# Introduction

## 1 Purpose of the Course

An important purpose of the course is to explain the standard English accent in England to English learners. Simply put, this book is intended to help Chinese learners to speak English with a good pronunciation. But what is a good pronunciation? A good pronunciation means that what you say can be easily or readily understood by present-day native English speakers. It is a comfortably intelligible pronunciation. It also implies that a non-native learner can communicate with native English speakers effectively. The acquisition of a good pronunciation can be obtained through a thorough knowledge of the English sound system and adequate, systematically designed practices. It is an enjoyable and life-long business. The specific requirement for a good English pronunciation can be set forth below:

- 1) To pronounce correctly all the individual speech sounds in English.
- 2) To pronounce correctly the speech sounds in their combinations in isolated words as well as in sentences.
- 3) To speak fluently with correct rhythm, including the correct placement of stresses, pauses and the transition of sounds according to the context.
  - 4) To speak with appropriate intonation according to the context.

Effective speaking, whether it takes place in a formal public setting or in a relaxed social context, involves more than pronunciation of individual sounds. However, most Chinese learners of English usually concentrate on the sounds of the language (known technically as the **segments**) when it comes to the pronunciation study. It is indeed important to learn to recognize and reproduce the consonant and vowel sounds of English and the differences between them. But rhythm and intonation (also known as prosody or **suprasegmentals**) aspects are mostly neglected. Teachers fail to teach them and learners fail to learn them. Like other elements of language, some gifted learners will pick them up more or less unconsciously; but many will not. Famous Professor of phonetics J. C Wells once commented: "native speakers of English know that learners have difficulty with vowels and consonants.



When interacting with someone who is not a native speaker of English, they make allowances for segmental errors, but they do not make allowances for errors of intenation."

If we wish to acquire a good English pronunciation, we should adjust our focus to the importance of speech melody. In this way can we harvest a good mastery of speech sounds to fulfill the communicative function of English pronunciation study.

# 2 Model of English Pronunciation

Present-day English has a great variety of accents since it is spoken not only in Britain but also in the United States of America, Canada, Australia, New Zealand, South Africa and so on. Thus, English has so many forms of pronunciation and its pronunciation varies a great deal in different geographical areas. And it is clearly best to choose a model used by those who speak English as their native tongue. Two types of native English pronunciation stand out of the potential models to be imitated, i.e. British English (BrE) and American English (AmE). Wherever English is taught, one of these two types of English is most likely to be provided as the model for pronunciation.

The type of English pronunciation described and introduced in this book is known as Received Pronunciation (RP). RP is based on London dialect and generally spoken among the educated people in Southern England. It is easily understood in all English-speaking countries. This type of English has been studied, investigated, described and recorded more comprehensively and thoroughly than any other type. RP has been adopted in China as a teaching standard in middle schools and colleges for decades. Also, RP is the form of speech to be heard from most BBC newsreaders.

However, in recent years, some people try to learn American English. Generally speaking, American English refers to the native language spoken by the majority of persons living in the United States. The model called General American (GA) is spoken by educated American and is widely used in textbooks, radio and TV programs in the U.S.A.

The pronunciation learners can learn either BrE or AmE, however, they are advised not to mix them up. In this book, we mainly describe Received Pronunciation, though in the Appendix II we will briefly discuss the differences between British English and American English in terms of pronunciation.

#### 3 Spelling and Sounds

There are 26 letters in the English alphabet, i.e. A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z. There are five vowel letters, i.e. A, E, I, O, U. And there are 21 consonant letters, i.e. B, C, D, F, G, H, J, K, L, M, N, P, Q, R, S, T, V, W, X, Y, Z. But there are more than 40 vowel and consonant sounds in English. The number of sounds in a word is not usually the same as the number of letters. We can see this if we write the word duck using phonemic symbols. For example, /dnk/ (4 letters but 3 sounds).

#### 3.1 English Spelling System

Before discussing the sound system of English in any detail, it is necessary to make a distinction between the sounds of English and the spelling of English. The English spelling system often fails to represent the sounds of English in a straightforward manner. In other words, there is often no one-to-one correspondence between the sounds that we hear and the letters that we see on the page. An examination of the English spelling system reveals many examples of this discrepancy between spelling and sounds, for example:

### Different letters may represent the same sound.

Try to pronounce the words below.

		1				
to	two	too	through	threw	clue	shoe
10	LWU	100	unougn	CIII C VV	Ciuc	SHOC

All of these words contain the same vowel sound but it is represented by seven different spellings.

