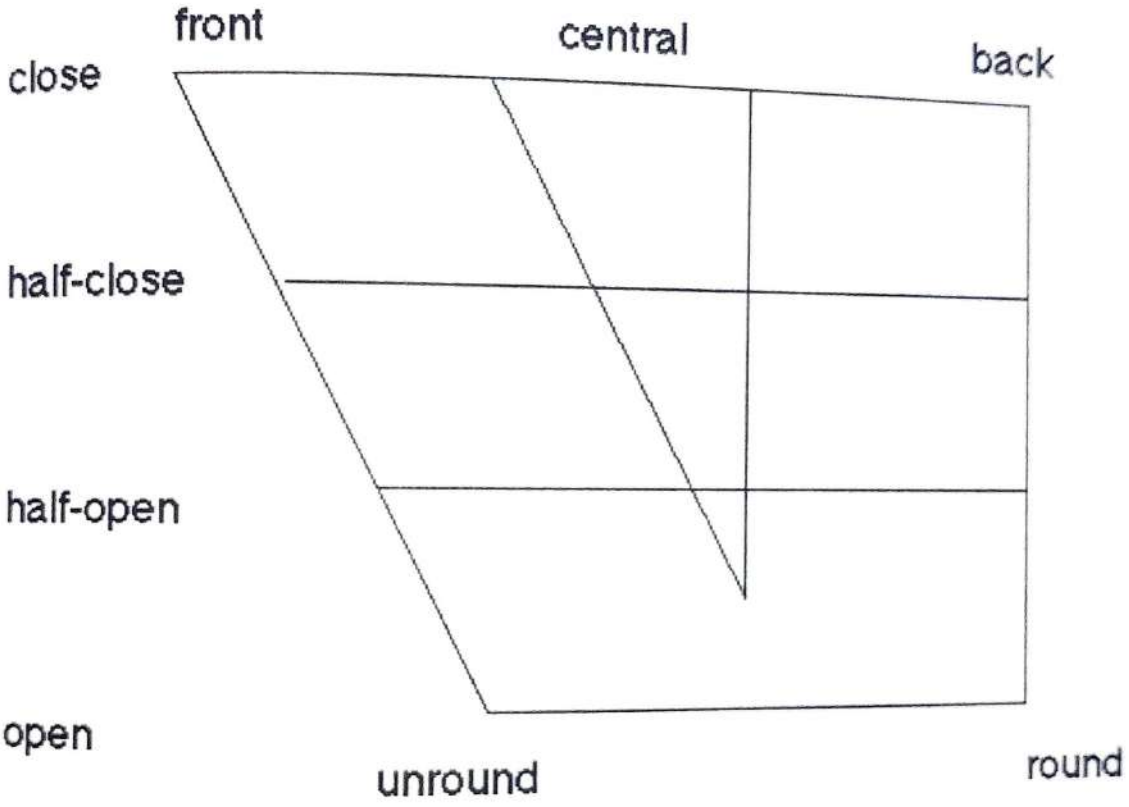
In most vowels, the tip of the tongue generally remains behind the lower teeth. The parts of the tongue which have the greatest influence on the quality of the vowel pronounced are the front, the centre, and the back.

In order to classify a vowel according to the shape of the tongue, we need to know:
(a) Which is the highest part (peak) of the tongue? Is it the front, central, or back part of the tongue. When the peak is the front of the tongue, we get a **front vowel**, when the peak is the central part of the tongue, we get a **central vowel** and when the peak is the back of the tongue, we get a **back vowel**.

(b) The distance between this peak and the roof of the mouth. e.g. a **close vowel** is one where the peak of the tongue is as close as possible to the roof of the mouth (i.e. at the vowel limit), but in an **open vowel** the peak is as low as possible (as far as possible from the roof of the mouth (the palate).

Thus we get front open and front close vowels, back open and back close vowels, etc.

For the purpose of descriptive accuracy, two more points of reference between open and close have been established and those are **half-open** and **half-close**. The intervals between close and half-close, between half-close and half-open, and between half-open and open are equal.



3.3.2. Shape of Lips

In addition to the position of the tongue, vowel quality is also determined by the shape of the lips. Two vowels pronounced with the same tongue position differ in quality if one of them is pronounced with rounded lips and the other with unrounded lips. e.g the English word *'keen'* and the French word *'une'*. In both of these words, the tongue position is the same but in the former the lips are spread while in the latter the lips are rounded.

The main positions of the lips are:

(a) **Spread lips** e.g the vowel in the word *'heat'*
(b) **Neutral lips** e.g the vowel at the end of the word *'heater'*
(c) **Open lip-rounding** e.g the vowel in the word *'hot'*
(d) **Close lip-rounding** e.g the vowel in the word *'hoot'*

3.3.3. Position of Velum

Vowel quality can also be affected by the position of the velum or soft palate. When the velum is raised, it touches the pharyngeal wall thus preventing the entry of air to the nasal tract as is the case with the production of English vowels. When the velum is lowered, it allows the air to escape through the nasal and the oral tract as is felt when one says the French sentence *'un bon vin blanc'*. Thus when the velum is in the lowered position, the vowel produced will have an additional nasal quality and is therefore termed **'nasalized'**.

In short, vowels are described in a different way from consonants. Vowels are described according to the **tongue height, frontness or backness**, the **shape of the lips (degree of lip-rounding),** and **position of the velum** as shown in the following:

Tongue Height:	Close,	Close-Mid,	Open-mid,	Open
Tongue Frontness:	Front,	Central,	Back	
Shape of Lips:	Rounded,	Spread,	Neutral	
Position of Velum:	Raised,	Lowered		

3.4. Cardinal Vowels

If a phonetician wants to describe the vowels of a language, he has to relate them to something, possibly the vowels of his own language, but this has two disadvantages:

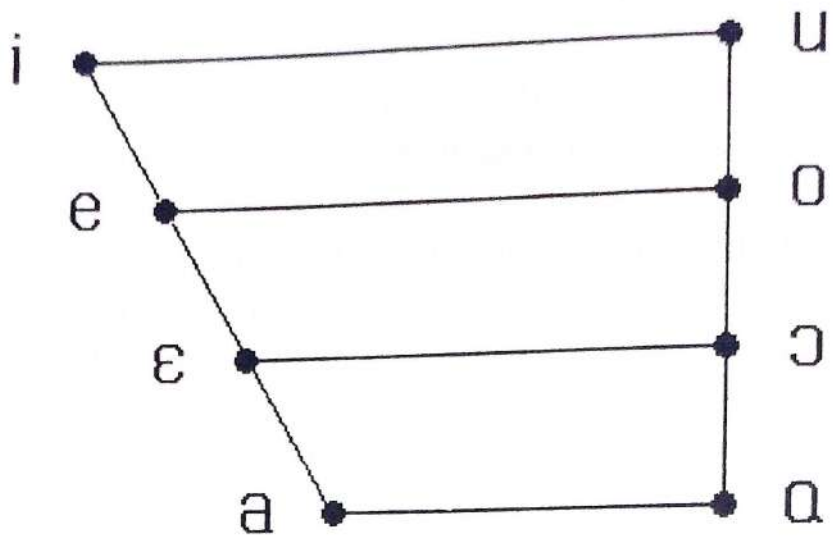
(1) The reader may not know the language of the phonetician.
(2) Even if the reader knows the language of the phonetician, the vowels may be different because of dialectical and personal variance.

For this reason, a phonetician called **Daniel Jones** devised a system for classifying vowels known as the **cardinal vowels** system about the middle of the nineteenth century. This system is made up of a set of fixed vowels arranged in a close-open, front-back tongue positions. They do not belong to any particular language, but they are simply standard reference points of vowel articulation that describe the range of vowels that the human vocal apparatus can make and against which the vowels of any language can be measured. This system has been introduced to meet the growing needs of phonetic research and teaching and it has proved to be the most satisfactory system of its kind and has, therefore, been widely in use.

It has become traditional to locate cardinal vowels on a four-sided quadrilateral. The cardinal vowel system is a scale of eight different vowels located on this four sided quadrilateral. Only vowels no. 1 and 5 are chosen for articulatory or physiological reasons. No.1 is the vowel [i] which is made with the lips as spread as possible, and the front of the tongue raised as high as possible towards the hard palate (i.e. as far as the vowel limit). No. 5 is the vowel [ɑ] which is made with the lips in neutral position, the mouth as open as possible and the back of the tongue drawn back as far as possible towards the soft palate, but the body of the tongue is as low as possible.

