People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research Higher School of Education Department of English



ANN

INTRODUCTION

PHONETICS

ENSO - AMMOUR AHMED

æ

22

ð

PHONETICS FOR FIRST YEAR STUDENTS PRE-SERVICE TEACHERS LECTURER: Dr. Lynda DALI YOUCEF

2024



Course title	Department
An Introduction to Phonetics	English
Field	Course Schedule
Linguistics	2 hours a week
Lecturer	Year of study
Dr. Lynda DALI YOUCEF	1st Year

Introduction

In simple terms, linguistics is all about understanding language: how it's built and how it works. Think of language like building blocks – different types and sizes coming together to create meaning. For instance, when we speak, sounds come together, and sometimes they change shape or do interesting things (that's phonetics and phonology). Then there's the order in which words are put (syntax), and sometimes we change the beginnings or endings of words to change their meaning (morphology). Even the way words are arranged can affect what they mean (semantics), and what the speaker knows about what the listener will understand also plays a part (pragmatics). Linguistics covers all these areas. Just like how there are branches like syntax, morphology, and semantics, phonetics and phonology are also branches of linguistics that focus on human speech sounds. They study how speech sounds are made, describing things like vowels (single and combined sounds) and consonants. So, in a nutshell, phonetics and phonology help us understand the sounds we make when we talk.

Why Study Phonetics?

Studying phonetics serves several important purposes. Firstly, it helps students understand the structure of human language, forming the foundation for grasping phonology, morphology, syntax, and semantics. Secondly, it's crucial for language acquisition and teaching, aiding in accurate pronunciation instruction and diagnosis of speech disorders. Additionally, phonetics is indispensable for linguistic research, facilitating analysis of dialects, accents, and speech perception. Moreover, it's essential for speech pathology and therapy, enabling assessment and treatment of various speech disorders. Lastly, phonetics is relevant to communication sciences, including speech technology and natural language processing, crucial for developing effective speech recognition systems and enhancing human-computer interaction. Overall, studying phonetics provides a comprehensive understanding of speech sounds and their significance in communication, linguistics, and related disciplines.

Focus Language - English

The primary language emphasized in this course is English. Specifically, we'll be focusing on Received Pronunciation (RP), which is the standard British accent of English. This means we'll delve deeply into the sounds of English, paying close attention to consonants, vowels, and diphthongs. By using RP as our reference point, students will gain a comprehensive understanding of English pronunciation, enabling them to accurately identify and produce English sounds in their speech. This approach ensures that students develop a solid foundation in English phonetics, which is essential for effective communication and language learning.

Objectives

This course aims to assist university students studying English as a Foreign Language (EFL) in developing a foundational understanding of English phonetics. It encompasses the fundamental aspects of the English phonetics curriculum typically covered in the first and second semesters of an English program at the university level. The course delves into the sound system of English, focusing primarily on segmental phonetics, including the structure and linguistic function of the articulatory apparatus, the characteristics and categorization of vowels and consonants, and the utilization of the International Phonetic Alphabet for phonetic transcription. Additionally, it briefly touches upon syllable and word stress, laying the groundwork for further exploration of suprasegmental phonetics and connected speech.

Furthermore, this course offers a condensed and systematic overview of English phonetics, serving as a springboard for students' further study. The theoretical framework draws heavily from the works of Roach (2009), Crystal (2004, 2008), Gimson and Cruttenden (2008), Collins and Mees (2003), and other referenced sources. The course is divided into nine sections, each aligned with specific unit content. It begins by elucidating the concepts of dialect, accent, and received pronunciation (RP), followed by an introduction to key sound concepts such as phone, phoneme, and allophone. Subsequent sections explore articulatory apparatus, sound production, and transcription skills development, as well as the characteristics and classifications of vowels and consonants.

Complex phonemes and their allophones are examined in detail in one section, while another section expands beyond segmental phonetics to briefly address syllable structure and stress placement, particularly in longer words and compounds. Each section includes further reading suggestions, self-assessment terminology quizzes, and study questions and exercises primarily focused on enhancing transcription skills. The course design emphasizes practical application, allowing ample time for hands-on practice in a language laboratory, and offers flexibility for instructors to incorporate their teaching preferences.

In conclusion, while this course provides a comprehensive introduction to English phonetics, it sets the stage for subsequent study in suprasegmental phonetics to provide students with a holistic understanding of the subject.

Learning Outcomes

At the end of the course, the students will be able to :

- 1. Develop a foundational understanding of the English phonetic system, including the articulatory apparatus and its linguistic functions.
- 2. Identify and categorize vowels and consonants according to their distinctive features and articulatory properties.
- 3. Demonstrate proficiency in using the International Phonetic Alphabet (IPA) for accurate phonetic transcription of English words and sentences.
- 4. Explain the concepts of dialect, accent, and Received Pronunciation (RP), and recognize their implications for spoken English.
- 5. Analyse complex phonemes and their allophones, and apply this knowledge to differentiate between various English accents and dialects.
- 6. Understand the principles of syllable structure and word stress placement, particularly in longer words and compounds.
- 7. Engage with supplementary readings to deepen understanding of phonetic concepts and terminology.
- 8. Utilize self-assessment terminology quizzes and study questions to reinforce learning and self-evaluate progress.
- 9. Demonstrate practical skills through hands-on exercises in a language laboratory, focusing on phonetic transcription and sound production.
- 10. Recognize the role of phonetics as a foundational component of English language study, and understand its significance in communication and language teaching.

Course Content

1. Varieties Of English	8
1.1. Varieties of Language	9
1.2. Standard English	9
1.3 Received Pronunciation (RP)	10
1.3.1. History of RP	11
1.3.2. RP in Contemporary Context	11
1.3.3. Types of RP	12
1.4. On Cockney and Estuary English	13
1.5. Rhotic and non-Rhotic Accents	13
1.5.1. The History and Status of 'r'	13
1.6. British English and American English	13
1.6.1. American English	14
1.7. Global English	20
1.8. A Brief History of the English Language	21
1.6.1 The Emergence of Old English (450-1150 AD)	21
1.6.2 Middle English	22
1.6.3 Early Modern English	22
1.6.4 Modern English	22
Activities	23
2. Phonetics and Phonology	24
2.1. Phonetics	24
2.1.1. Branches of Phonetics	25
2.2. Phonology	26
2.3. On Sound and Phone	27
Study Questions	28
3. Speech Production Mechanism	28
3.1.The Branches of Phonetics	28
3.2. The Speech Sound Production Processes	28
3.2.1. Initiation or Respiration Process	29
3.2.1.1. Describing Airstreams	30
3.2.2. Phonation Process	31
	1

3.2.3. The Oro-nasal Process (Resonation)	32	
3.2.4. Articulation Process		
4. Writing And Pronunciation	36	
4.1. Letters and Sounds	36	
4.1.1. Many Sounds to one Letter	36	
4.1.2. Many Letters to one Sound	37	
4.1.3. Silent and Double Letters	37	
4.1.4. Homophones	39	
Activities	40	
5. The International Phonetic Alphabet and Transcription	44	
5.1. The English Phonemic Chart	45	
5.2. Sound Classes: Vowels and Consonants	45	
5.2.1. Vowel Sounds	45	
5.2.2. Consonant Sounds	46	
Activities	48	
6. Classification Of Consonant Sounds	50	
6.1. Consonant Sounds	50	
6.2. Voicing	50	
6.3. Place of Articulation	51	
6.4. Manners of Articulation	53	
6.4.1. Plosives	54	
6.4.2. Fricatives	55	
6.4.3. Affricates	55	
6.4.4. Nasals	55	
6.4.5. Laterals	55	
6.4.6. Approximants	56	
6.5. Table of the Consonants	57	
Activities	58	
7. Classification of Vowel Sounds	62	
7.1. The Cardinal Vowel Diagram	64	
7.2. English Pure Vowels (Monophthongs)	65	
7.2.1. The Height of the Tongue	66	
7.2.2. The Advancement of the Tongue	66	

7.2.3. The Shape of the Lips		
7.2.4. Tenseness and Length		
7.2.4.1. Front vowels / i: /, / I /, / e /, / æ /	69	
7.2.4.2. Central vowels: / 3: /, / ə /, / ʌ /	72	
7.2.4.3. Back vowels: /ɑ:/, /ɒ/, /ɔ:/, /ʊ/, /u:/	75	
7.3. English Diphthongs	80	
7.3. English Triphthongs	87	
Activities	87	
8. Syllable Structure	92	
8.1. The Structure of the Syllable		
8.2.1. Onset		
8.2.2. Nucleus	94	
8.2.3. Coda	94	
8.3. Syllabic Consonants	95	
9. Word Stress		
9.2. Placement of Stress		
9.3. Stress in Word Class Pairs	99	
9.4. Stress Shift		
Activities		
References		

These learning outcomes are designed to align with the objectives of the course and to provide students with a comprehensive understanding of English phonetics, laying the groundwork for further study in suprasegmental phonetics and connected speech.

Evaluation Criteria for the Course

The standard evaluation criteria of the university will be used for the course. There will be quizzes, assignments, mid-term and final-term exams covering all the important topics of the course. Transcription will also be an important part of the evaluation.

1.VARIETIES OF ENGLISH

1.1. Varieties of Language

Varieties of language encompass the diverse linguistic systems that arise from a multitude of factors including historical, geographic, and social influences. Put simply, a language variety represents "a system of linguistic expression whose usage is shaped by contextual factors" (Crystal, 2008: 509). Within this framework, dialects emerge as distinct forms governed by regional or social factors, characterized by unique vocabulary, pronunciation, and grammar. Crystal (2008) notes that **dialects** typically develop when a language is utilized by a sizable population and when geographical or social barriers contribute to linguistic divergence (2008: 509). Every individual communicates through a distinct dialect, encompassing a set of linguistic characteristics specific to their speech patterns. When a group of individuals shares a particular dialect, they form what is commonly known as a speech community. Within such communities, variations in language usage based on social factors give rise to sociolects. These sociolects are defined by social attributes such as social class or occupational affiliation, reflecting the linguistic norms and practices within these groups.

In contrast, regional dialects, or regiolects, are shaped by geographical boundaries, representing the linguistic features prevalent in specific geographic areas. These dialects capture the unique linguistic flavours of different regions, influenced by historical, cultural, and environmental factors. An idiolect, on the other hand, pertains to the individualized language usage of a single speaker. It encapsulates the distinct linguistic choices and patterns employed by an individual, encompassing variations in vocabulary, grammar, pronunciation, and stylistic nuances. Recognizing the concept of idiolect underscores the diversity and individuality inherent in language use, highlighting the personalized nature of communication among speakers.

On the other hand, **an accent** primarily pertains to pronunciation variations, serving as an audible marker of regional or social origin. It can be regarded as a spoken manifestation of dialectical differences, as it reflects "pronunciation features indicative of an individual's regional or social background" (Crystal, 2008: 3). Over time, a dominant dialect may assume the status of the official or standard language form, often referred to as a prestige variety or an "institutionalized form" as coined by Crystal (2008: 450). This standard form is typically employed in mass media, education, and foreign language instruction. Conversely, nonstandard varieties are those dialects that deviate from this established norm (Crystal, 2008: 450).

1.2. Standard English

Globally, English is spoken in various forms, serving as both a first and second official language in numerous countries. As a first language, it is widely spoken in the United Kingdom, the United States of America, Canada, Ireland, Australia, New Zealand, South Africa, and certain islands in Central America. Each of these English-speaking nations possesses its own distinct national variety of English, such as British English, American English, Australian English, and Canadian English, among others. Within each national variety, there exists a standardized form known as Standard English (SE) or General American, which serves as the linguistic norm.

This course focuses on Standard English (SE), which is rooted in British English. SE holds a significant place in the English-speaking world, as emphasized by Trudgill (1999), who refers to it as "the most important dialect in the English-speaking world from a social, intellectual, and cultural point of view" (1999: 123). Unlike regional dialects, SE is not tied to a specific geographical region but is instead a social dialect associated with high status. It is endorsed by educational institutions and utilized in formal contexts such as government proceedings, legal settings, religious ceremonies, and media broadcasts. SE is the preferred variety for written texts and public speeches.

However, it is important to note that the linguistic characteristics of SE primarily concern matters of grammar and vocabulary, rather than pronunciation. Consequently, SE is spoken with various accents that reflect the speaker's regional origin, social group, or ethnicity. The accent most commonly associated with SE is Received Pronunciation (RP), historically regarded as the accent of the British elite. Despite its association with SE, RP is just one of many accents spoken within the realm of Standard English.

1.3 Received Pronunciation (RP)

RP, also known as BBC English or the Queen's English, has long been considered the standard of pronunciation associated with the educated elite in Britain. It is commonly spoken by individuals from the middle and upper classes, particularly those who have received formal education at prestigious institutions such as public schools or universities like Oxford or Cambridge. The use of RP has historical roots in the accent of the British aristocracy and has been perpetuated through the influence of the BBC, which traditionally employed announcers and newsreaders who spoke with RP.

RP is characterized by its clarity, precision, and lack of regional features, making it suitable for formal settings such as public speaking, broadcasting, and professional environments. Its association with education, social status, and cultural capital has contributed to its perceived prestige and authority. Despite its declining usage in contemporary Britain, RP continues to be recognized as a symbol of linguistic refinement and cultural heritage.

Furthermore, RP is not limited to Britain but has also been adopted as a model for pronunciation in various English-speaking countries, particularly in former British colonies and territories. Its influence can be observed in the accents of news presenters, actors, and other public figures who aspire to project an image of sophistication and professionalism. However, it is important to note that RP is not static and has evolved over time, incorporating new linguistic features and adapting to changes in social norms and attitudes towards language.

1.3.1. History of RP

The historical development of Received Pronunciation (RP) can be traced back to the 16th century, a time when particular prestige and authority became associated with a specific accent. This accent, predominantly used by the court and central administration in London, was regarded as the correct and accepted form of pronunciation by the educated upper social class. Alternative accents were often viewed as deviations from the established norm.

During the 19th century, the significance of this accepted accent further escalated, owing in part to the flourishing of prestigious public schools. Members of the royal family and the upper echelons of society commonly attended boarding schools such as Eton, Winchester, and Harrow, and later graduated from esteemed universities like Oxford and Cambridge. The accent adopted by these individuals acquired a unique status and was passed down through generations of the educated elite.

The term "Received Pronunciation" was coined in 1869 by linguist A. J. Ellis, although it did not gain widespread usage until phonetician D. Jones included it in the second edition of the English Pronouncing Dictionary in 1924. Subsequently, RP attained its most accepted status in 1922 when it was adopted as the broadcasting standard by the British Broadcasting Corporation (BBC). The BBC exclusively employed announcers and newsreaders who spoke with RP, solidifying its association with prestige and authority in broadcasting.

To reinforce its language policy, the BBC established the Advisory Committee on Spoken English in 1926, later renamed the BBC Pronunciation Unit. While the unit initially held significant influence, its authority waned following World War II, reducing its role to providing pronunciation guidelines for newsreaders, particularly for geographical and personal names.

Despite changes in broadcasting practices, the BBC remains widely regarded as a model of good English, both in Britain and abroad. While modern BBC newsreaders and announcers may

speak with modified RP or mild local accents, the BBC's influence on language standards persists, showcasing the enduring legacy of Received Pronunciation as a marker of linguistic prestige.

1.3.2. RP in Contemporary Context

In present-day Britain, recent statistics indicate that only a small fraction, approximately 3-5% of the UK population, speaks Received Pronunciation (RP). Despite its numerical minority, RP retains significant cultural and linguistic importance. It remains associated with the educated elite, is extensively studied, and continues to be the most frequently referenced form of spoken English worldwide. Furthermore, in England, where accent often serves as a marker of social and educational background, RP continues to maintain its elevated status.

Beyond its prestige as an accent, RP holds a pivotal role in phonetics. It serves as the basis for phonemic transcriptions in dictionaries and acts as a standard for English as a Foreign Language (EFL) learners in Europe. Consequently, the social and linguistic status of RP holds particular relevance for university students studying English as a foreign language. Moreover, RP serves as a fundamental reference accent in the field of accent studies, facilitating comparisons with other varieties.

1.3.3. Types of RP

RP, like all accents, undergoes continuous evolution, incorporating new linguistic phenomena while losing others. This evolution has led to the emergence of distinct subtypes of RP, varying in their degree of conservatism or progressiveness and spoken by different age groups.

Gimson and Cruttenden (2008) categorize three main types of RP:

- 1. **Conservative RP**: This subtype is the most resistant to change and is characteristic of older generations. It is traditionally associated with specific professions or social groups.
- General RP: Often defined as the pronunciation adopted by the BBC, General RP is the most commonly used type. It represents a contemporary, unmarked form of RP, typically spoken by BBC newsreaders.
- 3. Advanced **RP**: This subtype reflects attempts at change and is predominantly used by young people from exclusive social groups, aiming to differentiate themselves linguistically.

Similarly, Wells (1982) distinguishes between two types:

- Mainstream RP: Corresponding to General RP, this is the modern and unmarked form of RP, commonly spoken by BBC newsreaders.
- 2. Upper-Crust **RP**: This more conservative and old-fashioned type of **RP** is associated with elderly individuals, the upper class, or members of the royal family.

Additionally, there is a distinction between RP and Near-RP accents, as proposed by Wells (1982). Near-RP accents resemble Mainstream RP but may include mild regionalisms, falling slightly outside the boundaries of traditional RP. Overall, this course guides EFL university students towards achieving a near-native pronunciation, aligning with the concept of "high acceptability" as advocated by Gimson.

1.4. On Cockney and Estuary English

Cockney, a distinct British accent, traces its roots to the East End of London. Historically associated with the working class, Cockney was famously linked to individuals "born within the sound of Bow Bells," (Wells 1982: 302) specifically the bells of Saint Mary-le-Bow Church in Cheapside. Initially, the Cockney accent faced derision and was considered inferior. However, in contemporary times, it has gained popularity among middle-class Londoners. Notable features of the Cockney accent include glottal stops, vocalization of the /l/ sound, th-fronting (substituting /v/ and /f/ sounds for / θ / and / δ /), and other phonetic characteristics prevalent in and around London, particularly among younger speakers. (McArthur and McArthur, 2005)

Estuary English (EE) emerges as the primary modern accent in London, representing a fusion of elements from both Cockney and Received Pronunciation (RP). EE is described as the "accent between Cockney and the Queen," embodying a balance between traditional Cockney traits and the prestige associated with RP. Originating from areas adjacent to the estuary of the River Thames, EE reflects the influence of regional speech patterns in London (Crystal 2008: 173). This form of speech has gradually gained prominence, supplanting RP, especially among young, upwardly mobile individuals across various professions and social spheres.