### The same letter represents different sounds.

Try to pronounce the words below and notice the letter a is pronounced in five different vowel sounds.

	cake	mat	call	any	sofa	
--	------	-----	------	-----	------	--

Now pronounce the next set of words and notice that the letter s is pronounced in three different sounds.

	4		
see	pleasure	resion	
300	predistre	1001511	

In the first word see, the letter s is pronounced in its usual way. In the word



pleasure, it is pronounced like the final sound in the word beige, and in the word resign, it is pronounced like the first sound in the word zoo.

### Combinations of letters may represent one sound.

It is possible for a combination of letters to represent only one sound. If you pronounce the words below, you will notice that "gh" "ph", and "ea" represent only one sound even though the spelling represents one single sound in two letters.

			$\overline{}$
rough	physics	head	

### Letters may represent no sounds.

There are a lot of silent letters in English. Pronounce the words below and you will notice that the letters in italics are not pronounced at all.

who	cas <i>t</i> le	ex <i>h</i> ibit	fas <i>t</i> en	honor
cupboard	comb	know	ta/k	island
ha <i>l</i> f	hour	<i>k</i> nee	diaphragm	<i>k</i> night
autum <i>n</i>	sign	debt	<i>k</i> nife	lis <i>t</i> en
reign	dou <i>b</i> t	has <i>t</i> en	vehicle	exhaust
subtle	two	Chris <i>t</i> mas	often	handkerchief
answer	ca <i>l</i> f	dough	han <i>d</i> some	psalm
We <i>d</i> nesday	san <i>d</i> wich			

After this brief examination of English spelling system, we can begin to understand what led George Bernard Shaw to suggest that English spelling could be used to spell the word *fish* as *ghoti*—the *gh* as it sounds in a word like *rough*, the *o* as it sounds in a word like *women*, and the *ti* as it sounds in a word like *nation*. Shaw's suggested spelling, at first glance, might seem quite ridiculous; however, it illustrates clearly the way in which a particular sound in English can be spelled in quite different ways.

### 3.2 Sound-Spelling Correspondences

The lack of sound-spelling correspondence illustrated in the previous examples should not be taken to mean that there are no sound-spelling regularities in English. Generally



speaking, there is a more consistent relationship between letters and the consonant sounds than between letters and vowels. This is partly because there are many more vowels in English than letters in the Roman alphabet and also because, historically, changes in the pronunciation of English have affected vowel sounds much more than consonant sounds. For example, letters b, m, and n only have a single pronunciation, unless they are silent.

b	m	n
boat	moat	no
rubber	hammer	winner
robe	home	wine

Other consonant letters are also consistent in their pronunciation but may appear in combination with another letter giving them a different pronunciation. For example, letter p is normally pronounced in one way when it is alone but when it is combined with h, it is pronounced in a different way, that is, like the letter f.

"p" alone = /p/	"p" + "h" = /f/
pat	philosophy
top	physics
copper	photograph

The pronunciation of other consonant letters can be predicted on the basis of their combination with vowel letters. For example, the letter c is pronounced like the letter s in *sent* when followed by the vowel letters i, e, or y, and like the letter k in *kite* when followed by the vowel letters a, o, or u, or when it occurs at the end of a word. Thus:

- c before i, e, and y = /s/
- e.g. city, cigar, certain, census, cent
- c before a, o, and u and at the end of a word = /k/
- e.g. cat, call, cone, come, custom, cup, plastic

This predictable difference in pronunciation of the letter c can also be observed in pairs of words that are related in meaning:

electric electricity

Notice that English spelling system preserves the same spelling in these related words even though the pronunciation of the letter c changes.

Although the correspondences between vowel sounds and vowel letters are very



complex, there are some generalizations that can be made regarding sound-spelling correspondences with vowels. One of these involves the traditional division of vowels into two categories, that is, "long" and "short" vowels (although "long" and "short" are misnomers in phonetic terms as they do not reflect the actual length of these sounds). When the vowel letters a, e, i, o and u occur in words ending in a silent e letter, they are pronounced with their long sound which is the sound heard when these letters are pronounced in isolation (e.g. when reciting the alphabet). When the same vowel letters occur in words without a silent e, they are pronounced with their short sounds. So, for example, we have:

Letter	Column 1(Long)	Column 2(Short)
a	mate /eɪ/	mat /æ/
е	Pete /iː/	pet /e/
i	hide /aɪ/	hi,d /ɪ/
0	note /əu/	not /p/
u	cute /ju:/	cut /n/

To decide which of its two possible sounds a letter in a word stands for, we must look at what letters follow the vowel letter in the word. If we do this we will find the following three patterns.

