

Dr. Dwi Asuti Wahyu Nurhayati, SS. M.Pd.

*Phonology in Teaching
English*



Phonology in Teaching English

Copyright © Dwi Asuti Wahyu Nurhayati, 2021

Hak cipta dilindungi undang-undang

All right reserved

Layout: Muhammad Sholeh

Desain Cover: Diky M. Fauzi

xi+ 115 hlm: 14 x 21 cm

Cetakan Pertama, Januari 2021

ISBN: 978-623-6704-49-3

Anggota IKAPI

Hak cipta dilindungi undang-undang. Dilarang memplagiasi atau memperbanyak seluruh isi buku.

Diterbitkan oleh:

Akademia Pustaka

Perum. BMW Madani Kavling 16, Tulungagung

Telp: 081216178398

Email: redaksi.akademia.pustaka@gmail.com

Preface

Linguistics is an important tool to understand the meaning behind the language. Some of its branches are context-related, but the others are not. Phonetics and phonology are free-context. These two are talking about sound, where this book is focused on.

The purpose of this book is to introduce the phonology to the student. By knowing the process of sound, they could become better speaker or listener. Thus, we are not the native speaker of English, without knowing the tone or the assimilation of some words will make us confuse. That's why phonology and phonetics becomes important on this case.

To help the students find another issues covered in this book, there will be exercise at the end of the book and some link of the video that related to the topic. The exercise will enable the students to check their knowledge of the main ideas or important terms introduced in the book. Meanwhile, the link of the video will provide an opportunity to figure out about how the patterns are applied in daily life. The students will be ready to perceive more about the use of the pattern in native speaker way of speaking.

This book is made from many references that can be found in the internet. Some of the references are not free, but the students still can find the related references with free e-book. This book is not complete edition to cover the whole phonology material. There is a lot of lack in this book.

Therefore, it will be a quite useful input to have feedback about the content of this book.

DAFTAR ISI

PREFACE	iii
DAFTAR ISI	v
INTRODUCTION	1
A. The Essence of Language	1
PHONETICS AND PHONOLOGY	3
A. The Sound Pattern of Language	3
B. Phonetics and Phonology	3
C. The International Phonetic Alphabet (IPA)	4
D. Morphemes	5
E. Phoneme and Allophone	9
F. Phonemic Orders Over Dialects	14
G. Common Distinction of Phonetic Units Speech Sounds“	16
H. The Rules of Phonology	18
I. Free Variation	20
J. Neutralisation	21
K. Phonology and Morphology	24
L. The Phoneme System	26
M. Minimal Pair and Sets	27
CONSONANTS	29
A. Description of Consonants	29
B. Inside The Phonetic Symbol	30

C. Categorization of Consonants.....	31
D. Accents.....	42
VOWELS	43
A. Description of Vowels	43
B. Classification of Vowels.....	43
C. Nasalization Vowel	57
D. Phonetic Symbols for American English Vowels.....	58
E. The Same but Different.....	58
F. Establishing Vowel Contrast.....	58
G. Vowels vs Consonants.....	74
SYLLABLE	77
A. Definition of Syllable.....	77
B. The Syllable's Constituents.....	78
C. Word Stress.....	84
E. The Foot	89
F. Segmental Phonology of the Phrase and Word.....	89
G. Morphophonemic Change	90
EXERCISES	105
A. Questions.....	105
B. Enhancement.....	111
C. Creativity	112
ABOUT THE AUTHOR	115

INTRODUCTION

A. The Essence of Language

The essence of human language is a quality that inherent in human language. The quality occurs in the characteristic of human language below:

1. System

Language has its own internal system that is rules using language (productive) and understanding language (receptive). Because of these rules, the human language can be recognized, learned, taught, predicted, and generalized that is have been agreed to be obeyed conventionally and sometimes is violated because there is conventional agreement, instance *poetica lisencia* in poetry.

2. Arbitrer

Language is manasuka (*mana* saja yang masyarakat penutur *suka*). Symbols of language have no logical connection in the reference (*referent*).

3. Vocal

Basically language is spoken not written. The human completeness because of the possession of speech tools. The written

language appeared later in line with the development of human civilization.

4. Symbol

The power of language is its powerful potential symbolic. Each letter on *f, i, r, a, u, n* are symbol of sound produced by involving a certain word tool that different in place or articulation. Combination of the sound are collectively refers to the king of Egypt. There is arbitrer connection (unreasonableness) between the symbol snd what it symbolizes. Symbol does not equal with sign. The relation of sign with which it refers is not (less) arbitrary.

5. Humane

Only human can use language. In other word, the phenomenon of language is only exist in mankind. The emergence of the term 'language of flower', 'body language', 'animal language', and others is proof of human greatness using their prowess to describe the symbolization of flowers, physical behavior, and animal interaction.

6. Communication

This is the function of language. Humans are created to have motivation interact with themselves with others and facilitated by completeness organ of speech. After human dead, the organ of speech does not work anymore even though perfect physically.

PHONETICS AND PHONOLOGY

A. The Sound Pattern of Language

Every human being has physically unique vocal tract. As a consequent, in physical terms, each person will utter sounds variously. There are ten thousand of substantially dissimilar style of saying words or sentences. Noticeable differences occur when the individual is shouting, is asking for something, or is suffering from cold. (Maharsi, 2002, p.28)

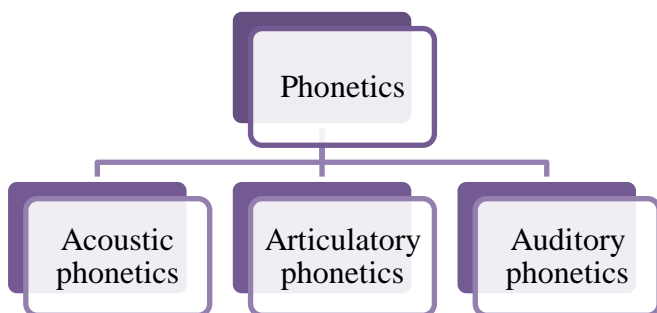
B. Phonetics and Phonology

Phonetics presents unbiased approach of representing and examining the scope of sounds usage in a language. Also especially, articulatory phonetics determines exactly whatever speech unit and flesh are combined by displaying the contrasting resounds coming from those accents from this universe or nature.

Acoustic phonetics participates with the delivery of speech vibration over the air (sound waves). Contrasting mechanism are applied to mark the typical feature of these sound waves.

Articulatory phonetics talks about a subject of by means of sound of tones are presented. Sounds are characterized corresponding to the position of articulation which means the speech organs managed in their construction (bilabial, alveolar, palatal), and affirming to

procedure of articulation that means how airflow from the lungs is interfered in their management.



The examination of how the human hearing organ distinguish sound is called **Auditory phonetics**.

The language-specific choice and organization of sounds to express meanings is known as **Phonology**.

The connection in the middle from phonetics and phonology is a complicated sole, yet you could at first say phonology as diminished-down phonetics.

Phonology, nonetheless, engages a devaluation to the indispensable message, to what speakers and listeners believe they are stating and listening. Phonetics is general, while phonology is language-specific.

C. The International Phonetic Alphabet (IPA)

It is reported for preventing uncertainty, the IPA (International Phonetic Alphabet) was suggested in 1888 and it has been held down continual analysis in considderation of the International Phonetic Association then there were any newest change periods in distinction to 1996.

This is English phonetic charts based on IPA.

Vowels	i:	ɪ	ʊ	u:	ɪə	eɪ	Short	
	e	ə	ɜ:	ɔ:	ʊə	ɔɪ		
	æ	ʌ	ɑ:	ɒ	eə	aɪ		
Consonants	P	B	t	D	ʃ	dʒ	k	g
	F	V	θ	ð	s	z	ʃ	ʒ
	M	N	ŋ	J	L	r	W	h
								Long
								Diphthongs
								Voiced
								Unvoiced

(Download **Sounds: The Pronunciation App** on Playstore to listen to the sound!)

D. Morphemes

In phonology, morphemes are how we announce words or parts of words. Often existed morphemes are pronounced differntly, this is depending on the context.

The Pronunciation of Plurals

A	B	C	D
cab	cap	bus	child
cad	cat	bush	ox
bag	back	buzz	mouse
love	cuff	garage	criterion
lathe	faith	match	sheep
cam		badge	
can			
call			
bar			
spa			
boy			

From the words before, the closing accent or tone of the multiple noun from list A is [z]. For list B is [s] and Column C is [əz]. The predictability in list A, B and C do not remain in D. Plural order or structure listed in D are hodge circumventin of certain cases recalled independently when you get English, either original or as a secod language. It is due to there is not any process to foresee the plural of these words.

How do we identify the pronunciation of this plural morpheme? Observe this table! (The scientific description for a variation of morpheme is allomorph.)

Allomorph	Environment	Example
[z]	After [b], [d], [g], [v], [ð], [m], [n], [ŋ], [l], [r], [a], [ɔɪ]	[kæb] → [kæbz], [kæd] → [kædz], [bæg] → [bægz], [lʌv] → [lʌvz], [leð] → [leðz], [kæm] → [kæmz], [kæn] → [kænz], [bæŋ] → [bæŋz], [kɔl] → [kɔlz], [bar] → [barz], [spa] → [spaz], [bɔɪ] → [bɔɪz].

[s]	After [p], [t], [k], [f], [θ]	[kæp] → [kæps], [kæt] → [kæts], [bæk] → [bæks], [kʌf] → [kʌfs], [feθ] → [feθs].
[əz]	After [s], [ʃ], [z], [ʒ], [ʒ], [dʒ]	[bʌs] → [bʌsəz], [bʊʃ] → [bʊʃəz], [bʌz] → [bʌzəz], [gərəʒ] → [gərəʒəz], [mæʃ] → [mæʃəz], [bædʒ] → [bædʒəz]

Allomorpl

Environment

[z]

“After voiced nonsibilant
segments”

[s]

“After voiceless
nonsibilant segments”

[əz]

“After sibilant segments”

To figure out the reason of why English plural attends this patterns, we repeatedly explain this type of question through examining the features of phonetic of the investigated piece. The observation displays such sections that bring about the [əz] plural obtain in frequent the characteristic of being sibilants (fricative

consonants sound, like a hissing sound). Of the nonsonants or affricates, the inarticulate sections grab the [s] multiple, then sound [z] plural takes place in the voiced sections.

The Pronunciation of Past Tense

Phonetic past-tense morphemes for common verbs are [d], [t] and [əd]. Those are some available illustrations listed in wide and comprehensive phonetic transcription.

Set A: *gloat* [glot], *gloated* [glotəd]; *raid* [red],
raided [redəd]

Set B: *grab* [græb], *grabbed* [græbd]; *hug* [hʌg],
hugged [hʌgd]; *faze* [fez], *fazed* [fezd];
plan [plæn], *planned* [plænd]

Set C: *reap* [rip], *reaped* [ript]; *poke* [pok],
poked [pokt]; *kiss* [kɪs], *kissed* [kɪst];
fish [fɪʃ], *fished* [fɪʃt]; *patch* [pætʃ],
patched [pætʃt]

On the set A indicates that whenever the verb finishes in a [t] or a [d], [əd] is included to form the past tense. It is the same to the infusion of [əz] to create the plural of noun which finishes in sibilants. On the other hand, set B implies that whenever the verb stops in a voiced sections separate than [d], include a voiced [d]. Set C displays us that in case the verb finishes in a

voiceless sections unrelated than [t], we need to include a voiceless [t].

E. Phoneme and Allophone

The primary order of a sound which grasped theoretically rather than spoken or heard is called Phonemes. Every phoneme is illustrated mentally through one or more sounds, named allophones, that are the observable sounds matching to the phoneme in diversified surroundings (Fromklin, 2014, p.230).

Phoneme is the single abstract unit of sound category which is symbolized by a single letter. Slash mark // are used to illustrate phoneme, and square brackets [] are used to each phonetic segment. The – and + are features used to determine each phoneme from the text.

1. *The phonem's reality*

The arrangement of phoneme from native speakers, and especially the dissimilarity between sounds' pairs that contrast and sounds' pairs that do not, firmly accustom her judgement: the early 20th century American linguist Sapir comes to conclusion that 'What the speaker of native hears is not phonetic section but phonemes'. After all, phoneme is an intellectually evident component in the other ways as well, considering it does not exclusively conform in what we listen, however in what we do too.