Although not strictly categorized as an accent, EE represents a contemporary deviation from RP prevalent in the London area (Roach, 2009). It is characterized by features such as glottal stops and vocalization of the /l/ sound, reminiscent of Cockney. Despite its departure from traditional RP norms, EE maintains a unique identity, embodying the evolving linguistic landscape of London.

1.5. Rhotic and non-Rhotic Accents

Some speakers pronounce an 'r' sound at the end of words like 'robber', and some speakers do not. This is largely down to the speaker's regional accent. Speakers who do pronounce an 'r' in

this position are called: □

rhotic speakers, and will always pronounce an <r> whenever it occurs in the spelling of a word.

Others will only pronounce an 'r' sound when the letter <r> occurs at the beginning or in the middle of a word, that is, in front of a vowel. These speakers are referred to as



People who come from the West Country in England, Ireland, Scotland and parts of the United States are likely to be rhotic, whereas those from Australia, London and the South East, and northern parts of England are likely to be non-rhotic – thus SSBE is non-rhotic.

1.5.1. The history and status of 'r'

In past times, all speakers in England would have been rhotic and would have pronounced an 'r' at the end of words like 'robber' and 'car', and it is this pronunciation that was taken to America on the Mayflower. However, the rhotic pronunciation was subsequently lost in most of England, and therefore did not travel to Australia with the colonists.

Now the pronunciation of 'r' at the end of words is sometimes a matter for social comment. People in the UK often focus on this feature in West Country speech, and associate rhotic pronunciations with people who have traditional country professions, such as farming. The situation in North America is rather different, as it can be seen as prestigious to speak with a rhotic accent, the opposite situation to that in the UK. This disparity demonstrates that there is nothing inherently prestigious or otherwise about a particular pronunciation; it is the views of the speech community that give a sound or accent its status. The 'r' sound, in particular, has a very interesting history in English.

1.6. British English and American English

The influence of British English and American English cannot be ignored in any study of the language. The past seems to lend British English the absolute superiority. English originates from

England and the language developed into a language of the world through dispersals from England to America and Asia and then to Australia and Africa, and finally it became international. Meanwhile the rise of American economy, technology and politics is making English more and more American. So the economic power of US has ensured the continuing influence of English throughout the twentieth century and beyond. Therefore, the economic and political power of US and the colonial past of Britain are the direct causes of the globalization of English.

1.6.1. American English

The reference accent for American English is called General American and is to some extent based on the speech of the more prestigious New England states, but also shows considerable variation. It is therefore often rather defined as an accent with few or no particularly strong regional features. In this lecture we intend to let students get a general notion of American English that is enough to help them deeper realize the nature of different English language phonetics phenomena.

The English language was first introduced to America by British colonization, beginning in the early 17th century. Similarly, the language spread to numerous other parts of the world as a result of British trade and colonization elsewhere and the spread of the former British Empire, which, by 1921, held sway over a population of about 470-570 million people: approximately a quarter of the world's population at that time. Over the past 400 years, the form of the language used in America – especially in the United States – and that used in the British Isles have diverged in a few minor ways, leading to the dialects now occasionally referred to as American English and British English. Differences between the two include pronunciation, grammar, vocabulary (lexis), spelling, punctuation, idioms, formatting of dates and numbers, and so on, although the differences in written and most spoken grammar structure tend to be much more minor than those of other aspects of the language in terms of mutual intelligibility.

A small number of words have completely different meanings between the two dialects or are even unknown or not used in one of the dialects. One particular contribution towards formalizing these differences came from Noah Webster, who wrote the first American dictionary (published 1828) with the intention of 110 showing that people in the United States spoke a different dialect from Britain, much like a regional accent. This divergence between American English and British English once caused George Bernard Shaw to say that the United States and United Kingdom are "two countries divided by a common language"; a similar comment is ascribed to Winston Churchill. Likewise, Oscar Wilde wrote, "we have really everything in common with America nowadays, except, of course, the language" (The Canterville Ghost, 1888). Henry Sweet falsely predicted in 1877, that within a century, American English, Australian English and British English would be mutually unintelligible. It may be the case that increased worldwide communication through radio, television, the Internet, and globalization has reduced the tendency to regional variation. This can result either in some variations becoming extinct (for instance, the wireless, superseded by the radio) or in the acceptance of wide variations as 'perfectly good English' everywhere.

Nevertheless, it remains the case that although spoken American and British English are generally mutually intelligible, there are enough differences to cause occasional misunderstandings or at times embarrassment – for example, some words that are quite innocent in one dialect may be considered vulgar in the other. Written forms of American and British English as found in newspapers and textbooks vary little in their essential features, with only occasional noticeable differences in comparable media (comparing American newspapers to British newspapers, for example). This kind of formal English, particularly written English, is often called "standard English".

An unofficial standard for spoken American English has also developed, as a result of mass media and geographic and social mobility. It is typically referred to as "standard spoken American English" or "General American English", and broadly describes the English typically heard from network newscasters, commonly referred to as non-regional diction, although local newscasters tend toward more parochial forms of speech. Despite this unofficial standard, regional variations of American English have not only persisted but have actually intensified, according to the linguist William Labov.

Regional dialects in the United States typically reflect the elements of the language of the main immigrant groups in any particular region of the country, especially in terms of pronunciation and vocabulary. Scholars have mapped at least four major regional variations of spoken American English: Northern, Southern, Midland, and Western. After the American Civil War, the settlement of the western territories by migrants from the east led to dialect mixing and levelling, so that regional dialects are most strongly differentiated in the eastern parts of the country that were settled earlier. Localized dialects also exist with quite distinct variations, such as in Southern Appalachia and New York.

The spoken forms of British English vary considerably, reflecting a long history of dialect development amid isolated populations. Dialects and accents vary not only between the countries in the United Kingdom, England, Northern Ireland, Scotland and Wales, but also within these individual countries. There are also differences in the English spoken by different groups of people in any particular region. RP, which is "the educated spoken English of south-east England", has traditionally been regarded as proper English; this is also referred to as BBC

English or the Queen's English (see section 1.3). The BBC and other broadcasters now intentionally use a mix of presenters with a variety of British accents and dialects, and the concept of 'proper English' is now far less prevalent.

Due to the fact that American English is what many Algerian students hear in songs and movies, the pronunciation which they develop is often something of 'hybrid', containing some vestiges of RP and some elements of American pronunciation. Finally, it needs to be stated that when it comes to the correct pattern of English pronunciation, one cannot afford to be totally dogmatic: there is room for variation even in the most rigid standard or RP.

In the USA variant of English language there are some lexical and orthographical peculiarities which generally don't stop American and British people from understanding each other but still are worth considering.

British English ‡	American English ‡
anti-clockwise	counter-clockwise
articulated lorry	trailer truck
Autumn	autumn, fall
Barrister	Attorney
bill (restaurant)	bill, check
Biscuit	Cookie
block of flats	apartment building
bonnet (car)	Hood
bonnet (clothing)	Hat
Boot	Trunk
Bottom	Backside
car park	parking lot
Caravan	Trailer
chemist's shop	drugstore, pharmacy
chest of drawers	dresser, chest of drawers, bureau
Chips	fries, French fries
Cinema	movies

The lexical peculiarities of the British English and the American English:

British English ‡	American English ‡
clothes peg	Clothespin
Coffin	coffin, casket
Crisps	potato chips
Crossroads	intersection; crossroads (rural)
Cupboard	cupboard (in kitchen); closet (for clothes etc)
Diversion	Detour
drawing-pin	Thumbtack
drink-driving	drunk driving
driving licence	driver's license
dual carriageway	divided highway
dummy (for baby)	Pacifier
Dustbin	garbage can, trash can
Dustman	garbage collector
Engine	engine, motor
estate agent	real estate agent
estate car	station wagon
Film	film, movie
Flat	apartment, flat, studio
flat tyre	flat tire
Flyover	Overpass
gear-lever	Gearshift
gearbox (car)	Transmission
Girl Guide	Girl Scout
ground floor	ground/first floor
Handbag	handbag, purse, shoulder bag
high street	main street
Holiday	Vacation
hood (car)	convertible top

British English ‡	American English ‡
Jam	jam, preserves
Jug	jug, pitcher
Juggernaut	18-wheeler
Lift	Elevator
loo (informal)	Bathroom
Lorry	truck, semi, tractor
Mad	crazy, insane
main road	Highway
Maize	Corn
Maths	Math
Motorbike	Motorcycle
Motorway	freeway, expressway
Motorway	highway, freeway, expressway, interstate highway, interstate
Nappy	Diaper
naughts and crosses	tic-tack-toe
pants, underpants	underpants, drawers
Pavement	Sidewalk
pet hate	pet peeve
Petrol	gas, gasoline
Plough, the	Big Dipper, the
pocket money	Allowance
Post	Mail
Postbox	Mailbox
Postcode	zip code
Postman	mailman, mail carrier, letter carrier
Pram	carriage, baby carriage
Pub	Bar
public toilet	rest room, public bathroom

British English ‡	American English ‡
Railway	Railroad
return (ticket)	round-trip
reverse charge	collect call
ring road	beltway, freeway/highway loop
road surface	pavement, blacktop
Roundabout	traffic circle, roundabout
Rubber	Eraser
Rubbish	garbage, trash
rubbish-bin	garbage can, trashcan
saloon (car)	Sedan
Shop	shop, store
silencer (car)	Muffler
single (ticket)	one-way
Solicitor	lawyer, attorney
Spanner	Wrench
Sweets	Candy
Taxi	taxi, taxi cab
tea towel	dish towel
telly (informal), TV	television, TV
third-party insurance	liability insurance
Timetable	Schedule
Tin	Can
toll motorway	toll road, turnpike
Torch	Flashlight
Trousers	pants, trousers
tube (train)	Subway
underground (train)	Subway
Vest	Undershirt

British English 🕽	American English ‡
Waistcoat	Vest
Wallet	wallet, billfold
wellington boots	rubber boots, rain boots

1.7. Global English

English has attained unparalleled global prominence, not solely due to its extensive usage but also because it has evolved into an indispensable tool for international communication, facilitating access to a wealth of intellectual and technical resources. Crystal (2003) defines a global language as one that attains a unique status recognized across diverse nations. In this context, English, often termed Global English or World English, serves as a lingua franca in various global domains. Its pervasive influence extends beyond linguistic boundaries, shaping interactions in myriad spheres of international activity.

The term "World Englishes" encapsulates the diverse linguistic variations of English that have emerged in different regions worldwide, particularly in nations historically colonized by the UK or influenced by the US. These variations reflect the dynamic interplay between local linguistic traditions and the global spread of English. Each iteration of World Englishes embodies unique cultural nuances and linguistic adaptations, enriching the global tapestry of the English language.

English's unparalleled global exposure transcends its role as a mere tool for communication. It serves as a unifying force in a rapidly evolving global landscape, facilitating cross-cultural exchange, commerce, and collaboration on a scale unprecedented in human history. Its versatility and adaptability enable individuals from diverse linguistic backgrounds to connect and engage in meaningful dialogue, fostering mutual understanding and cooperation across borders.

In an increasingly interconnected world, English stands as a beacon of international communication, bridging linguistic divides and fostering global connectivity. As it continues to evolve and diversify through the phenomenon of World Englishes, English remains an indispensable asset, empowering individuals and nations to navigate the complexities of a rapidly changing global landscape.

1.8 A Brief History of the English Language

The English language, with its rich history spanning over millennia, reflects the dynamic interplay of cultural, political, and social forces that have shaped human civilization. From its humble origins as a collection of dialects spoken by Germanic tribes in early medieval Britain to its current status as a global lingua franca, the journey of English has been marked by remarkable transformations and adaptations. In this exploration, we delve into the fascinating evolution of the English language through four distinct periods: the emergence of Old English, the linguistic synthesis of Middle English, the standardization and Renaissance influence of Early Modern English, and the global expansion and technological influence of Modern English. Through each era, we witness the resilience and versatility of English as it evolves to meet the needs of its speakers and adapts to the changing currents of history. Join us on a journey through time as we unravel the story of how English became the language we know today.



1.8.1 The Emergence of Old English (450-1150 AD)

The English language traces its roots back to the migration of Germanic tribes, including the Angles, Saxons, and Jutes, from continental Europe to the island of Britain in the 5th century AD. This period marks the beginning of Old English, a language heavily influenced by the dialects of these Germanic tribes as well as by the Celtic languages spoken by the indigenous inhabitants of Britain. The earliest written records in Old English include epic poems such as "Beowulf" and various religious texts.

1.8.2 Middle English

The Norman Conquest and Linguistic Synthesis (1150-1500 AD): The Norman Conquest of 1066 brought significant changes to the linguistic landscape of England. Following William the Conqueror's victory, Norman French became the language of the ruling elite, while English remained the language of the common people. This linguistic divide led to the emergence of Middle English, a blend of Old English and Norman French. Middle English witnessed the flourishing of literature, including Geoffrey Chaucer's "The Canterbury Tales," which showcased the richness and diversity of the evolving language.

1.8.3 Early Modern English

Standardization and Renaissance Influence (1500-1800 AD): The invention of the printing press by William Caxton in the late 15th century played a pivotal role in the standardization of the English language. With the widespread dissemination of printed materials, a standardized form of English began to emerge. The Renaissance, with its renewed interest in classical learning, brought about further changes to the language, including the adoption of Latin and Greek words and the development of new literary forms. Early Modern English witnessed the publication of influential works such as the King James Bible and the plays of William Shakespeare, which helped solidify the language's status as a vehicle for artistic expression.

1.8.4 Modern English

Global Expansion and Technological Influence (1800 AD - Present): The Modern English period has been shaped by global forces such as the Industrial Revolution, British colonial expansion, and technological advancements. The rise of the British Empire and later the United States as global powers led to the spread of English as a lingua franca across the world. English underwent further evolution and diversification as it encountered new cultures and languages. Today, English is one of the most widely spoken languages in the world, with diverse dialects and variations spoken by millions of people worldwide. Technological advancements, globalization, and cultural exchange continue to shape the trajectory of the English language in the 21st century and beyond.

Activity 1

Study questions:

1. What is the difference between a dialect and an accent?

2. What is a sociolect?

3. What is an idiolect?

4. What is the difference between SE and RP?

5. What are the different types of RP?

6. What are the different names for RP? Why are they called so?

7. What is the difference between RP, Cockney, and Estuary English?

8. What native dialect / accent do you speak?

9. What are the historical reasons for such different ways of development of originally the same language?

10. What is 'standard spoken American English' or 'General American English'?

11. What is "Received Pronunciation" (also called "the educated spoken English of south-east England", "BBC English" or "Queen's English")?

5. What major regional variations of spoken American English and British English can you name?

Activity 2

American spelling is usually simpler. For example, British English words ending in -our and -re, end in -or and -er in American English, e.g. colour/color, centre/center. Words ending –ise in British English end in -ize in US English.

There are differences in individual words, too, e.g. British "plough" becomes "plow". If you saw words spelt in the following way, would you expect the writer in each case to be British or American? Why?

1. labor	3. hospitalized	5. favour
2. centre	4. a movie theatre	6. thru

2. PHONETICS AND PHONOLOGY

Phonetics and **phonology** are the branches of linguistics concerned with sounds, thus the main object of investigation in this course is **a sound**. The English alphabet is comprised of 26 letters, while the sound system of English contains 44 sounds as phonemes (see explanation of phonemes below). Both branches investigate the sounds from different perspectives:

Phonetics is concerned with the physical manifestation of language in sound waves and how they are produced, transmitted, and perceived, and also "provides methods for their description, classification, and transcription" (Crystal 2008: 363). **Phonology** "studies the sound systems of languages" (ibid: 365) and how sounds function in relation to each other in a language.

2.1. Phonetics /fə'netiks/

Phonetics is the subfield of linguistics that deals with (studies) the physical properties (aspects/characteristics) of human sounds (phones/voices), and the processes of their physiological production. The minimal linguistic unit in phonetics is the speech sound 'phone' in a language. The field of phonetics is divided into three sub-disciplines based on the research questions involved on how humans plan and execute movements to produce speech; how different movements affect the properties of the resulting sound; and how humans convert sound waves to linguistic information. This can be summarized as follows:

2.1.1. Branches of Phonetics

a- Articulatory Phonetics is concerned with the articulation of human speech sounds (how sounds are produced), i.e., the position, shape and movement of the different articulators (speech organs, such as the tongue, lips, the vocal cords, etc. It studies the voicing, places of articulation and manners of articulation (V.P.M) of sounds. In general, what a person does to produce the different speech sound utterances.

b- Acoustic Phonetics is concerned with the physical properties of the sound waves, such as frequency & harmonies (resulting from the disturbance of air by some kind of movement). These disturbances of air are called sound waves. Acoustic Phonetics is what

goes on between the speaker and the listener. We can hear, feel, touch, and measure the movement of speech sounds, i.e., energy in movement.

c- **Auditory Phonetics** is concerned with speech perception. (how sounds are Perceived, interpreted and understood by the inner ear and the brain). This is referred to as a neuro-physical process. It entails the study of the relationship between speech stimuli and the listener's response to such stimuli. The auditory perception includes sound loudness, pitch, sound quality, and length.

In a nutshell, phonetics broadly deals with two aspects of human speech: the production process, how humans produce sounds, and the process of perception, the way human speech is understood. Languages with oral-aural modalities such as English produce speech orally (using the oral cavity 'mouth') and perceive speech aurally (using the ears).

2.2. Phonology /fə'nɒlədʒi/

Phonology is grounded in phonetics and is a subfield of linguistics that studies the sound system of a specific language or different languages. It describes the way sounds function within a given language or across languages. In other words, phonology is the abstract study of sounds and how these sounds are combined to convey meaning.

The minimal functional distinctive unit of phonology is the phoneme /'fəoni:m/. It is the mental representation of a speech sound or different sounds (no physical reality). It is a meaningful unit having a contrastive function (it is responsible for the change of meaning). It is a unit of sound that can distinguish one word from another in a particular language. For example, if we substitute the consonant phoneme /f/ for /r/ in a word like 'rat' /ræt/, it would result in 'fat' /fæt/. Similarly, the sound pattern /sin/ 'sin' and /sɪŋ/ 'sing' are two separate words distinguished by substituting one phoneme, /n/ for /ŋ/. In this situation, when two words differ in meaning through the contrast of a single phoneme, these words form what is referred to as a 'minimal pair'.