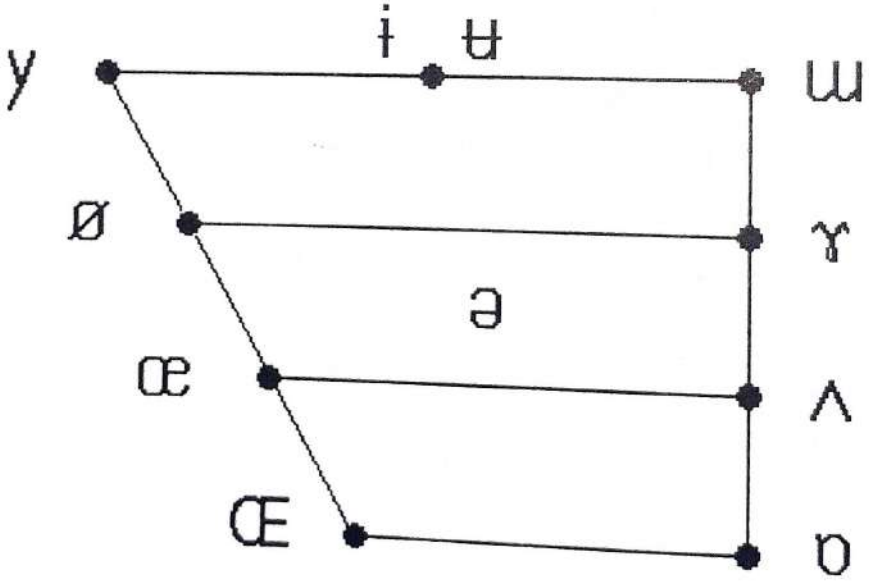
The rest of the cardinal vowels are made in the following way: Starting with vowel no. 1 position, the front of the tongue is lowered gradually, lips remaining spread or neutrally open, and stopped at three acoustically equidistant points at which the vowels no. 2 [e], no. 3 [ɛ], and no. 4 [a] are produced. Similarly, the back of the tongue is gradually raised from the position of no. 5 and stopped at three positions of equal acoustic separation to produce vowels no. 6 [ɔ], no. 7 [o], and no. 8 [u]. [ɔ] is with open lip-rounding, [o] with medium lip-rounding and [u] with close lip-rounding.

The Cardinal Vowels



In addition to the first eight vowels called **'primary' cardinal vowels**, there are ten **'secondary' cardinal vowels** numbered 9-18. Thus the cardinal vowels are 18 in number.

The Secondary Cardinal Vowels



Cardinal vowels from no. 9-16 have exactly the same tongue positions as cardinal vowels no. 1-8, respectively, but they are pronounced with reversed lip positions. For example if we take cardinal vowel No. 1 [i] which is made with a fully front, close tongue position and lips

spread, cardinal vowel No. 9 is made with fully front, close tongue position, but with rounded lips instead.

The secondary vowels no. 17 and 18 have a central tongue position between cardinal vowels no. 1 and 8, but they are made with different lip positions. No.17 is made with unrounded lip position, whereas no. 18 is made with a rounded lip position.

UNIT FOUR

The Contents of Unit Four:

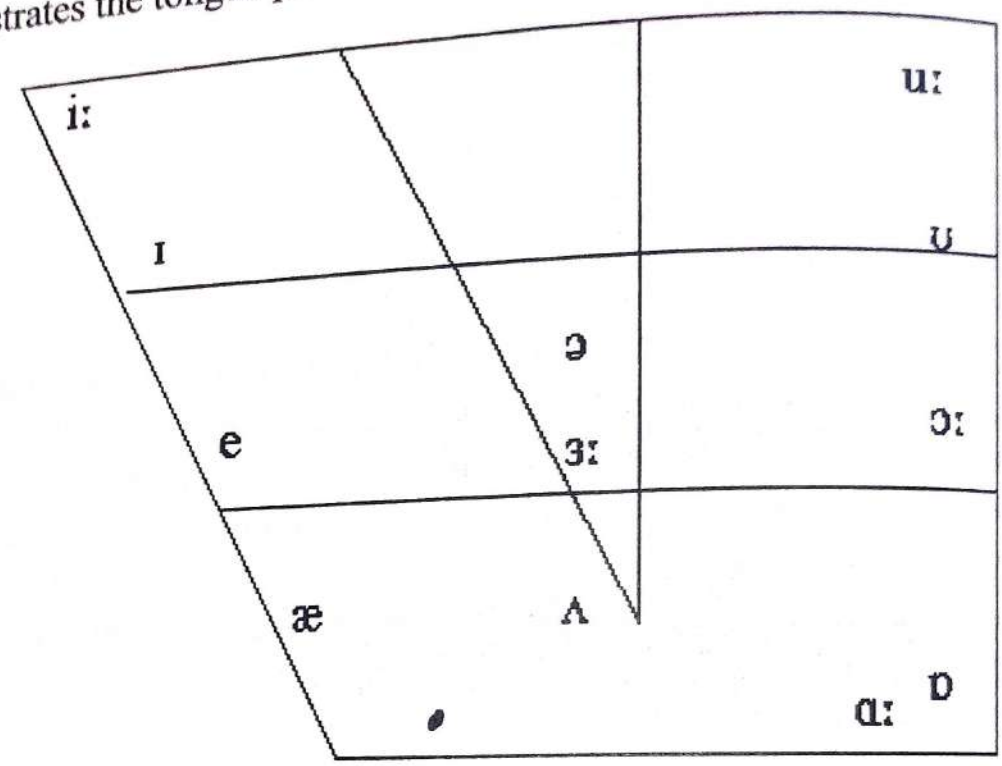
Having introduced the reference points that phoneticians use to describe the vowels in a certain language i.e the Cardinal Vowel System, the next step is to describe the English vowels. English has a large number of vowels. Since we are concentrating on the RP accent, in what follows we shall describe all the RP vowels. These can be divided into three types: **pure vowels** or **monophthongs**, **diphthongs**, and **triphthongs**.

The following table presents the RP English vowels (pure vowels and diphthongs). They are twenty in number. Each is given in an example together with its IPA symbol.

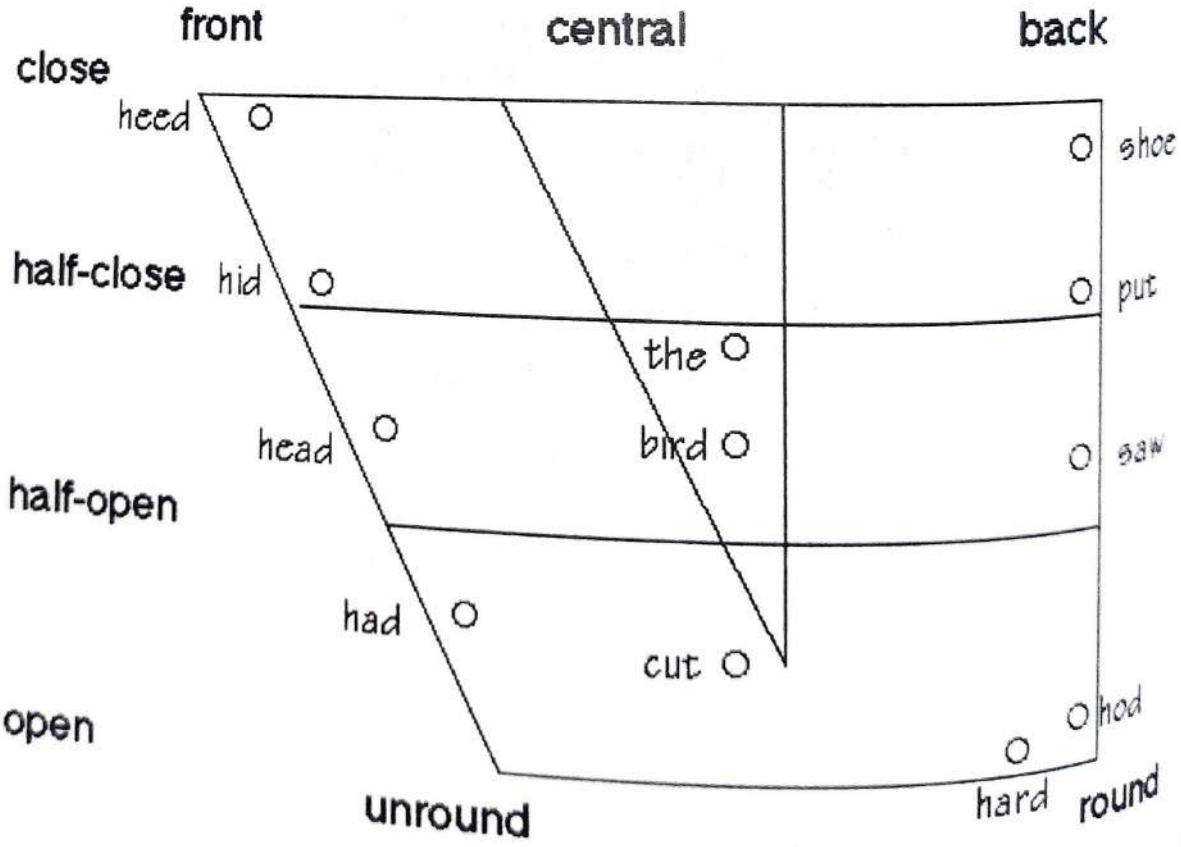
	b__d	IPA		b__d	IPA
1	bead	iː	11	booed	uː
2	bid	ɪ	12	bud	ʌ
3	bayed	eɪ	13	bird	ɜː
4	bed	ɛ	14	bide	aɪ
5	bad	æ	15	bowed	aʊ
6	bard	ɑː	16	Boyd	ɔɪ
7	bod(y)	ɒ	17	beer	ɪə
8	bawd	ɔː	18	bare	ɛə
9	budd(hist)	ʊ	19	byre	aə
10	bode	əʊ	20	boor	ʊə