One, alphabetic spelling scheme are regularly depended on the language phonemes: there are numerous recorded situations of linguists explaining the IPA variations to languages speakers who do not have orthographies, and arranging stocks of characters

that comprised all the language phones, on the other hand where speakers exploit a symbol alone per phoneme later. The two of [f] and [v] in Old English that were then in interdependent dissemination, were uttered, when in Modern English at odds of /f/ and /v/ commonly correlate to (or) versus. Likewise, in Hungarian /k/ and /c/ are frequently analyzed as and. The alphabet has been obtained by native speakers from each other several times, and has been recondition in several ways to suit the borrowing phoneme system better. Thus, the Semitic alphabet's first letter speaks for the glottal stop, [ʔ], that is diverse phonemically in Arabic, as the illustration. However just as such alphabet is acquired by the Greeks, that first letter, Greek alpha, was captured to show the vowel that starts the word alpha itself. Even though Greek speakers would generally do first glottal stop on a word like alpha, they would not examine it or wish to represent it, because [ʔ] is not a Greek's phoneme. English acquires two orthographic symbols for /k/, namely and, yet such do not orderly indicate two distant allophones: the spelling system plainly has an excessive more symbols. Moreover, several phonemes are uttered persistently, yet without any visual representation. Hence, the phonemic disparity between the English nasals /m/, /n/ and /ŋ/ in ran, ram and ran, is indicated orthographically by, and (or in rank).

Along with particularly, the origin phoneme system is likely blocked as we attempt to study another language. At first, we must get it hard to afford sound that is not discovered in our first language. On the other hand, it is just as challenging, and occasionally worse, to study sounds that are phonemically different in the

language that is being studied by us, yet a single phoneme's allophones in our native system. For example, there is no difference between aspirated [th] and unaspirated [t] in English; we may anticipate that the previous comes only word initially. In Chengtu Chinese, but, /t/ differs with /th /, when we discover minimal pairs as [tou] "a unit of dry measure for grain" versus [th ou] "to tremble"; the invariable is correct in Thai, where [tam] "to pound" compare to [th am] "to do", initiating a phonemic difference of /t/ and /th/. While there is an English native speaker that attempts to study Thai or Chengtu Chinese, he may get such difference really strange to imitate, in spite of the experience which he himself has repeatedly managed the two of these sounds. What matters are, while a completely strange and foreign sound solely need to be mastered from scratch, a former sound in a current position calls for supplementary transformation development: the English learner who speaks Thai needs to camouflage her reflex and senseless section of the sounds that are aspirated and unaspirated, and attempt to deliver both in the same context. In intuitive language, it is again more effortless to hear an entirely current sound, that will at the beginning be excessively accessible to distinguish since its ignorance, than to determine to perceive two sounds which have conceptually been acknowledged as one and the same. In reverse, a Korean speaker, who has [r] and [l] as allophones of a single phoneme, with [r] produced between vowels and [l] everywhere else, will cause errors in learning English, encountering minimal pairs like lot and rot highly counter-intuitive, and likely to offer [l] at the starting point of both, but [r] medially in

both lolly and lorry. A sequence of unlearning and learning are necessary to get those arrangement right.

2. ***How to find phonemes***

A literal recognition (pronunciation) of a phoneme is called phone. The collective of phones that are the realizations of the same phoneme are named the allophone.

To resolve graphically enclosed by a phoneme and its allophones, we utilize slashes // to immerse phonemes and then to use square brackets [] for allophones or phones.

For instance, [i] and [ĩ] are allophones of the phoneme /i/; [ɪ] and [ĩ] are allophones of the phoneme /ɪ/, and so on. That is why we will display bead and bean phonemically as /bid/ and /bin/. We announce to these as phonemic transcriptions of the two words. The order for allocation of oral and nasal vowels in English presents that phonetically these words will be announced as [bid] and [bĩn]. The pronunciations are indicated by phonetic transcript, and noted between square brackets.

3. ***Complementary Distribution***

Minimal pairs emphasize that a few speech sounds in a language are divergent and can be utilized to make different words such as *big* and *dig*. These diverse sounds gather themselves into the phonemes of that language (natural classes).

A few sounds are non-contrastive and cannot be done to form different words. Non-contrastive sounds in English are oral and nasal vowels. Where oral vowels exist, nasal vowels do not occur, and vice versa.

Each English vowel phoneme acquires an oral and a nasalized allophone that exists in different spoken circumstances. In this case, a mental illustration (phoneme) is in *complementary distribution* because they never show up in the same environment. Replacing one for the other may sound bizarre, but it will not alter the message of what is spoken.

For further explanation about phoneme and allophone, how to find phonemes, and complementary distribution visit the link: <https://youtu.be/wA9--WJSPws>

4. *Distinctive Feature*

Phonetics shows the message to make clear in speech the phones (sounds) of language, serving how they are formed and how they change. *Phonology* explains us how miscellaneous structure patterns to form phonemes and their allophones.

When a feature establishes one phoneme from another, then one word from another, it is a **distinctive feature** or, in another words, a **phonemic feature**.

a. *Feature Values*

Anyone is capable to think of voicing and voicelessness as the existence or agitation of a single feature, *voiced*. This specific feature may have two meanings: plus (+) signifies its existence, and minus (-) signifies its agitation. For instance, [b] is [+voiced] and [p] is [-voiced].

Labial, voiced, nasal, alveolar, velar are listed as phonemic feature in the consonants, but aspiration is not because [p] and [ph] do not portray particular phonemes in English. In a *phonetic*

transcription, yet, the aspiration feature would be particularized where it takes place.

Vowels, also, acquire distinctive features. For illustration, the feature [\pm back] determines the vowel in *look* [lʊk] ([+back]) against the vowel in *lick* [lɪk] ([-back]) and is consequently distinctive in English. Likewise, [\pm tense] distinguishes [i] and [ɪ] (*beat* versus *bit*) and is again distinctive feature of the English vowel order.

5. ***Nondistinctive Feature***

As we witness, aspiration is not a peculiar feature of English consonants. It is called a **nondistinctive** or **redundant** or **predictable feature**. A few features may be idiosyncratic for one class of sounds but nondistinctive for another. For instance, nasality is an offbeat feature of English consonants but not a distinctive feature for vowels.”

F. **Phonemic Orders Over Dialects**

It has been recognized that the same phones can take place in double languages, yet form variously since the phonologies are dissimilar. Portuguese, Akan and English acquire nasal and oral vowel phones; in English, such vowels are a phoneme's allophones, however in Akan and Portuguese such illustrate different phonemes.

Aspiration of voiceless stops additionally manifest the asymmetry of the phonological systems of particular languages. Both aspirated and unaspirated voiceless stops happen in English and Thai, but they serve in other way in the two languages. Aspiration in English is not a peculiar feature because its presence or nonexistence is easy to foretell.

Voiceless Unaspirated		Voiceless Aspirated	
[paa]	Forest	[p ^h aa]	To split
[tam]	To pound	[t ^h am]	To do
[kat]	To bite	[k ^h at]	To interrupt

The voiceless unaspirated and aspirated stops in Thai appear in minimal pairs; they deviate and as a result are phonemes. In Thai and English, the phones [t], [p], [k], [th], [kh], and [ph] take place. In Thai they perform phoneme /kh/, /t/, /k/, /th/, /ph/, and /p/ while in English they show the phonemes /p/, /t/, and /k/. Thus, aspiration is an offbeat characteristic in Thai; it is a nondivergence or excessive aspect in English.

The phonetic laws themselves do not inform what phonemic or distinctive is:

The phonetic representation of pronunciations represents what speakers recognize about the articulation of sounds. The phonemic representation of pronunciations shows what speakers realize about the forming of sounds.

Vowel length and consonant length are nonphonemic in English. Extending a sound in English cannot create a peculiar term. In another language, long and short vowels which are indistinguishable excluding for length are phonemic. In those languages, length is a nonforeseeable dissimilar aspect.

In ASL, phonology signs are able to be dissolved into narrower groups which are in multifarious methods related to the phonemes and diverse characteristic in spoken languages. They manage to be decayed into handshape, shifting, and area. There are minimal pairs which are determined by a variation in one of such aspects. As

illustration, the marks meaning “candy,” “apple,” and “jealous” are expressed at the similar position on the face and contain the similar shifting, yet diverge minimally in hand arrangement. “Summer,” “ugly,” and “dry” are minimal sets diverging only in place of articulation, and “tape,” “chair,” and “train” contradict only in shifting. These are the reason why marks may be broken down to narrower minimal sets which compare message. Several aspects are non-distinctive. Even if a mark is expressed on the left or right hand will not change its message.

G. Common Distinction of Phonetic Units Speech Sounds

We recognize what speakers realize about the anticipated aspects of speech over phonological rules. In English, these rules decides the situations in which vowels are nasalized or voiceless stops aspirated. These rules administer to *all* the words in the language, and indeed employ to made-up words such as *sint*, *peeg*, and *sparg*, that would be /sɪnt/, /pɪg/, and /spɑrg/ phonemically and [sɪnt], [phɪg], and [spɑrg] phonetically.

The more linguists review the phonologies of languages of the world, the more they discover that identical phonological ways associate the same groups of sounds like nasals and voiceless stops. As an illustration, some languages aside English have an order that nasalizes vowels before nasal consonants:

Nasalize a vowel when it go ahead of a nasal consonant in the same syllable.

The procedure will demand to all vowel phonemes just as they take place in a curcumtance predating any part signed [+nasal] in the same syllable, and will include the

feature [+nasal] to the aspect matrix of the vowel. Our depiction of vowel nasalization in English desires only such policy. It does not need to incorporate a list of the particular vowels to which the practice claims or a record of the sounds that derive from its demand.

Multiply languages obtain rules that commit to [+voiced] and [-voiced] sounds. For illustration, the aspiration rule in English appeals to the class of [-voiced] noncontinuant sounds in word-initial environment. As in the vowel nasality custom, we do not need to contemplate particular segments. The policy naturally handles to initial /p/, /t/, /k/, and /tʃ/.

Phonological practices usually demand to **natural classes** of sounds. A natural class is a crowd of sounds defined by a limited number of unique aspects like [-voiced], [-continuant], that outline /tʃ/, /k/, /t/ and /p/. Any particular part of natural group class might need additional aspects in its confession than the class itself, so /p/ is not only [-voiced], [-continuant], but also [+labial].

The connections between phonological rules and natural classes manifest why segments are to be observed as packages of features. If segments were not determines as feature matrices, the correlations among /p/, /t/, and /k/ or /m/, /n/, and /ŋ/ might be missing. That might be just as feasible for a language to own a rule like:

1. Nasalize vowels before p, i, or z.
2. Nasalize vowels before *m*, *n*, or *ŋ*.

The first rule do not have phonetic reason, however the second does: the curtailed of the velum in expectation of a subsequent nasal consonant brings about the vowel to be nasalized. In Rule 1, the surroundings is a motley

compilation of irrelevant sounds which are not able to be expressed with some aspects. Rule 2 implements to the legitimate group of nasal consonants, called sounds which are [+nasal], [+consonantal].

H. The Rules of Phonology

One of the component of a speaker's awareness of the language is phonological procedures. The depictions of phonemic are less mentioned as an outcome of some elements or feature valuations are easy to fortell. The phonemic portrayal should consist of particularly the nonpredictable, diversified elements of the phonemes in a word. The phonetic portrayal, acquired by implementing the phonological custom, contains whole of the linguistically suitable phonetic phase of the sounds.

1. Feature-Changing Rules

Not a few rules that alter aspects from one valuation to the other or even include features that are not in phonemic depiction.

In English, rules that voiceless aspirates stop at the opening syllables only add nondistinctive features. Generally, aspiration only occurs if the following vowels are emphasized.

2. Assimilation Rules

A special type of feature change rules is assimilation. The vocal nasal procedure is an assimilation procedure that creates adjoining sections more alike to having [+nasal] features to vocals.

Most of the assimilation rules come from the articulation process. As we speak to enhance the ease of articulation, there will be an impulse.

For more information about this rules click the link: <https://youtu.be/McO4Bcfk3zc>

(Download **BBC Learning English** and go to Programmes then click Pronunciation in Language skills to find out many cases of Assimilation!)

3. Dissimilation Rules

A step from assimilation, it also obtains a feature change called the dissimilation rule, where particular segments turn into barely identical to other segments. Amusingly, these rules obtain the equal description: sometimes it is simpler to articulate contrasting sounds.

Click the link to get more explanation about dissimilation:

<https://youtu.be/UxPDHuMhy4><https://youtu.be/bkdh6Jz7UZU>

4. Segment Insertion and Deletion Rules

Phonological regulations is allowed to include or erase a whole parts. These rules are dissimilar from the feature-changing policy that we have observed up until now, which only parts of segments that can be changed. The action of injecting a consonant of vowel is named **epenthesis**.

The regulation of creating regular plurals, possessive arrangements, and third-person singular verb agreement in English all need an epenthesis rule. Example:

Enter a [ə] ahead of the plural morpheme /z/. When a common noun drops in a sibilant, adding [əz].

Segment **deletion** rule takes place in offhand or fast speech. We generally erase the unstressed vowels

in terms like *mystery, general, memory, vigorous, funeral, Barbara*,.