Speech sounds that differ but do not create a change in meaning in words are known as 'allophones' /ælə'fəonz/ of the same phoneme. Allophones are the different realizations of the same phoneme in particular phonetic environments. They may be free and vary in the articulation of different speakers of languages or dialects, although this articulation would have no effects on word meaning.

Phonemes usually fall into two classes: consonants and vowels. Differences in words may depend on differences between these classes in different environments.

Phonemes are conventionally placed between slashes in transcription / /, whereas speech sounds (phones) are placed between square brackets []. Examples of the contrast of phonemes in different environments are as follows:

a- In monosyllabic words:

1. Initially: 'bat' /bæt/ and 'rat' /ræt/ differ in only one consonant, i.e., /b/ and /r/. (initial phonemes are in contrast)

2. Medially: 'hit' /hit/ and 'hat' /hæt/ differ in only a vowel, i.e., /I/ and /æ/. (medial phonemes are in contrast)

3. Finally: 'ring' /ring/ and 'rink' /rink/ differ in only one consonant, i.e., /g/ and /k/. (final phonemes are in contrast).

b- In disyllabic words:

- 1. 'harden' /ha:dən/ and 'garden' /ga:dən/ differ in only one consonant, i.e., /h/ and /g/ (Initial phonemes are in contrast)
- 2. 'rider' /'raɪdə/ and writer /'raɪtə/ differ in only a vowel, i.e., /d/ and /t/. (medial phonemes are in contrast)
- **3.** 'riddle' /ridl/ and 'ridden' /ridn/ differ in only one consonant, i.e., /l/ and /n/ (final phonemes are in contrast).

2.3. On Sound and Phone

The term **sound** is often regarded as not being a precise one in the fields of phonetics and phonology and is thus replaced by the term **phone**. Sound could mean any noise or sound, while phone is restricted to the human voice ('Phone' comes from a Greek word 'phone' [human voice] and is regarded as a speech sound which can be cut out from the speech stream. Crystal (2008) defines phone as "the smallest perceptible discrete segment of sound in a stream of speech" (2008: 361).

QUESTIONS

- 1. What does phonetics deal with?
- 2. What is Phonology concerned with?
- 3. How many letters and sounds does English language consist of?
- 4. Why do we use transcription in English?
- 5. What problems can we focus on when discussing the English pronunciation?

3.SPEECH PRODUCTION MECHANISM

3.1.The Branches of Phonetics

a- Articulatory phonetics, which studies the ways the vocal organs are used to produce speech sounds;

b- Acoustic phonetics, which investigates the physical properties of speech sounds (duration, frequency, intensity, and quality) that are generally measured by spectrographs to depict waveforms and spectrograms;

c- Auditory phonetics, which is concerned with how people perceive speech sounds, i.e. how the sound waves activate the listener's eardrum, and how the message is carried to the brain in the form of nerve impulses.

3.2. The Speech Sound Production Processes

Articulatory phonetics focuses on the organs of speech and their role in producing speech sounds, which is predominantly based on data provided by other sciences, such as human anatomy and physiology. Human beings do not possess organs used exclusively in the production of speech sounds. Instead, these organs primarily serve other functions (digestive, respiratory, etc).

Speech is the result of neuro-motor activity, thus the sound originates in the brain. After the creation of the message in the mind, a number of commands are executed by the organs of speech to physically produce the sound. The physical production initiates in the lungs and undergoes important modifications in the respiratory tract before it is realised. The different stages involved in this process are referred to as a **speech chain**. This process is viewed as a kind of **speech mechanism** involving the active or passive functioning of the organs of speech. The stages in physical speech mechanism are presented in *Figure 1* and are listed as follows:

- 1. Initiation or Respiration Process (the lungs provide the energy source);
- 2. Phonation Process (the vocal folds convert the energy into an audible sound);
- The Oro-nasal Process (the soft palate distributes the audible sound into the oral cavity or nasal cavity);
- 4. Articulation Process (the organs of speech transform the sound into an intelligible speech sound).



Figure 1. Speech Sound Production Processes (Extracted from Giegerich (1992))

3.2.1. Initiation or Respiration Process

The airstream provided by the lungs undergoes important modifications in the upper stages of the respiratory tract before it acquires the quality of a speech sound. The production of any speech sound starts when the air escapes from the lungs which serve as an energy source. It then, passes through the trachea (wind pipe). The lungs consist of spongy material that are filled with air when we inhale. The lungs are located in the thoracic cavity. Speech sounds require a pulmonic (lung) air stream for their production, the air stream used for speech in English is always egressive, that is, moving out of the lungs and up the trachea. Some languages have sounds in which the air stream takes the opposite (ingressive) direction. In English, speech sounds are initiated by a **pulmonic egressive air stream**.



© 2013 Encyclopædia Britannica, Inc.

Figure 2. The Respiratory System

3.2.1.1. Describing Airstreams

As we have seen in earlier units, airflow is crucially important for speech. An airstream mechanism is how air is set into motion for speech to occur. By far the most common airstream mechanism in the languages of the world is the outward flow of air from the lungs. The technical term for this type of airstream is pulmonic egressive; 'pulmonic' refers to the lungs and 'egressive' means that air flows out of the body. This outward flow happens because muscular activity contracts the ribcage, thereby compressing the lungs and thorax, which causes the air inside the lungs to be under higher pressure than in the surrounding air. As always, air flows from an area of higher pressure to an area of lower pressure.

The other type of airstream mechanism that we considered above is termed pulmonic ingressive. The lungs are still responsible for the movement of air, but this time the air flows into the body. This happens because muscular activity lifts the ribcage, allowing the lungs to expand, and creating a lower pressure inside the lungs than in the air outside the body.

As you can see, then, there are two things that we need to name when describing an airstream mechanism. Firstly, we need to describe the part of the body that causes the movement of air. This part of the body is called the initiator, which is the lungs in the two airstreams we have looked at so far. Next, we need to describe the direction of airflow in relation to the body, which can be inwards (ingressive) or outwards (egressive).

a- Non-Pulmonic Airstreams

It may surprise you to learn that airstreams other than pulmonic airstreams can be used to produce speech. These can be referred to as non-pulmonic airstreams. Although they are not used to create meaning in English, they may be used in other contexts and are used to produce meaningful speech sounds in other languages. They exist in about 13 per cent of languages and are quite common in languages in Africa and Asia, although less so in Europe.

A second type of mechanism is that which produces **ejective** sounds. They are produced by a closed glottis forcing air pressure in the mouth and a sharp sound is produced when the air is released suddenly. Ejectives are found in many American Indian and African languages such as Hausa, Nama in Namibia, Sandawe in Tanzania, and Amharic in Ethiopia.

In contrast to the first two mechanisms, the third and fourth mechanisms both produce **ingressive** sounds. The third mechanism produces **clicks** by air being sucked into the mouth. Clicks are a common feature of Southern Bantu languages like Xhosa and Zulu, and other languages spoken by the Bushmen and Khoikhoi (Fromkin et al, 2003).

The fourth mechanism produces **implosive** sounds when air is drawn from the mouth into the throat. Implosive sounds are found in American -Indian, African, Indian, and Pakistani languages.

Airstream Mechanism	Airflow Initiator	Airflow Direction	Language
Pulmonic Egressive	Lungs	Outwards	Most Languages
Velaric Ingressive	Velum	Inwards	Zulu (South Africa)
Glottalic Egressive	Glottis	outwards	Navajo (North America)
Glottalic Ingressive	Glottis	Inwards	Sindhi (India)

3.2.2. Phonation Process

The airflow passes from the lungs into the vocal tract and then to the **larynx** (voice box). In the larynx, some of the essential features of the sound production take place as they contain the vocal folds (vocal cords). The laryngeal aperture (or space) between the vocal folds is called the glottis. Clark and Yallop (1992) characterise the glottal opening as being approximately 17 to 22 mm long in males and about 11 to 16 mm long in females. The vocal folds play a crucial role in

one of the most important phonetic processes, which is that of **voicing**. They can be brought into a variety of different positions, thus altering the shape of the glottis.

a- Closed glottis:

The vocal folds can be firmly pressed together so that no air can pass between them. The speech sound produced from this closure of the glottis is called the **glottal stop** [?]

b- Narrow glottis:

A small gap is left between the vocal folds, so that when the airstream is forced between them, they vibrate and produce voice. Sounds produced with type of phonation are called **voiced sounds**, e.g., [b], [d], [z]

c- Open glottis:

When the vocal folds are wide apart, the airstream passes between them freely, meaning that the vocal folds do not vibrate. This position is set for breathing, so that air can pass in and out of the lungs unimpeded. Sounds produced with type of phonation are called **voiceless sounds**, e.g., [p], [t], [s]



3.2.3. The Oro-nasal Process (Resonation)

The next stage in sound production involves the airflow in the **upper vocal tract** and the configuration of the cavities through which it passes once it has left the larynx. The pharynx functions as an air passage during breathing, and it branches into two cavities that act as resonators

for the upward airflow: the **oral cavity** and the **nasal cavity**. The soft palate (velum) plays a significant role in the pharynx because it is the organ that directs the airflow into either of the two cavities.

a- Raised soft palate:

If the soft palate is raised, it closes the entrance to the nasal cavity and directs the air through the oral cavity (mouth) to produce **oral sounds** (see *Figure 3 (a)*).

b- Lowered soft palate

If the soft palate is lowered, the airflow is directed through both cavities, escaping through the nostrils and mouth at the same time. During this pattern of airflow, the sounds produced are defined as **nasal sounds** (see *Figure 3 (b)*).



Figure 3. The production of oral and nasal sounds

3.2.4. Articulation Process

After the initiation and phonation processes in the larynx and the pharynx, the audible sound is formed into a concrete sound with the help of the **organs of speech (articulators)** situated in the oral cavity. The main organs of speech are illustrated in *Figure 4* and are briefly described below.

The most important and flexible of all the organs of speech is **the tongue**, which is situated in the oral cavity and makes the greatest contribution to the articulation process. Gimson and Cruttenden (2008: 14) characterise it as "capable of assuming a great many varieties of positions of articulation for both vowels and consonants".



Figure 4: Parts of the Tongue

- The Tip: The end-point, or part of the tongue that is nearest to the front teeth.
- **The Blade**: refers to the part of the tongue just next to the tip.
- **The front**: includes the section between the back of the tongue and the blade. Consonant sounds produced with the front of the tongue rising towards the hard palate are called palatal sounds.
- **The back**: is the rear part near the roof. It is the base of the tongue, where it is attached to the rear end of the lower jaw

The tongue comes into contact with several other articulators, which are either flexible and mobile or are stable and immobile.

The **lips** (**upper and lower**) are quite mobile and may be shut or held apart to give a shape to the oral cavity. The **upper teeth** and **alveolar ridge** (located behind the upper teeth) are stable (immobile) articulators, while the **lower teeth** and **lower jaw** are mobile. Many organs of speech are located in the upper part of the oral cavity, a region deemed **the roof of the mouth** (*see Figure 4*) by Gimson and Cruttenden (2008, p.13).

The Palate is a smooth curved surface in the upper part of the mouth and consists of different parts:

- The Alveolar Ridge: the bony prominence immediately behind the upper teeth.
- **The Hard Palate**: The arched immobile bony structure, which forms the roof of the mouth, and located immediately behind the alveolar ridge
- **The Velum**: Also known as the soft palate; it is a tissue at the back of the roof of the mouth. The velum can be lowered to allow airflow through the nose, or raised to seal off the nasal cavity.
- **The Uvula**: A fleshy extension at the back of the soft palate, which hangs above the throat. The pendent fleshy lobe in the middle of the posterior border of the soft palate.


Figure 5. Organs of speech (Gimson and Cruttenden, 2008: 13)

From this discussion, we can see that numerous **organs of articulation** or **articulators** are involved either actively or passively in the production of speech, thus are referred to as active or passive (see Roach 2009a). The **organs of speech** are summarized in *Table 1*.

Active (flexible) organs of speech (because they of	can be moved into contact with other articulators)		
the lungs	the upper lip		
the vocal folds	the lower lip		
the tongue	the lower jaw		
the soft palate (velum)	the lower teeth		
the uvula			
Passive (stable) organs of speech (because they are stable (immobile) in sound production and their most important function is to act as the place of an articulatory stricture)			
the upper teeth the pharynx			
the alveolar ridge	the larynx		
the hard palate			

Table 1. The passive and active articulators

4.WRITING AND PRONUNCIATION

4.1. Letters and Sounds

Some languages represent sounds more consistently in their spelling systems than others. In some languages, like Italian, a word's spelling corresponds more or less exactly to its pronunciation. In Italian, the word for book is libro, and leg is gamba, where all the letters are pronounced with a fairly consistent value (although even here there is not a strict, one-to-one correspondence of sound and letter).

However, this letter-to-sound consistency is less the case in English, as we can see just by looking at the two following words. The in 'book' can be silent in other words like 'debt'; the <00> makes a different sound in 'food' in most accents; and the <k> can be silent in words like 'knight'. Similarly, for 'leg', the <l> can be silent in words like 'calf'; the <e> can make a different sound in words like 'pretty'; and the <g> can make a different sound in words like 'pretty'; and the <g> can make a different sound in words like 'feorge'. Because the English language has been influenced by many other languages throughout its history, and because all languages change over time, the English spelling system is not always a good guide to pronunciation. Of course, English words usually give a fair indication of at least part of a word's pronunciation, which is why we can read aloud words that are new to us, but there are also many inconsistencies. Note that angled brackets <> surround letters.

4.1.1. Many Sounds to one Letter

Let us have a look at the following list of words. Focus on the letter $\langle c \rangle$ in each one. What sound does the $\langle c \rangle$ represent in each word?

Face cherub control duck much city

In 'face' and 'city' the <c> represents a sound like that at the start of 'sun'. In 'duck' and 'control' it represents a different sound, like that at the start of 'kitchen'. In 'cherub' and 'much' it is joined by <h> to make yet a third sound, like that at the start and end of 'church'. The same letter can therefore represent different sounds in different words.

4.1.2. Many Letters to one Sound

Now let us think about the opposite situation: how one sound can be represented by several different letters or combinations of letters.

36

a) Think about the sound made by the word 'I' (the pronoun referring to 'me').

b) Now think of several other words containing the same sound as the word 'I', and see how that sound is spelt in each case.

Comment:

Words might include 'pie', 'cry', 'nine', 'high', 'buy', 'Tyne'. Note that they are all spelt differently from 'I', even though they contain the same sound. In particular, the word 'eye' sounds identical to 'I', but is spelt differently. So, we have seen that one complication of English spelling is that sounds and letters do not have a one-to-one correspondence. The same letter can represent different sounds, and the same sound can be represented by many different letters, and letter combinations, in different words.

4.1.3. Silent and Double Letters

Many English words also include silent letters in their spelling, as we suggested above. Words like 'knight' have a silent <k> and start with the same sound as 'Nan', rather than with the same sound as 'king'. Words like 'psychology' and 'pterodactyl' have a silent <p> at the start, and many other letters can be silent. In addition, many English words contain double letters, and we will now think about how these are pronounced.

Let us think about the following words that contain double letters. Say each of the words below. When you come to the part of each word represented by the double letters, listen carefully and work out if you hear two of the same sound. You may like to practise this with someone else and try to work out what you hear.

letter summer winner apple rubber offer

In each case, the double letter only corresponds to one sound within the word (double letters can actually affect the way the previous vowel is pronounced, but this is not important to the current point). Again, we can see that there is no direct match between spelling and sound.

Speech is a continuous and dynamic process, but, for convenience, we can think about splitting it up into smaller sections consisting of individual sounds. Think about the words 'dog' and 'cat'. Each of these contains three letters and also three sounds or segments. The sounds into which each word can be divided are as follows:

'dog': d as in 'doughnut', o as in 'off', and g as in 'goat'.

'cat': c as in 'camel', a as in 'and', and t as in 'table'.

As we have just seen in the previous section, however, spelling can be misleading, as there is not always a simple match between sounds and letters.

Here is a list of common letter combinations with silent letters.

Silent B - B is not pronounced when following M at the end of a word: climb-crumb-dumb-comb. Silent C - C is not pronounced in the ending «scle» – muscle.

Silent D - D is not pronounced in the following common words: handkerchief-sandwich-Wednesday.

Silent $\mathbf{E} - \mathbf{E}$ is not pronounced at the end of words and usually makes the vowel long: hope-drivegave-write-site.

Silent G – G is not often pronounced when followed by an N: champagne-foreign-sign-feign.

Silent GH – GH is not pronounced before T and at the end of many words: thought-throughdaughter-light-might-right-fightweigh.

Silent H - H is not pronounced when following W: whatwhen-where-whether-why. H is not pronounced at the beginning of many words. Use the article «an» with unvoiced H. Here are some of the most common: hour-honest-honour-heir-herb.

Pronounced H - H is pronounced at the beginning of these common words. Use the article «a» with voiced H: hill-history-height-happy-hangover.

Silent K - K is not pronounced when followed by N at the beginning of a word: knife-knee-know-knock-knowledge.

Silent L - L is often not pronounced before L, D, F, M, K: calm-half-salmon-talk-balk-would-should.

Silent N - N is not pronounced following M at the end of a word: autumn-hymn.

Silent P - P is not pronounced at the beginning of many words using the suffix "psych" and "pneu": psychiatrist-pneumonia psychotherapy-psychotic.

Silent S - S is not pronounced before L in the following words: island-isle.

Silent $\mathbf{T} - \mathbf{T}$ is not pronounced in these common words: castle-Christmas-fasten-listen-oftenwhistle-thistle.

Silent U - U is not pronounced after G and before a vowel: guess-guidance-guitar-guest.

Silent W – W is not pronounced at the beginning of a word followed by an R: wrap-write-wrong. W is not pronounced with these three pronouns: who-whose-whom.

4.1.4. Homophones

Another example of how the orthographic (spelling) and sound levels are separate comes from the existence of homographs and homophones. Homographs are words that sound different but are spelt the same. Homophones, on the other hand, are words that sound the same but are spelt differently. For example, 'dough' and 'doe', and 'cue' and 'queue' are homophones for all English speakers. There are other cases, however, where a person's accent will determine whether a pair of words are homophones or not.