### Pattern A

If the single vowel letter is followed by a single consonant letter, then the vowel sound will be the one in column 2. Other examples are given in below.

hop	bat	bit	nut	kit	sit	set	
bed	cat	red	sat	top			

### Pattern B

If the single vowel letter is followed by two consonant letters, it will also have the sound in column 2. Other examples are given in below.

Rest	past	must	cost	film	cross	half
bulb	lump	knock				

#### Pattern C

If the single vowel letter is followed by a consonant and the letter e (at the end of the word), the single vowel letter will represent the sound in column 1. Other examples are given in below.





cake	make	side	joke	mute	home	came	like
hoľe	June	while					

This is the "silent e" rule which English children are taught at school, usually in one of the following formulas: "When two vowels go walking, the first one does the talking." or "An e at the end of a word makes the vowel say its name." (i.e. the letter name used when reciting the alphabet)

Another pattern that can be pointed out is that the pronunciation of vowels in longer words can be predicted by counting the number of consonants after the vowel. One consonant after a vowel results in a "long" vowel sound while two results in a "short" sound. So, for instance, "completion" will have a "long" "e" while "congestion" will have a "short" "e". Kenworthy (1987) claims that this rule is very useful for learners as it is effective more than 99 percent of the time.

There are obviously links between spelling and word stress rules as well and these will be discussed later on, in Chapter 4.

While there are several vowel letter-sound correspondences to be listed here, their large number and many exceptions make their usefulness to ESL/EFL learners somewhat questionable. However, once we have mastered enough spelling, we usually become quite proficient at guessing the pronunciation of an unknown word based solely on the spelling.

# Phonemic and Phonetic Transcription

If we want to represent speech sounds in writing we can transcribe the sounds using either:

- (a) phonemic symbols / / (in slanted brackets);
- (b) phonetic symbols [] (in square brackets).

Phonemic symbols represent the phonemes of English – for example /u/. They are generalizations, not auditory realities. There are 44 phonemes in RP.

Phonetic symbols represent auditory realities and are not related to a specific language: they are international (IPA = International Phonetic Alphabet).

Phonetic transcription is a transcription that is much more accurate in phonetic detail, and contained much more information than a phonemic transcription. A phonetic transcription containing a lot of information about the exact quality of the sounds would be called a narrow phonetic transcription, while one which only included a little more



information than a phonemic transcription would be called a **broad** phonetic transcription. Most of the transcriptions in this book use phonemic symbols as they represent the phonemes of English but occasionally, if we want to show more details about contextual variations, we may use phonetic symbols as well.

**Diacritics** are symbols used to add more, precise information to phonetic symbols, for example, the symbol [ ~ ] shows that a sound is nasalized.

**Phonemic transcription** does not represent precise phonetic qualities and therefore there are several possible symbols to represent one phoneme. Unfortunately, this means that different books on RP use different symbols. We will follow the IPA consonants and use length marks for vowels (as in Roach 2000, Wells 2008), that is, recognizing qualitative and quantitative differences.

## 5 Key to Phonetic Symbols and Other Signs

Throughout this book, we will use the symbols below from the phonetic alphabet to represent English sounds. When you encounter these symbols, remember that they are intended to represent sounds. That is they are not letters, but symbols for sounds.

### I . Symbols for phonemes

	Vowels			Consonants	
i:	as in see	/siː/	р	as in pie	/paɪ/
I	as in sit	/sit/	b	as in bad	/bæd/
е	as in ten	/ten/	t	as in tea	/ti:/
æ	as in hat	/hæt/	d	as in do	/du:/
			k	as in cat	/kæt/
Λ	as in cup	/kʌp/	g	as in get	/get/
3:	as in fur	/fa:/			
Э	as in ago	/əˈgəʊ/	f	as in fair	/feə/
			V	as in voice	/vois/
a:	as in arm	/a:m/	θ	as in thin	/0in/
D	as in got	/gpt/	ð	as in then	/ðen/
0:	as in saw	/so:/	S	as in so	/səu/
U	as in put	/put/	Z	as in zoo	/zu:/
u:	as in too	/tu:/	ſ	as in she	/ʃi:/
			3	as in vision .	/vɪʒn/
еі	as in say	/seɪ/	h	as in he	/hi:/