The silent g which abuses spellers in such words as sign and design is indeed the result of a segment deletion rule. Observe cases below:

A	B
sign [sām]	signature [signəʃər]
design [dəzām]	designation [dəzignəʃn]

In zilch of the terms in column A is there a phonetic [g], yet in every reciprocal term in column B a [g] takes place.

5. The Role of Phonological Rules

The the phonological rules' role in a grammar is to afford the phonetic intelligence paramount for the utterances' pronunciation.

I. Free Variation

Internally over than one conceivable utterance in the identical term or circumstances; it is notorious as free alternative, and establishes two available hypothetical issues. Firstly, they demand interdependent dissemination to determine two sounds to a spesific phoneme. Second, as a substitute of getting two allophones of a particular phoneme in the invariable background, disrupting interdependent dissemination, they notice two sounds that on another precedent relate to contrasting phonemes, declining to create variation of message they call for.

J. Neutralisation

In this following category of free alternative may likewise be noticed as establishing the tip of a more extremely logical iceberg. As illustrated in the [ɛ]conomic – [i]conomic situations, these aleternatively contrasting sounds are both feasible in a single word. The difference in the middle from both phonemes can be further disrupted more atically, in a certain phonological circumstances; in this situation, instead of the two phonemes being fairly probable substitute, we discover any form transitional bounded by them.

An illustration comprises the voiceless and voiced English plosives. The above-mentioned imply to contradict in every possibility places in the word: minimal pairs manage to be encountered for /t/ and /d/ initially, as in *till* against *dill*; amidst, in *matter* alternative *madder*; eventually, as in *lit* contrast *lid*; and in consonant clusters, as in *trill*, *font* versus *drill*, *fond* – and the same is accurate for the labial and velar plosives. Yet, no difference is conceivable in an introductory cluster, after /s/: *spill*, *still* and *skill* are totally rational English words, however there is no **sbill*, **sdill* or **sgill*. The circumstance is called as neutralisation, considering the otherwise prosperous and common difference in the middle from two sets of phonemes is neutralised, or ejected, in a certain context – in this case, after /s/.

For information, the facts are somewhat further than troublesome yet. Even though the spelling might indicate that the sounds organized after /s/ are recognitions of the voiceless stops, linguists have noticed that already, in an important reference, they do not perform as the linguists would predict voiceless stops to act at the opening of a

word: so that, they are not aspirated. In a different manner, they perform such as recognitions of neither /b/ nor /d/, considering they are not voiced. That is to announce, the anything-it-is which occurs after /s/ obtains a thing in shared with both /p/ and /b/, or /t/ and /d/, or /k/ and /g/, being an oral plosive of a certain area of articulation. However in a further insight, it is not one or the other either, considering it does not have aspiration, that is the divergent phonetic aspect of an original voiceless stop, and it does not have voicing too, the preeminent trademark of an original voiced stop.

It is said at hand two more chunks of proof, a pragmatic and an academic, in assistance of the interpolated sounds position ensuing /s/. With the condition that one documentation is produced of *spill, still, skill*, the [s] is deleted, and the remaining part is performed to English speakers; natives spot it delicate to announce in case the words are *pill, till, kill*, or *bill, dill, gill*. In addition, they would talk about that a /t/ is a /t/ through it differs with /d/ – a phoneme describes other phonemes in the arrangement they associate in. As an illustration, once more from lettered English, children who was taught to write usually experience hardship in putting the coil for a license at the bottom of the upstroke, and occasionally it shows up a bit higher than in grownup writing – that is alright, forasmuch as it does not shift so high as to be misguided for a , where the coil is portended to emerge at the top. The problem is controlling peculiarity bounded by both; and the same is valid in talking, where an attainment of /d/, for occurrence, may be over or barely voiced in particular contexts, in consideration of it does not turn into chaotic in fulfillment of /t/. In a dilemma where both cannot probably vary, equally behind /s/ in English, /t/ cannot be represent

under the name of itself, as well due to in this only place, it does not contradict upon /d/. It also pursues that the voiceless, un-aspirated sound afterwards /s/ in *still* cannot be a common allophone of /t/.

An archiphoneme is called by the phonologists as a component discovered in an environment of neutralization. It is epitomized by a capital letter, and is created of the whole characteristics that the neutralized phonemes keep unitedly, yet not the features that commonly determine them.

/T/

+oral

+stop

+alveolar

()voice

The archiphoneme /T/ above is introduced where the common obstruction enclosed by /t/ also /d/ is postponed, on this wise either /t/ or /d/ is not a likelihood. The /T/ here is a transitional scheme, distributing the characteristic meanings prevailing to /t/ along with /d/, though with no possible meaning for voicing, through there is not any distinction of voiced and voiceless in its circumstance. Neutralization is accordingly a broken placement of a division of phonemes, including a common phonological circumstance (preferaly than a particullar word, as in the *either/neither* condition).

“It is said there are a lot of farther conditions of neutralization in English, though to the amount of time being, we may deal with one alone. In a large numbers of diversity in English, the common comparison enclosed by

vowels undertake before /r/. As an illustration, natives of British English will likely preserve a three-way disparity of Mary, merry and marry, even though multitude General American speakers discontinue the common comparison of /eɪ/, /ɛ/ and /ɜ/, as determined by minimal triplets like sail, sell and Sal or pain, pen and pan, in this case, generating Mary, merry and marry homophones. Despite the fact that the vowel discovered here usually appears like [ɛ], it cannot be addressed as a common recognition of /ɛ/, since /ɛ/ is a phoneme which contrasts with /eɪ/ and /ɜ/, and that contrast is not desirable here. So, we can set up an archiphoneme /E/ in just those cases before /r/, again signaling that a contrast otherwise found in all environments fails to manifest itself here.”

K. Phonology and Morphology

We should notice that the archiphoneme is important in giving a sign to situations where obstruction are discontinued, yet it obtains two obstacles. One, a depiction such as /mEri/ is three ways enigmatic for a speaker of General American, considering it would be *Mary*, *merry* or *marry*: this might be altogether somewhat suitable, as the three sound go identical at the phonetic degree, however it should be essential to gain an establishing technique, someplace in the phonology, just which is which. Two, in several situations which seem noticeably as neutralization, the archiphoneme cannot be certainly applied. As example, regular plural nouns closure of English is indicated by a spelling, it involves in other respects of particular concept phonologically: in *caps*, *cats*, *chiefs*, where the stem closing sound is voiceless, the plural suffix is recognized as voiceless [s]; in *heads*, *dogs*, *pans*, *dolls*, *hooves*, *eyes*, where the stem ending sound is voiced, the plural suffix is also voiced [z]; and finally, in situation where the stem finishes

in a sibilant, specifically [s z ʃ tʃ d], a vowel is included for intentions to improve the articulation, by reason of both sibilants arrangements are not approved in English, giving *bushes, horses, churches* with [əz] (or [ɪz]). This may look to be a merely phonetic problem on the base of it, including assimilation of the plural closure to the final section of the stem; however there is beyond to it than such. On the assumption that voicing assimilation were needed in eventual assemblage, arrangements such *hence, face, loss* might not be possible English words, on the grounds that they include closing arrangement of a voiced consonant or vowel, conformed by voiceless [s]. The distress is, in the plural circumstance, what the closing sound is achieving: the events where it is a suffix signifying plural function in another way from those in which it is the stem part.

Then as well, the forms of singular and plural noun such as *hoof – hooves, leaf – leaves, knife – knives* would originally occur to epitomize a situation of neutralization, wherever the common comparison bounded by /f/ also /v/ is postponed formerly /z/ (keep in mind that this is pronounced voiced).

To add information, neutralization consistently includes a common comparison break in a particular phonetic circumstance. In this place, we are managing with a repeated rotation enclosed by both phonemes, /f/ also /v/, in a certain grammatical situation. *Leaf* acquires a closing /f/, and *leaves* a medial /v/ – there is not any form of transitional archiphonemic here. The definitive influence is not phonetic or phonological either: it is merely evidence about particular nouns of English (involving *hoof, leaf, life, knife, wife*, but expelling *chief, roof, hive, and stove*) which they obtain /f/ in several systems, remarkably the singular, and /v/ in other plurals, prominently.

Aforesaid repeated rotation bounded by phonemes, leaning on grammatical evidences, is totally ordinary. As example, in previously particular suffixes, the last consonant form of a stem can evolve: thus /k/, /s/ also /ʃ/, otherwise three special phonemes such as *kin*, *sin* and *shin*, appear expectedly reckoning on whether the stem *electric* settles alone, or obtains an ensuing suffix. In related alternations include *president* and other words derived from that, as shown in the illustration bellow. Native speakers of English can correctly pronounce [k] before the sound order [Iti], as in *kitty*, or [t] before [i], as in *pretty* or *Betty*: the fact that these sounds do not appear in *electricity* or *presidency*, where we find [s] instead, reflects the function of -ity and -y as suffixes in those cases.

L. The Phoneme System

Feature introduction explains a phoneme as a cover-symbol for scale of properties. Nevertheless, it allows higher-level properties, exploring natural groups, and the stimulation for alike arrangement of behaviour in phoneme sets.

In line with phonemes, even though abstract units seem to have some degree of certainty for areal speaker and to form their thoughts, so the system of phoneme reflects speakers' insights and can form the language development.

The system of phoneme frequently seems to have shapes that they do for essentially phonetic factors. As an example, in case there are several specific sounds with alike characteristics, they are expected to be misunderstood and constantly assimilate classically: for a language, there is a common bias to have a rational bound security among sounds so the words can be kept separated with no efforts that is incompatible with quick, uncertain speech.

Besides being concluded by the needs for relevant bounds of error so the assimilation process can appear without encroaching largely on the adjacent phoneme areas., systems seem to favor proportion.

In the case of the English fricatives, when voiced /v ð z/ came to contrast with pre-existing /f θ s/ in Middle English, there was no voiced counterpart for either /ʃ/ or /h/: however, // has subsequently been introduced by simplification of the [zj] cluster and in loans from French, while /h/ is increasingly marginal, appearing only syllable-initially; indeed, in some accents, like Cockney, it is routinely dropped in that position too, and might be said to be absent from the system altogether. Looking at phoneme systems may perhaps help phonologists identify weak spots in the language which are likely targets for later changes, as well as exemplifying some of the general principles native speakers pay attention to when learning and using their languages.

M. Minimal Pair and Sets

Two words which are alike in forms without difference in a phoneme and occur in the same place can be called as a minimal pair. Example: *pat-bat*, *van-fan*, *side-site*, *bat-bet*. Such pairs have been used to determine non-native speakers' ability in understanding the meaning differences resulting from the minimal sound difference.

A minimal set can be defined as, "A group of words which are distinguished each one by shifting a phoneme like *feat*, *fat*, *fit*, *fate*, *foot fought*." (Maharsi, 2002, pp.29-30)

CONSONANTS

A. Description of Consonants

Plosive, fricative and nasal are the terms all students should be firmly knowledge about. In understanding a **plosive consonant** (stop consonant), here are the stages:

- i. Two articulators appear as one – the articulators can be lips appearing as one; the tongue coming forward to be contacted with the ridge of the teeth/the back part of the tongue being in contact with the soft palate. It can be called as “on-your-marks” stage.
- ii. The air from the lungs is retained entirely in check; the combined organs anticipate it from leaving. It can be called as “get-set” stage.
- iii. There comes after an unexpected parting of the organs, a process that permits arrested air to leave. It is called as “go” or “plosion” stage.
- iv. What comes after directly in the plosion wake can be voicelessness or voicing that depends on the vocal lips’ action; absence or vibration of it. It can be called as “post-plosion (pp)” stage.

Fricative consonants happen when articulating organs approach each one, leaving a small area between them. The air which crosses makes such hissing sound because of the narrowed space. Those constants are usually remarked to be “continuant consonant”.

Those that are realized through nose is called nasal consonant. The soft palate should be lowered to cover the cavity of the mouth and it permits the nasal cavity free for the air to cross. The nasalized process is important in producing sound since it distinguishes two groups of sounds (oral and nasal).

Visit the link if you want a further explanation about consonants: <https://youtu.be/mOd3iDQLnKE>

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

(Download **Sounds: The Pronunciation App** on Playstore to listen to the sound!)

B. Inside The Phonetic Symbol

IPA symbol is a symbol system that is used in pronunciation of words in any language that permits us to articulate a range of sounds that are greater than the spelling system of English will. Nevertheless, only see such symbols might advise that we deal with independent individual groups when we deal with allophones and phonemes: every is like a locked black box labeled with the IPA symbol.