It can sometimes be difficult to remember the meanings of homophone and homograph, and sometimes students get them confused, but knowing the origins of these words can help. Homocomes from the Greek, meaning 'the same'. 'graph' is also from the Greek, meaning 'writing' (as in autograph), as is 'phone', which means 'sound' (as in telephone and phonetics). So, words that are homographs have the same writing (spelling), and words that are homophones have the same sound.

Activity one

Each of the words below contains three letters, but how many sounds are there in each word? Take each word and try to break it down into the smallest parts possible, then count how many parts there are. Remember that we are thinking about the way the word sounds, not how it is spelt.

Word	Number of letters	Number of sounds
Lie		
The		
Eye		
Owe		
Emu		
Fox		
Pit		
Try		

'Owe' and 'eye' both have only one sound. You may disagree, as you can feel your mouth moving somewhat, but these words do only contain one sound. 'Lie' and 'the' both have two sounds; 'pit' and 'try' have three. 'Emu' has four for some speakers, but three if you do not pronounce a sound like that at the start of 'yogurt' after the 'm' sound. 'Fox' also has four sounds, as the <x> letter represents two sounds: a sound like that at the start of 'kite', followed by one like that at the start of 'socks'. In fact, if we think about the sounds at the end of 'fox' and 'socks', we can hear they are the same, even though the spelling is different.

Activity Two

Now let us look at these words. First of all, count the letters, and then try to work out how many sounds each word contains.

Word	Number of letters	Number of sounds
Tough		
Bud		
Beige		
Cup		

Love	
Ox	
Buff	

Hopefully, you have found that all these words contain three sounds, despite containing between two and five letters. For example, the <gh> at the end of 'tough' represents only a single sound, as does <ff> at the end of 'buff'. <e> at the end of 'love' does not represent a sound at all. As we can see, the number of written letters in a word does not always tell us how many sounds a word contains. Therefore, when thinking about phonetics, it will be very important not to think about the spelling of a word when we want to think about its sounds. We have seen in the previous exercises that spelling and sound are separate. In fact, we can think of them as two separate levels for analysis. The technical term for the level of spelling is the **orthographic level**. The technical name for the sound level is **the phonetic or phonemic level**.

Activity Three

Find the correct homophones in the following sentences

- 1. This is the number before nine and the past of 'to eat.'
- 2. This is to look at someone in a rude way and what you climb when you want to go to bed.
- 3. Something is this when it is easy to understand or clear and it is a thing that we can travel by.
- 4. Which word is missing: 'I go ______ bed at ten usually' and the number after one.
- 5. The past of something you do at a candle and the colour of the sky.
- 6. When this happens you get wet and a King or Queen does this.
- 7. A word that you can sometimes use instead of 'very' and something you do when you make clothes.
- 8. Another word for 'appear' and a thing that your clothes have.
- 9. We do this when we get very old and it is to change the color of your hair for example.
- 10. "To______ or not to ______" Shakespearean quote and an insect that flies.
- 11. The number after three and the word missing from this sentence: 'I have been here_____ four years.
- 12. A football player does this if he hurts another player deliberately and another word for hens.

- 13. The opposite of 'yes' and the missing word in the sentence: 'You ____ a lot of English."
- 14. Another word for 'stories' and some animals have them.
- 15. A store has these when things are half price and something you do in a boat.
- 16. We see with this and a pronoun.
- 17. This is a state when there is no fighting and the word missing in this sentence: "May I have a ______ of cake please?"
- 18. The missing word in this sentence: 'I am in ______ of you; I really, really admire you and the missing word in this sentence: 'Would you like tea _____ coffee?"
- 19. A short word for hello and the opposite of low.

Activity Four

Find the correct homophones in the following text:

I live in a town near the see. It is a very quiet town; knot a lot happens.

There is a big church in the middle of the town and every Sundae you can here

the peel of the church bells. There is a busy key near the town.

.....

This is a grate sauce of employment four hour town. My father and brother work there.

.....

They love two work in the fresh air. It hardly ever reigns in our town.

.....

The whether is actually very nice most of the year round.

.....

We don't get much snow but we do get a lot of son during the summer.

.....

People are very happy hear. I never want to leave.

Activity Five

In this story, there are 12 incorrect words. The correct word is pronounced the same as the incorrect one, but the spelling is different. Correct them using words from the box.



(Extracted from Mark Hancock, 2012)

Activity 6

Provide the correct pronunciation of the final 'ed' in the following regular verbs:

parked, divided, arrived, sneezed, started, washed, watched, frightened, married needed, walked, shouted, hurried, roomed, ruined, reminded, remembered, talked

/d/	/t/	/ɪd/

5. THE INTERNATIONAL PHONETIC ALPHABET AND TRANSCRIPTION

5.1. The English Phonemic Chart

Articulatory phonetics deals not only with the organs of speech but also with the categorisation and classification of the production features of phones. An extensive knowledge of how concrete vowels and consonants are articulated by particular organs of speech is essential for successful articulation.

There are 44 phonemes in English. **The English Phonemic Chart,** as presented by Underhill (1994) and given in *Table 2*, exhibits clear sets of vowels (monophthongs and diphthongs), consonants, and sonorants.



Table 2. The English Phonemic Chart

The symbols for the English phonemic chart have been compiled from the **International Phonetic Alphabet (IPA)** devised by **International Phonetic Association** (also abbreviated **IPA**). The association was established in 1886, and since then, it has been functioning as the major as well as the oldest representative organisation for world phoneticians. The association's mission is to promote the scientific study of phonetics by providing phoneticians worldwide with a notational standard for the phonetic representation of all languages, i.e. the IPA. The alphabet

The term **transcription** refers to the process and "the methods of writing down speech sounds in a systematic and consistent way" (Crystal 2008: 490). Each sound must be identified and written in an appropriate symbol. Principally, there are two kinds of transcription: phonemic and phonetic transcription. **Phonemic transcription** gives only a basic idea of the sounds, and is thus often termed as **broad transcription**. It uses the 44 English phonemic symbols and does not show any phonetic details of the sounds. The symbols are enclosed in slashes / /, e.g. /t/; /taɪp/.

Phonetic transcription has a high degree of accuracy and shows a lot of articulatory and auditory details. It is often termed as the **narrow transcription** or **transcription proper** because it aims to represent actual speech sounds in the narrowest sense and uses additional diacritics. The symbols are therefore enclosed in square brackets []. For example, [th] means that /t/ is aspirated, and [spi:d] means that /d/ is a bit devoiced at final position.

5.2. Sound Classes: Vowels and Consonants

Speech sounds are generally divided into two classes: vowels and consonants. Vowels are produced with a comparatively open vocal tract for the airflow to pass unimpeded. As a result, vowels are considered to be open sounds, whereas consonants are produced with a certain constriction in the vocal tract. Roach (2009a) gives the following characterisation of the sounds:

Vowels are the class of sounds that are associated with the least obstruction to the flow of air during their production.

Consonants are the class of sounds that are associated with obstructed airflow through the vocal tract during their production.

5.2.1. Vowel Sounds

Vowels can also be distinguished from consonants as they display a different acoustic energy: vowels are highly resonant and intense and have greater sonority than do consonants. Vowels also have the function to be syllabic (a syllable can contain a minimum of one vowel), while consonants are units that function at the margins of syllables, either singly or in clusters, and are optional. Vowels typically involve the vibration of vocal folds, so they are voiced, while consonants split into voiced and voiceless forms.

A special set of consonants that demonstrate reduced levels of obstructed airflow during their production are called **sonorants**. According to Roach (2009) **Sonorants** are sounds that are voiced and do not cause sufficient obstruction to the airflow to prevent normal voicing from continuing. Thus, the manners of articulation can be put into two major groups, obtruents and sonorants. The obstruents are plosives, fricatives and affricates, all sounds with a high degree of obstruction. Obstruents usually come in pairs, one voiceless, one voiced, e.g. [p/b, t/d]. Sonorants have much less obstruction and are all voiced and therefore more sonorous. They include nasals, the lateral, and approximants.

/I/	as in <i>sit</i>	/eɪ/	as in <i>may</i>
/i:/	as in <i>speak</i>	/aɪ/	as in <i>kite</i>
/ʊ/	as in <i>book</i>	/ɔɪ/	as in <i>toy</i>
/u:/	as in <i>tool</i>	/Iə/	as in <i>near</i>
///	as in <i>cup</i>	/eə/	as in <i>dare</i>
/a:/	as in <i>heart</i>	/ບອ/	as in <i>cure</i>
/ɒ/	as in <i>box</i>	/əʊ/	as in <i>cold</i>
/ɔː/	as in <i>door</i>	/au/	as in <i>mouth</i>
	/e/	as in <i>bed</i>	
	/æ/	as in <i>cat</i>	
	/3:/	as in <i>bird</i>	
	/ə/	as in <i>ago</i>	

A list of the **20 vowel sounds** in English with word examples is given in *Table 3*:

Table 3. Vowel Sounds

5.2.2. Consonant Sounds

A list of the 17 consonant sounds in English with word examples is given in Table 5:

/p/	as in <i>pipe</i>	/z/	as in <i>zoo</i>
/b/	as in <i>be</i>	/0/	as in <i>think</i>
/t/	as in <i>time</i>	/ð/	as in <i>that</i>
/d/	as in <i>do</i>	/ʃ/	as in <i>sure</i>

46

/k/	as in <i>car</i>	/3/	as in <i>casual</i>
/g/	as in go	/tʃ/	as in <i>church</i>
/ f /	as in <i>fine</i>	/dʒ/	as in <i>gin</i>
/v/	as in <i>vet</i>	/h/	as in <i>hat</i>
/s/	as in <i>sad</i>		

Table 4. Consonant Sounds

/m/	as in <i>map</i>
/n/	as in <i>nose</i>
/ŋ/	as in <i>king</i>
/1/	as in <i>love</i>
/r/	as in <i>red</i>
/j/	as in <i>yacht</i>
/w/	as in <i>wet</i>

Table 5. Sonorant Sounds

Activity one:

Word	Vowel	Word	Vowel
Cup		How	
Said		Hear	
Sea		Float	
Ash		Foot	
Blow		First	
Glance		Dare	
Wash		Pool	
Sign		Cream	
Walk		Pill	

Transcribe the vowel phonemes in the following words:

Activity two:

Transcribe the consonant phonemes in the following words:

Word	Consonant	Word	Consonant
Fee		The	
Тоо		Palm	
Egg		Thin	
Show		View	
Chew		Zoo	
Old		Massage	
Hair		Large	

TRAINING

Tongue Twister (1)

- a. Red lorry, yellow lorry, red lorry, yellow lorry, red lorry, yellow lorry.
- b. When a twister twisting would twist him a twist,

For twisting a twist three twists he will twist;

But if one the twist untwists from the twist,

The twist untwisting the twist.

Tongue Twister (2)

a. She sells sea shells by the sea shore. The shells she sells are sea shells,

I'm sure. For if she sells sea-shells on the sea-shore, then I'm sure she sells the sea-shore shells. b. Bill had a billboard and also a board bill.

But the board bill bored Bill so That he sold the billboard to pay the board bill

(NOTE: at first the teacher reads the twisters slowly and if necessary, defines the sounds practiced. Then all students read together quite quickly one time. Then half of the group read it in turn as quickly as possible. The person who reads best is defined. The next twister is worked out in the same way but is read by the rest students. Two best twist readers read both twisters to choose the winner. The element of contest is used.)

2. Underline the word that does not rhyme with the others:

go-so-no-do; cleared-heard-beard-feared; shoes-goes-nose-toes; great-seat-wait-gate; among-wrong-sung-begun; load-road-showed-board.

6.1. Consonant Sounds

Consonant sounds are made with obstruction of air at the level of the vocal tract. This obstruction may be complete or partial. Complete, when the two organs make a blockage so as the stream of air is compressed for a short time before it is released. Partial, when the two organs are sufficiently approaching each other to let the air escape through a narrowing they make. Thus, on the way out the air flow can be more or less obstructed, producing a consonant, or is simply modified, giving a vowel. If you pronounce the first sound of the word "paper" you close your mouth completely and that is the utmost obstruction, whereas if you pronounce the first sound of the word "after" the mouth is more open than normal, the air flows as freely as it possibly can. Consonants are often classified by being given a so-called VPM-label. VPM stands for Voicing, Place and Manner.

- Voicing means that the vocal folds are used; if they are not, the sound is voiceless (note that vowels always imply the use of vocal folds).

- Place of articulation is the place where the air flow will be more or less obstructed.
- Manner is concerned with the nature of the obstruction.

6.2. Voicing

All the consonants are sub-classified as either **voiced** or **voiceless**. At the phonation stage, the vocal folds are in tight contact for the production of voiced consonants, while the air for voiceless consonants passes through the glottis with vocal folds set apart. The larynx is in the neck, at a point commonly called Adam's apple. It is like a box, inside which are the vocal folds, two thick flaps of muscle. In a normal position, the vocal folds are apart and we say that the glottis is open (figure a). When the edges of the vocal folds touch each other, air passing through the glottis will usually cause vibration (figure b). This opening and closing is repeated regularly and gives what is called voicing.



Figure (6): voicing. (Roach 1983:23, 25)

The only distinction between the first sounds of sue and zoo for example is that [s] is voiceless, [z] is voiced. The same goes for few and view, [f] is voiceless, [v] is voiced. If you now say [ssssszzzzzsssss] or [fffffvvvvvfffff] you can either hear the vibrations of the [zzzzz] or [vvvvv] by sticking your fingers into your ears, or you can feel them by touching the front of your larynx (the Adam's Apple). This distinction is quite important in English, as there are many pairs of sounds that differ only in voicing.

According to the force of articulation or energy with which they are articulated and perceived, consonants are subdivided into relatively strong (**fortis**) or relatively weak (**lenis**) (Roach, 2009: 28). English voiced consonants are lenis, whereas English voiceless consonants are fortis. The latter seem to be pronounced with a stronger muscular tension and breath force. For example, compare *pow* /**p**ao/ and *bough* /**b**ao/. The force of articulation is not easy to define and measure, however some phoneticians prefer to use the terms fortis and lenis rather than the terms voiceless and voiced.

- In English the following consonants are voiced: b, d, g, v, ð, z, ζ, l, r, j, w, dζ, m, n, ŋ
- The following ones are unvoiced: p, t, k, f, Θ , s, \int , h, t \int

6.3. Place of Articulation

As we saw above [p,t,k] are all voiceless, so there must be another way to distinguish between them, otherwise we would not be able to tell try apart from pry or cry, or pick from tick or kick . Apart from the behaviour of the vocal folds, sounds can also be distinguished as to where in the oral cavity they are articulated (i.e. where in the mouth there is most obstruction when they are pronounced)

	Bilabial sounds are produced with the upper and lower lips pushed together /p/, /b/, /m/, /w/;
	Labio-dental sounds are articulated with contact between the lower lip and the upper teeth /f/, /v/;
	Dental sounds are generated with the tip of the tongue protruded between the lower and the upper teeth: $/\theta/$, $/\delta/$;
and the second s	Alveolar sounds are made by advancing the tip of the tongue toward the alveolar ridge: /t/, /d/, /n/, /l/, /s/, /z/;
	Palato-alveolar sounds are produced by raising the blade of the tongue toward the alveolar region: /ʃ/, /ʒ/, /tʃ/, /dʒ/;

and the second s	Post-alveolar sound is made by upturning the tip of the tongue behind the alveolar ridge: / r /;
	Palatal sounds are pronounced by advancing the blade of the tongue toward the highest part of the hard palate: /j/;
	Velar sounds are made as the tongue body makes contact with the soft palate: /k/, /g/, /ŋ/;
	Glottal sound is produced by the narrowing of the glottis as the wall of the pharynx makes contact with the root of the tongue: /?/, /h/.

6.4. Manners of Articulation

We can now distinguish between English consonants from two points of view, that of voicing, and that of place. We can see that [b] and [t] are different in both respects, [b] is voiced and bilabial, and [t] is voiceless and alveolar. [p] differs from [b] only in being voiceless, as both are bilabial, and [p] differs from [t] only in being bilabial, as both are voiceless. There are still pairs of sounds where we cannot yet describe the difference of one from the other, e.g. [b, m]

(bend, mend) as both are voiced and bilabial, and [t, s] ton, son which both are voiceless and alveolar.

As the examples show, we can however tell the words apart, and this is because the sounds are different in a way we have not yet discussed, and that is with respect to their manner of articulation. The manner of articulation has to do with the kind of obstruction the air meets on its way out, after it has passed the vocal folds. It may meet a complete closure (plosives), an almost complete closure (fricatives), or a smaller degree of closure (approximants), or the air might escape in more exceptional ways, around the sides of the tongue (laterals), or through the nasal cavity (nasals).

- 1. Plosives: / p, t, k, b, d, g, ? / (also called "stops")
- 2. Fricatives: / f, v, θ , δ , s, z, \int , ζ , h /
- 3. Affricates: / tſ, dʒ /
- 4. Nasals: / m, n, ŋ / (also called "nasal stops")
- 5. Lateral: /1/
- 6. Approximants: / w, j, r /

6.4.1. Plosives

Plosives are sounds in which there is a complete closure in the mouth, so that the air is blocked for a fraction of a second and then released with a small burst of sound, called a plosion (it sounds like a very small explosion). Plosives may be bilabial [p, b] e.g., **p**ark, **b**ark, alveolar [t, d] **t**ar, **d**ark or velar [k, g] **c**ar, **g**uard. There is a fourth kind of plosive, the glottal stop. The word football can be pronounced without interruption in the middle as in [fotbo:l] or with a complete closure of the glottis instead of [t]: [fo?bo:l].

In English a voiceless plosive that occurs at the beginning of a word and is followed by a vowel, is rather special in the sense that at the release of a plosion one can hear a slight puff of air (called aspiration) before the vowel is articulated. Hence in "pen "we hear [p^hen]. These aspirated voiceless plosives are not considered to be different sounds from unaspirated voiceless plosives from the point of view of how they function in the sound system. This difference, which can be clearly heard, is said to be phonetic.