аі	as in buy	/baɪ/			
IC	as in toy	/ict/	t∫	as in chin	/t∫in/
θŪ	as in go	/gəu/	dʒ	as in jump	/dʒʌmp/
au	as in now	/nau/			
			m	as in may	/meɪ/
19	as in hear	/hɪə/	n	as in no	/nəʊ/
еә	as in care	/keə/	ŋ	as in sing	/sɪŋ/
uə	as in poor	/puə/			
			1	as in let	/let/
			r	as in red	/red/
			j	as in yes	/jes/
			W	as in wet	/wet/

### II. Rhythm

- = primary stress, as in open /'aupan/
- = secondary stress, as in ice cream /'aɪsˌkriːm/
- ' '= even stress, as in Chinese /'t[ar'ni:z/
- / = rhythm-unit boundary
- = tone-unit boundary
- = pause

### III. Intonation

- \ fall
- 7 rise
- √ fall rise
- rise − fall
- level

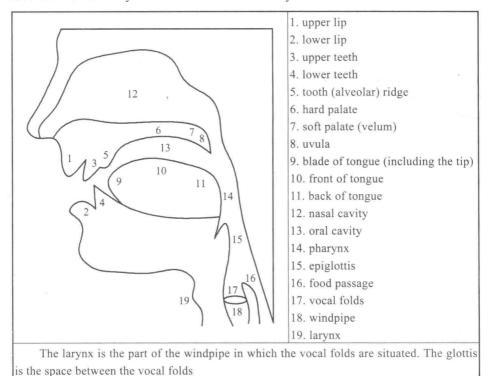


Individual Sounds of English

# Unit 1 Articulators

All the sounds we make when we speak are the result of muscles contracting. The muscles in the chest that we use for breathing produce the flow of air that is needed for almost all speech sounds; muscles in the larynx produce many different modifications in the flow of air from the chest to mouth. After passing through the larynx, the air goes through what we called **vocal tract**, which ends at the mouth and nostrils. Here the air from the lungs escapes into the atmosphere. We have a large and complex set of muscles that can produce changes in the shape of the vocal tract, and in order to learn how the sounds of speech are produced it is necessary to become familiar with the different parts of the vocal tract. These different parts are called **articulators**.

The figure below is a diagram showing a side view of the articulators. You need to look at it carefully as the articulators are described, and you will find it's useful to have a mirror so that you can look at the inside of your mouth.





- 1) The **lips** (upper and lower) are important in speech. They can be pressed together (when we produce the sounds /p/, /b/), brought into contact with the teeth (as in /f/, /v/), or rounded to produce the lip-shape for vowels like /u:/. Sounds in which the lips are in contact with each other are called **bilabial**, while those with lip-to-teeth contact are called **labiodental**.
- 2) The **teeth** (upper and lower) are usually only at the front of the mouth, immediately behind the lips. This is for the sake of a simple diagram, and you should remember that most speakers have teeth to the sides of their mouths, back almost to the soft palate. 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 **dental**.
- 3) The **alveolar ridge** is between the top front teeth and the hard palate. You can feel its shape with your tongue. Its surface is really much tougher than it feels, and is covered with little ridges. You can only see these if you have a mirror small enough to go inside your mouth (such as those used by dentists). Sounds made with the tongue touching (such as /t/ and /d/) are called **alveolar**.
- 4) The **hard palate** is often called the "roof of the mouth". You can feel its smooth curved surface with your tongue.
- 5) The **soft palate** or **velum** is seen in the diagram in a position that allows air to pass through the nose and through the mouth. Yours is probably in that position now, but often in speech it is raised so that air cannot escape through the nose. The other important thing about the velum is that 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.
- 6) The **tongue** is, of course, a very important articulator and it can be moved into many different places and different shapes. It is usual to divide the tongue into different parts, though there are no clear dividing lines within the tongue. i.e. **tip**, **blade**, **front**, **back** and **root**.
- 7) The **pharynx** is a tube which 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, one part being the back of the mouth and the other being the beginning of the way through the nasal cavity. If you look at your mirror with your mouth open, you can see the back of the pharynx.
- 8) The **larynx** has several very important functions in speech. Inside the larynx are the **vocal folds**, two thick flaps of muscle rather like a pair of lips; an older name

for these is vocal cords, which can be brought near together or down apart. If the vocal folds are brought near together, the compressed air in the lungs has to force its way out and make the vocal folds vibrate, thus producing voiced sounds such as vowels and voiced consonants. If the vocal folds are down apart, the air leaves freely. There is no vibration of the vocal folds. The sound, thus made, is voiceless. And the interference with the air passage in various ways and at various places makes the sound different.