4.1. RP Pure Vowels (Monophthongs)

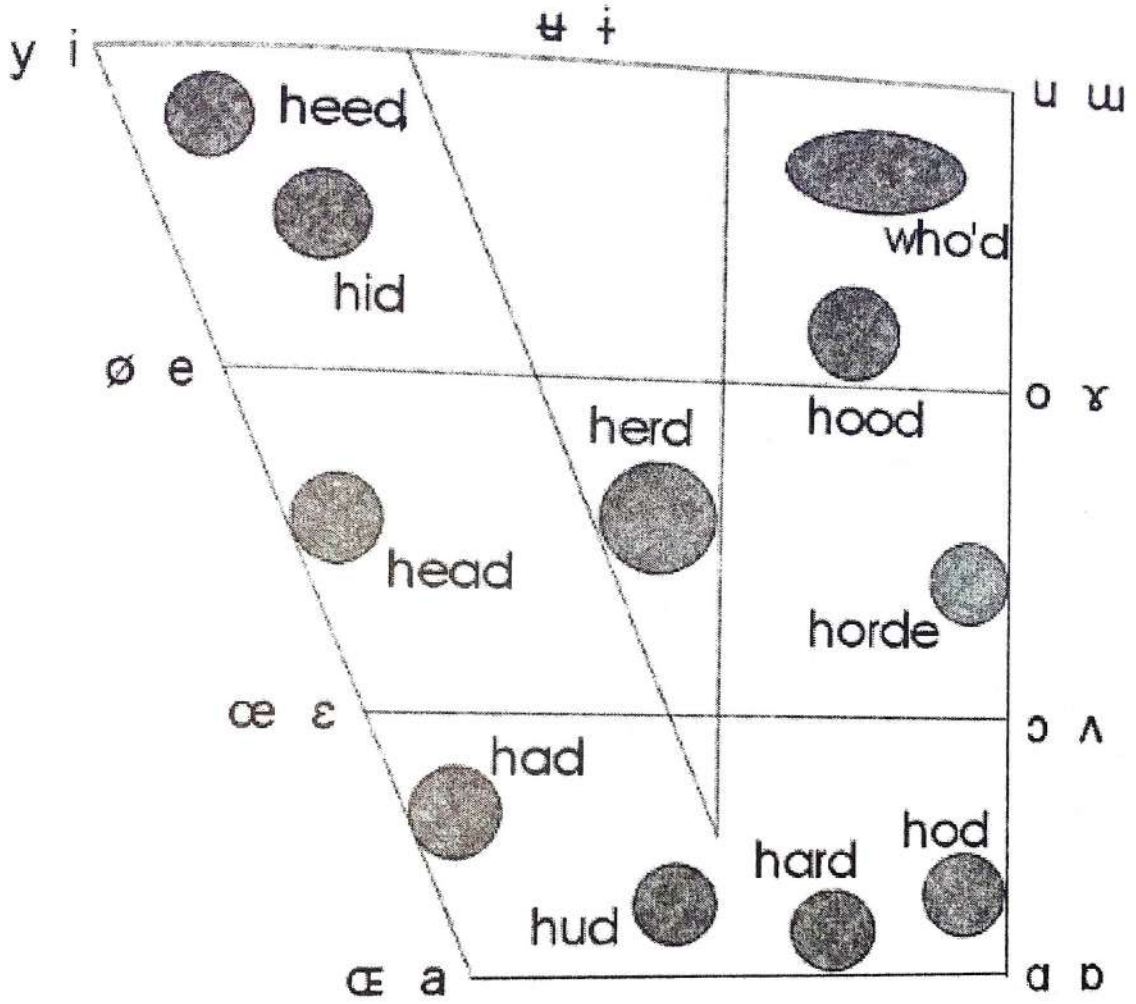
The RP pure vowels are twelve in number. The following diagram illustrates the tongue position of each:



'RP Pure Vowels or Monophthongs



The following figure compares between the tongue positions of the English RP pure vowels with the Cardinal Vowels.



RP British English Monophthongs
relative to the Cardinal Vowels

In what follows each of the RP pure vowels will be described separately:

RP no. 1: [i:] as in (fee, bead, thief)

Definition:

Tongue position: nearly fully front, nearly close

Lip position: slightly spread lips

(unrounded long vowel)

Occurrences:

ee as in *see, meet, fee;t*

ea as in *meat, sea, team;*

ei as in *receive, perceive, seize;*

ie as in *chief, piece, thief;*

e as in *be, scene;*

i as *routine, police, suite.*

RP no. 2: [ɪ] as in (hit, pin, pit, will)

Definition:

Tongue position: retracted front, between close and half-close

Lip position: slightly spread lips

(unrounded short vowel)

Occurrences:

i as in *fish, him, hit, pin;*

y as in *hymn, physics, funny;*

e as in *pretty, eleven, wanted;*

ie as in *parties, lilies, cities;*

a as *private, cabbage;*

days of the week: *Sunday, Monday, Tuesday,* … are pronounced with a RP No. 2 **[ɪ]**

suffixes like *–less, -ness, -est* are also pronounced with the same short **[ɪ]**

RP no. 3: [e] or [ɛ] as in (get, pet, men, head)

Definition:

Tongue position: fully front, between half-close and half-open

Lip position: slightly spread or neutral lip position.

(unrounded short vowel)

Occurrences:

e as in *bed, help, mess, men;*

ea as in *head, weather, treasure*;
a as in *many, any, Thames*;
infrequent occurrences are ai as in *said*, ie as in *friend*, ei as in *leisure* and eo as in *leopard.*

RP no. 4: [æ] as in (man, trap, am)
Definition:
Tongue position: fully front, between half-open and open
Lip position: slightly spread or neutrally open lips
(unrounded short vowel)
Occurrences:
a as in *fan, hat, man;*
infrequent occurrences are ai as in *plait, plaid,*
and a + consonant + e as in *bade* (past of bid).

RP no. 5: [ɑ:] as in (card, heart, calm, pass)
Definition:
Tongue position: advanced back, fully open
Lip position: neutrally open lips
(unrounded long vowel)
Occurrences:
ar as *star, art, hard, part*;
a as *father, past, branch, calm, half, palm*;
Infrequent occurrences are in words of French origin like *memoir, reservoir;* and words like *laugh, aunt, draught, clerk, Derby, sergeant, heart.*

RP no. 6: [ɒ] as in (cot, long, pond)
Definition:
Tongue position: not quite fully back, between open and half-open
Lip position: slightly rounded or open lip rounding.
(rounded short vowel)
Occurrences:
o as in *hot, fog, proverb*;
a following /w/ as in *watch, want, wash;*
au as in *sausage, Austria, Australia;*
infrequent occurrences are ou as in *cough and trough,* and ow as in *knowledge.*

RP no.7: [ɔ:] as in (cold, horse, old, board)

Definition:

Tongue position: nearly fully back, between half-open and half-close
Lip position: medium lip rounding.
(rounded long vowel)

Occurrences:

or as in *horse, or, sword;*
aw as in *saw, law;*
au as in *taught, caught, daughter,*
ou as *thought, bought, brought;*
a as in *hall, talk, fall.*

RP no. 8: [ʊ] as in (foot, put, could)

Definition:

Tongue position: advanced back, between close and half-close
Lip position: closely but loosely rounded lips.
(rounded short vowel)

Occurrences:

u as in *put, full, sugar;*
oo as in *foot, book, good;*
o as in *woman, wolf;*
ou as in *could, should, would.*

RP no. 9: [u:] as in (pool, remove, soup)

Definition:

Tongue position: slightly advanced back, nearly close
Lip position: closely rounded lip-position.
(rounded long vowel)

Occurrences:

oo as in *food, moon, spoon;*
o as in *move, lose, who;*
ou as in *soup, group, through;*
u as *in rude, June, Susan.*
Less frequent occurrences are:
ew as in *few, chew,*
ue as in *blue,*
ui as in *juice*
oe as in *shoe.*

RP no. 10: [ʌ] as in (hut, cut, front)

Definition:

Tongue position: a central, between open and half-open
Lip position: neutrally open lips.
(unrounded short vowel)

Occurrences:

u as in *cup, shut, sun, hut.*
o as in *done, come, son, mother, worry.*
ou as in *country, southern enough, young, couple.*
Infrequent occurrences are oo as in *blood , flood,* and oe as in *does.*

RP no. 11: [ɜ:] as in (bird, earn, herd)

Definition:

Tongue position: central, between half-open and half-close.
Lip position: neutrally spread lips.
(unrounded long vowel)

Occurrences:

er as in *refer, herd, verse;*
ir as in *bird, girl, sir, birth;*
ur as in *fur, turn, burn;*
ear as in *earth, heard, earn, learn;*
or as in *world, work;*
our as in *journal, journey, adjourn.*

RP no. 12: [ə] known as 'schwa' as in (father, alive, similar)

Definition:

Tongue position: central, between half-open and half-close
Lip position: neutral lips
(unrounded short vowel)

Occurrences:

er as in *modern, later, concert;*
a as in *along, salad, admit, about, accept;*
ar as in *standard, forward, particular;*
e as in *pavement, reference;*
or as as *doctor, actor, tailor;*
o as in *method, polite, contain, compare;*
ou as in *famous, jealous, generous;*
ure as in *picture, future, leisure, furniture.*

Infrequent occurrences are i as in *possible, horrible,* and oar as in *cupboard.*