6.4.2. Fricatives

Fricatives have a closure which is not quite complete. This means that the air is not blocked at any point, and therefore there is no plosion. On the other hand the obstruction is big enough for the air to make a noise when it passes through it, because of the friction. This effect is similar to the wind whistling around the corner of a house. Fricatives may be labio-dental [f, v] wife, wives, dental [δ , Θ] breath, breathe, alveolar [s, z] sink, zinc, palato-alveolar [\int , \Im] nation, evasion, or glottal [h] help. [h] is a glottal fricative. As it has no closure anywhere else, and as all air passes between the vocal folds, this means that [h] is like aspiration unaccompanied by any obstruction.

6.4.3. Affricates

Affricates are a combination of a plosive and a fricative. They begin like a plosive, with a complete closure, but instead of a plosion, they have a very slow release, moving backwards to a place where a friction can be heard (palato-alveolar). The two English affricates are both palato-alveolar, [tf] which is voiceless, chin, rich, and [d3] which is voiced, gin, ridge. The way an affricate resembles a plosive followed by a fricative is mirrored in the symbols. Both consist of a plosive symbol followed by a fricative one: [t+f], [d+3].

6.4.4. Nasals

Nasals resemble plosives, except that there is a complete closure in the mouth, but as the velum is lowered the air can escape through the nasal cavity. Though most sounds are produced with the velum raised, the normal position for the velum is lowered, as this is the position for breathing (your velum is probably lowered right now when you are reading this). The three English nasals are all voiced, and [m] is bilabial, ram, [n] is alveolar, ran, and [ŋ] velar, rang. In the section on places, the dotted line on the pictures of bilabial, alveolar, and velar articulations illustrate the three nasals.

6.4.5. Laterals

Laterals are sounds where the air escapes around the sides of the tongue. There is only one lateral in English, [1], a voiced alveolar lateral. It occurs in two versions, the so called "clear l" before vowels, light, long, and the "dark l" in other cases, milk, ball. Words like little, lateral have one of each type. "Dark l" may be written with the symbol [1]. "Clear l" is pronounced with the

top of the tongue raised, whereas for "dark l" it is the back of the tongue which is raised. Here again, as with aspirated and unaspirated voiceless plosives, even though "clear l" and "dark l" are phonetically different, they cannot be said to be different sounds from the point of view of how they function in the sound system. If you produce a "dark l" where usually you have a "clear l", for example at the beginning of the word long, your pronunciation will sound odd but nobody will understand a different word.



Figure 15: clear and dark 'T'.(Thomas 1976:44)

Figure 7: clear and dark "l" (Thomas 1976:44)

6.4.6. Approximants

Approximants are sounds where the tongue only approaches the roof of the mouth, so that there is not enough obstruction to create any friction. English has three approximants, which are all voiced. [r] is alveolar, right, brown, sometimes called post-alveolar, because it is slightly further back that the other alveolar sounds [t,d,s,l]. [j] is a palatal approximant, use, youth, and [w] is a velar approximant, why, twin, square. [w] always has lip-rounding as well, and therefore it is sometimes called labio-velar.

[r] only occurs before vowels in southern British English, whereas other accents, e.g. Scottish, Irish, and most American ones, also can have it after vowels. Therefore, those accents can make a distinction between e.g. saw and sore, which are pronounced exactly alike in southern British English.

6.5. Table of the Consonants

The discussion on consonants above can be summarised in the table below (Roach 1983:52). A sound on the left side of a column is voiceless, one on the right side is voiced.

		Bilabial			Labiodental		Dental	TEMPO		Alveolar		Post-alveolar	Palato-	alveolar	Palatal			TETAL		glottal
Plosive	p		b						t	¢	ł						k	ġ	1	
fricative				f		v	θ	ð	s	2	z		ſ	3					:	h
Affricate													tſ	dz						
Nasal			m							1	ı							ŋ		
Lateral]	L									
Frictionless Continuant			w									r				Ċ				

Voiceless consonants on the left, voiced on the right

PRACTICE 1

1- Circle the words that contain a bilabial plosive:

tomb, peace, bomb, rubber, supper, letter, order, done, bigger, tongue, daddy

2- Circle the words that contain an alveolar plosive:

bomb, utter, said, butter, rapid, organ, ton, built, glass, lacked, dirty, shirt, ride

3- Circle the words that contain a velar plosive:

organ, bulb, open, skin, gain, biker, hid, bread, guide, curtain, cartoons, pig, pick

4- Circle the words that contain a fortis plosive:

bead, set, buy, go, crow, girl, door, but, dirty, paper, gate, dog, going, doll

5- Circle the words that contain a lenis plosive:

apple, bar, goat, queen, car, door, tour, sad, gas, gun, write, rode, stupidity

6- Circle the words that contain a strongly aspirated plosive:

sky, bell, car, time, spy, slate, dime, poor, forty, attack, import, stick, pie

7- Circle the words that contain a weakly aspirated plosive:

supper, park, lucky, letter, cool, time, happy, apart, soup, neck

8- Circle the words that contain an unaspirated plosive:

scar, key, store, stay, tone, pie, stone, cold, spy, steak, take, span, slate

9- Circle the words that contain a fully long vowel or diphthong:

tripe, seat, tribe, seed, failure, water, league, leak, paper, labour, bound

10- Circle the words that contain a reduced (shortened) long vowel or diphthong:

tribe, warder, water, labour, tripe, seat, leak, seed, ride, write, rate

11- Circle the words that have a plosive released through another plosive:

captain, bets, good boy, actor, locked, bottle, ripe, cheese

PRACTICE 2

1- For /p/ and /b/, the active articulator isand the passive articulator is
2- For /k/ and /g/, the active articulator isand the passive
articulator is
3- For /t/ and /d/, the active articulator isand the passive articulator
is
4- For /?/

PRACTICE 3

Give the VPM of the following sounds Consonant Voicing Place of articulation Manner of articulation:

Consonant	Voicing	Place of	Manner of
		articulation	articulation
/p/			
/t/			
/k/			
/b/			
/g/			
/?/			
/d/			

PRACTICE 4

Useful practice using $\theta/ \& \delta$ sounds in context:

- This is the third myth that they have thought of together
- I think my brother visited the theatre this Thursday
- Three thousand smooth teeth together in this healthy mouth
- In this weather, wealthy people breathe through their mouth

PRACTICE 5

a- Circle the words that contain a palate-alveolar affricate:

choose, June, shine, trumpet, drink, treatment, hedge, catch, actress, Andrew

b- Circle the words that contain a post-alveolar affricate:

dreadful, joke, extreme, reach, rigid, truth, adroit, contracted, butcher, attracted

c- Circle the words that contain a fortis affricate:

genius, chance, trace, dresses, lunch, huge, addressed, attribute, reproach, sponge

d- Circle the words that contain a lenis affricate:

dreamer, jaundice, transport, achieve, address, oblige, branch, drove, change

e- Circle the words that contain a fully voiced affricate:

merger, joking, murderer, changing, drove, huge, tragic, addressed, drugs, fragile

f- Circle the words that contain a fully long vowel or diphthong before a final lenis affricate:

chance, badge, perch, reach, torch, cage, search, indulge, urge, march, age

g- Circle the words that contain a reduced 'shortened' vowel or diphthong before a final fortis affricate:

crouch, merge, surge, teach, torch, cage, search, brooch, large, coach, rage, speech

PRACTICE 6

Give the VPM of the following sounds Sound Voicing Place of Articulation Manner of articulation:

Sounds	Voicing	Place of articulation	Manner of articulation
/ dʒ /			
/ð/			
/v/			
/ tʃ /			

PRACTICE 7

a-	For	/	m	/,	the	active	e ai	rticulator	r	is	 and	the	passive	articulator	r is
		••••		••••	· · · · · · , ·	·····		· · · · · · ·				1.1		. 1.	
b-	For /	'n	/, t	he a	activ	e artic	ulat	or 1s	•••		 8	and th	ne passiv	e articulato	or is
 c-	For	 / n	·····	the	acti	ve arti	icula	ator is			 aı	nd th	e passivo	e articulato	or is
			••••										1		

PRACTICE 8

Put the words containing nasal consonants under their appropriate headings: hammer, snake, ring, timber, long, singer, shrink, bacon, prison, fortune, wrinkle spindle, canny, lamb, mummy, bramble, income, dozen, mortal, knower, knotty

Bilabial Nasal	Alveolar Nasal	Velar Nasal

PRACTICE 9

Give the VPM of the following sounds:

Sounds	Voicing	Place of articulation	Manner of articulation
/ n /			
/ m /			
/ŋ/			

7. CLASSIFICATION OF VOWEL SOUNDS

(Lecture 1)

In the production of vowel sounds, the vocal tract is open so that there is no obstruction to the air flow escaping over the tongue. The characteristic sound of a vowel depends on the shape and size of the resonant space in the mouth. This is determined by:

- Tongue position is described using two criteria:
 - The tongue height (how high is the tongue): high- mid- low or close- half- open
 - The part of the tongue involved: front- centre- back
- The lip position (rounded- neutral- spread)

And there is another characteristic of vowels which is not dependent on tongue or lip position:

• The length or duration of the vowel (long- short)

In this lesson we'll examine these characteristics in turn and you will also see how these variables are incorporated in the design of the chart.

Activity (1) Tongue height: refers to how high or low the tongue is positioned in the mouth (see *Figure 1 & 2*).

(i) Make a vowel like the /i:/ in the English word 's<u>ee</u>' and look in the mirror; you will be able to see that the tongue is held up close to the roof of the mouth. Now make a /a/ vowel (as in the word 'c<u>a</u>t') and notice how the distance the surface of the tongue and the roof of the mouth is now much greater. The difference between /i:/ and /ae/ is a difference of tongue height, we would describe /i:/ as a **close** or high vowel and /ae/ as an **open** or low vowel. Tongue height can be changed by moving the tongue up or down.



Fig.2 Tongue positions for i: and a

Fig.1 a. close vowel /i:/ close vowel b. open vowel /æ/ open vowel

Activity (2) Tongue Advancement: refers to the part of the tongue involved in the production of the vowel (see figure 3)

ii) - Say /i:/ as in 'tea', and now /u:/ as in 'two'. Alternate the sounds /i... u: ... i: ...u:
 .../. Try this slowly at first and then more rapidly. What physical movements do you notice?

- Try the same thing with the pair /a as in 'cat', and /a:/ as in 'pass', altering them /a ... a: ... æ ... a:/. What movement does your tongue make as you slide between these two sounds?

In making the two pairs of vowels described above, you probably noticed that each pair consists of a vowel with the tongue forward in the mouth and a vowel with the tongue back in the mouth. The vowels in which the back of the tongue is the highest point (/u:/ as in 'two' and /a:/ as in 'pass') are called **back** vowels. The vowels produced with the tongue forward (/i:/ as in 'tea' and /æ/ as in 'cat') are called **front** vowels.



7.1. The Cardinal Vowel Diagram

In order to describe the vowels of any language, and compare the vowel systems of different languages, Daniel Jones invented 18 reference vowels called cardinal vowels. It is important to understand that these cardinal vowels are not sounds of a particular language, thus if you learn the cardinal vowels, you are not learning to make English sounds, but you are learning about the range of vowels that the human vocal apparatus can make, and also learning a useful way of describing, classifying and comparing vowels.

Cardinal vowels are located on a four-sided figure (a quadrilateral of the shape seen in figure 4) the vowels in Fig.4 are the so-called **primary** cardinal vowels, and there are other cardinal vowels (secondary cardinal vowels) that sound less familiar.

A cardinal vowel is a vowel produced when the tongue is in an extreme position, either front or back, high or low







Fig. 5 Primary & secondary cardinal vowels

Daniel Jones pronouncing the cardinal vowels: <u>https://www.youtube.com/watch?v=6UIAe4p2I74</u>

The cardinal vowel chart defined 4 reference points representing the extreme limits of possible vowel quality. These limits depend on the tongue position:

- Cardinal vowel N° 1 has the symbol [i]: extremely front and close
- Cardinal vowel N° 8 has the symbol [u]: extremely back and close
- Cardinal vowel N° 4 has the symbol [a]: extremely front and open
- Cardinal vowel N°5 has the symbol [a]: extremely back and open

Between these four extremes, two horizontal lines are inserted (mid position):

- 2 front vowels [e] & [3]: mid-close
- 2 back vowels [0] & [a]: mid-open

7. ENGLISH PURE VOWELS (MONOPHTHONGS)

(Lecture 2)

7.2. English Pure Vowels (Monophthongs)

Now using the principles that have just been explained, we will examine some of the English pure vowels. The diagram below (see figure 7) is a representation of the vowel space in the centre of the mouth where vowel sounds are articulated. It indicates tongue position: part of the tongue which is raised and the height of the tongue (see figure 6)



Fig. 6 RP English Monophthongs



Fig. 7 vowel diagram

F	С	В
	Е	
R	Ν	А
0	Т	С
N	R	K
Т	Е	

Vertical tongue position (front-centre-back)

Close (High)	
Half (Mid)	
Open (Low)	

Horizontal tongue position (close-half-open)

7.2.1. The Height of the Tongue

The vertical movement of the tongue depicts the height of the tongue and refers to how high or low the tongue is positioned in the mouth.

- High or close vowels articulated with the tongue located as high as possible in the oral cavity, thus narrowing the passage for the airflow: /I/, /i:/, /u/, /u:/;
- Mid or mid-open vowels with the tongue lowered to the mid position in the oral cavity: $/\alpha/$, $/\nu/$, $/\alpha/$, $/\alpha/$;

• Mow or open vowels produced with the tongue positioned as low as possible in order to leave a lot of space for the airflow: /e/, /3:/, /3/.

7.2.2. The Advancement of the Tongue

The horizontal movement of the tongue, or tongue advancement to the front position is essential in forming the following groups of vowels:

- Front vowels articulated with the tongue far forward in the oral cavity toward the hard palate: /i:/, /I/, /e/, /æ/;
- Central vowels produced with the tongue retracted to the middle position in the oral cavity: /A/, /3:/, /ə/;
- Back vowels produced with the tongue retracted as far as possible to shape the space in the front part of the oral cavity: /p/, /o:/, /u:/, /a:/

7.2.3. The Shape of the Lips

Vowels may also be different from each other with respect to the rounding and shaping of the lips necessary to enlarge or diminish the space within the mouth. The following sets of vowels are identified:

- **Rounded** vowels, as the lips shape into a circle or a tube: /v/, /u:/, /p/, /ɔ:/;
- Spread vowels, as the corners of the lips are moved away from each other: /e/, /i:/, /i/, /æ/;
- Neutral vowels, as the position of the lips is not noticeably rounded or spread: /ʌ/, /ɑ:/, /ɜ:/, /ə/. These various lip shapes are illustrated in *Figure 8*

66



Fig.8 The shape of the lips

7.2.4. Tenseness and Length

$$/a:/ - /\Lambda / /3:/ - /3 / /i:/ - /I / /u:/ - /v / /3:/ - /a/$$

The /ə/ sound stands out from all other vowels and requires some further comment. It appears to be the shortest possible vowel, and in some forms of words, it is even omitted. It is known as the **schwa** (from Hebrew, meaning 'emptiness') or the **neutral vowel.** Furthermore, it is the most frequently occurring vowel in English.

We can summarise the description of English vowels as follows:

i:	long high front spread monophthong
I	short high front spread monophthong
e	short mid front spread monophthong
æ	short low front spread monophthong
Λ	short low central neutral monophthong
a:	long low back neutral monophthong
D	short low back rounded monophthong
ว:	long mid back rounded monophthong
σ	short high back rounded monophthong
u:	long high back rounded monophthong
3:	long mid central neutral monophthong

(example words: seat, east, eagle) (example words: sit, ink, ill, it) (example words: get, set, red, bell) (example words: cat, rat, bat, mat) (example words: cut, come, cup) (example words: arm, ask, calm, car) (example words: gone, shot, lock, dot) (example words: brought, call, law) (example words: cook, book, look, took) (example words: spoon, fool, food) (example words: girl, earn, turn, pearl)

r

ð



How to Use a Vowel Quadrilateral - IPA Vowel Chart with Examples

7. Classification of Vowel sounds

(Lecture 3)

(1) Front vowels / i: /, / I /, / e /, / æ /

Description

a) / i: /

Examples:

i, as in: machine, fatigue, suite, urine, bedim, centime

ie, as in: piece, shield, believe, retrieve, thief, achieve, sieve, retrieve

ei, as in: seize, receive, ceiling, receipt, deceive, caffeine

ea, as in: repeat, reveal, cease, please, increase, beans, lead, appeal

ee, as in: freedom, fees, redeem, canteen, feed, freedom, bleeding, eel

e, as in: these, be, economic, cede, be, equal, evil, cedar, edam, elongate

ey, as in: key

Note: / i: / in 'quay', 'people', 'Beauchamp' /'bi:tʃəm/ (Gimson 1989: 101)

Long: [i:] read, freeze, breathe, flee, please, fees

Reduced [i] meet, least, lease, reef, beach

Compare [i:] & [i] feed, feet; seize, cease; lead, leak

Note 1: Any long vowel is usually reduced before a fortis/voiceless consonant.

Note 2: Any reduced long vowel is marked by omitting the two dots which mark the vowel length.

Vocabulary:

'bedim' /br'di:m/: cause to become dim (less bright/faint)

'quay' /ki:/: a long platform beside the sea or a river where boats can be tied. 'Beauchamp' /'bi:tʃəm/: name of habitation of several places in France.

'cede' /si:d/: give up (power or territory)

'eel' /i:l/: a kind of snake-like fish

'Edam' /'i:dəm/: a yellow pressed cheese from the Netherlands, made in balls

Description: 1- The long vowel / i: / is articulated with the front of tongue raised to the position approximately below fully close position. 2- The lips are widely spread with narrow jaw opening. 3-

The tongue is tense with the side rims making a firm contact with the upper molars. This contact is made by accident. / i: / is described as a 'high, front, unrounded, long vowel'.

b) / I /

Examples:

i, as in: pit, bid, sister, twitch, activity, pick, stick, until, unfit, ethics
e, as in: judges, reaches, sorted, response, deceive, believe, shouted
ie, as in: bodies, cities, babies, remedies, forties, sorties, bundies
a, as in: image, damage, surface, senate, separate, private, intimate
y, as in: crystal, mystery, lyrics, oxygen, styptics, glyptic
Note: the /1/ exists in words like: 'build', 'Sunday' (end of days of the week), 'business', 'women', 'minute', 'England' (Gimson 1989: 103)

Description: 1. The short vowel / I / is pronounced with the part of tongue nearer to the centre than to the front, raised just above half-close position with the jaw narrowly open. 2. The lips are loosely spread. 3. The tongue is lax (compared with the tension for /i:/) with the side rims making a light contact with the upper molars. / I / is described as a 'high, front, unrounded short vowel'.