Well, every IPA symbol stands for various types of property, and such characteristics make clear how

particular segments are portrayed as pronounced; dismantling the black box for every sound does not reveal mixed up, but internal form, and accepting that form lets us to compare to the other sounds. For example, we know that [k] is soundless velar, we can go ahead to see what property that is shared with other sounds that may also be silent, or velar, or plosif; we can also see the difference with which other sounds not voiced, or velar, or plosif. Next, we will see what allophonic features are dissimilar from the same phoneme distribution, that is feasible allows them to be considered 'equal' by English speakers: that is, we can find out what features of a particular English phonetic speaker to ignore, and what they realize. Because this might be very different for other language speakers, dismantle the science notation in this way too allow cross-linguistic comparisons to be created. Thus, here, we must think of phonetic features' very basic set that allow us to interpret the articulations of English consonants, and to judge their similarities and differences.

C. Categorization of Consonants

1. *Voiced or Voiceless*

Voiced and voiceless sounds are the major categorization among speech sounds. The two important settings of phonation are voicelessness and voicing. When we put our fingers on our voiceboxes and produce a very long [zzzzz], we will feel the vibration; it represents that [z] is a voiced sound. However, when we make a very long [sssss], we cannot feel the same sort of activity; [s] is a voiceless sound. Example (the first word of each pair ends with a voiced sound and the second word with voiceless sound):

robe	fade/	rag/ra	wreathe/wre
/rope	fate	ck	ath
[rob]	[fed]	[ræg]/	[rið]/[riθ]
/[rop]	/[fet]	[ræk]	

The other examples (the first word starts with a voiced sound and the second with a voiceless sound):

vine/fine	zeal/seal	joke/choke
[vam]/[fam]	[zil]/[sil]	[dʒok]/[ʃok]
beat/peat	dote/tote	gale/kale
[bit]/[pit]	[dot]/[tot]	[gel]/[kel]

2. Oral or Nasal

Nasal sounds can be produced with air only crossing the nasal cavity for at least part of their production like [m] and [n]. However, nasalized sounds, like the vowel in can, heading up a nasal consonant, as opposed to the vowel can, that heads up an oral one, are characterized by airflow through both mouth and nose simultaneously.

3. Manner or Articulation

a. Stops

Plosives (stops) may be voiced; [d], [g], and [b] or voiceless; [k], [p] and [t]. Stops can be defined as consonants whereabouts the airstream is entirely blocked in the oral cavity for short period.

- i. Bilabial stops happen with the airstream stopped at the mouth by the total close of the lips like [m], [p] and [b].
- ii. Alveolar stops happen when the airstream is stopped by the tongue, making a total close at the alveolar ridge like [n], [t] and [d].
- iii. Velar stops happen with the total close at the velum like [ŋ], [k], and [g].
- iv. Palatal affricates with total stop close like [tʃ] and [dʒ].

Nasal stops in English are [m], [n] and [ŋ]. Even though they are usually referred to simply as nasals. All these nasals are also voiced.

b. Fricative

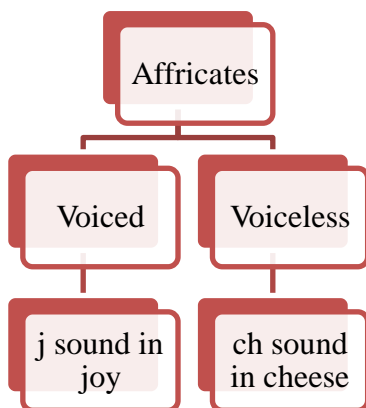
If you heard hissing sound, it is called voiceless fricative. However if you heard only buzzing sound, it is called voiced fricative. All fricatives are continuants. English [v] five and [z] size are voiced fricatives, whereas [f] five and [s] size are voiceless fricatives.

c. Approximants

Here, the active and passive articulator never abundantly close to create

audible friction. Instead, the open approximation of the articulators alter the form of the oral cavity, and leads to the production of a particular sound quality. There are four approximant consonant phonemes in English: /j/ yes, /w/ wet, /r/ red and /l/ let. All these approximants are voiced. The [l] is a lateral approximant, and the rest is central approximants.”

d. Affricates [tʃ] [dʒ]



We can produce such sounds by a stop closure come after directly by a continuous release of the closure which produces an impact aspect of a fricative. The palatal sounds which start and end the word church and judge are voiced and voiceless affricates.

e. Liquids [l] [r]

i. /l/ /ɫ/ lateral liquids

A lateral liquid can be defined as a sound whereabouts the air flow out of the body is deflected all over the tongue and toward the sides of the mouth before leaving through the lips. alveolar lateral approximate is /l/ as in *melon* and *hello*. The syllable-initial sound /ɫ/ is velarized alveolar lateral approximate, example; *full*, *little* and *belfry*.

ii. /ɹ/ /ɻ/ /r/ non-lateral liquids

A non-lateral liquid is a sound whereabouts the airflow out of the body is altered by the form of the tongue, frequently flowing over the tongue resonating near the roof of the mouth before exiting through the lips."

f. Glides [j] [w]

The sound [w] and [j], the first sound of *we* [wi] and *you* [ju], are produced with amount block of the airstream. After articulating [w] or [j], the tongue glides fast into area to pronounce the following vowel, thus the term glide.

The glide [w] is labio-velar glide and the glide [j] is a palatal sound.

g. Trill and Flaps

A trilled *r* is produced by fast vibration of an articulator. Another r-sound is named flap and is produced by a flick of the tongue against

the alveolar ridge. It occurs in British English in word such as *very*.

h. T sound

There are three kind of T sound:

- i. True T: when T at the opening of a word, example; in the TR cluster (*train, try*) and T can be CH (*to, today, tomorrow, tomato*)
- ii. Flap T: when T between 2 vowels or diphthong (*beatuiful, city*) and when T after R before a vowels or diphthong (*party, dirty*)

i. Sibilance

Sibilance is making hissing sound in consonants. There are 6 sound of sibilance:

/s/	“suit” and “bus”	Air is forced through tongue and alveolar ridge (alveolar)
-----	------------------	--

/z/	“zit” and “jazz”	Air is forced through tongue and alveolar ridge (alveolar)
/ʃ/	“shot” and “brash”	Air is forced through the tongue and point just beyond alveolar ridge (post-alveolar)
/ʒ/	“vision” and “measure”	Air is forced through the tongue and point just beyond alveolar ridge (post-alveolar)
/tʃ/	“chick” and “match”	Air is blocked with tongue just beyond alveolar ridge (post-alveolar), then released as a fricative
/dʒ/	“jam” and “badge”	Air is blocked with tongue just beyond alveolar ridge (post-alveolar)

j. Lateral

The main characteristic of laterals is that the airflow usually passes to the sides of the tongue when pronouncing them. Example: lake, bell.

k. Nasal

Nasal is the sounds produced with articulated are entirely closing the mouth passage. However, allowing the air to pass out through nose. Type of nasal:

- i. Bilabial: total closure is made by both lips. Here the lower lip becomes the active articulator, while the upper lip becomes the passive articulator.

/p/	<i>pie</i>	Voiceless bilabial plosive
/b/	<i>by</i>	Voiced bilabial plosive
/m/	<i>my</i>	Voiced bilabial nasal

- ii. Alveolar: we can produce it by moving the tongue's top up against the palate of the rough part.

/t/	<i>tie</i>	Voiced alveolar plosive
/d/	<i>die</i>	Voiced alveolar plosive
/n/	<i>night</i>	Voiced alveolar nasal
/s/	<i>sip</i>	Voiceless alveolar fricative
/z/	<i>zip</i>	Voiced alveolar fricative
/ɾ/	<i>rip</i>	Voiced alveolar central approximant
/l/	<i>lip</i>	Voiced alveolar lateral approximant

- iii. Velar: the tongue's back part touched against the soft palate, the back part roof of the mouth. Here, the tongue's back part becomes the active articulator, while the soft palate (velum) becomes the passive one.

/k/	<i>cot</i>	Voiceless velar plosive
/g/	<i>got</i>	Voiced velar plosive
/ŋ/	<i>rang</i>	Voiced velar nasal
/x/	<i>loch</i>	Voiceless velar fricative

4. *The Airflow*

In English, the most general airstream mechanism is when we want to produce consonant and vocal sounds where lungs become the initiator, whereas those left the respiring system and the airflow's direction is visible.

5. *Articulation's Place*

Here are the places where the consonants are produced:

a. *Bilabial*

For a bilabial sound, the active articulator is the bottom lip and the passive articulator is the top lip. Example:

/p/	<i>pie</i>	Voiceless bilabial plosive
/b/	<i>by</i>	Voiced bilabial plosive
/m/	<i>my</i>	Voiced bilabial nasal

b. *Labio-dental*

Like Bilabial sounds, labio-dental ones the the bottom lip becomes the active articulator, yet here it arises to the teeth's top front part. Example:

/f/	<i>fat</i>	Voiceless labio-dental fricative
/v/	<i>vat</i>	Voiced labio-dental fricative

c. *Dental*

Here the tip teeth becomes the active articulator, while the upper front teeth becomes the passive articulator.

/θ/	<i>thigh</i>	Voiceless dental fricative
/ð/	<i>thy</i>	Voiced dental fricative

d. Alveolar

Alveolar sounds are produced by the tip or blade of the tongue moving up towards the alveolar ridge."

/t/	<i>Tie</i>	Voiced alveolar plosive
/d/	<i>Die</i>	Voiced alveolar plosive
/n/	<i>night</i>	Voiced alveolar nasal
/s/	<i>Sip</i>	Voiceless alveolar fricative
/z/	<i>Zip</i>	Voiced alveolar fricative
/r/	<i>Rip</i>	Voiced alveolar central approximant
/l/	<i>lip</i>	Voiced alveolar lateral approximant

a. Post-alveolar

Post-alveolar sounds are produced with the blade of the tongue as the active articulator and the adjoining parts of the alveolar ridge and the hard palate as the passive one.

/ʃ/	<i>ship</i>	Voiceless postt-alveolar fricative
/ʒ/	<i>beige</i>	Voiced postt-alveolar fricative
/tʃ/	<i>chunk</i>	Voiceless postt-alveolar affricative
/dʒ/	<i>junk</i>	Voiced postt-alveolar affricative

e. **Palatal**

Palatals are produced by the front tongue, which moves up towards the hard palate.”

/j/	yes	Voiced palatal approximant
-----	-----	----------------------------

f. **Velar**

For velar sounds, the active articulator is the back of the tongue and the passive articulator is the velum, or soft palate.”

/k/	cot	Voiceless velar plosive
/g/	got	Voiced velar plosive
/ŋ/	rang	Voiced velar nasal
/x/	loch	Voiceless velar fricative

g. **Glottal**

Glottal sounds are the minority in articulatory terms, because they do not include the tongue: instead, the articulators are the vocal folds, that form a place of articulation as well as having important function in voicing.

The first is allophonic, the glottal stop [ʔ] which appears as an intervocalic realisation of /t/ in many accents, as in *butter*. It is technically voiceless.

The second, the voiceless glottal fricative. /h/ in *high* is voiceless glottal fricative.

	Place							
Manner	Bilabial	Labiodental	Interdental	Alveolar	Postalveolar	Palatal	Velar	Glottal
Stop	p, b			t, d			k, g	
Fricative		f, v	θ, ð	s, z	ʃ, ʒ			h
Affricative					tʃ, dʒ			
Nasal	m			n			ŋ	
Liquid (lateral)				l				
Liquid (rhotic)				ɹ				
Glide	w					j	w	

***bolded** symbol is the voiced sound

D. Accents

We know that every English speaker has their own idiolect system. English speakers from America and English speakers from Australia of course have different accent. This is very important since others can know where they are from. Also those differences can add more variation in English.

VOWELS

A. Description of Vowels

In describing vowel sounds, we should think the way whither the tongue affects the shape through that airflow should go by. The vowel's feature relies upon the vocal tracts' shape when the air crosses.

Diphthongs are combination of vowel sound. They start with a vowel sound and ends with a glide.

For further explanation about vowels visit the link:
<https://youtu.be/HTdvSVGp1Ew>

B. Classification of Vowels

We need to consider three different parameters; frontness, rounding, and height. Furthermore, vowels to be short or long and monophthongs or diphthongs.

1. *The Front-back Dimension*

Front vowels are produced with the front of the tongue raised towards the hard palate (although not raised enough, remember, to obstruct the airflow and cause local friction; vowels are approximants)."

ɪ	ɛ	æ	i:	eɪ
ɑ:	ʊ	ɒ	ɔ:	oʊ
u:	ə	ɜ:	ʌ	

Front	Back	Central
-------	------	---------

Conversely, back vowels have the back of the tongue raised, towards the soft palate or velum. Central vowels involve a raising of the body of the tongue towards the area where the hard and soft palate join.”

2. *The Hig-low Dimension*

High vowels have the tongue raised most towards the roof of the mouth. Low vowels are those where the tongue is not raised at all, but rather lowered from its resting position. Mid vowels depends on wheter they are nearer the high end of the scale, or nearer the low end.