4.2. RP Diphthongs

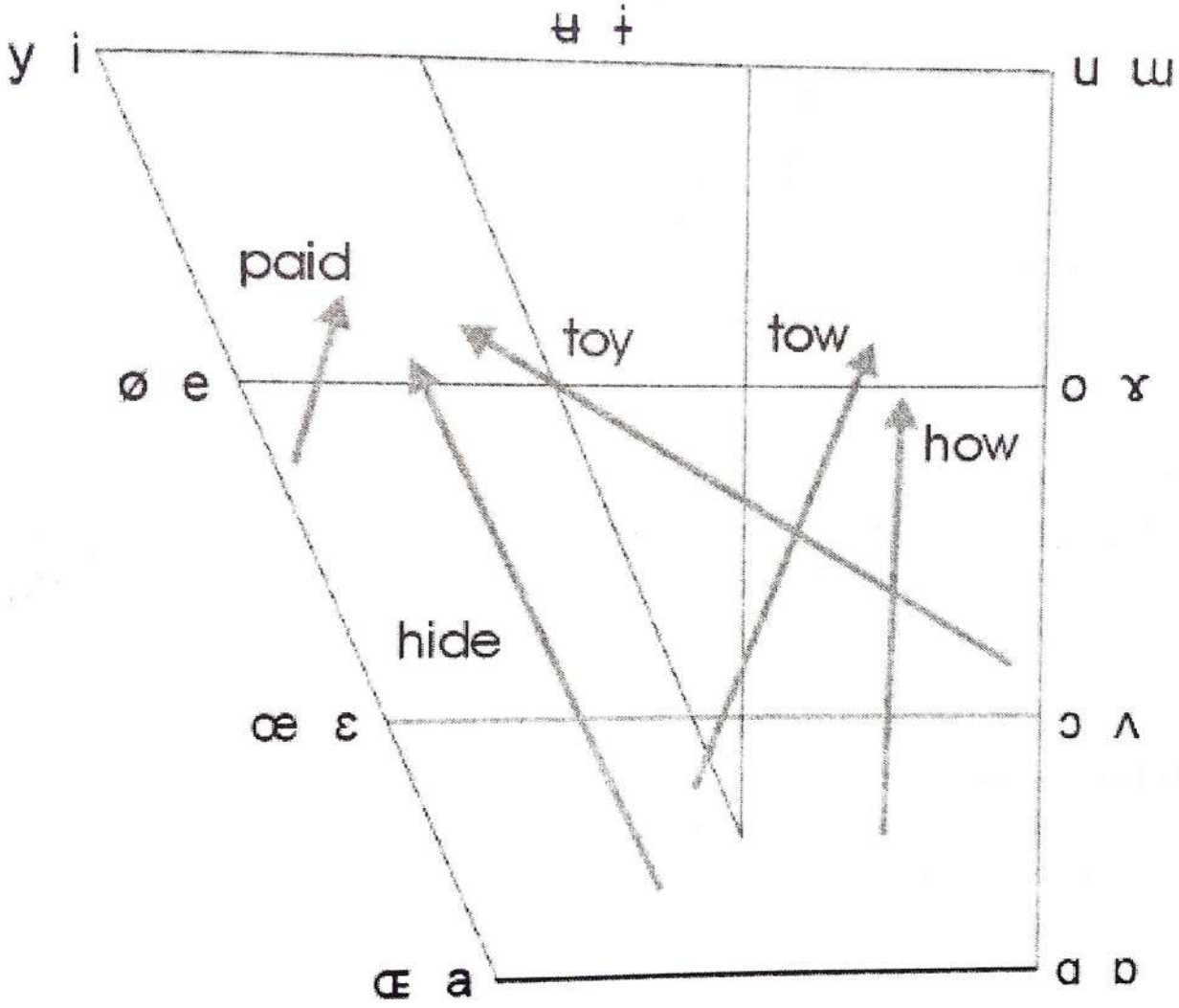
A **diphthong** is a sound made by moving or gliding from one vowel position to another. A vowel that does not glide and remains constant is called a **pure vowel**, and one of the most common pronunciation mistakes made by learners of English is the production of a pure vowel where a diphthong should be pronounced.

Diphthongs are represented by two symbols: the first indicates its starting point and the second showing the point towards which the tongue proceeds, e.g. the diphthongs [eɪ] and [aʊ] in the words 'gain' /geɪn/ and 'down' /daʊn/, respectively. An important thing to remember is that the first part of the diphthong is much longer and stronger than the second part, so learners of English must remember not to make the second part of the diphthong too strongly.

In RP, we have eight diphthongs five of which are called **closing diphthongs** because they glide towards a closer tongue position i.e. towards the vowel limit, and three are called **centring diphthongs** because they move towards a central tongue position. In what follows a detailed description of each of the RP closing and centring diphthongs is given:

4.2.1. Closing Diphthongs

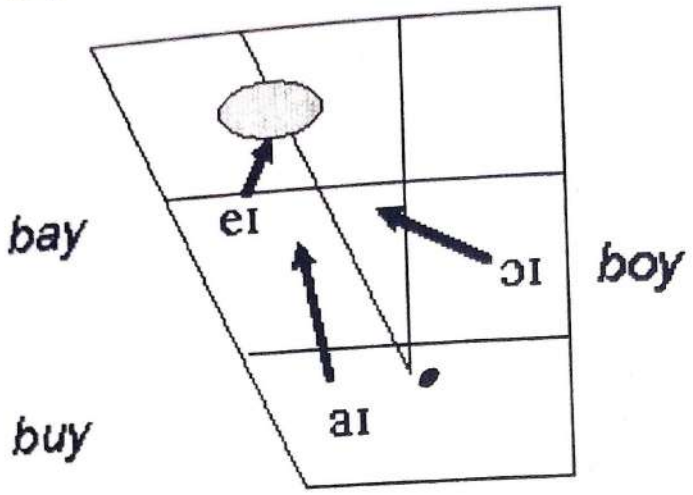
The closing diphthongs are characterized by ending with a glide towards a closer vowel. The first group of closing diphthongs glide towards RP [ɪ]. The second group of closing diphthongs glide toward RP [ʊ].



RP British English Non-Centring Diphthongs relative to the Cardinal Vowels

a. The closing diphthongs that glide toward RP [ɪ]. They are three in number and in what follows each is described separately:

Diphthongs that rise *in the direction of /ɪ/*



RP no. 13: [eɪ] as in (came, wait, eight)

Definition:

Type of diphthong: a closing diphthong

Starting point: a fully front, between half-close and half-open tongue position

Gliding towards: RP No. 2 [ɪ]

Occurrences:

a + consonant + e as in *hate, made, fame;*

ai as in *plain, sail, aim;*

ay as in *day , way, say,*

ei as in *weight, veil, eight,*

ea as in *great, break, steak;*

infrequent occurrences are au as in *gauge,* and ao as in *gaol.*

RP no. 14: [aɪ] as in (nice, lie, by)

Definition

Type of diphthong: a closing diphthong

Starting point: a retracted front, nearly fully open tongue position.

Gliding towards: RP No. 2 [ɪ]

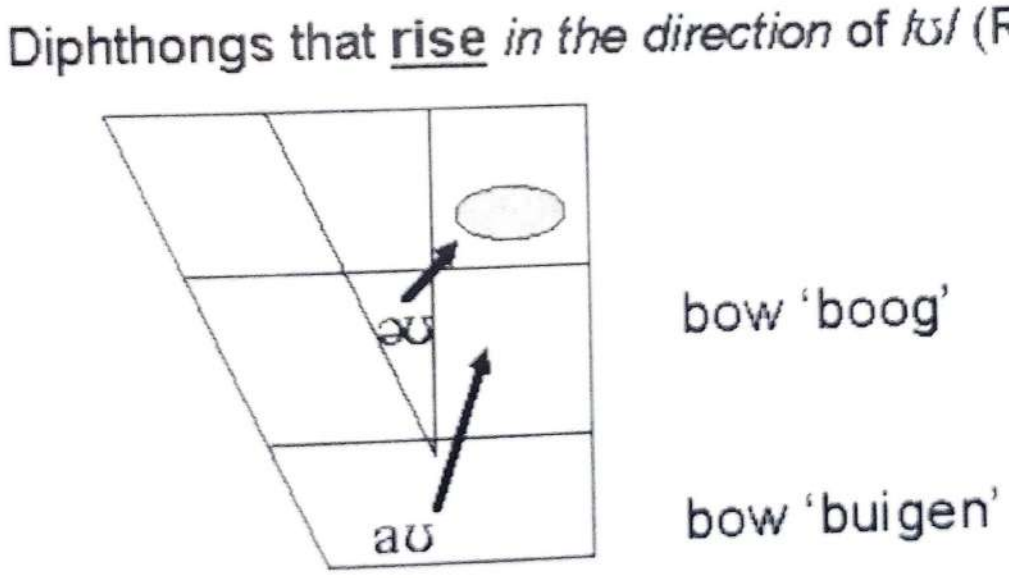
Occurrences:

i + consonant + e as in *time, shine, wide;*

i as in *find, bind, high;*
y as in *cry, try, fly;*
ie as in *die, tie, pie;*
ei as in *height, either, neither;*
Infrequent occurrences are *eye* and *buy.*

RP no. 15: [ɔɪ] as in (oil, joy, join)
Definition
Type of diphthong: a closing diphthong
Starting point: a fully back, between half-open and half-close
Gliding towards: RP No. 2 [ɪ]
Occurrences:
oi in *boil, poison, voice;*
oy in *boy, toy, employ;*

b. The closing diphthongs that glide towards RP [ʊ]. They are two in number and in what follows each is described separately:



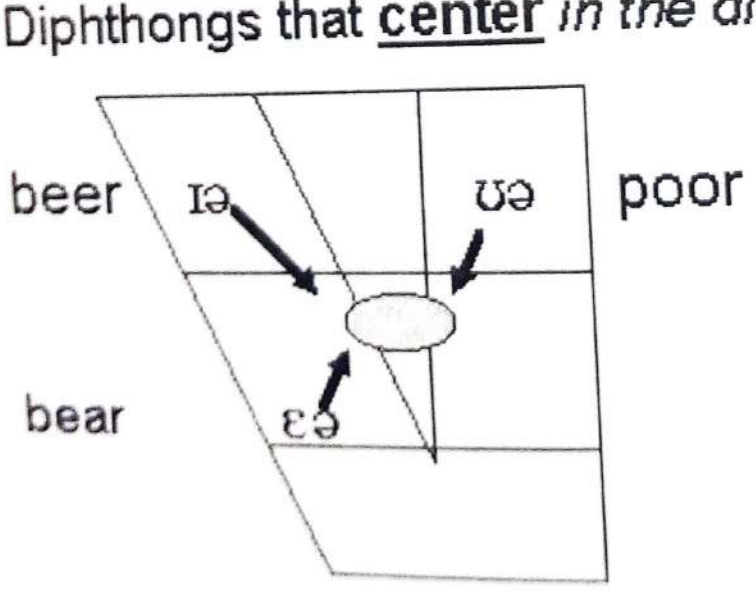
RP no. 16: [əʊ] as in (go, road, home, most)
Definition
Type of diphthong: a closing diphthong
Starting point: central, between half-open and half-close tongue position.
Gliding towards: RP [ʊ]

Occurrences:
o + consonant + e as in *home, note, rope;*
o as in *so, old, hold,*
ow as in *slow, blow, throw,*
oa as in *soap, oath, coal,*
ow as in *soul, shoulder, mould,*
oe as in *toe, foe, doe;*
unusual occurrence of au in *mauve.*

RP no. 17: [aʊ] as in (house, town, round)
Definition
Type of diphthong: a closing diphthong
Starting point: a fully open, midway between back and front tongue position
Gliding towards: RP [ʊ]
Occurrences:
ou as in *loud, sound, out;*
ow as in *cow, town, gown, allow;*

4.2.2. Centring Diphthongs

The centring diphthongs glide toward RP [ə] and they are three in number:



RP no. 18: [ɪə] as in (ear, peer, interfere)

Definition

Type of diphthong: a centring diphthong,
Starting point: a retracted front, between close and half-close tongue position.
Gliding towards: RP [ə]

Occurrences:

ear as in *near, tear, appear;*
eer as in *beer, cheer, steer;*
ere as in *mere, here, sphere;*
ier as in *fierce, pier, easier;*
unusual occurrences:
ior in *interior, exterior, inferior;*
iou in *serious, obvious*;
eu in *museum.*

RP no. 19: [eə] or [ɛə] as in (rare, air, bear)

Definition

Type of diphthong: a centring diphthong,
Starting point: a fully front between half-close and half-open tongue position.
Gliding towards: RP [ə]

Occurrences:

are as in *care, share, scare;*
air as in *fair, pair, chair;*
ear as in *pear, wear, tear* (as a verb)

RP no. 20: [ʊə] as in (poor, mature, tour)

Definition

Type of diphthong: a centring diphthong
Starting point: an advanced back, between half-close and close tongue position.
Gliding towards: RP [ə]

Occurrences:

ure as in *sure, cure, jury, obscure;*
ua as in *casual, manual, dual;*
ue as in *cruel, fuel, duel;*
oo as *poor, moor*
(this diphthong is becoming increasingly rare)

4.3. Triphthongs

A **triphthong** is a glide from one vowel to another and then to a third, all produced rapidly and without interruption. e.g. a careful pronunciation of the word 'hour' will show that it is made up of three sound segments: it begins with [ɑ:] , goes on to a glide towards the back close rounded area [ʊ], then ends with a mid-central vowel (schwa) [ə] . We use the symbol [ɑʊə] to represent the way we pronounce 'hour'.

The triphthongs can be looked on as being composed of the five closing diphthongs described earlier with a schwa [ə] added on the end. Thus we get two sets of triphthongs:

eɪ + ə = eɪə
aɪ + ə = aɪə
ɔɪ + ə = ɔɪə

+ ə = əʊə
+ ə = aʊə

A source of difficulty for the foreign learner is that in present day English the extent of the vowel movement is very small, except in very careful pronunciation. Because of this, the middle of the three vowels of the triphthong (that is, the [ɪ] or [ʊ]) can hardly be heard and the resulting sound is difficult to distinguish from some of the diphthongs and long vowels. However, some examples are given below to help identify these triphthongs:

/eɪə/ which is heard in words like *'player', 'layer'*
/aɪə/ which is heard in words like *'fire' 'liar'*
/ɔɪə/ which is heard in words like *'royal', 'loyal'*

/əʊə/ which is heard in words like *'lower', 'mower'*
/aʊə/ which is heard in words like *'power', 'hour'*

UNIT FIVE

Contents of Unit Five

5.1. Phonemes

A **phoneme** can be defined as the smallest unit of sound which can distinguish two words. Examples of phonemes you have learnt before are /p/, /b/, /s/, /z/, /e/, /æ/, /etc. An essential property of a phoneme is that it functions **contrastively**. For example, if we change the vowel /e/ for /æ/ in the word *'met'* /met/ we get a different word that has a different meaning: *'mat'* /mæt/. Therefore we can say with confidence that in English /e/ and /æ/ are two different phonemes and that the two words *met* and *mat* are **minimal pairs**, because they only differ by one sound. Similarly, if we substitute /p/ for /b/ in *'ban'* /ban/, we will have *'pan'* /pan/, which is a different word as well. Therefore we can say that /p/ and /b/ are also two different phonemes in English. But we cannot say the same thing about Arabic. /p/ and /b/ are not two different phonemes in Arabic because if we change /b/ for /p/ in the word /sabt/ meaning *'Saturday'*, the meaning of the word will not change. It will still mean *'Saturday'*. Thus, while /p/ and /b/ are two different phonemes in English they are not so in Arabic. In Arabic they are two realizations of the same phoneme and thus we refer to them as two different **allophones**.

This contrastive property is quite important because it is the basic test for determining the phonemes which exist in a certain language. If we substitute one sound for another in a word and there is a change of meaning, then the two sounds represent different phonemes, if they

don't then they are two realizations of the same phoneme i.e. they are allophones.

5.2. Allophones

As seen in the example above from Arabic a phoneme may have different **realizations,** depending on its linguistic environment. The different realizations of a phoneme are called **allophones**. The following are different examples of different realizations of the same phoneme in English:

The word *'tea'* /tʰi:/ is said with the /tʰ/ aspirated, i.e. with a sound like /h/ coming after the release of the air from the oral cavity. But in the word 'eat', the /t/ is unaspirated. Whether we say the word 'tea' with or without aspiration; /tʰi:/ or /ti:/, that does not change the meaning of the word *'tea'*. The same applies to the word *'eat'*. Whether it is said with or without aspiration (/i:t/ or /i:tʰ/) the meaning is still the same although native speakers are unlikely to aspirate /t/ in word final position. Thus, here it is said that there are a number of **realizations** of the phoneme /t/ in English. One of these realizations is the [t] unaspirated and the other is the [tʰ] aspirated. These realizations are technically known as **allophones**.

Similarly, the clear "l" /l/ and the dark "l" /ɫ/ are also the allophones of the phoneme /l/ in English. Clear /l/ occurs only before vowels never before consonants or a pause. e.g. the word *'lea'* /li:/. Dark /ɫ/, on the other hand, never occurs before vowels only before a consonant as in the word *'eels'* /i:ɫz/.

Since one allophone can be substituted for the other without changing the meaning, we say that the two realizations are in **free-variation**. But to English speakers for example, the aspirated realization of [tʰ] will never be found in the place where the unaspirated realization [t] is appropriate, and vice versa. When we find this strict separation of place where particular realizations can occur, we say that the realizations are in **complementary distribution**.

5.3. A Phonemic System

A **phonemic system** is the complete set of phonemes found in a language. In the first part of this book, the phonemic system of English has been described. It is made up of forty four phonemes, twenty four consonants and twenty vowels.

5.4. Phonemic and Phonetic Transcription

In a **phonemic transcription**, every speech sound is identified as one phoneme and written with the appropriate phonemic symbol. e.g. The words *top* and *stop* are transcribed phonemically as /tɒp/ and /stɒp /, respectively. Phonemic symbols are enclosed within slant brackets / /.

In a phonetic transcription, there is much more information about the exact quality of the sounds. **Diacritics** (marks which modify the value of a certain symbol such as / ʰ / which adds the value of aspiration to a /t/ or /p/) are used to give the extra detailed phonetic values. e.g. The same words *top* and *stop* are transcribed phonemically as [tʰɒp] and [stɒp], respectively. Phonetic symbols, which represent precise phonetic values and not just phonemes, are always enclosed in square brackets [ ].

5.5. Phonology

So far we have been mainly focusing on the straightforward business of describing the sounds that we use in speaking English. These matters are the main concern of the area of study known as **phonetics**. But when we talk about how phonemes function in language and the relationships among the different phonemes - then we are talking about another area of study which is known as **phonology**.

In every language, we find that there are restrictions on the sequence of phonemes that can be used. For example no English word starts

with the consonant sequence zbf and no word ends with aeh. Similarly, in Arabic, no word starts with the consonant sequence ضعص and no word will end with the consonant sequence طنغ. This area of study is the concern of phonology.

5.5.1. Suprasegmental Phonology

Many significant sound contrasts are not the result of differences between phonemes. **Stress,** for instance, is important. When a word like *'import* is pronounced with the first syllable sounding stronger than the second, English speakers would hear it as a noun, whereas when the second syllable in the word *im'port* is stronger, the word is heard as a verb.