Variants of / 1 /

a) In word-final position,

/ ə / takes the place of / ı /:

e.g. ity: /əti / instead of /iti / as in: dignity, quality, extremity, quantity

itive: /ətIv/ instead of /ItIv/ as in additive, genitive, sensitive

ily: /əli/ instead of /ılı / (especially after /r/) as angrily, primarily, readily, hungrily

ate: is usually pronounced as /ət/ rather than /it/ as in private, climate, private, approximate, accurate

ible: /əbl/ instead of /ıbl/ as in adorable, inevitable, payable, excitable

em: /əm/ instead of / Im/ or /em/ as in poem, anthem, system

b) Sometimes, both / I/ & / ∂ / are heard in RP speakers' speech.

e.g. ess: /_1s/ or /_əs/ as in loudness, brightness, senseless, sadness, harshness ace: /_1s / or /_əs/ as in necklace, menace, surface, palace

e.g. age: pronounced mostly as /1d3 / as in damage, garbage, advantage

Note: in some French loan words such as barrage, camouflage, the 'age' is pronounced as /a:(d)3)/,

'et' is pronounced as / π / especially following /k, g, t \int , d3/ as in rocket, basket, target, widget, gadget, garret
Note: the endings 'let', 'ret' often have / ϑ t/, as in bracelet, secret, claret, garret 'be' /I/ is more common than / ϑ /, as in because, between, behalf; yet / ϑ / is more common than /I/ in words like believe, belong, behave

Examples:

a, as in: many, Thames, marine, ate
ai, as in said, again, against, saith
ay, as in says /sez/, but not in 'say' /set/
e, as in: fed, red, wet, set, let, met, pet, set, net, wetly, restless, wretch
ea, as in: dead, health, breath, wealth, dealt
ei, as in Leicester
ie, as in friend
u, as in: bury
compare: /i/, /e/ pit, pet; knit, net; till, tell; lit, let

Vocabulary:

'Thames' /temz/: a river in Southern England that flows through London to the North Sea **'saith'** /seθ/: old use of 'says' with 3 rd person singular; this verb is also used in the Bible **'wretch'** /retʃ/: a poor, unhappy, or possibly unlucky person

Description: 1-The vowel / e / is articulated with the front of the tongue raised between half- open and half-close positions with medium jaw opening. 2- The lips are loosely spread, but lightly wider apart than for / I /. 3- The tongue rims make a light contact with the upper molars. /e/ is described as a 'mid front, unrounded short vowel'.

d) /æ/

Examples:

a, as in: cat, bad, back, carry, jacket, happen, marry, ramble, statue

ai, as in: plait, plaid

Vocabulary:

'ramble' /'ræmbəl/: a long walk for enjoyment often in the country **'plait'** /plæt/: form of hair into a plait /plexus)

'plaid' /plæd/: a type of loth usually made of wool

'ked' /ked/: any of various blood-feeding often wingless flies of the family

'Hippoboscidae' /hipp'bpskədai/that are parasitic on sheep, deer, and other animals

'cad' /kæd/: usually a man who behave dishonourably, especially towards a woman

'writ' /rɪt /: a form of written command in the name of a court or other legal authority to act, or abstain from acting, in some way

'ret' /ret/: abbreviation of the word 'retired'

Description: 1- The short vowel / α / is articulated with the mouth slightly more open than for / e /. 2- The front of the tongue is raised just below half-close position, with the side rims making a very slight contact with the back upper molars. 3- The jaw is widely open and the lips are neutrally spread. / α / is described as a 'front open unrounded short vowel'.

Note: The short vowel /æ/ appears to be lengthened in RP English, mainly before the lenis/voiced consonants /b, d, g, dʒ, m, n/ (dab, cad, bag, badge, ram, man). It seems to be equivalent in quality to the long vowels /i:, a:, o:, 3:/. However, like all short vowels, it is reduced before any fortis/voiceless consonants.

(2) Central vowels: $/ 3: /, / 3/, / \Lambda /$

Description

a) / 3: /

Examples:

ir, as in bird, dirt, firm, skirt first, girl, thirty, thirsty, birthday, gird
ea, as in: earth, heard, learn, search
er, as in ear, merge, her, serve, berth, mercy, mercury, berserk, wert
ur, as in burst, fur, curd, turn, church, nurse, curl, burnt, purple
err, as in: err

•••••••••••

our, as in journey, courtesy, scourge

urr, as in: purr

W + or, as word, world, work, worse, worthy, worship, worm

yr, as in: myrtle

Note: / 3: / in 'colonel' /k3:nl/

Long [3:], as in: fur, burn, bird, urge

Reduced [3], as: in first, earth, worse, church

Compare [3:], **[3]**, as in heard, hurt; bird, birth; third, thirst; hers, nurse; Thursday, thirsty; curve, surf

Vocabulary:

'berth' /b3: θ /: a place where a ship can stop and be tied up, as in a harbour

'Berserk' /b3:'s3:k/: mad with violent anger

'err' /3:/: to make an error or mistake

'courtesy' /'k3:təsi/ : showing of politeness in one's attitude and behaviour towards others. 'scourge' /sk3:dʒ/: hist. a whip (piece of leather) used as an instrument of punishment

'myrtle' /'m3:tl/: a kind of tropical tree

'purr' /p3:/: to utter a low, continuing murmuring sound expressive of contentment or pleasure.

'worm' /w3:m/: a small thing creature with no backbone or limits like silkworms

Description: 1- The long vowel/3:/ is a central vowel articulated with the centre of the tongue raised between half-close and half-open. 2- No firm contact is made between the tongue and the upper molars. 3- The jaw is medially open and the lips are neutrally spread. /3:/ is described as a 'mid, central, unrounded, long vowel'.

Variants: / 3: / is sometimes reduced to [9] in unaccented syllables. In the words: 'amateur', /'æmət3:/ and pennyworth /'penɪw3: θ /, the stress is on the first syllable, thus the /3:/ is changed into [9]; the result would be: ['æmətə] and /'penɪwə θ /.

c) / ə /

Examples:

/ ə / may be spelt with most vowel letters and their combinations.
i, as in: possible, edible, animal, family, pencil, experiment, decimal, dilemma
e, as in: gentlemen, wonder, wonderful, enemy, problem, system, veteran
a, as in: woman, gentleman, dilemma, balloon, again, pleasant, banana, adopt
o, as in: obtain, oblige, observe, obscure, obedient, salmon, gallon, parrot
u, as in: suppose, support, album, circumstance, survive, medium, stadium
ar, as in: particular, beggar, Trafalgar, popular, collar, scholar, muscular
e, as in: problem, celebrate, enemy, synthesis, system, symmetry, remedy
er, as in mother, danger, stranger, bearer, bigger, robber , passenger, power
or, as in: famous, gorgeous, spacious, enormous, advantageous, conscious
our, as in: colour, behaviour, endeavour, savour, favour, neighbour, harbour
ure, as in: figure, departure, creature, closure, caricature, culture, literature

y, as in: syringe, analysis, Pennsylvania, synonymous, sibyl, Cyrillic

It should be noted that schwa / ϑ / is normal in common unaccented weak forms of such words like: a, an, the, to, for, but, and, etc.

Vocabulary:

'edible' /'edəbəl/ to be eaten ; eatable

'dilemma' /də'lemə/: a difficult choice to be made between two courses of action, both undesirable 'salmon' /'sæmən/: a type of large fish with silvery skin which lay eggs

'warrior' /'worra/: especially in ancient times, a brave or experienced soldier or fighter

'savour' (v) /servə/: to taste good food or drink and enjoy it completely

'sibyl' /sIbəl/: a woman in ancient times supposed to utter the oracles (revelations) and prophecies of God.

'Cyrillic' /sə'rılık/: alphabet used by many Slavic Peoples

Description: 1- $/ \circ /$ is a quick, relaxed, neutral, central vowel in which the vocal tract is in its neutral position. 2- It frequently occurs in unaccented syllables. 3- The lips are in their neutral position. 4- The tongue is raised between half-open and half-close, and the jaw is completely relaxed. 5- Its quality varies depending on the adjacent consonant sounds; for example, in the vicinity of velar consonants /k, g/ and /ŋ/, the tongue may be slightly more raised and retracted, as in: 'long ago' /loŋ \circ 'gou/. However, in word-final position, the schwa may be articulated in half-open position as in builder, Colchester, banana, etc. $/ \circ /$ is described as a 'mid, central, unrounded, short vowel'.

Note: sometimes, there is an alternation between the Schwa /ə/ and the short vowel sound /I/

d) / ʌ /

Examples:

u, as in: cut, fun, dull, humble, hunter, punk, sunny, uncultured

o, as in: none, some, among, monetary, month, colourful, monk, London

oo, as in: blood, flood

ou, as in: country, southern, double, couple, trouble, enough, younger

oe, as in: does

Vocabulary:

'punk'/pʌŋk/: a worthless person (often used as a general term of abuse)

'stump'/stAmp/: the bottom part of a tree left projecting from the ground after most of the trunk has fallen or been cut down

74

'cutch' /kʌtʃ/: a kind of green tea

'dirge' /d3:d3/: a slow sad song sung over a dead person

'drudge' /drʌdʒ/: to do hard, humble, or uninteresting work

Description: 1- The short vowel $/\Lambda$ / is articulated with the jaws considerably separated. 2- The lips become neutrally open. 3- The centre of the tongue is raised just above the fully open position. 4- In the process, no contact is being made between the tongue and the upper molars. 5- $/\Lambda$ / does not occur in final open syllables. $/\Lambda$ / is described as an 'open, central, neutral, unrounded, short vowel'.

(3) Back vowels: /a:/, /p/, /ɔ:/, /u/, /u:/

Description

a) /a:/

Examples:

a, as in: after, arsenal, glance, glass, half, impala, banal, dancer

ar, as in: part, march, card, farther, carpenter, darkness, arsenal

ear, as in: heart, hearth, hearty

er, as in: clerk, Derby, sergeant

al, as in: calm, palm, half, calf, salve

au, as in: aunt, laugh

Note: /a:/ in 'vase', and in recent borrowings from French in which the French oir [wa:], e.g. 'reservoir'

Long [a:], as in: card, starve, large, hard, banal, garage (Fr. loan word), calm

Reduced [a.], as in: March, last, heart, lark, start, park, glass

Vocabulary:

'impala' /ım'pa:lə/ : a kind of large brownish graceful African deer-like animal

'hearth' /ha: θ /: the area around the fire in one's home, esp. the floor of the fire place

'salve' /sa:v/: oily paste to be put on a cut, or a wound to help the forming of the new skin

'Marge' /ma:ʒ/: a margin or edge

'cud' /kAd/: food that has been swallowed and brought up again to the mouth from the first stomach

of certain animals, such as sheep and cows, etc., for further chewing

'hub'/hAb/: the central part of a wheel

'cub'/kAb/: the young of a fox, bear, lion or other carnivorous mammals

'bard' /ba:d/: a poet

'bub' /bAb/: an aggressive or rude way of addressing a boy or man

Description: 1- The long vowel / α :/ is articulated with the jaws considerably separated. 2- The lips become neutrally open. 3- The tongue is in its fully neutral position. 4- In the process, no contact is being made between the tongue and the upper molars. / α : / is described as an 'open, back, neutral, unrounded, long vowel.

b) /p /

Examples:

a, as in: wash, wad, wander, what, want, watch, quality, wallet, swan
au, as in: restaurant, sausage, Austria, Australia, cauliflower, austerity
o, as in: shop, sorrow, model, involve, doctor, follow, obvious, policy
ou, as in: cough, trough /trof/, Gloucester /gloster/
ow, as in: knowledge, acknowledge

Vocabulary:

'wad' /wvd/: a bundle (package) of paper, banknotes, or documents
'trough' /trof/: a long narrow boxlike object, esp. for holding water or food for animals
'Gloucester' /'glostə/: a cathedral city situated in the South West of England
'sot' /svt/: a person who is habitually drunk and unable to think clearly
'loch' /lvk/: a lake ; a part of the sea enclosed by land
'larch' /la:tʃ/: a tall upright tree with bright green needle-like leaves and hard skin fruit
Description: 1- The short vowel /v/ is articulated with wide-open jaws and slight open lip rounding.
2- The back of the tongue is in its fully open position. 3- No contact is made between the tongue and the upper molars. / v / is described as an 'open, back, rounded, short vowel'.

c) /3:/

Examples:

a, as in: fall, talk, salty, water, ball, caller, wallet, smaller

ar, as in: towards, reward, award, warless, quart

au, as in: daughter, sauce, fault, naughty, caudle, maudlin, gaudy

aw, as in: raw, hawk, straw, yawn, strawberry, crawling, drawly, lawless

oa, as in: abroad, broadly, broadcast

oar, as in: hoard, oar, board, soared, soar, roar, Foard, coarse or, as in: short, horn, torn, porch, form, dormitory, cordially, floret ore, as in: more, snore, spore, before, shored, adore, cornet, hornet oor, as in: moor, floor, spoors, coordinate, microorganism, doorway ou, as in: sought, ought, fought, wrought our, as in: court, four, source, pouring, courtesy Note 1: /ɔ:/ in 'sure'/[ɔ:/; 'poor' /po:/ or with /uə/ 'sure' /[uə/ or 'poor' /puə/ Note 2: /ɔ:/ does not occur before $/\eta/$ Long [3:], as in: saw, war, born, board, dawn Reduced [5], as in: sort, ought, horse, chalk, quart **Vocabulary:** 'hawk' /ho:k/: a kind of large bird which catches other birds and small animals with its feet 'wrought' /ro:t/: (of metals) beaten out or shaped by hammering 'gaudy' /go:di/: a celebratory reunion dinner or entertainment held by a college 'quart' /ko:t/: a unit of liquid capacity equal to a quarter of a gallon of two pints 'floret' /'flo:rət/: one of the small flowers making up a composite flower head 'moor' /mo:/:make fast (a boat) by attaching it by cable or rope to the shore or to an anchor 'oar'/o:/ : a long pole with a flat blade used for rowing a boat 'roar' /ro:/: (of a lion or other large wild animal) utter a full, deep, prolonged cry Description: 1-The long vowel /5:/ is articulated with medium lip-rounding. 2- The back of the

tongue is raised between half-open and half-close positions. **3-** No contact is being made between the tongue and the upper molars. /ɔ:/ is described as a 'mid, back, rounded, long vowel'.

d) /v/

Examples:

u, as in: pull, sugar, cushion, bullring, butcher, fulfill

o, as in: wolf, woman, bosom, Wollongong /'woləngoŋ/

oo, as in: good, rook, wood, wool, look, took, hooker, wooden, childhood

ou, as in: group, could, should, would, courier

or, as in: Worcester' /'wostə/; worsted (cloth) /'wostid/

Vocabulary:

'Wollongong' /'woləngoŋ/: a seaside city located in the Illawarra region of New South Wales, Australia **'Worcester'** /'wostə/: is a cathedral city in Worcestershire /'wostəʃə/, England, 136 km North West of London

Description: 1- The short vowel $/\upsilon$ / is articulated with the part of the tongue nearer to the centre than to the back, which is raised just above half-close position. 2- The tongue has a lax state (compared with the tenser $/\upsilon$:/. 3- No firm contact is being made between the tongue and the upper molars. $/\upsilon$ /is described as a 'high, back, rounded, short vowel'.

e) / u:/

Examples:

oo, as in: mood, school, food, cartoon, blooming, rooster, poodle, loosen o, as in: do, who, two, prove, lose, whom, move, lose, improve, remove ou, as in: group, soup, troupe, wound, through, route, crouton, routine u, as in: rude, June, accuse, beautiful, abuse, induce, illusion, include ew, as in: chew, crew, flew, screw, shrewd, brewery, cashew ue, as in: blue, flue, fluent, cruelly, pursue, queue, revue, rescue, subdue ui, as in: juice, cruise, bruit, recruit, bruise, suitcase, sluice, suitor oe, as in: shoe, canoe ooe, as in: cooed, mooed, tattooed, wooed iew, as in: view, review, interview, viewpoint **Note:** In many cases of the spelling u, eu, ew, ue, ui, /u :/ is preceded by /j/, e.g. music, duke, new, few, hue, argue, nuisance, beauty; in some words, both /u:/ and /ju:/ are heard, e.g. 'suit' /sju:t/ or /su:t/, 'enthusiasm' /ın'θju:ziæzəm/ or /ın'θu:ziæzəm/. Long [u:], as in two, blue, food, move Reduced [v], as in boot, fruit, hoof, group, douche, hoop **Note:** $/ \upsilon$: $/ does not normally occur before [<math>\eta$] **Description:** 1- RP long vowel / u: / is a back close vowel, with a raising relaxed tongue. 2- The

Description: 1- RP long vowel / u: / is a back close vowel, with a raising relaxed tongue. 2- The articulation of / u: / is tense compared with that of / υ /. 3- No firm contact is made between the tongue and the upper molars. The lips tend to be closely rounded and centralized. /u:/ is described as a 'high, back, rounded, long vowel'.

Vocabulary:

'poodle' /pu:dl/: a type of dog with thick curling hair, usually cut in special shapes

'crouton' /kru:tpn/: (French) a small square piece of bread toasted or cooked in flat and eaten in soup 'shrewd'/ʃr:d/: well-reasoned and likely to be right; clever in judgment

'brewery' /'brou:əri/ a place where beer is made

'cashew' /kæju: ; kəju:/: an edible kidney-shaped nut, rich in oil and protein

'subdue' /səb'dju:/: overcome, quieten, or bring under control

78

'bruise' /bru:z/: an injury appearing as an area of discoloured skin on the body, caused by a blow or impact rupturing underlying blood vessels

'sluice' /slu:s/: a sliding gate or other device for controlling the flow of water, especially one in a lock gate 'cooed' /ku:d/: past of 'coo'(of a pigeon or dove): make a soft murmuring sound 'mooed' /mu:d/: past of **'moo'** deep vocal sound of a cow

'tattooed' /tæ'tu:d/: past & pp. of 'tattoo': mark (a person or part of the body) with an indelible design by inserting pigment into punctures in the skin

'wooed' /wu:d/:past of 'woo'; try to gain the love of someone, typically a woman, especially with a view to marriage.