ɪ	ε	æ	i:	eɪ
ɑ:	ʊ	ɒ	ɔ:	oʊ
u:	ə	ɜ:	ʌ	

Mid	Low	High
-----	-----	------

3. *Position of Lips*

Vowels can be either **rounded**, here we protrude the lips ahead, or **unrounded**, here we place the lips either in a neutral position or usually slightly spread.

ɔ:	u:	ʊ	ʊ	Rounded
i:	E	ε	ɪ	Unrounded

4. *Length*

Generally, long vowels are more incidental, or articulated in a more acute and clear method, than their brief matches.

i:	ɑ:	æ	ʌ	
u:	ɜ:	ɒ		
o:	ɪ	ʊ		Long
ɔ:	ɛ	ə		Short

5. Diphthong and Monophthong

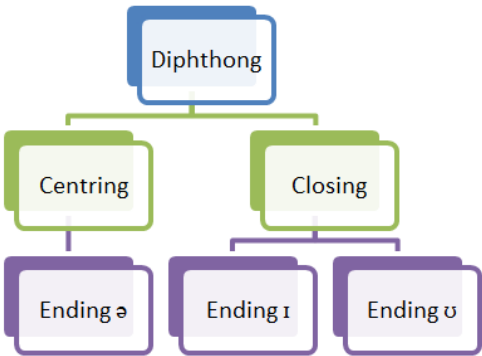
vowels	i:	ɪ	ʊ	u:	ɪ ə	e ɪ		Short
	e	ə	ɜ:	ɔ	ʊə	ɔ ɪ	əʊ	Long
	æ	ʌ	ɑ:	ɒ	eə ɪ	a ɪ	aʊ	Diphthongs

(Download **Sounds: The Pronunciation App** on Playstore to listen to the sound!)

a. Diphthong

Diphthong is sounds which consist of a movement or glide from one vowel to another. In terms of length, diphthongs are like the long vowels. The most important thing to remember about all the diphthong is that the first part is much

longer and stronger than the second part. The total number of diphthongs is eight.”



The centring diphthong glide towards the ə (schwa) vowel, as the symbol indicate. (For the explanation about schwa you can watch it at **BBC Learning English** app then click Programmes then Pronunciation!)

/ɪə/	<ul style="list-style-type: none"> • This diphthong shifts from a vowel area to another in one syllable • Mouth is closed a little, start saying the /ɪ/ and move to say the sound /ə/ • Lips spread and move tongue up a little when saying it 	Ear, here, tear, clear, fear, engineer.
------	--	--

/eə/	<ul style="list-style-type: none"> • Starts with /e/ but more open than the short vowel /e/ and moves to /ə/ • Lips remain open 	Area, rare, librarian, their, where, chair.
/ʊə/	<ul style="list-style-type: none"> • The front of the back of the tongue moves from the position of the /ʊ/ sound to the /ə/ sound • Mouth goes from being almost closed with slightly rounded lips like we are going to kiss someone 	Poor, spoor, tour, sewer, hour.

The closing diphthong has features which they all end with a slide against a nearer vowel. Three of the diphthongs glide towards ɪ:

/eɪ/	<ul style="list-style-type: none"> • Lips spread in a relaxed position • Tongue moves up to high position 	Wait, eight, strange, stay, baby, neighbor
/aɪ/	<ul style="list-style-type: none"> • The back of the tongue lowers and front of 	Eye, like, side, quite, silent,

	<p>tongue up</p> <ul style="list-style-type: none"> • Jaw shifts from an unclosed to a more closed position • The lips are unrounded • The vocal folds apart and resound • The velum is lifted putting inside the nasal vacuity 	while
/ɔɪ/	<ul style="list-style-type: none"> • The tongue moves from a low back position to a high front position • From lips rounded, make lips wide • The vocal folds apart and resound • The velum is lifted putting 	Boy, voice, foil, point, enjoy, destroy, coin

	inside the nasal vacuity	
--	-----------------------------	--

Two diphthongs glide towards u:

/əʊ/	<ul style="list-style-type: none"> • The tongue is set lower than /u/ at the back, with a small pressure • Jaw is slightly lowered • Lips are round shape and forward • The vocal folds apart and resound • The velum is lifted putting inside the nasal vacuity 	Home , ago, loan, old, shoulder, widow
/aʊ/	<ul style="list-style-type: none"> • The tongue shifts from a low back position to a mid-high front position 	Cloud , flower, tower, loud, around, now

	<ul style="list-style-type: none"> • Jaw is raised during sound production • From an unrounded shape, lips move to a round shape • The vocal folds apart and resound • The velum is lifted putting inside the nasal vacuity 	
--	---	--

b. Monophthong

A monophthong is a pure vowel sound. Long vowels likely to be longer than the short vowel in akin condition.

	i:	ɪ	ʊ	u:	
e	ə	ɜ:	ɔ:		
æ	ʌ	ɑ:	ɒ		

Long vowels:

Short

Long

/i:/	<ul style="list-style-type: none"> • Tongue accelerates and arises in the mouth when the edges tap tooth fold and the the tongue's tip is placed behind the bottom teeth • Jaw is raised • Lips are not rounded and can be conceded • The vocal folds apart and resound • The velum is lifted putting inside the nasal vacuity 	<p>Free, agree, sheep, believe, meal, complete</p>
/ɑ:/	<ul style="list-style-type: none"> • The tongue is set at a back and low position • Jaw is lowered 	<p>Bar, hard, guard, draught, smart</p>

	<p>more than the rest of the back vowels</p> <ul style="list-style-type: none"> • Lips are not rounded and wide open • The vocal folds separate and vibrate • The velum is raised blocking off the nasal 	
/ɜ:/	<ul style="list-style-type: none"> • The tip of the tongue curls up and is near top of the mouth • Jaw moves down a little • Lips are rounded • The vocal folds apart and resound • The velum is lifted putting 	<p>Burn, word, search, her, world, bird</p>

	inside the nasal vacuity	
u:/	<p>The tongue is raised to a high back position, against the teeth at the back of the mouth while the back of the tongue is out forward to create an air passage</p> <p>Jaw is raised</p> <p>Lips are rounded and put forward</p> <p>The vocal folds apart and resound</p> <p>The velum is lifted putting inside the nasal vacuity</p>	True, you, move, whose, two, chew
ɔ:/	<p>The tongue is set at the back in a low-mid position</p> <p>Jaw moves down a little</p> <p>The lips are rounded, but less than /ʊ/ r /o/</p> <p>The vocal folds apart and resound</p> <p>The velum is</p>	Sport, short, wall, launch, law, fall

	lifted putting inside the nasal vacuity	
--	---	--

Short vowels:

ɪ /	<p>The tongue is put forward and lower in the mouth than the sound /i:/, while the sides touch the teeth and the tip is behind the bottom teeth</p> <p>Jaw moves lower a little than /i:/</p> <p>The lip are unrounded</p> <p>The vocal folds apart and resound</p> <p>The velum is lifted putting inside the nasal vacuity</p> <p>Do not spread lips into a smile</p>	<p>Him, miss, honest, sit, kit, return, bit, remind</p>
ʌ /	<p>Tongue is in the middle of the mouth</p> <p>Jaw moves down a little bit</p> <p>The lips are unrounded</p> <p>The vocal folds</p>	<p>Honey, done, flood, must, sunny, touch</p>

	<p>apart and resound</p> <p>The velum is lifted putting inside the nasal vacuity</p>	
e/ /	<p>The tongue is put forward, close to the tooth ridge, the tongue 's edge touches the teeth and the tongue's tip is behind the lower teeth</p> <p>Jaw is up</p> <p>The lips are not rounded and can be conceded</p> <p>The vocal folds apart and resound</p> <p>The velum is lifted putting inside the nasal vacuity</p>	<p>Anyon e, them, breath, hell, met, head, eleven</p>
ə/ /	<p>Tongue is up a little and curls near the top of mouth</p> <p>Jaw moves down a little</p> <p>The vocal fold apart and resound</p> <p>The velum is</p>	<p>Open, answer, balance, mother, woman, banana</p>

	lifted putting inside the nasal vacuity	
æ /	<p>The tongue is put a little bit forward and low in the mouth with the tongue's tip is behind the bottom teeth</p> <p>Jaw moves down</p> <p>The lips are unrounded and can be pulled back</p> <p>The vocal folds apart and resound</p> <p>The velum is lifted putting inside the nasal vacuity</p>	Man, black, challenge, narrow, thanks
u /	<p>The back of tongue is raised up to a high position and touches the teeth at the mounth's back</p> <p>Jaw moves up a little</p> <p>The lips are usually rounded and forward</p> <p>The vocal folds separate and vibrate</p>	Cook, foot, book, took, wool

	The velum is raised blocking off the nasal cavity	
ɒ/	<p>The tongue is set at a low back position in the mouth</p> <p>Jaw moves down</p> <p>The lips are unrounded and wide open</p> <p>The vocal folds apart and resound</p> <p>The velum is lifted putting inside the nasal vacuity</p>	Shot, body, dog, stop, block, box

C. Nasalization Vowel

Similar with the consonants, we can produce vowel sounds by raising velum to prevent the air from leaving through nose, or lowering velum to permit the air leaving the nasal section. To show a vowel's nazalisation in a narrow phonetic transcription, another sign named **diacritic** (~) is placed over the vowel. Example: [bɪn] ~ [bɪ̃n] and [ʌŋ] ~ [ʌ̃ŋ].

D. Phonetic Symbols for American English Vowels

	Front	Central	Back
High	i ɪ		u ʊ
Mid			
Low	e	ə	o
	ɛ	ʌ	ɔ
		æ a	ɑ

*bolded is a rounded sound

E. The Same but Different

As we have learned, to classify and describe consonants, most features that function properly are completely unsuitable for vocals, whereas vowels change in proportions (such as tongue height) that are irrelevant for consonants. Nevertheless, while turning to the standard for building phonemes and the exemptions to those studied in the previous material, it appears that consonants and vowels act really alike. The following parts thus carry out a double function of bringing additional facts about vowels when permitting several changes of ideas such as complementary distribution, allophonic rules, free variation, neutralisation and phonetic similarity, which were first introduced mainly in connection with consonants.

F. Estabilishing Vowel Contrast

1. Minimal Pairs

In phonology, this term is defined as the pairs of words or phrases, spoken or written, which only have

one difference in the phonological element, for example: in the chroneme, toneme, or phoneme, and have dissimilar meanings. The minimal pairs usually are applied to show that two phones actually are two distinct phonemes in languages.

In mid 20th century, many phonologists had a great interest advancing the ways to discover the unknown languages' phonemes. According to Kenneth Pike, the minimal pairs were the basic tool in the process of discovering and were found by substitution and commutation analysis.

Here are some examples of the English vowels:

a. **Let and lit**

Those two words only have one difference in the phones [ɛ] in the word let and [I] in the word lit which actually show the different phonemes, they are /ɛ/ and /I/.

b. **Pat and bat**

Similar with the example above, this is the example of minimal pairs in consonant.

The similar pairs can be anywhere in the words, they can be in the vowel, initial consonant, or final consonant. The example of minimal pairs in the initial consonant, such as; pin and bin, seal and zeal. While the different phonemes in vowel, like; pen and pan. The last one, minimal pairs in final consonant, for example; hat and had.

There are some contrasts between short and long consonants and vowels which are shown in many

languages. Chroneme, said the phonologists, is the attribute in length. The example below is based on the Italian long and short /l/.

Spelling	IPA	Meaning
Pala	/ˈpala/	Shovel
Palla	/ˈpalla/	Ball

Nevertheless, in some cases, it is difficult to consider if it is the long consonant or vowel. In some dialects, they have the distinctive vowel length. For example:

Dialect Spoken in Palmi	IPA	Quality	Etymology	Latin
Cū voli?	/kuˈvɔ:li/	Short	cū<lat. qu (<i>is</i>) ("who?")	Quis vult
Cū voli?	/kuːˈvɔ:li/	Long	cū<lat. qu(<i>o</i>) (<i>ill</i>)ū (m) ("for-what him?")	Quō illum/illud vult?

There is also the difference tone in language, it is called toneme. The example below for distinguishing the high and low tone on syllables.

2. *Standard lexical sets*

This study is introduced by John C. Wells in *Accents of English* are in broad usage. According to Wells, two

references, RP and GenAm, are used in each lexical sets as the basic of the words' pronunciations.

- a. RP (Received Pronunciation), which is the traditional accent in England.
- b. GenAm (General American), which is the neutral or widespread system of the sound in US.

There are 24 lexical sets according to Wells. It is the pronunciation basic of the vowel which is the stress syllable reference according to RP and GenAm. The lexical set is named according to the representative keyword. There are also three sets of the final unstressed vowels, out of 24 lexical sets.