Intonation is also important: if the word *'right'* is said with the pitch of the voice rising, it is likely to be heard as a question or as an invitation to a speaker to continue, while a falling pitch is more likely to be heard as confirmation or agreement. These examples show sound contrasts that extend over several segments (phonemes) and such contrasts are called **suprasegmental**. The study of those features that extend beyond a single phoneme is the concern of the area of study known as **suprasegmental phonology**.

In the following unit, we shall be looking at some the suprasegmental features of English.

UNIT SIX

Contents of Unit Six

6.1. The nature of Stress

From the point of view of production, stressed syllables are produced with more **muscular energy** than unstressed ones. From the perceptual point of view, stressed syllables are more **prominent** than unstressed syllables. i.e. They are heard by the listener to be more prominent. Prominence is produced by four factors: **loudness, length, pitch** and difference in **quality** from neighbouring sounds.

a. Loudness: people seem to feel that stressed syllables are louder than unstressed ones. i.e. loudness is a component of prominence. e.g. if you say the syllables ba: ba: ba: ba: where one is louder than the rest, the louder one will sound stressed.

b. Length: the length of syllables also plays a part in prominence. If one of the syllables in ba: ba: ba: ba: is made longer than the others, that syllable may be heard as stressed.

c. Pitch: changing the frequency of vibration of the vocal folds also plays an important part in making a syllable sound more prominent. Saying a syllable of ba: ba: ba: ba: with a different pitch from the others will give the effect of stress or prominence. If all are said with a low pitch, but only one with a high pitch, then it will be heard as stressed.

d. Quality: If the quality of one vowel is different from neighbouring vowels, then the syllable will be more prominent. e.g. ba: ba: bi: ba: (the syllable bi: will sound more prominent).

Generally all four work together in combination though at times one or two of them make a syllable more prominent. Of these four qualities, the most powerful are pitch and length.

6.2. Levels of Stress

Generally speaking, two levels of stress can be considered:
1. **Primary stress:** It is the strongest type of stress or prominence as in the third syllable of the word *photo'graphic'* /fəʊtə'græfɪk/. We mark primary stress by placing a small vertical line high up, just before the syllable
2. **Secondary stress:** It is weaker than primary stress but stronger than the stress of other syllables as in the first syllable of the word *photo'graphic* /ˌfəʊtə'græfɪk/. We mark secondary stress by placing a low mark ˌ before the syllable.

Unstressed syllables are marked by an absence of prominence as in the first syllable of the word *a'round* /ə'raʊnd/.

It should be noted that unstressed syllables containing /ə/, /ɪ/, /ɒ/ or a syllabic consonant will sound less prominent than an unstressed syllable containing some other vowel. For example, the first syllable of the word "poetic" /pəʊ'tɪk/ is more prominent than the first syllable of the word "around" /ə'raʊnd/.

6.3. Place of Stress

Stress in English cannot be decided in relation to the syllables of the word like in French where the last syllable is always stressed. English word stress is so difficult to predict that it is best to treat stress placement as a property of the individual word to be learnt when the word itself is learned. Although there may be some rules for stress placement, there are always exceptions to these rules. However, there are some rules which may be helpful for learners in predicting word stress:

6.3.1 Stress in Simple Words

There is a very strong tendency in English nouns and adjectives to have stress on the first syllable.
e.g window /ˈwɪndəʊ/, table /ˈteɪbəl/, mother /ˈmʌðə/
pretty /ˈprɪtɪ/ ugly /ˈʌglɪ/ beautiful /ˈbjuːtɪfəl/

6.3.2 Stress in Complex Words

There are two major types of complex words:
1. Words made from a basic **stem** word with the addition of an **affix** (**prefix** or **suffix**).
2. **Compound words** which are made of two independent English words.

1. Words with Affixes: Prefixes and Suffixes

a. Words with Prefixes
In words (two- or three- syllable words) with prefixes such as "be-", "in-", "dis-", "ex-", "un-" etc, the stress is almost always on the second or third syllable, i.e. prefixes are not stressed. Actually, prefixes do not affect stress placement of stem words.

e.g. distrust /dɪsˈtrʌst/ unhappy /ʌnˈhæpɪ/
beloved /bɪˈlʌvɪd/

b. Words with Suffixes

There are suffixes which carry stress themselves:

e.g. ciga'*rette* refu'*gee* enter'*tain*

There are some suffixes which do not affect stress placement:

e.g.	'comfort	re'fuse	'poison	'glory
	'comfort*able*	re'fus*al*	'poison*ous*	'glori*fy*

There are suffixes which influence stress in the stem:

e.g.	ad'vantage	'photo	e'conomy
	advan'tage*ous*	pho'to*graphy*	eco'nomi*cal*

2. Compound Words

There are also some rules for determining stress in **compound words**. Compound words are words which are formed by combining two nouns, a noun and an adjective, a verb and a preposition, etc. It is very common for compound words which are nouns to have stress on the first element:

e.g. a 'teapot a 'chairman a 'blackbird

There are compound words that are made up of a first element which is an adjectival followed by –ed suffix. In these compounds the stress is on the second element.

e.g. bad-'tempered hot-'blooded heavy-'handed heavy-'hearted

6.3.3. Stress in Word-Class Pairs

In English, word stress is important in two-syllable words with identical spelling, because it helps determine the word-class of these words (noun, verb, adjective etc …). There are several dozen pairs of such words in English. Normally, one of these pairs is a verb and the other is either a noun or an adjective. The stress will be placed on the

second syllable if the word is a verb and on the first syllable if the word is a noun or an adjective.

e.g.

Noun or adjective	**verb**
Absent /'æbsənt/	to absent /æb'sent/
Convict /'kɒnvikt/	to convict /kən'vikt /
Object /'ɒbdʒɪkt/	to object /ɒb'dʒekt /
Protest /'proutest/	to protest /prə'test/
(Stress on first syllable)	**(Stress on second syllable)**

However, stress is not the only distinctive feature. The variation in stress is accompanied by a change of sound (mainly of vowels) as is clear in the phonetic transcription of the above words.

But in the following there are also examples of pairs of words where stress is the only contrastive feature:

Noun	**Verb**
import / 'impɔ:t/	to import /im'pɔ:t/
insult /'insʌlt/	to insult /in'sʌlt/
discount /'dis'kaunt/	to discount /'dis'kaunt/
increase /'in'kri:s/	to increase /'in'kri:s/

However, there are many noun/verb words which are not differentiated by the place of stress such as the following:

Noun	**verb**
comment / 'kɒment/	to comment /'kɒment/
signal /'sɪgnl/	to signal /'sɪgnl/
resort /rɪ'zɔ:t/	to resort /rɪ'zɔ:t/

6.3.4. Stress in Sentences

Before discussing stress in English sentences, it is necessary to distinguish between two types of words that are found in languages which are: **Content Words** and **Function Words**.

Content Words are the words that have a dictionary meaning even when they are used alone such as nouns, verbs, adjectives and adverbs. **Function** or **Structural Words (Grammatical Words)** are words which do not have a dictionary meaning in the way that we normally expect nouns, verbs, adjectives and adverbs to have, but which show grammatical relationships in and between sentences. Conjunctions, prepositions, articles, auxiliary verbs, pronouns etc. are function words.

As far as stress in sentences is concerned, it is the content words that carry the stress. Word stress in sentences falls on the syllable of the content word that is normally stressed when the word is spoken in isolation.
e.g.
They 'flew to 'Paris to 'spend their 'holiday.

We'll 'see you at the 'station.

I 'want you to in'vite her 'now.

'Jad and 'Masa will 'never for'get that ex'citing ad'venture.

Thus, we find that in the words where we have stress, the stress is placed on the same syllable where we place it when the word is said in isolation e.g. the words 'spent, 'holiday, ex'citing and ad'venture. However, stress can be placed on any word for the purpose of emphasis or contrast.
e.g. 'What are you 'looking 'for? (here the stress is placed on the preposition *'for'* for emphatic purposes).

Learners must pay attention to both word and sentence stress. It is not sufficient to know just the sounds that make up a word, knowing where to place the stress is an essential part of the speech process.
e.g. They 'recited 'Hamlet (meaning they re-sighted Hamlet) instead of they re'cited 'Hamlet.

6.4. Strong and Weak Forms

As mentioned earlier words in languages are of two types: function words and content words. In English, almost all the words which have both a **strong** and a **weak** form are function words. In certain circumstances, these words can be pronounced in their strong forms, but they are more frequently pronounced in their weak forms. There are certain contexts where only the strong form of functional words is acceptable and others where the weak form is the normal pronunciation. For example, if a function word is said in isolation or is stressed, the **strong form** is used. e.g. the strong form of the word *"can"* is /kæn/, and the strong form of the word *"and"* is /ænd/. But if a function word is unstressed, usually spoken in connected speech, the **weak form** is used. e.g. the weak form of the word "can" is /kən/ and the weak form of the word "and" is /ən/ or /ənd/.
Native speakers of English find a strong form of pronunciation unnatural and foreign sounding, and most native speakers use the weak forms of function words in speech, so learners of English need to learn about these weak forms.
Usually a function word is spoken in its strong form in the following instances:

1. When it occurs at the end of a sentence.
   e.g. Coffee is what I'm fond **of** /ɒv /.

2. When it is being contrasted with another word.
   e.g. The letter is **from** /frɒm/ her, not **to** /tu:/ her.

3. When it is emphasized, or when it is being quoted.
   e.g. You **must** / mʌst/ give me more of your time.
   e.g. You shouldn't put "**and**" /ænd/ at the end of a sentence.