The eight articulators described above are the main ones used in speech, but there are two other things to remember. Firstly, the jaws could also be described as an articulator; certainly we move the lower jaw a lot in speaking. But the jaws are not articulators in the same way as the others, because they themselves cannot make contact with other articulators. Secondly, although there is practically nothing that we can do with the nose and the nasal cavity, they are a very important part of our equipment for making sounds, particularly nasal consonants such as /m/, /n/.



# Unit 2 English Phonemes

# 2.1 Phonemes and Allophones

Natural speech is a continuous stream of sounds which we "segment" into pieces and a **phoneme** is the smallest, linguistically meaningful segment of speech. So, the words *man* and *pan* can each be segmented into three sounds or phonemes and what distinguishes the meaning of one word from the other is the different initial phoneme /m/ or /b/. Both these phonemes have features in common, that is, they are both bilabial but /m/ is a bilabial nasal while /p/ is a bilabial plosive.

Phonemes are abstractions, they are not auditory realities. In the same way, the letters of the alphabet are representations, that is, just as we can write letter "b" in various ways and it is still understood as representing a "b", for example, "b, B, b, b, b".

We can say the sound "a" in various ways in the same word and it is still understood as representing the phoneme /æ/, for example, *stag*. The different phonetic realizations of the phoneme are called **allophones**.

If we were to try to classify all the possible variations in an explanation of the sound system, the classification would become impractical. Languages tolerate a significant level of sound variation before comprehension is affected. Consider the variation that might occur in the pronunciation of the phoneme /r/.

Typically, in RP, this is pronounced as a post-alveolar approximant in words like *three* or *run*. However, there are considerable differences in the production of the /r/, depending on its position in words, that is, **positional variation**. For instance, the degree of lip rounding will vary depending on the following vowel (e.g. *room* vs *rim*) and /r/ will be devoiced following a voiceless plosive (e.g. *price*, *cream*). There is also considerable **reginal variation** in the articulation of /r/ with many Scotish speakers producing a trill (a succession of taps by the tip of the tongue on the alveolar ridge) and some speakers (of rural North East England and Scotland) producing a uvular sound similar to French /r/. Nevertheless, we typically tolerate such variations as representing the same sound. In other words, these different phonetic realizations are seen as allophones of the phoneme /r/.

Even apparently identical sounds may vary according to their position in a word or in a connected utterance as they are affected by the sounds that occur around them. This positional variation can be explored by comparing the /l/ sounds in <code>lip</code> and <code>fill</code> where the quality of the consonant is different. In the first word, the /l/ is made by the tip of the tongue touching the alveolar ridge but the back of the tongue is lowered. This is called clear "l". In the second case, alveolar contact is again made by the tip of the tongue but the back of the tongue is higher, raised toward the soft palate or velum. This is called dark "l". However, there is no meaningful difference in our understanding of the sound. There are no pairs of words where the only difference is dark or light "l". If someone used a dark "l" in place of a clear "l" the result might sound strange to our ears but we would still understand what was being said.

Similarly, levels of aspiration can be measured by placing a piece of paper in front of your mouth and saying *pot*, *spot*, *top* and *tops*. The movement of the paper should vary as each /p/ is released. In English, an initial /p/ will be aspirated while a medial or final /p/ will be relatively unaspirated. However, the difference between them is non-distinctive. As a result, /p/ is presented as one basic sound, a phoneme of English and the variations in its production are considered allophonic variations rather than as different phonemes.

When one allophone or variation of a phoneme occurs where another does not, it is said that the allophones are in **complimentary distribution** – that is, there is a strict separation of where a particular variant can occur and one cannot replace the other. So, in English the clear "l" allophone occurs before vowels (as in *lift*), while dark "l" occurs in other positions (as in *fill*). Aspirated and unaspirated /p/ occur in different positions, not randomly.