Wells Lexical Sets

Keyword	RP	GenAm	Example
KIT	ɪ	ɪ	Busy
DRESS	ɛ	ɛ	Neck
TRAP	æ	æ	Back
LOT	ɒ	ɑ	Stop
STRUT	ʌ	ʌ	Cup
FOOT	ʊ	ʊ	Put
BATH	ɑ:	æ	Ask
CLOTH	ɒ	ɔ	Boston
NURSE	ɜ:	ɜr	Burst
FLEECE	i:	ɪ	Creep
FACE	eɪ	eɪ	Day
PALM	ɑ:	ɑ	Spa
THOUGHT	ɔ:	ɔ	Sauce

GOAT	əʊ	o	Soap
GOOSE	u:	U	Loop
PRICE	aɪ	aɪ	Try
CHOICE	ɔɪ	ɔɪ	Noise
MOUTH	Aʊ	aʊ	Out
NEAR	ɪə	ɪr	Beer
SQUARE	ɛə	ɛr	Care
START	ɑ:	ɑr	Far
NORTH	ɔ:	ɔr	For
FORCE	ɔ:	Or	Four
CURE	ʊə	ʊr	Poor

The three sets of the final unstressed vowels

Happy	ɪ	ɪ	Copy
LetTER	ə	ər	Paper
CommA	ə	ə	Quota

As an illustration, the word “far” is pronounced differently both in RP and GenAm. In RP, Far is pronounced /fa:r/ but in GenAm, it pronounced /far/. The word far belongs to START. Another example, the word loop in GOOSE lexical set is also pronounced differently too. In RP, loop is pronounced /lu:p/ but in GenAm it pronounced /lup/. There are also some words in English that do not belong to any 24 lexical sets. For example, the word tomato.

It is pronounced /ɑ:/ in RP, and /eɪ/ in GenAm. This word has a unique combination so that it cannot be put in any 24 lexical sets.

The lexical sets from Wells is usually used to discuss the system of phonology and phonetic about the distinct English accents in a clear and rational manner. Actually, the lexical sets do not only use in describing the RP and GenAm but also it is able to use in describing other English accents. It is based on the fact that in many dialects, the words in the sets are pronounced with the identical stressed vowels. Wells also used the lexical sets for giving tables of lexical incidence in all distinct accents he discussed when working on it. The examples below are the table of lexical incidence for Newfoundland English.

- KIT: ɪ
- DRESS: ɛ
- TRAP: æ
- LOT: ɑ
- STRUT: ʊ
- FOOT: ʊ

- BATH: æ:
 - CLOTH: ɑ:
 - NURSE: ɜr [ɜ:]
 - FLEECE: i:
 - FACE: ε:, εɪ
 - PALM: æ, ɑ:
 - THOUGHT: ɑ:
 - GOAT: ʌʊ
 - GOOSE: u:
 - PRICE: əi
 - CHOICE: əi
 - MOUTH: əu
 - NEAR: εr
 - SQUARE: εr
 - START: ær
 - NORTH: ɔr
 - FORCE: ɔr
 - CURE: ɔr
 - happY: [i]
 - lettER: ɜr [ɜ:]
 - commA: ə
-

From the example above, we can know that in Newfoundland English using the phoneme /ɪ/ for the lexical set KIT, while in lexical set FORCE, CURE, and NORTH are pronounced with the vowel /ɔ̃r/. But, we can look at the lexical set of FACE that has more than one pronunciation, that are /ɛ:/ and /ɛɪ/. It means that, all the words that include in the lexical set FACE are pronounced differently between /ɛ:/ and /ɛɪ/. Wells also used the symbol /ɔ̃/ so that the reader will not get confused with the THOUGHT vowel. It is caused by the symbols of vowel in THOUGHT lexical item which written with /ɔ/ or /ɔ:/ in many other accents. The use of lexical items did not stop in describing the English accents. It also used in describing the splits and mergers, such as in pronouncing words father and farther. Both of them can be pronounced identically. So that, it can be described as the merger of PALM and START.

3. *Vowel Features and Allophonic Rules*

Vowel features can be defined as the height tongue in oral cavity (low, mid and high), the tongue's (back, central and front), the tension degree of tongue and lips (tense/lax). Sometimes, it is also related to the root of the tongue, they are ATR, RTR, and the lips position (+/-round). ATR is the Advanced Tongue Root and RTR is Retracted Tongue Root.

- **High**

The tongue is lifted against the hard palate or the soft ones.

- **Low**

Different from the high one, here, we lower away the tongue from the hard palate and the soft ones.

- Front

It is the blade of the tongue.

- Back

The tongue or dorsum body.

The following is how the vowels are labelled:

The following is how the vowels are labelled

- High [+high]
- Front [-back] mid [-high, -low]
- Central and back [+back] low [+low]

It is impossible to use the Binary classification when there is only one distinction. The height vowel can be classified by [-/+low] because it is more common to use low and high than using mid. So that, low and high can be categorized as [-low].

The list of the features below can be used to describe a vowel:

- Height
- Part of tongue
- Tense/lax
- Roundness

For example:

/a/ - [low, +back, lax, -round] /u/ - [+high, +back, tense, +round]

Tense/lax are usually applied with Advanced and Retracted Tongue Root (ATR/RTR). But, the contrast only includes more than the tongue root. The lists below are the other vowel features in American English standard.

- Nasal

The vowel that goes before nasal consonants, such as [sĩn] ‘seen’

- Devoiced

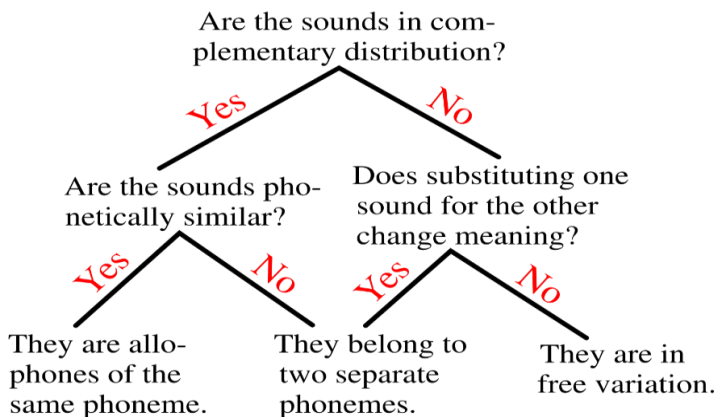
Vowels found confined by voiceless obstruent, such as [tʰ ʌp] ‘top’

- Long

It is the vowel that goes before the voiced phonemes which are lightly lengthened in opposition to those which goes before voiceless sounds, such as [sit] ‘seat’ versus [si:d] ‘seed’.

The word allophone come from Greek, *állos*, which means other and *phōnē* which means voice or sound. Allophone can be defined as the group of the some possibilities of the spoken sounds. It can also be defined as the signs that can be used to pronounce a single phoneme in a language such as stop and top, [t] in [stop] and [tʰ] in [tʰ op], the [t] is the allophone.

To determine the phonemic status of two sounds:



The positional variants are the allophone which is selected in a given situation that often be able to be predicted from the context of the phonetic. But, there are also some allophone that are called the free variations. It will not change the meaning if you replace a sound with another allophone in the same phoneme. But, that treat can make the result sound non-native. There is also the tonic allophone named allotone as the neutral tone in Mandarin standard. There are many allophonic processes, they are:

- Aspiration

The aspirating process of the voiceless plosive of /p, t, k/ if it is put as the beginner of the first-stressed syllable. Examples: [p^h] in the *pin* and [p] in *spin* are the allophones for the /p/ phoneme since it cannot distinguish words.

- Nasal plosion

A plosive in /p, t, k, b, d, g/ have nasal plosion, but it must be followed by a nasal, either across or within the words.

- Partial devoicing of sonorants

The sonorants in /j, w, l, r, m, n, ŋ/ are devoiced partially after a voiceless sound in the same syllable.

- Complete devoicing of sonorants

Different from the partial devoicing of sonorants, this one is completely devoiced in /p, t, k, ʃ/.

- Partial devoicing of obstruents

It is devoiced partially next to s pause or voiceless sound within or across a word.

- Retraction

/t, d, n, l/ are retracted before /r/.

Here are the rules for English Consonant Allophones:

1. When at the end of the phrase, the consonants are longer.
2. When the voiceless stops /p, t, k/ are put in the beginning of the syllables, it must be aspirated.
3. When voiced obstruents in /b, d, g, v, ð, z, ð, ʒ/ in the end of the utterance /v/ such as in 'improve' or before /d/ in add two (voiceless sound) are only voiced shortly during articulation.

4. Voiced /b, d, g, dʒ/ (stops and affricates voice) is voiceless until it is preceded by voiced sound immediately.
5. Approximants are partly voiceless while occurring after syllable-initial /p, t, k/ in play, twin, and cue.
6. Voiceless stops /p, t, k/ are not aspirated until it follows an initial fricative syllable, such as spew, stew, and skew.
7. /p, t, k, tʃ/ stop and affricates stop are longer when they are put at the end of syllables.
8. The air explosion only follows after the second stop when there is a stop comes before another one.
9. The English accents produce a glottal stop which have a voiceless stop for its end.
10. Some English accent use the glottal stop in /t/ when it is put before the alveoral nasal.
11. Nasals can become syllabic when it follows obstruent, immediately.
12. /l/ when follows the consonants immediately, also syllabic at the end.
13. When occurring between two vowels, alveoral stops can become voiced taps.
14. When occurring before a dental, all consonants (alveoral) assimilates to dentals.
15. Between two consonants, alveoral stops are reduced.

16. When a consonant comes before identical consonant, it is shortened.
17. A homorganic voiceless can be put after a nasal, but it must be put before the fricative voiceless which is followed by unstressed vowel in the same word.
18. /k, g/ velar stops turns more front while the following vowel sound (must be in the same syllable) turns more front.
19. The lateral /l/ when it is put after a vowel before a consonant is velarized.

4. *Phonetic Similarity and Defective Distribution*

Phonetic similarity is the two or more sounds that actually sharing the phonetic features which is discovered as variations of the single phonological group in language. For examples:

The phonetic similarity	Differ in
[p] and [b]	Voicing
[p] and [f]	Place of articulation and manner of articulation
[l] and [r]	Manner of articulation
[p] and [t]	Place of articulation

While defective distribution can be defined as the situation where a phoneme in a language does not exist in all contexts. For example: In German, the /h/ phoneme will not exist in the end of the word.

5. *Free variation, Neutralisation and Morphophonemics*

Free variation is phenomenon the two (or more sounds) or form which is put in the same environment without changing the meaning and still correct according to native speaker. For example:

- The rhotic consonant /r/

It is the free variation which is placed between the retroflex approximant, alveolar approximant, alveolar trill, and alveolar flap.

- Glottalization of voiceless stops

The word stop may be pronounced unaspirated [stɒp] or glottalized [stɒpʔ].

- The word economics

It can be pronounced with [i:] or [ɛ] in the first syllable.

- In the words either and neither

[ei] may be pronounced /i:/ or /aɪ/.

- Loanwords

Route may be pronounced /raʊt/ or /ru:t/.

- The word data

It also may be pronounced /'dætə/ or /'deɪtə/.

- Proper names

Particularly for geographic state names.

While neutralization actually can be found in many fields of study and there is no one of them which really concerning in it. One of the neutralization can be found in

phonology. Actually, neutralization firstly introduced in 1930s by the Prague School linguists. According to Crystal, neutralization is the term that is used in phonology which function is to describe what happens when in particular environment the difference between two phonemes is lost. For example: the contrast between voiceless and voiced plosives such as tip and dip is crucial but it can be neutralized by adding /s/ before those words such as stop and skin.

Morphophonemic can be defined as the relationship between two studies, they are morphology and phonology. For example: in the words 'sleep', 'bind', and 'vain' the vowels are changing become 'slept', 'bound', and 'vanity'. For the consonant, 'knife' becomes 'knives' then 'loaf' becomes 'loaves'.

G. Vowels vs Consonants

Vowel can be described as the speech sound which is made with an open mouth, nucleus of the spoken syllable. While, consonant can be described as the sound which is made with a closed mouth. How the consonants are produced? The lists below consist of the way how the consonants can be produced.

1. Briefly stopping the you release the air ("p", "b", "t", "d", "k", "g")
2. Changing the airflow then you associate vibration to the nose ("m", "n", "", "ng",)
3. Through the confined area you squeeze the air such as "th" in thin and then.
4. You can combine the stop the squeezing ("ch", "j")

5. You can narrow the vocal strict (“w”, “y”, “r”, “i”)

So, what are actually the differences between vowels and consonant? The lists below can be the answer of that question.

- Both of them are not letters, but sounds.
- Vowels are the loud sounds which form the nuclei of every syllable the consonants are the sound that separate the vowels.
- The letters A and O are mostly applied to spell the vowels.
- The letters E, G, H, I, L, R, U, W, Y are applied to spell the vowels and consonants.