The most common weak-form words:

"The"
Strong Form : /ði:/
Weak Forms : /ðə/ before consonants and /ðɪ/ before vowels

"A", "An"
Strong Forms : /eɪ/ and /æn/ respectively
Weak Forms : /ə/ before consonants and /ən/ before vowels

"And"
Strong Form : /ænd/
Weak Form : /ən/

"But"
Strong Form : /bʌt/
Weak Form : /bət/

"She", "He", "We", "You"
Strong Forms : /ʃiː/, /hiː/, /wiː/, /jʊː/ respectively.
Weak Forms : /ʃɪ/, /hɪ/ (or simply /ɪ/), /wɪ/, /jʊ/ respectively.

"Him"
Strong Forms : /hɪm/
Weak Forms : /ɪm/

"Her"
Strong Forms : /həːr/ or /həː/
Weak Forms : /ər/ before vowels and /ə/ before consonants and /hər/ at the beginning of a sentence.

"There" and "That"
The words "there" and "that" are pronounced in their weak forms only when they do *not* have a demonstrative function.

e.g. "There she is." cf "There should be a place for everyone."
(strong form) /ðeər/ (weak form) /ðə/

"Put that away.". cf "I think that she is right."
(strong form) /ðæt/ (week form) /ðət/

From the examples given, it is clear that /ə/, /ɪ/, and /ʊ/ are the most common vowels found in the weak forms of function words. That is because they are the vowels that are found in weak syllables. Of these three vowels, /ə/ is used most often.

6.5. Rhythm

The notion of **rhythm** involves some noticeable event happening at regular intervals of time. One can feel the rhythm of a heartbeat, a flashing light, a piece of music … etc. Similarly, the distribution of stress beats in an utterance is its rhythmic pattern.

6.5.1. Rhythm in English

English speech is rhythmical, and the rhythm is evident in the regular occurrence of stressed syllables. English has **stress-timed rhythm** which means that **stressed** syllables will tend to occur at relatively regular or equal intervals of time whether they are separated by unstressed syllables or not and regardless of the number of unstressed syllables that intervene. e.g.

'James has been	'shot	'dead

In the above example the same time should be spent from the word *James* to the word *shot* to the word *dead.*

In the following sentence, the stressed syllables are given numbers: syllables 1 and 2 are not separated by any unstressed syllables, 2 and 3 are separated by one unstressed syllable, 3 and 4 by two, and 4 and 5 by three, but the time from each stressed syllable to the next is still more or less the same. Thus, the same time should be spent from the word *walk* to *down* to *path* to *end* to *nal.*

'Walk	'down	the	'path	to	the	'end	of	the	ca 'nal
1	2		3			4			5

Some writers have developed theories of English rhythm in which a unit of rhythm, the **foot**, is used; the foot begins with a stressed syllable and includes all following unstressed syllables up to, but not including, the following stressed syllable. i.e.

|'Walk	|'down the	|'path to the	|'end of the ca	|'nal
1	2	3	4	5

In a stress-timed language like English, all the **feet** are supposed to be of roughly the same duration. This concept is important to foreign learners of English because it reminds them of the difference in English between strong and weak syllables. If you want to sound more like a native speaker, you should not pronounce the stressed and unstressed syllables with the same duration.

This rhythmic pattern of English affects the length and stress of words. Thus, a syllable in a monosyllabic word is longer than the same syllable in a word consisting of two or more syllables. e.g.
'come (longer syllable)
be'come (shorter syllable)
'outcome (shortest syllable)

6.5.2. Stress-Timed and Syllable-Timed Rhythm

Besides stress-timed languages, there are **syllable-timed** languages. French is an example of a syllable-timed language where all the syllables of an utterance (stressed and unstressed) are separated by equal intervals.

6.6. Intonation

In speech, the pitch of the voice continues to rise and fall. Variation of pitch is **intonation**. When the vocal folds are in motion, the frequency of their vibration changes and that gives rise to modulations of pitch. Intonation is an important feature of speech because it serves a number of functions:

- It enables us to express emotions and attitudes as we speak.
- It helps to produce the effect of prominence on syllables that need to be perceived as stressed.
- It enables the listener to recognize the grammar and syntactic structure of what is being said, such as the placement of boundaries between phrases, clauses or sentences, or the difference between questions and statements.
- It can signal to the listener what is to be taken as "new" information and what is already "given".
- It can convey to the listener what kind of response is expected.

6.6.1. Tone Unit (Tone Group)

A **tone unit** is the part of a sentence over which a particular intonation pattern extends. In its smallest form the tone unit may consist of only one syllable, but usually a tone unit is larger than a syllable. There may be one or more tone units in an English utterance. In what follows, we will consider the tone units which consist of one syllable only.

6.6.2. Tone

Speakers have a choice of saying a one-syllable tone unit with the pitch remaining at a constant level, or with the pitch changing from one level to another. The overall behaviour of the pitch in these tone groups is called the **tone**; a one-syllable word can be said with either a **level tone** or a **moving tone**. There are different types of moving tones, like the **falling tone**, the **rising tone**, etc. In English, unlike other languages, a change in tone will not result in a change of lexical meaning, but a difference in tone may show a difference in attitude.

6.6.3 Some Functions of English Tones

Fall (`yes `no) : This tone is regarded as more or less neutral, and gives an impression of finality.

Rise ('yes 'no) : This tone conveys an impression that something more is to follow.

Fall-Rise (` ´yes ` ´no) : This tone can be described as showing "limited agreement" or "response with reservations".

Rise-Fall ({ yes { no) : This tone is used to convey rather strong feelings of approval, disapproval or surprise.

Level (¯yes ¯no) : This tone conveys a feeling of saying something routine, uninteresting or boring.

The above mentioned functions of tones are only general descriptions. It must be noted that the same tone could be used in other contexts and for more than one function.

UNIT SEVEN

Contents of Unit Seven:

7.1. Features of Connected Speech

Sometimes when a word is spoken in connected speech (i.e. it occurs in a phrase or in a sentence), it is pronounced with sounds different from those it has when it is spoken in isolation. A number of phonetic processes are responsible for the difference. These processes are **Assimilation, Elision,** and **Linking**. All these processes tend to facilitate articulation by reducing the amount of effort a person has to make in speaking.

7.1.1. Assimilation

A significant difference in natural connected speech is the way that sounds belonging to one word can cause changes in sounds belonging to neighbouring words. When we find a phoneme realized differently as a result of being near some other phoneme belonging to a neighbouring word, we call this an instance of **assimilation**.

Assimilation often occurs across word boundaries, and is more likely to be found in rapid, casual speech and less likely in slow, careful speech. It can be of two kinds: **progressive** or **regressive**, depending on the direction to which the "assimilating influence" moves. If a sound (usually a consonant) becomes more like the sound that

precedes it, the process is called **progressive assimilation** because the assimilating influence has moved forward from the final phoneme in the previous word to the initial phoneme in the following word. If a sound becomes more like the sound that follows it, the process is called **regressive assimilation** because the assimilating influence has moved backward from the initial phoneme in the following word to the final phoneme in the previous word. In English, regressive assimilation is much more common than progressive assimilation.

With consonants, three types of assimilation may occur:
1- Assimilation of place of articulation.
2- Assimilation of manner of articulation.
3- Assimilation of voicing.

7.1.1.1. Assimilation of Place

Examples of **assimilation due to place of articulation** is usually observed in some cases where a final consonant with alveolar place of articulation is followed by an initial consonant with a place of articulation that is **not** alveolar. Examples of this type of assimilation is found when alveolar consonants like /t/, /d/, /n/ .... etc. tend to assimilate to a following consonant with a place of articulation that is **not** alveolar, particularly bilabial, velar or dental as in the following examples:

That person /ðæt pəːsn/ becomes /ðæp pəːsn/
(/t/ alveolar becomes /p/ bilabial)

light blue / laɪt bluː / becomes / laɪp bluː /
(/t/ alveolar becomes /b/ bilabial)

Similarly, before a dental consonant, /t/ will change to a dental plosive, i.e the /t/ will be made with the tongue on the teeth instead of the alveolar ridge, e.g.

that thing / ðæt θɪŋ / becomes / ðæt θɪŋ / with the /t/ here dental
(/t/ alveolar and /θ/ dental, thus /t/ becomes dental /t/)

get those /get ðəʊz/ becomes /get ðəʊz/
(/t/ alveolar and /ð/ dental, thus /t/ becomes dental /t̪/)

Before a velar consonant, the /t/ will become /k/, e.g.
that case /ðæt keɪs/ becomes /ðæk keɪs/
(/t/ alveolar becomes /k/ velar)

bright colour /braɪt kʌlə/ becomes /braɪk kʌlə/
(/t/ alveolar becomes /k/ velar)

quite good /kwaɪt gʊd/ becomes /kwaɪk gʊd/
(/t/ alveolar and /k/ velar)

In similar contexts, /d/ would become /b/, /d/ dental, and /g/, respectively and /n/ would become /m/, /n/, and /ŋ/.

However, the same is not true of the alveolar fricatives: /s/ and /z/ which behave differently, the only noticeable change being that /s/ becomes /ʃ/, and /z/ becomes /ʒ/ when followed by /ʃ/ or /j/, as in *'this shoe'* /ðɪs ʃuː/ which becomes /ðɪʃ ʃuː/ and *'those years'* /ðəʊz jɪəz/ which becomes /ðəʊʒ jɪəz/.

It is important to remember that consonants that have undergone assimilation have not disappeared.