7. ENGLISH DIPHTHONGS

(Lecture 4)

So far, the discussion has characterised pure vowels with a single perceived auditory quality, which are known as **monophthongs**. Such vowels remain constant in their articulation process and do not glide. There are 12 monophthongs in English: /I/, /i:/, / υ /, /u:/, / Λ /, / α :/, / υ /, / ε

Diphthongs are vowels in which two vowel qualities can be perceived, and the articulators move from the production of one vowel to the other. The first part of the diphthong is longer and stronger than the second and is often referred as to the **nucleus** of the diphthong. The second part is just a **glide** whose full formation is generally not accomplished. The organs of speech only move toward the articulation of the glide, but they are not set to pronounce it fully. The total number of diphthongs is eight: /eI/, /aI/, /JI/, /IP/, /eP/, /UP/, /AU/. Diphthongs are usually grouped into the following three categories, depending on the height and advancement of the tongue.

The diphthongs that glide toward the vowel /a/ in the centre of the oral cavity are known as **centring to /a/**: /ia/, /ea/, /va/. Thus, the English eight diphthongs are divided into five closing diphthongs and three centering ones. They are structured as follows:



1) Centering diphthongs towards the /ə/ (schwa) vowel, as the symbols indicate. The diphthongs that glide toward a higher position in the mouth to reach the close sound /I/ are known as closing to /I/: /eI/, /aI/, /oI/; (Figure 11)



Figure 11. Centring Diphthongs

a) /ıə

Examples:

eer, as in: deer, veer, leer, peered, cheering, career, charioteer, profiteer
ear, as in: near, year, fear, theater, appear, gear, smear, weary, disappear
ere, as in: here, sere, adherence, atmosphere, sphere, severe, cashmere
eir, as in: weird, Madeira
ier, as in: burier, fierce, healthier, flakier, heavier, merrier, worrier
iu, as in: medium, premium, stadium, podium
ia, as in: media, Celia, podia, Claudia, Numidia, onomatopoeia
eo, as in: theory, theological, theoretical,
ea, as in: idea, ideal, real, beard, realism
ir, as in: museum
Vocabulary:
'veer' /viə/: a sudden change of direction
'charioteer' /tʃæriə'tiə/: a chariot driver
'smear' /smiə/: a spot made by an oily or sticky material as ink

'sere' /siə/: (especially of vegetation) dry or withered

'onomatopoeia' /pnəmætə'piə /: The formation of a word from a sound associated with what is named

Description: 1) The diphthong of RP English /i = 3 starts from the area below close position used for /i/, and then the tongue moves in the direction of the more open variety of /=/.2) The lips are neutral throughout, with a slight movement from spread to open.

b) /eə/

Examples:

are, as in: dare, rare, share, square, welfare, prepare, hardware, careless

ar, as in: Mary, precarious, scarcely, sectarian, egalitarian, declarer

air, as in: air, fair, pair, chair, fairly, aircraft, armchair, laird, despair

ear, ea, as in: bear, pear, wear, tear (v), bugbear, whereas

ere, as in: therefore, anywhere, therein

eir, as in: theirs, heir, heirloom

Vocabulary:

'precarious' /pri'keəriəs/: unsafe; not firm or steady; dependent on chance; uncertain

'egalitarian' /ɪgælə'teərɪən/: holding or showing the belief that all men are equal & should have equal rights and advantages

'laird' /leəd/: (in Scotland) a person who owns a large estate

'bugbear' /'bʌgbeə/: a cause of concern, perhaps without reason; a cause of obsessive fear, irritation, or loathing

'heirloom' /'eəlu:m/: a valuable object that has belonged to a family for several generations.

Description: 1) The diphthong /eə/ starts in the half-open front position, and moves in the direction of the centre towards the /ə/. This is very clear when the diphthong is final in the cases of a syllable closed by a consonant and in an open syllable. 2) During the realization of /eə/, the lips are neutrally open.

c) /ʊə/

Examples:

oer, as in: doer oor, as in: poor, moor our, as in: tour, dour ua, as in: truant, usually ue, as in: fluent, cruelty ur, as in: curious, spurious, during, purity, security ure, as in: pure, endure, cure, sure Note: /və/ in: jewel /'djʊ:əl/ Vocabulary: **'moor'** /muə/: a wide, open raised area of land, covered with rough grass or low bushes, that is not farmed because of its bad soil

'dour' /doo/: hard and cold in one's manner; unfriendly; unsmiling

'spurious' /'spuəriəs/: not being what it purports to be; false or fake

'endure' /ın'djuə/ suffer (something painful or difficult) patiently

Description: 1) The diphthong $/\upsilon_{2}/$ glides from the back tongue position of $/\upsilon/$ towards the centre where $/\mathfrak{d}/$ forms the end-point of all three centring diphthongs. 2) The lips are somewhat rounded at the beginning of the glide to become neutrally spread as the glide progresses.

2) Closing Diphthongs towards /1/.

the diphthongs that glide toward a higher position in the mouth to reach the close sound /1/ are known as **closing to /1/**: /e1/, /a1/, /31/ (*Figure 12*)



Figure 12. Closing to /I/ diphthongs in the cardinal vowel diagram

d) /eɪ/

Examples:

a, as in: state, narrate, female, patient, wasteful, inhalator, information ai, as in: waist, main, wait, aim, again, complain, failure, faithful, straight ay, as in: may, lay, away, always, railway, birthday, nowadays, Norway ei, as in: eight, veil, sleigh, beige, weigh, rein, vein, neigh, feign, neighbour ey, as in: they, prey, whey, hey, grey, convey, survey, purvey, abeyance ea, as in: great, steak, break, breaker au, as in: gauge /geidʒ/ ao, as in: gaol /geil/ Note: halfpenny /'heipni/; cocaine /kəʊ'kein/; Vocabulary: 'inhalator' /Inhə'leitə/: a device for inhaling something, especially oxygen ; a respirator

'sleigh' /slei/: a vehicle which slides along snow on two metal blades, esp. for carrying people and for pulling by a horse

'neigh' /nei/: the long and loud cry that a horse makes

'feign' /fein/: 1- pretend to be affected by(a feeling, state, or injury) 2- to invent (an excuse, reason, etc)

'gauge' /geidj/: an instrument or device for measuring the magnitude, amount, or content of something, typically with a visual display of such information

'gaol' /djeɪl/: prison ; jail ; imprisonment

Description: 1) The diphthong / e_I / glides from slightly below half-close front position and moves in the direction of below close position towards /I/. 2) The lips are spread throughout.

b) /aɪ/

Examples:

I, as in: rite, dime, sine, bite, dive, riding, climate, kiting, slider, writing

y, as in: try, cry, dry, type, style, psychic, hyponymy, psychology

igh, as in: high, light, knight, fight, slight, fighter, nightmare, frightening

eigh, as in: height

ie, as in: die, lie, pie, tried, pie, tied, flies, tried, fried, skied

ye, as in: dye, rye

ei, as in: either

ai, as in: aisle

ye, as in: bye

Vocabulary:

'rite' /rait/: a religious ceremony or act

'dime' /daɪm/: a ten-cent coin

'hyponymy' /hai'ponəmi/: subordination

'knight' /naɪt/: (in former times) a noble soldier on horseback serving a rule

Description: 1- The diphthong /ai/ starts at a point just behind the front open position and glides towards the position of /i/. 2- The tongue is raised to a level below the position of the cardinal vowel [e]. 3- The lips change from a neutral to a loosely spread shape.

c) /31/

Examples:

oi, as in: spoil, voice, point, moist, avoid, rejoin, noisy, toilet, boisterous oy, as in: boy, toy, royal, destroy, cowboy, enjoy, loyalty, employ, coyness

uoy, as in: buoy

Vocabulary:

'moist' /moist/: slightly wet, damp or humid

'boisterous' /'boistoros/: (of a person) noisy, energetic, and cheerful ; rowdy

'coyness' / "koinos/: (especially in a woman or her behaviour) the quality to be prettily modest or humble in the presence of others so as to attract attention

'buoy' /boi/: a floating object fastened to the bed of the sea to show ships where there are rocks.

Description: 1) For the diphthong /31/, the tongue glide begins at a point between the back half- open and open positions and moves in the direction of /1/. 2) The tongue moves from back to the front. 3) The lips start as open rounded, then changes into neutral shape.

1) Closing diphthongs towards /v/:

The diphthongs that glide toward a higher position in the mouth to reach the sound $/\upsilon$ / and are known as **closing to** $/\upsilon/$: $/\upsilon\upsilon/$, $/a\upsilon/$.



Figure 13. Closing to $/\upsilon$ / diphthongs in the cardinal vowel diagram

a) /əʊ/

Examples:

o, as in: so, Rome, fold, bold, homeless, folder, colder, clothes, imposing oa, as in: soak, loam, foals, loader, download, croaker, roaming, goading oe, as in: toe, doe, sloe, foe, hoe, aloe, woe ou, as in: soul, though, shoulder

ow, as in: throw, know, bowl, widow, blowing, slower,

Note: /əu/ in mauve ; brooch ; beau ; sew ; don't ; won't (Gimson 1989: 134)

Vocabulary:

'soak'/souk/: make or allow something to become thoroughly wet by immersing it in liquid

'loam' /loom/: a fertile soil of clay and sand containing humus ; mud

'croaker' /'crouko/: are creatures such as frogs which make a deep low noise

'roaming' /'roomin/: move about or travel aimlessly, especially over a wide area

'goading' /'goudin/: provoking or annoying someone so as to stimulate some action or reaction from his part

'sloe' /sloo/: a small bitter kind of plum with dark purple skin that is the fruit of the blackthorn.

'aloe' /ə'ləʊ/: a kind of a tropical Asian tree

'woe' /wəu/: great sorrow or distress

Description: 1) The diphthong $|\neg \upsilon\rangle$ begins at a mid-position between half-close and half-open and moves towards $|\upsilon\rangle$. 2) The lips start as neutral for the first part $|\neg\rangle$ and then change to round for the second segment $|\upsilon\rangle$.

b) /av/

Examples:

ou, as in: doubt, cloud, plough, house, sound, shouted, clouding, louder

ow, as in: how, town, fowl, allow, crowded, download, flowering, however

Vocabulary:

'fowl' /faul/: a domestic cock or hen

'owl' /aul/: any of several types of night bird with large eyes, supposed to be very wise

'cowl' /kaol/: a loose head covering for the whole of the head but not for the face, esp. worn by monks

'fount' /faot/: the place where something begins or comes from like (a spring of water)

'lout' /laot/: a rough awkward man or boy with bad manners

Description: 1) The diphthong /au/ starts at a point between the back and front open positions, slightly more fronted than the position for /a:/, and then moves in the direction of /u/. 2) The tongue is raised at the half-close level. 3) The lips change from a neutrally open to a weakly rounded position.

7. ENGLISH TRIPHTHONGS

(Lecture 5)

In phonetics, a **triphthong** (/'trɪf θ vŋ/ or /'trɪp θ vŋ/) (from Greek "triphthongos", literally "with three sounds", or "with three tones") is a monosyllabic vowel combination involving a quick but smooth movement of the articulator from one vowel quality to another that passes over a third, all produced rapidly and without interruption. Roach (2009: 19) describes triphthongs as "composed of the five closing diphthongs [...] with a schwa added on the end".

While "pure" vowels 'monophthongs' have one target articulator position, diphthongs have two, and triphthongs three. For instance, a careful pronunciation of the word 'hour' begins with a vowel quality similar to / α :/, goes on to a glide towards the back close rounded area (for which we use the symbol / σ /), then ends with a mid-central vowel (schwa, / σ /). We use the symbols / $\alpha\sigma\sigma$ / to represent the way we pronounce the word 'hour'. In English, triphthongs can be looked at as being composed of the five closing diphthongs described in the last section, with / σ / added to the end. The five examples of triphthongs are given below:







Examples:

ayer, as in: prayer, layer, player, slayer

yor, as in: mayor, conveyor, purveyor

aya, as in: betrayal, Himalayas, layabout, jambalaya

eya, as in: conveyance

ayo, as in: bayonet

ei, as in: reification

ao, as in: Laodicean

ia, as in: via, liars, friable, diastema, diabolic, dialectal, adiabatic maniacal,

io, as in: lion, diocese, pioneer, violin, biotechnology,

Compare: [ei], [eiə] pray, prayer; lay, layer; slay, slayer

Description: 1) In the articulation of the triphthongs /e1ə/, the tongue moves from slightly below half-close front position in the direction of below close position towards /I/, then to the centre where /ə/ forms the endpoint. 2) The lips change from spread to neutral position.

Vocabulary:

'slayer' /sleiə/: killer, esp. violently

'purveyor' /p3:veiə/: a seller or firm that supplies food to a large group

'layabout' /leiə'baot/: a person who habitually does little or no work

'conveyor'/kən'veiə/: a person or thing that transport goods or anything-else

'bayonet' /'berənət/: a long knife fixed to the end of a soldier's gun (riffle)

'reification' /reiəfi'keifən/ : the act of representing an abstraction as a physical thing; objectification'Laodicean'/leiə'dəsi:n/ : a person with a halfhearted attitude toward religion or politics.

c) /aiə

Examples:

ire, as in: fire, admire, aspire, satire, esquire, require, empire, entire

ia, as in: liar, trial, viable, diary, dialogue, reliance, diagnosis, triangle

ier, as in: fiery, hierocracy, hierophant, hierarchy, supplier,

ie, as in: diet, variety, scientific, dietitian, varietal, societal

yer, as in: flyer, lyre, dryers, fryers

io, as in: lion, zwitterions, Orion, iodine, calliope

ir, as in: iron, Epirus

Compare: [a1], [a1] high, higher; lie, lyre; fly, flyer; try, trial; pie, empire

Description: 1) In the articulation of the triphthongs /aiə/, the tongue starts at a point just behind the front open position and glides towards the position of /I/, and then it is raised to the centre where /ə/ forms the endpoint. 2) The lips change from an open to a neutral shape.

Vocabulary:

'satire' /sæ'taɪə/: (usu. in literature, theatre or work of art), the use of humour, irony; exaggeration, or ridicule to expose and criticize people's stupidity or vices.

'esquire' /ɪs'kwaɪə /: a title appended (added) to a lawyer's name 'viable' /'vaɪəbl /: capable of working successfully; feasible

'fiery'/'faiəri/: consisting of fire or burning strongly and brightly

'hierophant' /'haiərəfænt /: a person, especially a priest in ancient Greece, who interprets sacred mysteries or esoteric (mystic) principles

'iodine' /aɪə'di:n /: the chemical element of atomic number 53, a nonmetallic element forming black crystals and a violet vapour

'calliope'/kə'laɪəpi: /: a keyboard instrument resembling an organ but with the notes produced by stream whistles, used chiefly on showboats and in travelling fairs.

d) /319/

Examples:

oy, as in: loyal, coyer, royal, joyous, enjoyable, annoyance, flamboyant oi, as in: coir, uncoil, Illinoisan,

Compare: [51], [51] Roy, royal; joy, joyous; enjoy, enjoyable; coin, uncoil

Description:

1) In the articulation of the triphthongs / \Im I/, the tongue starts at a point between the back half-open and open positions and moves in the direction of /I/, and then it is lowered to the centre where / \Im / forms the endpoint. 2) The lips change from a rounded to a neutral shape.

Vocabulary:

'coyer' /kɔiə/: (esp. with reference to a woman) making a pretense of shyness or modesty that is intended to be alluring; timid; shy; bashful,

'flamboyant' /flæm'bɔɪə/: (of a person or their behaviour), tending to attract attention because of their exuberance, confidence, and stylishness

'coir' /kɔɪə/: fiber from the outer husk (skin) of the coconut, used for making ropes and matting **'uncoil'** /ʌŋ'kɔɪə/: solve; resolve; fix; settle

'Illinoisan' /Ilə'nəɪə/: of or relating to characteristics of the US state of Illinois or its inhabitants **'Roy'** /rəɪ/: a city in northeastern Utah, a Southwestern suburb of Ogden, population 35.672.

2) a) /əʊə/

Examples :

ower, as in: grower, slower, lower, mower, widower, borrower

Compare: [əu], [əuə]: grow, grower ; low, lower ; slow, lower ; widow, widower

Vocabulary:

'mower' /'məʊə/: a machine for cutting grass in gardens, having blades that turn round as it moves ; reaper ; binder

Description: 1) In the articulation of the triphthongs / $\vartheta \upsilon \vartheta$ /, the part of tongue begins at a midposition between half-close and half-open and moves towards / υ /, and then glides back in the direction of the centre for / ϑ / as an endpoint. 2) The lips start as neutral for the first part / ϑ /, change to round for the second segment / υ /, and then change back to their neutral shape.

e) /aʊə/

Examples:

ower, as in: power, flower, shower, powerful, glowering owe, as in: dowel, vowel, ou, as in: foul our, as in: flour, hour, lour, glour, stourbridge, owa, as in: coward, dowager

owr, as in: dowry,

Note: bow and scrape /bauən(d)əskreip/ (in context); gaur /gauə/

Compare: [av], [avə]: how, hour; shout, shower; town, tower; powder, power

Description: 1) In the articulation of the triphthongs /avə/, the body of tongue starts at a point between the back and front open positions and then moves in the direction of back close for /v/ before it is lowered towards the centre for /ə/ as an endpoint. 2) The lips change from a neutrally open to a strongly rounded position, and then to the neutral position.

Vocabulary:

'glowering' /'glauərıŋ /: have an angry or sullen look on one's face; scowl

'dowel' /dauə/: a peg of wood, metal, or plastic without a distinct head, used for holding together components of a structure

'lour' /lauə/: to look in a dissatisfied bad-tempered manner; frown

'stourbridge' /'stauəbrid3 /: a market town in the West Midlands county of England

'dowager' /'dauədʒə/: a widow with a title or property derived from her late husband

'dowry'/'dauəri:/: property or money brought by a bride to her husband on their marriage

'bow and scrape' /'bavən(d)əskreip/: to make a deep bow with the right leg drawn back (thus

'scraping' the floor), left hand pressed across the abdomen, right held aside

'gaur' /gauə/: a large wild ox native to India and Malaysia.