SYLLABLE

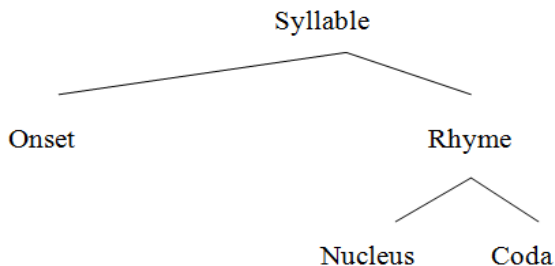
A. Definition of Syllable

A syllable can be defined as a phonological set consisted of one or more phoneme. All syllables have nucleus, which is generally a vowel, and must contain a vowel sound. Syllable also has consonants (C). Technically, the syllable's basic elements are "the **onset**" (one or more consonant) and "the **rhyme**". The rhyme is composed as a vowel (V), that is considered as "**nucleus**", plus any following consonants, called as "the **coda**".

Open syllable is when a coda is when a syllable has an onset and a nucleus without coda. However, when a coda is present, it is called closed syllable. Example:

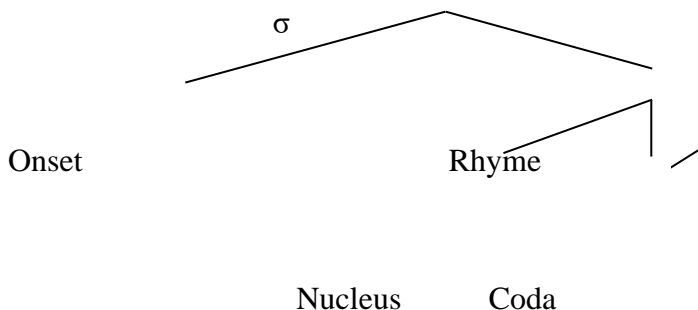
Green	CCVC	Closed syllable
Do	CV	Open syllable

The diagram:



B. The Syllable's Constituents

The accepted syllable diagram is given below. Remember that small sigma (σ) is shorthand for "syllable".



Usually it contains a vowel. In case there is no vowel possible, particular consonants can be nucleus and acts as a vowel.

Both the onset and the coda are alternative elements and they will consist one or more consonants. Example: *be* does not have any coda, but an onset; *eat* does not have any onset, but a coda; *beat* does have an onset and coda.

1. *The Grammar of Syllables: Patterns of Acceptability*

a. Phonotactic Constraints

Phonotactic constraints is having restriction on the permissible contentst of the onsets and codas. Chiefly, English lets clusters of two or three consonants in both onsets and codas. Several limitations on the compositin of clusters represent structural idiosyncracies of English.

- i. In a CCC onset, C1 must be /s/
- ii. /ŋ/ does not appear in onsets
- iii. /v/ /ð/ /z/ do not form part of onset clusters
- iv. /t/ /d/ /θ/ plus /l/ do not form permissible onset clusters
- v. /h/ does not appear in codas
- vi. Coda clusters of nasal plus oral stop are only acceptable if the two stops share the same place of articulation
- vii. /lg/ is not a permissible coda cluster

b. The Sonority Sequencing Generalisation

The most important phonological rule that appears here is called as “the Sonority Sequencing Generalisation”, and controls the form of both onsets and coda. Sonority is correlated with the dissimilarity between sonorants, “sounds that are typically voiced, like approximants, nasal stops, and vowels” and obstruents “oral stops, and fricatives, which may be either voiced or voiceless”.

More explanation about Sonority Sequencing visit the link:

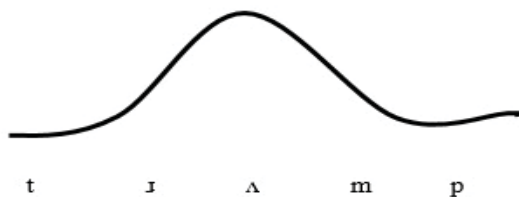
<https://www.youtube.com/watch?v=oKhmbZGzyZ8>

Here, at the bottom is the least resonant sound, while at the top is the most resonant sounds.

- i. Long vowels
- ii. High vowels
- iii. Glides
- iv. Liquids
- v. Nasals
- vi. Voiced fricatives
- vii. Voiceless fricatives
- viii. Voiced plosives
- ix. Voiceless plosives

The Sonority Sequencing Generalisation expresses the common principle which syllables must represent the following sonority curve:

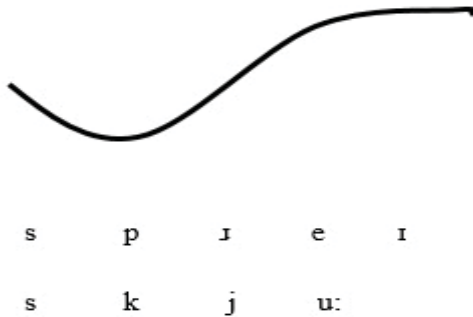
The nucleus constitutes the sonority peak of the syllable, with sonority decreasing constantly against the margins.



Like many rules, the Sonority Sequencing Generalisation has an exemption and this involves the behaviour of /s/. Observe this picture!

2. Justifying the Constituents

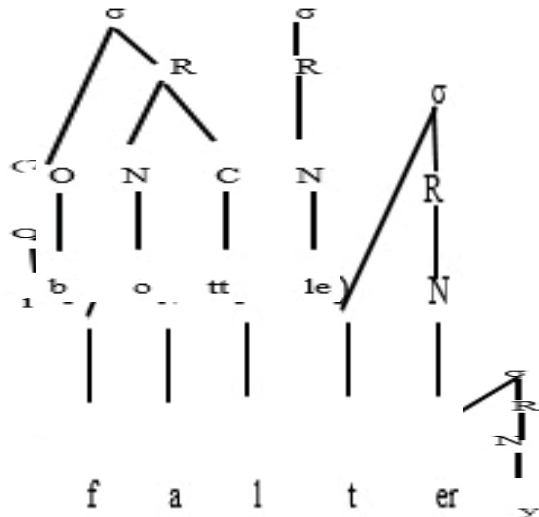
a. Syllables-based Processes



The adjacent segment's nature usually controls a phonological process.

The notion of the syllable in general supports us state the condition for voiceless' goal stops more correctly. Goal of voiceless stops take place, not at the opening of the word, but at the opening of the onset. Alike support may be discovered for the rhyme.

Example:



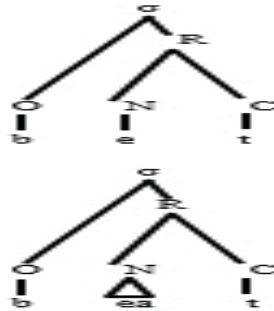
b. Onset Maximalism

Where there is a choice, always assign as many consonants as possible to the onset, and as few as possible to the coda. Nevertheless, note that all words should compose of sequence of wellformed syllable as well.

Onset maximalism states, In a word like leader, the medial /d/ must belong to the second syllable, where it can be located it on the onset.

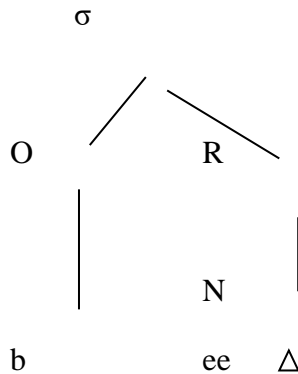
c. Syllable Weight

There are two syllable type's subdivisions. Both rely upon the rhyme's structure. *Firstly*, syllables may be open or closed. An angled nucleus will have a long vowel or diphthong, whereas a branching coda will hold a consonant cluster.



Closed syllable:

Open syllable:



Second, similar difference between the heavy syllables and the light ones. Heavy syllables have a complicated rhyme, while light syllables have a short vowel in the rhyme without coda. There are several ways of complicatedness:

- i. A heavy syllable may have a short vowel, but one or more consonants.

Example: *bet*, *best*.

- ii. It may have a branching nucleus, consisting of a long vowel or diphthong. Example: *beast*, *bite*, *bee*, *by*.

Syllable weight is a chief aspect in determining the position of stress in a word: essentially, no stressed syllable in English may be light.

C. Word Stress

1. The Phonetic Characteristic of Stress

English native speakers know that particular syllables in all words, and one syllable in certain, will be more phonetically remarkable than others. Such more remarkable syllables are stressed. Stress is a culminative feature, indicated by some secondary phonetic aspects, that act along to remark stressed syllables from the unstressed ones that nearby it.

- i. The vowels of stressed syllables are produced with higher fundamental frequency; the vocal folds vibrate more quickly, and this is heard as higher pitch.
- ii. The duration of stressed syllables is greater, and they are perceived as longer.
- iii. The stressed syllables are produced with greater intensity, and are thus heard as louder than adjacent unstressed syllables.

Stress can impact the vowel's feature, as a result, the vowel usually reduces to schwa under low stress.

We cannot distinguish a stressed from an unstressed syllable if each is spoken in isolation, but only comparing the syllable of a word, or a longer string, to see which are picked out as more prominent.

2. Figuring Out Stress Placement

The languages of the world fall into two broad classes in terms of stress position. In fixed-stress languages, primary stress always (or virtually always) falls on one particular syllable. On the other hand, languages may have free stress where words that semantically may be identical in terms of phonological segments, and differ only in the position of stress.

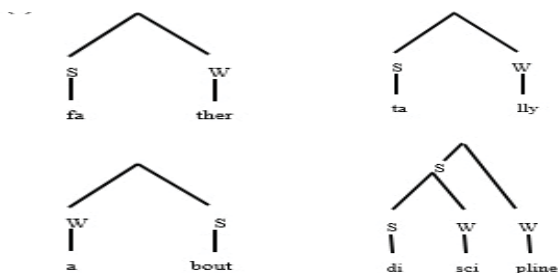
English does not fall completely within either group: it is neither a completely fixed stress, nor a

completely free-stress language. English ends up with the Germanic and Romance stress systems' combination. English has different stresses based on the word's lexical class they are using to. There are several general rules that let stress placement to be figured out in several English words.

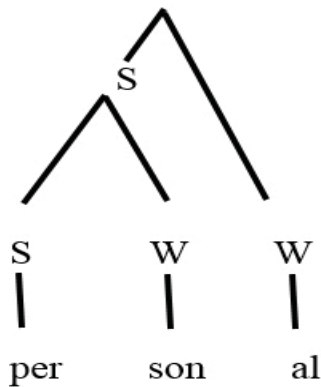
- i. Noun rule: stress the penultimate syllable if heavy. If the penultimate syllable is light, stress the antepenult.
- ii. Verb rule: stress the final syllable if heavy. If the final syllable is light, stress the penultimate syllable.

A syllable which has a short vowel, but no coda becomes light. The verb rule conversely stresses syllables that are at the end, therefore, long as these are heavy.

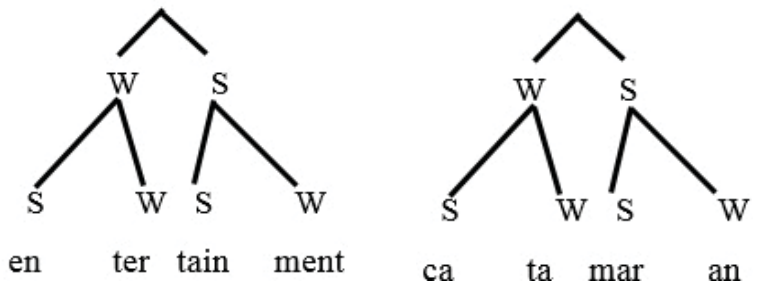
In the following diagrams, which form part of a theory named Metrical Phonology, every syllable is marked either S (Stronger than an adjacent W) or W



(Weaker than an adjacent S). Example:

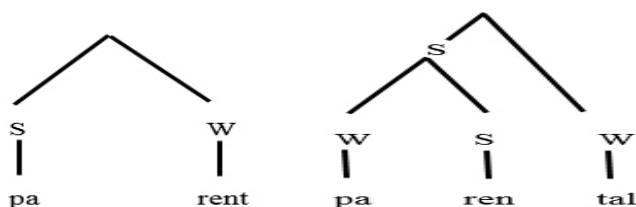


Different patterns shows in *entertainment* and *catamaran*.



Almost all suffixes are stress-neutral, and do not influence stress placement at all. Nevertheless, there are other suffixes' classifications that affect stress placement.

- i. Stress-attracting suffixes, which themselves take the main stress in a morphologically complex word. Example: adding *-ette* to *kitchen* or *-ese* to *mother*, produces *kitchen'ette*, *mother'ese*.
- ii. Other suffixes, notably *-icy*, *-ity* and adjective-forming *-al*, do not become stressed themselves, but cause the stress on the stem to which they attach to retract one syllable to the right. Example:



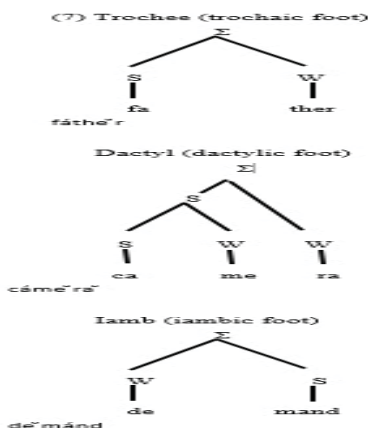
Another word's classification with its own feature of stress system. As compounds in English (consisted of two independent words, but indicate a single meaning), stress is usually on the first feature.