7.1.1.2. Assimilation of Manner

Assimilation of manner is less noticeable. It is a regressive type of assimilation and the changes are towards an 'easier' consonant (with less obstruction of the airflow). It is possible to find cases where a final plosive becomes a fricative or nasal as in the following examples:

e.g. *that side* / ðæt saɪd / becomes /ðæs saɪd/
(/t/ is a plosive and /s/ is a fricative)

good night /gʊd naɪt/ becomes /gʊn naɪt/
(/d/ is a plosive and /n/ is a nasal)

In the previous examples, the final consonant is a plosive; it has been changed into a fricative in the first example and into a nasal in the second.

There is only one incidence of progressive assimilation due to manner and that is when we have /ð / as an initial consonant.
e.g *'in the'* /ɪn ðə/ becomes /ɪn nə/
and *'get the'* /get ðəm/ becomes /get təm /
and *'read these'* /rɪ:d ðɪ:z/ becomes /rɪ:d dɪ:z /

7.1.1.3. Assimilation of Voice

Assimilation of voice is also found but – only regressive. If the final consonant is lenis (voiced) and the initial consonant is fortis (voiceless), the lenis will be devoiced. If the final consonant is fortis and the initial consonant is lenis, assimilation of voice never takes place in English like it does in other languages, e.g.
'have to' /hæv tʊ: / becomes / hæf tʊ:/

Up till this point we have been looking at some clear cases of assimilation across word boundaries. However, similar effects are also observable across morpheme boundaries. A similar example of a type of assimilation that has become fixed is the progressive assimilation of voice with the suffixes /s/ and /z/; when the verb carries a third person singular '-s' suffix: Final 's' is pronounced as /s/ if preceded by a consonant that is fortis (voiceless) and as /z/ if preceded by a consonant that is lenis (voiced), e.g.
cats, dogs; jumps and runs; pat's and pam's.

7.1.2. Elision

Elision is when under certain circumstances a phoneme disappears; i.e. in certain contexts a phoneme will be realized as zero or elided.

This is typical of rapid casual speech. The following are some examples of elision in English:

(i) Loss of a weak vowel after /p, t, k/ in words like *potato* /pʰteɪtəʊ/, *tomato* /tʰmɑːtəʊ/, *perhaps* /pʰhæps/, *today* /tʰdeɪ/, canary /kʰneərɪ/.

(ii) Weak vowel + / m̩/, /l/ or /r becomes syllabic consonant (syllables in which no consonant is found) as in the following words: *tonight* /tn̩aɪt/, *police* / pl̩iːs/, *correct* / kr̩ekt/.

(iii) Avoidance of complex consonant clusters. It has been said that a normal English speaker would ever pronounce all the consonants between the last two words of the following:
George the sixth's throne /dʒɔːdʒ ðə sɪks θrəʊn/,
Other examples of elision are:
acts /æks /,
aspects /æspeks/,
scripts /skrɪps/.

(iv) Loss of final /v/ in 'of' before consonants. e.g.
lots of them /lɒts ə ðəm/
waste of money /weɪst ə mʌnɪ /

(v) Contractions. It is not clear whether to consider contractions as forms of elision or not. The fact that they always appear with special spelling forms makes them seem rather different from the above examples. Some examples of contractions are:
had = 'd ; is , has = 's; will = 'll, have = 've

7.1.3. Linking

In connected speech, we sometimes link words together. This often happens when two vowels occur next to each other across word boundaries. There are different ways to link words together. The most common ones are the use of the **linking r** and the **intrusive r.**

1. Linking r

The phoneme /r/ cannot occur in syllable-final position in RP English, but when a word ends in /r/, and a word beginning with a vowel follows, the usual pronunciation for RP speakers is to pronounce the word with final /r/, e.g.
'Here' /hɪə/,
But *'here are'* / hɪər ə/.
'Four' /fo: /,
But *'four eggs'* /fo:r egz/.

2. Intrusive r

Many RP speakers use /r/ even if it is not in the word to link a word ending with a vowel. This is known as the **intrusive 'r'**, e.g.
Formula A / fo:mjələr eɪ/,
Media event /mɪdɪər ɪvent/.
India office /ɪndɪər ɒfɪs /

EXERCISES

1. Transcribe the underlined vowel sounds in the following words (All the vowels concerned are short vowels.): (After you finish the exercise use a good dictionary to check the correct transcription)

dog	mud	run	got
hid	but	cat	think
fill	chat	not	pen
academy	accent	any	attack
bachelor	beyond	blister	breakfast
bury	cactus	custom	classic
combat	compliment	deadlock	definite
discover	dragon	embed	envisage
explicit	extra	family	ferment
fixative	forbid	forest	forgot

2. Transcribe the underlined vowels in the following words. The vowels can be long vowels, short vowels or diphthongs. (After you finish the exercise use a good dictionary to check the correct transcription).

boat	coat	pot	pear
peak	ball	pay	boil
girl	clear	graft	grand
good	tart	board	care
art	cook	pick	guy
legend	butter	interchange	livelihood
outrage	pervasive	quiet	reward
sensation	tragedy	Utopia	verdict
wholesome	alternate	biology	circulate
counsellor	derogatory	endeavour	frustrate

3. Transcribe the following words, paying special attention to the pronunciations of the past tense markers. (After you finish the exercise use a good dictionary to check the correct transcription)

started	wanted	loaded	banned
jammed	pulled	jumped	hoped
packed	looked	grabbed	thanked
repeated	pleaded	dropped	advanced
mouthed	answered	regretted	damaged

4. Transcribe the following words, paying special attention to pronunciations of the plural (or third person singular, or possessive) markers. (After you finish the exercise use a good dictionary to check the correct transcription)

bucks	mats	advises	George's
Alice's	jumps	Herbert's	packs
Clifford's	fans	John's	risks
mats	regulates	leaves	goes
Mary's	differences	exposes	months

5. Transcribe the pronunciations of all the letters of the English alphabet.

6. Read the following passage and identify all instances of short vowels.

A salesperson's speech, recently recorded, has an interesting thesis. Human beings should solve problems. And human beings should create problems to solve. For instance, a man's car will not start. He has a problem. An auto-parts salesperson solves it by selling him a battery. I think that by nature human beings are solvers of problems. A teacher baffles his class with problems. Then he helps the students solve them.

7. Read the following passage and identify all instances of long vowels and diphthongs.

A salesperson's speech recently recorded has an interesting thesis. Human beings should solve problems. And human beings should create problems to solve. For instance, a man's car will not start. He has a problem. An auto-parts salesperson solves it by selling him a battery. I think that by nature human beings are solvers of problems. A teacher baffles his class with problems. Then he helps the students solve them.

8. Practise saying the following pairs of words. What do you notice about the movements of the lips and the tongue?

tea .....two	tea ... tar	tar ...two	two...tea
pea ... paw	tier ... tear (verb)	tour ...tear (verb)	

9. Practise the difference in the following pairs of words.

they	day	thought	taught
than	Dan	thank	tank
those	doze	theme	team
loathe	load	both	boat

10. Practise saying the following phrases, concentrating on the clarity of the "th" and "t" sounds.

What's the time?	Who's that?
Those three	On both sides
In three months' time	

11. Practise asking the questions and choosing the correct answers.

Questions	Answers
What's this?	These are zips.
Who's that?	Those are zebra.
What are these?	That's Zoe.
What are those?	This is a zoo.

12. Make up a meaningful sentence with all (or most of) the words beginning with an /s/ sound.

13. Say the following tongue twisters.

a. Peter Piper picked a pepper.
b. Tiny Tim took his time.
c. Ken can't cook cauliflower.
d. She sells seashells on the seashore.
e. Does your shirt shop stick short socks with spots?
f. So they flew through the flaw in the flue.
g. A flea and a fly in a flue were stuck and didn't know what to do.
h. "Let us flee!" said the fly.
i. "Let us fly!" said the flea.
j. While we were walking, we were watching window washers wash Washington's windows with warm washing water.

14. Aspirated and Unaspirated Plosives: Try saying the following pairs of words:

e.g.	pea	par	tea	two
	bee	spar	Dee	do

To feel the difference between aspirated and unaspirated sounds, try saying these words again while doing one of the following:
a. Blow out burning match or candle with puff of air.
b. Blow strip of paper with puff of air so that it moves

15. Identify the places where elision can take place in the following phrases. Transcribe the words first as they would be pronounced out of context, and then re-transcribe them to show the operation of elision.

	Before Elision	After Elision
roast beef	_____	_____
stuffed tomatoes	_____	_____
chained together	_____	_____

16. Transcribe the words in the following phrases as they would be pronounced out of context. Check for cases of assimilation and re-transcribe them to show the operation of assimilation.

	Before Assimilation	After Assimilation
Red Cross	_____	_____
nice shape	_____	_____

17. What are the letters (letter combinations) which represent the plosive sounds /p, t, k, b. d, g/ respectively? Give examples to support your claims.

18. What are the letters (letter combinations) which represent the affricate sounds /tʃ , ʒd/ respectively. Give examples to support your claims.

19. Which consonant sounds do the following letter combinations represent? Give examples to support your claims.

ck, ph, qu

20. What vowel sounds do the following letters represent? Give examples to support your claims.

a, e, i, o, u

21. What vowel sounds do the following letter combinations represent? Give examples to support your claims.

au, aw, ea, ee, ei, ey, eu, ew, ie, oa, oi, oy, oo ui, ou, ow

سعر البيع للطالب : ١٠٠ ل.س