When one allophone can be substituted for another without changing the meaning they are said to be in **free variation**, for example, /I/ in *divide* may be pronounced as a weak, lax vowel or as a strong, tense vowel. Similarly, as we have seen, /r/ in English may, for instance, be a voiced post-alveolar approximant or a voiced alveolar tap. The variations in the production of "r" in English are not significant so they are said to be allophones and are not meaningful in any way.

## 2.2 Classification of English Phonemes

The English spoken sounds, like the sounds of any other language, are generally divided into two main classes: vowel phonemes and consonant phonemes.



Vowels are sounds produced without obstruction of the air passage in the mouth but with the vibration of the vocal folds. All vowels are voiced.

Consonants are sounds produced with a complete or partial obstruction which prevents the air from going freely through the mouth. They are either voiced or voiceless.

The distinction between vowel and consonant phonemes may be observed in some other respects:

- 1) For vowel phonemes the air stream is weak, but it is comparatively strong in the enunciation of consonants, especially those without vibrations of the vocal folds. And the air stream for vowel is continuous in the super-glottal passage, and when we pass from one vowel to another it produces various kinds of intermediate sounds. With consonant phonemes the case is different. Take /s/, /f/, or /l/ for instance; a definite boundary is noticed in passing from one sound to another, and in the course of their travelling they do not give rise to any sound that goes halfway between them.
- 2) During the pronunciation of vowel phonemes the articulators, including the resonance chamber and the nasal cavity, are held evenly tense, while in producing consonant phonemes, the articulators are tensely held only at the moment and place of obstruction, the rest being not tense at all.
- 3) Acoustically speaking, a vowel phoneme possesses greater sonority or more carrying power than a consonant. This means that vowel travels longer and can be heard at greater distance than a consonant, if they are spoken with the same length, stress, and pitch.

### 2.2.1 Consonant Classification

There are 24 consonants in British English. The common nature of all consonant phonemes is the obstruction of the air passage in the mouth. Some of them are accompanied by vibrations of the vocal folds, some are not. So we classify the consonant phonemes according to the following principles:

 Presence or Absence of Voicing. Those with the vibration of the vocal folds are called voiced consonants. Those without the vibration of the vocal folds are called voiceless consonants.

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

2) Place of Articulation. Sounds are labeled according to their principal point or points of articulation in the vocal tract.

Bilabial – upper lip (lower lip)	/p/, /b/, /m/	
Labio-dental – lower lip (upper teeth)	/f/, /v/	
Dental – tongue tip (behind or between teeth)	/θ/, /ð/	
Alveolar – tongue tip (alveolar ridge)	/t/, /d/, /s/, /z/, /n/, /l/ (clear)	
Post-alveolar – tongue blade (back of alveolar)	/r/	
Palatal-alveolar – front of tongue (front of hard palate)	/ʃ/, /ʒ/, /tʃ/, /dʒ/	
Palatal – front of tongue (hard palate)	/ <b>j</b> /	
Velar – back of tongue (soft palate)	/k/, /g/, /ŋ/, /l/ (dark)	
Glottal – glottis	/h/	

Articulations can occur at two points in the vocal tract as with /w/ in wet which is articulated at the lips (labial) and the velum (velar) so is termed labio-velar.

In English then, consonant sounds can be described as bilabial (both lips), labio-dental (lips and teeth), dental, alveolar, post-alveolar, palate-alveolar, velar and glottal according to their point of articulation.

The tip or blade of the tongue is the organ most frequently called into action to produce the consonant sounds. The tip of the tongue is involved in the production of dental, alveolar and post-alveolar consonant sounds, while the back of the tongue is used to articulate velar consonants. Vowel sounds involve the front, central or back part of the tongue.

Consonant sounds are thus distinguished by their point of articulation, that is to say, the place of the most significant obstruction to the passage of air through the vocal tract.

3) Manner of Articulation. Manner of articulation refers to the way in which the obstruction of the airstream, which characterizes all consonants, is achieved. At the different places of articulation in the mouth, there are several basic ways that the airstream can be obstructed.

Complete obstruction of the airstream-plosives	/p/, /b/, /t/, /d/, /k/, /g/	
Partial obstruction of the airstream-fricatives	/f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/	
Complex consonant sounds-affricates	/tʃ/, /dʒ/	
Sounds made with the air escaping through the nose-nasals	/m/, /n/, /ŋ/	
Sound made with air passing out of the mouth over one side of the tongue only – lateral	/l/ (clear), /l/ (dark)	
Proximity of the articulators without them being sufficiently close to touch each other – approximant	/r/, /w/, /j/	