8. SYLLABLE STRUCTURE

The **syllable** is a unit containing one and only one vowel either alone as in "I" /ai/ or surrounded by consonants in certain arrangements. In English, a **minimum syllable** is formed by a single vowel, e.g. "are" /a:/, *or* /ɔ:/. Longer syllables have one or more consonants preceding or following the vowel, e.g. *meet* /mi:t/, *tick* /tik/, kicked /kikt/, *consonant* /'kɒn.sə.nənt/, *simplify* /'sɪm.pli.fai/, syllable /'sɪ.lə.bl/

Counting Syllables: To find the number of syllables in a word, follow the next steps

- 1. Count the vowel sounds in the word.
- 2. Subtract any silent vowels, (like the silent *e* at the end of the word) such as: rate /rent/.
- 3. Diphthongs count as one vowel sound like: Time /taɪm/, don't /dəunt/, toy /təɪ/.
- 4. The number of vowel sounds must be the same as the number of syllables, such as:
- receive /rɪ'siːv/, perhaps /pə'hæps/, intend /ɪn'tend/, record (v) /rɪ'kɔ:d/, many /'meni/

8.1. The Structure of the Syllable

Phonologically, the syllable is a unit of phonological organisation whose central component is a nucleus, which is normally a vowel, and which may be preceded or followed by consonants. The vowel in the centre of the syllable is called the **syllable nucleus**, and the optionally surrounding consonants are defined as **margins**. The initial margin is the **onset**, whereas the final margin is called the **coda**.



The general structure of a syllable consists of three segments:



Onset (ω): (optional)

Consonant(s) preceding the nucleus. Except for $/\eta$ /, all consonants in English can appear as onsets. In the following examples the onsets are in bald type: fat, speak, string. If the first syllable of a word begins with a vowel, this syllable has a zero onset, as in 'apply', 'artist'

Coda (κ): (optional)

Coda is usually one or more consonant. The coda may or may not exist in some syllables. For example: 'mean' /n/, 'fight' /t/, 'red' /d/ The syllable is usually considered right-branching, i.e. nucleus and coda are grouped together as a "rime" (rhyme) and are only distinguished at the second level.

Rhyme (ρ) (obligatory)

Right branch, contrasts with onset, splits into nucleus and coda:

In some theories of phonology, these syllable structures are displayed as tree diagrams (similar to the trees found in some types of syntax). The nucleus is usually the vowel in the middle of a syllable. The onset is the sound or sounds occurring before the nucleus, and the coda (literally 'tail') is the sound or sounds that follow the nucleus.

The term rhyme covers the nucleus plus coda. In the one-syllable English word cat, the nucleus is / α / (the sound that can be shouted or sung on its own), the onset / k /, the coda / t /, and the rime / α t /. This syllable can be abstracted as a consonant-vowel-consonant syllable, abbreviated CVC.

Languages vary greatly in the restrictions (constraints) on the sounds making up the onset, nucleus and coda of a syllable, according to what is termed a language's phonotactics.

8.1.1. Onset

The onset is the consonant sound or sounds at the beginning of a syllable, occurring before the nucleus. Most syllables have an onset. Some languages restrict onsets to be only a single consonant, while others allow multi-consonant onsets according to various rules. For example, in English, onsets such as pr-, pl- and tr- are possible but tl- is not, and sk- is possible but ks- is not.

8.1.2. Nucleus

The nucleus is usually the vowel in the middle of a syllable. Generally, every syllable requires a nucleus (sometimes called the 'peak'), and the minimal syllable consists only of a nucleus, as in the English words "eye" /aɪ/ or "owe" /əu/. The syllable nucleus is usually a vowel, in the form of a monophthong, diphthong, or triphthong, but sometimes is a syllabic consonant. By far the most common syllabic consonants are sonorants like [1], [m], [n] or [ŋ].

8.1.3. Coda

The coda comprises the consonant sounds of a syllable that follow the nucleus, which is usually a vowel. The combination of a nucleus and a coda is called a rime/rhyme. Some syllables consist only of a nucleus with no coda. Some languages' phonotactics limit syllable codas to a small group of single consonants, whereas others allow any consonant phoneme or even clusters of consonants. A coda-less syllable of the form V, CV, CCV, etc. (V = vowel, C = consonant) is called an open syllable (or free syllable), while a syllable that has a coda (VC, CVC, CVCC, etc.) is called a closed syllable (or checked syllable). Almost all languages allow open syllables, but some, such as Hawaiian, do not have closed syllables.



8.2. Syllabic Consonants

Some syllables have syllabic consonants as their nucleus. Words like bottle /'botl/, trouble /'trʌbl/, pigeon /'pɪdʒn/, often /'ofn/ are formed by two syllables, though they do not have a vowel as the nucleus. Instead, consonants may serve the function of the nucleus, and in these positions, they are noted with a small vertical diacritics underneath the symbol (,), e.g. /'trʌbl/, /'pɪdʒn/. In other words, a Syllabic Consonant is a consonant that replaces the vowel [ə] in a syllable. They make it possible to make some short syllables shorter and simpler. Syllabic /n/ is the most common syllabic consonants which is found after alveolar plosives and fricatives; in the case of /t, d/ sounds followed by /n/. Such as: Eaten /'i:tn /, seven /'sevn/.

The syllabic consonants are /l/ and /n/, yet /r/, /m/, and /n/ can also acquire syllabic positions, especially under the influence of some processes in connected speech. If distributed in word final position or if preceded by a vowel, those consonants do not count as syllabic. Compare the following examples:

sadden /sædn /, sand /sænd/, doesn't /dʌznt/, don't /dəʊnt/

The division of words into syllables is referred to as syllabification, which helps to distinguish between words according to the number of syllables they possess.

- Monosyllabic (one syllable): A, the, cold, quite, trade, hide, start, clean, chair, sign.
- Disyllabic (two syllables): Quiet, party, today, partner, doctor, Friday, over, chicken.
- Trisyllabic (three syllables): Fantastic, expensive, wonderful, temptation, technical.
- Polysyllabic (more than three syllables): Misunderstanding, American, psychology, conversation.

Syllables are often defined as strong or weak. The strong syllables are relatively longer, more intense, and different in quality as they appear in stressed positions of a word (see section on Word Stress). The weak syllables contain either /9/, /i/ or /u/. Syllabic consonants are also counted as forming weak syllables. The transcription of monosyllabic words is very straightforward. It involves the recognition of concrete sounds and relating them to their phonemic symbols.

9. WORD STRESS

Syllabification is closely connected with the accentual structure of words, which is known as the word stress or lexical stress. In transcription, a superscribed vertical line appears before the stressed syllable e.g. never /'nevə/, agree /ə'gri:/. Every disyllabic or polysyllabic word is pronounced with one or more syllables emphasized more than the remaining syllables in the word. Stress is usually equated with the notions of emphasis and strength, as the stressed syllables seem to be pronounced with more effort than unstressed ones. Roach (2009: 73) defines it as a prominence that is determined by four main factors: loudness, vowel length, vowel quality and pitch. In Table 11 the stressed syllables are opposed to unstressed ones:

	Loudness	Vowel length	Vowel quality	Pitch
Stressed	Loud	long	Strong	High
syllables				
Unstressed	Quiet	short	Weak	Low
syllables				

Table 9. The prominence characteristics of stressed and unstressed syllables(adapted from Roach 2009: 74)

9.1. Placement of Stress

The position of the stress determines the different types of it as described below. In many languages, word stress is fairly predictable, i.e. it is determined by rules that apply to the majority of entries in the vocabulary. These languages are said to have fixed stress. However, languages with free stress have a vocabulary for which stress placement is difficult to predict.

English is a free stress language. Moreover, free word stress may be either constant (remaining on the same syllable in different word class or in different derivatives from the same root, e.g. wonder, wonderful, wonderfully) or shifting (varying between the syllables, e.g. proverb, proverbial). Although English is a free stress language, it is possible to predict the stress placement according to the following information as indicated in Roach (2009: 76): the syllable number in the word, the phonological structure of the syllable, the grammatical category of the word, and the morphological structure of the word.

The basic stress patterns are given in the tables below, but there are exceptions, thus learners should treat each single case individually. Syllabification is one of the factors that support the prediction of stress placement. Table 10 presents the context when the stress is influenced by strong and weak syllables.

	Nouns	Stress on the first	object	/'ɒbdʒekt/
		syllable unledd the first	Speaker	/ˈspi:kə/
		syllable is weak and the 2^{nd} syllable is strong	Center	/'sentə/
	Verbs	Stress on the final	arrange	/əˈreɪndʒ/
Disyllabic words		syllable (if the final	release	/rɪˈliːs/
(Two syllable		syllable is strong)	Admit	/ədˈmɪt/
words)		Stress on the first	fasten	/ˈfaːsņ /
		syllable (if the final	open	/ˈəʊpən/
		syllable is weak)	Answer	/ˈaːnsə/
	Adjectives	Stress on the final	polite	/pəˈlaɪt/
		syllable (if the final	discrete	/dɪˈskriːt/
		syllable is strong)	correct	/kəˈrekt/
		Stress on the first	Lovely	/ˈlʌvli/
		syllable (if the final	Fatal	/ˈfeɪtl/
		syllable is weak)	Shabby	/ˈʃæbi/

Table 10. Stress patterns according to syllabification (adapted from Roach 2009: 77-78)

Another important factor in stress determination is the **morphological structure** of the words. Some suffixes and prefixes in complex words may influence the level of stress (see *Table 11*).

Self-stressed	-ee	refugee		/ˌrefjʊˈdʒiː/		
suffixes (carry the	-eer	Engineer		/ endʒi'niə/		
primary stress	-ese	Portuguese		/ˌpɔːtʃʊˈgiːz/		
themselves)	-ette	Kitchenette		/ kitʃi'net/		
	-esque	Sculpturesque		/ˈskʌlpt∫əˈresk/		
	-able	knowledge	/ˈnɒlɪdʒ/	knowledgeable	/ˈnɒlɪdʒəbl/	
	-ous	continue	/kənˈtɪnjuː/	continuous	/kənˈtɪnjʊəs/	
	-age	cover	/'kʌvə/	Coverage	/ˈkʌvərɪdʒ/	
	-al	rebut	/rɪˈbʌt/	Rebuttal	/rɪˈbʌtəl/	
	-er	advertise	/'ædvətaız/	Advertiser	/ˈædvətaɪzə/	
	-ate	affection	/əˈfek∫ņ/	affectionate	/əˈfek∫ənət/	
Neutral suffixes	-en	threat	/θret/	Threaten	/'θretņ/	
(do not affect	-ful	wonder	/ˈwʌndə/	Wonderful	/ˈwʌndəfəl/	
stress placement)	-ess	steward	/ˈstjʊəd/	Stewardess	/ˌstjʊəˈdes/	
	-hood	like	/ˈlaɪk/	Likelihood	/ˈlaɪklɪhʊd/	
	-man	business	/ˈbɪznəs/	businessman	/ˈbɪznəsmæn/	
	-like	child	/t∫aıld/	Childlike	/ˈtʃaɪldlaɪk/	
	-less	power	/ˈpaʊə/	Powerless	/'paʊəlɪs/	
	-ish	fool	/fu:l/	Foolish	/'fu:lɪʃ/	
	-ly	hurried	/ˈhʌrɪd/	Hurriedly	/ˈhʌrɪdli/	
	-ment	acknowledge	/əkˈnɒlɪdʒ/	Acknowledgment	/əkˈnɒlɪdʒmənt/	
	-ness	discursive	/dɪˈskɜːsɪv/	Discursiveness	/dɪˈskɜːsɪvnəs/	
	-OUS	poison	/ˈpɔɪzņ/	Poisonous	/'pəɪzənəs/	
	-fy	glory	/'glɔːri/	Glorify	/ˈglɔːrɪfaɪ/	
	-ship	relation	/rɪˈleɪʃņ/	relationship	/rɪˈleɪʃnʃɪp/	
	-some	burden	/ˈbɜːdn̯/	burdensome	/ˈbɜːdnsəm/	
	-al	government	/'gʌvənmənt/	governmental	/ gavn'mentl/	
	-eous	advantage	/əd'va:nt1d3/	advantageous	/ ædvənˈteɪdʒəs/	
	-graphy	photograph	/'fəʊtəgraːf/	photography	/fəˈtɒɡrəfi/	
Influencing	-ate	origin	/ˈɒrɪdʒɪn/	Originate	/əˈrɪdʒəneɪt/	
suffixes	-ic	climate	/ˈklaɪmət/	Climatic	/klaɪˈmætɪk/	
(influence stress	-ion	transport	/træns'pɔːt/	Transportation	/ trænspo: 'teɪʃn/	
in the stem)	-ious	injure	/'1ndʒə/	Injurious	/ınˈdʒʊərɪəs/	
	-ity	banal	/bəˈnaːl/	Banality	/bəˈnæləti/	
	-ive	prospect	/prəˈspekt/	prospective	/prəˈspektɪv/	
	-nda	agent	/'eɪdʒənt/	Agenda	/əˈdʒendə/	

Table 11. Stress patterns according to suffixes (adapted from Roach 2009: 83-84)

9.2. Stress in Word Class Pairs

There are words with identical spelling that represent different parts of speech. These words are differentiated by means of **shifting of the stress**. A small group of words for which the noun is differentiated from a verb by stress without a change in sound quality, e.g.:

Noun	Verb
<i>increase</i> /'ınkriːs /	<i>increase</i> /ɪnˈkriːs/
<i>insult</i> /'InsAlt/	<i>insult</i> /ɪnˈsʌlt /
<i>impress</i> /' impres/	<i>impress</i> /Im'pres/

Next follows another group of words for which the shifting of the stress may or may not be accompanied by a change in the quality of the vowel in the unstressed syllable of the verbs, e.g.:

Noun	Verb
transport /'trænspo:t/	<i>transport</i> /træn'spɔ:t/ or /trən'spɔ:t/
<i>torment</i> /'to:ment/	<i>torment</i> /to:'ment/ or /tə'ment/

Finally, there is a large group of words for which the shifting of the stress is accompanied by a change in the quality of the unstressed vowel, e.g.:

Noun	Verb
<i>combine</i> /'kombaın/	<i>combine</i> /kəmˈbaɪn/
conduct /'kondʌkt/	<i>conduct</i> /kənˈdʌkt/
contrast /'kontra:st/	contrast /kənˈtraːst/

9.3. Stress Shift

When the change in stress placement is caused by the context, this is known as **stress shift** (Roach, 2009a). When a polysyllabic word with a stress placed at the end of it is followed by another word with the stress placed in the beginning of it, there is a tendency for the stress in the first word to shift towards the beginning, especially if it has a syllable that is capable of receiving stress, e.g.: *Japanese* / dʒæpə'ni:z/, but a *Japanese student* /'dʒæpə,ni:z 'stju:dnt/

Exercises

Make a word ending in -ity from each of these words, and give the stress pattern. Use a dictionary to help you if necessary.

E	XAMPLE	author authority 000	0		
1	person		5	nation	
2	universe		6	real	
3	public		7	human	
4	major		8	electric	

Write the words from the box in the correct column according to their stress pattern.

economics	economy	physics	chemistry	geogra	phy /'dʒɒgrəfı/	
mathematics /m	mætiks/	sociology	history /	'histri/	geology	
photography	nation	nationality				

00	000	0000	00000	0000
	2.5 0.1 03	100 P		economics
			a standard on	alley - state ou
	1.1.1.2.1.425	the second	and the second	A GEL A
	Second Village Ion		the state server granne	

Fill the gaps with a word from the box which has the stress pattern given. Then listen and check.

My favour	ite subjects at sch	ool were scie	ences, especially	Ooo chi	emistry and
0000		I've always	been good with	numbers, so I	was good at
000		l didn't reall	y like the social	science subject	ets like
00000		and Oo		, and that's	strange because when I
went to ur	niversity I did Ooo				

Write in the word which is missing from the family. Then listen, check and repeat.

EXAMPLE society, _____Sociology_ (00000), sociological

- 2 _____ (oOoo), biologist, biological

- 5 (Oo), authority, authorise

(Extracted from Mark Hancock, 2012)

100

	Transcribe these monosyllabic words:					
Word	Transcription	Word	Transcription			
Comb		Choose				
Last		Month				
Feel		Year				
Rose		Quick				
Bug		Sword				
Pack		Hear				
Gloves		Laugh				
Short		Large				
Long		Five				
Chair		Write				
Want		Back				
One		Hold				
Three		Rude				
Six		Young				
Town		Use				
Watch		Joke				
Age		Front				
Worm		How				
Warm		Air				
Walk		Fire				

REFERENCES

- Carr, Ph. 2008. A Glossary of Phonology. Edinburgh: Edinburgh University Press.
- Carr, Ph. 2013. English Phonetics and Phonology. An Introduction. 2nd edition. Oxford: Wiley-Blackwell.
- Clark, J. and C. Yallop. 1992. An Introduction to Phonetics and Phonology. Oxford: Blackwell Publishers.
- Cruttenden, A. 2014. Gimson's Pronunciation of English. 8th edition. London: Routledge.
- Crystal, D. 2003. English as a Global Language. Cambridge: Cambridge University Press.
- Crystal, D. 2004. *The History of English*. Text Prepared for BBC Voices Project: http://ww.davidcrystal.com/DC_articles/English6.pdf accessed 19 March 2014.
- Crystal, D. 2008. A Dictionary of Linguistics and Phonetics. 6th edition. Oxford: Blackwell Publishers.
- Gimson, A. C. and A. Cruttenden. 2008. *Gimson's Pronunciation of English*. 7th edition. London: Edward Arnold.
- Macmillan English Official Website: http://www.macmillanenglish.com/phonemic-chart/ accessed 24 February, 2014.
- McArthur, T. B and R. McArthur. 2005. *Concise Oxford Companion to the English Language*. Oxford: Oxford University Press.
- Mark Hancock (2012) English pronunciation in use: Intermediate, Cambridge University Press
- Roach, P. 2009. *English Phonetics and Phonology*. 4th edition. Cambridge: Cambridge University Press.
- Rosewarne, D. 1994. Estuary English: tomorrow's RP? English Today 10 (2): 3-6.
- Skandera, P. and P. Burleigh. 2011. A Manual of English Phonetics and Phonology. 2nd edition. Tubingen: Narr Verlag.
- Trudgill, P. 1999. The Dialects of England. Oxford: Blackwell Publishers.
- Underhill, A. 1994. Sound Foundations. Oxford: Heinemann ELT.
- Wells, J. C. 1982. Accents of English. Cambridge: Cambridge University Press.
- Widdowson, H. G. 1994. The Ownership of English. TESOL Quarterly 28 (2): 377-89.

#