Stress is very important in marking this dissimilarity between compounds and phrases.

E. The Foot

All phonological feet begin with a stressed syllable, and continue up to, yet not involving, the following stressed syllable.

Similar to syllables, feet are able to be contrasted as stronger and weaker. We can divide foot into some kinds, three of that are illustrated below.



F. Segmental Phonology of the Phrase and Word

1. *Phrase-level Processes*

The bulk of these segmental phonological processes are characteristic of fast and casual speech, and are often referred to as connected speech processes (CSPs). These generally involve either assimilations or reductions. Most CSPs are also optional, will tend to be suspended or at least occur less frequently in more formal situations and in slower speech.

Speaking fast and not formal may also tend to cut the duration of unstressed vowels in full lexical words

like nouns, verbs and adjectives, with a concomitant impact in their quality.

G. Morphophonemic Change

1. Loss of Phonemes

“The phoneme /n/ of the negative prefix (in-) is lost before the morphemes starting with sonorant sounds /m/; /r/; /n/ and /l/.” (Nurhayati, 2015a; 2016b; 2016 f)

Examples:

Word	Phonetic transcription
Immobile	/ ɪ'məʊbaɪl /
Immature	/ ,ɪmə'tjʊə(r)/
Imbalance	/ɪm'bæləns/
Immoderate	/ɪ'mɒdərət/
Immorale	/ɪ'mɒrəl/
Irregular	/ɪ'regjələ(r)/
Irrational	/ɪ'ræʃənl/
Irrelevant	/ɪ'reləvənt/
Irresolute	/ɪ'rezəlu:t/
Irrevocable	/ɪ'revəkəbl/
Illogical	/ɪ'lɒdʒɪkl/
Illegal	/ɪ'li:gl/
Illiterate	/ɪ'litərət/

The phoneme /t/ is lost. It changes the word class (adjective to noun). Example:

Different	/'dɪfrənt/	→	Difference	/'dɪfrəns/
Confident	/'kɒnfɪdənt/	→	Confidence	/'kɒnfɪdəns/
Redundant	/rɪ'dʌndənt/	→	Redudancy	/rɪ'dʌndənsi/

The phoneme ou is lost. Example:

Piano / → Pianist /'piənɪst/
 pi'ænəʊ/

The intendend message of a word is clear with the spoonerisms. For whatever changing, phychological factor, the word's opening is more essential to communicate than the word's ending. Got the feature, the ending of syllable and word is commonly shortened in languages where there is a coda. In other words, the more complicated the coda, the more possible it will be shortened.

"All differences of English deletes stops and fricatives before coming next consonants. That is culturally common. Nevertheless, several vernaculars have more consonant deletion before coming next vowels, involving English in Appalachia and some variety of African-American English" (Hazen, 2015, p.97).

2. *Addition of Phonemes*

The phoneme /s/ is the additional phoneme.

Sword	/sɔ:d/	→	Swordsman	/'sɔ:dzmən/
Sale	/seɪl/	→	Salesgirl	/'seɪlɜ:ɜ:l/
Craft	/kra:ft/	→	Craftsman	/'kra:ftsmən/

3. *Simple Consonant Change*

Example:

Knife /naɪf/ → knives /naɪvz/

the phoneme /f/ changes to /v/

Commit → commission /kə'mɪʃn/

/kə'mɪt/

the phoneme /t/ changes to /ʃ/

4. *Assimilation*

Assimilation can be defined as “how sounds modify each other when they meet, usually across word boundaries, but within words too” (Kelly, 2000: 109). Speakers make several sounds more similar too other sound by assimilation. In this way, the first sound usually melts to the next sound. For sound, the degree of similarity changes. Hence, the change sound can be a little more similar or entirely alike.

1. Inevitable
Inoperable
Inexpensive
2. Insufficient
Intolerant
Independence
3. Impractical
Immature
Imbalance
4. Illegal
Illicit
Illiterate
5. Irresponsible
Irregardless
Irregular

In English the prefix “in-“ means “not” is attached to some various words. Beyond the language’s history, the [n] of that prefix has made its articulation’s place more related to consonant which comes after it. In group 1, the [n] do not change because the next sound is a vowel. In group 2, the next sound is a consonant, but [s], [t],[d] are all division of the same common group of alveolar sound. Because the [n] sound is already alveolar, it has the same articulation’s place as the next sound. In group3, the [p], [m], [b] are all part of the same common group of bilabial sounds, and the alveolar [n] changes to a bilabial [m]. in group 4 and 5, the [n] sound has been wholly blended in both position and aspect of articulation. What specific feature do the [ɹ] and [l] sound distribute? Both of them are like liquid, and because assimilation can be defined as a process of a sound

that is flowing into another, such sounds are particularly good at it.”

“Assimilation is one of the most common phonological processes for all languages. It happens with both consonants and vowels. Below are seven types of assimilation which are common enough as sound patterns to have earned their own name” (Hazen, 2015, p. 90).

5. *Dissimilation*

“A process quite opposite to assimilation, as the name itself indicates. With this stage, two phonemes form two different morphemes, most often the last of prefix and the first of the root are dissimilated in such a way that they are no longer the same phoneme, but the first one is changed into a different one. The reason for that is easier morpheme identification. The difference may be in the place of articulation, or another sound quality. This is not frequently present change.” (Javanovic, 2016)

Examples:

a) IN + NOBLE = INNOBLE > IGNOBLE

b) IN + NOMINY = INNOMINY > IGNOMINY

6. *Synthesis*

Synthesis is a consonant change commonly occurs in modern English.” It is the consonants’ mixture, carried as one by morpheme mixture, into a single recent phoneme differs from both of its components. The new phoneme should be

thought to relate to both the allomorphs whose junction-point it portray. Examples:

- i. /mən + potɔŋ/ becomes /məmotɔŋ/ ‘cut’ ([p] and [m] are both pronounced with the lips)
- ii. /mən + tulis/ becomes /mənulɪs/ ‘write’ ([t] and [n] are both pronounced with the tip of the tongue)
- iii. /mən + kira/ becomes /məŋjɪrə/ ‘guess’ ([k] and [ŋ] are both pronounced at the back of the tongue)

a. Change of Syllabic Vowel or Diphthong

In English, there is morphophonemic change’s type called the substitution to another syllabic vowel or diphthong for the one that comes in the common allomorph.

Example:

aɪ > ɪ five /faɪv/ → fifteen /fɪfti:n/

i: > e please /pli:z/ → pleasant /'pleznt/

ɪə > ɜ: hear /hɪə(r)/ → heard /hɜ:rd/

eɪ > e say /seɪ/ → said /sed/

aɪ > eɪ lie /laɪ/ → lay /leɪ/

b. *Stress Shift*

Stress shift can be defined as switch of a stress which happens in the recently produced word's syllables because of an affix's addition to an English word. It is usually followed by vowel change. However, there are several conditions, with no vowel change's following, like these examples:

Scientist /'saɪəntɪst/	→	Scientifict /,saɪən'tɪfɪk/
Economy /ɪ'kɒnəmi/	→	Economical /,i:kə'nɒ:mɪkl/

c. *Suppletion*

Suppletion occurs when an allomorph corresponds into a pattern with another allomorph; the two be part of the same morpheme inspite they can be phonemically very contrary.

Whole qualification is involved here not as a common process, yet in the essence of tiring the reasonable potentials. Its existence is by its character sporadic and idiosyncratic within inflectional classes built by common process, for instance th past inflection in English, where it is the *-ed* past tense forms and common ablaut that build the class in which suppletive *went* happens as an isolated.

Examples:

- i. **Good → better → best**
- ii. **Bad → worse → worst**
- iii.

Present	Past
Strike	Struck
String	Strung
Fling	Flung
Go	Went
Play	Played
Miss	Missed
Need	Needed

7. The definition of elision or deletion

This is the process of omitting of one sound or more in a word or phrase. The sound that is omitted can be a whole syllable, a consonant, or a vowel. Actually, elision and deletion have the same meaning but that word is found in a different study of linguistic. The term elision is found in the linguistic definition of existing language, and deletion is applied in the historical linguistics in a historical sound change.

Elision is a normal speech phenomenon, for native speaker, which come naturally in the language. For example: cannot which has elision become can't and the word history become histry because of dropping.

When elision is the process of omitting the sounds, then epenthesis is the process of inserting the sounds into a word. For example: in American English, there is a word ath[ə]lete and real[ə]tor. For American, they do not find any difficulty when pronouncing that word. When the elision is found in a sentence or phrase, it is no longer an elision, yet an elliptical or ellipsis structure.

Kinds of elision and deletion

As we know that an elision is the process of omitting a sound or more. It used a null sign (Ø) in phonological rules. The sign is used to mark the position where a sound has been deleted. For example: /d/ => Ø is used to describe the synchronic deletion of /d/. For example: *lado* is pronounced *lao* in Spanish. This type is used in a limited case which can be described with the phonological rules.

- Syncope

It is a vowels' elision between consonants.

- Aphaeresis

It is a beginning sound's elision in a word.

- Apocope

It is an elision of the sound at the end of a word.

The example of elision or deletion

Word	IPA before elision	IPA after elision
Family	/ˈfæmɪli/	/ˈfæmli/
Fifth	/ˈfɪfθ/	/ˈfɪθ/
Temperature	/ˈtæmpərətʃər/	/ˈtæmpərʃər/, /ˈtæmprətʃər/, sometimes /ˈtæmpətʃər/
Vegetable	/ˈvedʒətəbəl/	/ˈvedʒtəbəl/ or devoiced into /ˈvɛtʃtəbəl/
Him	/hɪm/	/ɪm/

Most of elision is used in a common practice or formal speech. However, in a modern writing or formal writing, these types of elision are rarely used. For example: the word him in the table above

is rarely used in a formal speech but it is used in fast or informal speech.

Another type of elision is commonly used in the word *can't*, *isn't*, or *I'm*. Those words are usually written as cannot, is not, and I am. But, when those words are spoken, they are pronounced as *can't*, *isn't*, and *I'm*.

8. Yod Variation

We have discussed the deletion of vowel, consonant, or syllable in a word. Then now, we will discuss the variation in English which some of them are new because the variation sometimes happened and sometimes disappeared. For example: Tuesday which is originally pronounced *tiw* and *day*. But now, that word has a variation of pronunciation which uses [j] like [tjuzde] and it is found in Oxford English Dictionary. While other without [j] like [tuzde] and it is pronounced by US speakers (sometimes it is also pronounced with [[j]]). Thus, this process is known as the yod variation or yod dropping and the [j] sound is called as yod.

Yod dropping itself is defined as the process of deleting the sound [j]. When the sound [i] is changed become [j] will produce some clusters which difficult to pronounce. For example:

- After /ʃ, tʃ, dʒ/ as in *chute* /ʃu:t/
- After /j/ as in *yew* /ju:/
- After /r/ as in *rude* /ru:d/
- After stop+/l/ as in *blue* /blu:/

Many varieties in English are used the yod dropping which the /j/ is in the same syllable as the preceding consonant. For example:

- After /θ/ as in *enthusiasm* /ɛn'θu:ziæzəm/
- After /z/ as in *zeus* /'zu:s/
- After /l/ as in *lute* /'lu:t/
- After /s/ as in *suit* /su:t/

9. Devoicing

In phonology, voicing, or we can call it as sonorization, is the process of sound change from voiceless consonant become voiced as a result of the influence of its phonological environment. While, the opposite of voicing or sonorization is devoicing or desonorization. Devoicing is the process of the sound from voiced becomes transparent. The change is caused by the assimilation of a sound with an adjacent sound of opposite voicing. But, that is not the only one way, it can also be occur the final of the word or in contact with a specific vowel. The example of devoicing is in the word *trip* which the sound [j] and [l] sound voiceless.

10. Palatalization

Palatalization is the process of sound change in palatalized articulation or a front vowel. This is sometimes an example of assimilation. The change of palatalization is put in articulation of consonant or its manner (which is a form of lenition). For example: [k] > [kʲ], [c], [tʃ], [ts], [ʃ], [s]. Another example of palatalization: Palatalization of [s] to [ʃ] as in /wʊs.tə.ʃɪ/ to /wʊʃ.tə.ʃɪ / in the word Worcestershire.

11. Flapping

Flapping is the process of the voiceless alveolar stop consonant phoneme /t/ which is pronounced as a voiced alveolar flap [ɾ]. That sound is produced by concisely tapping the alveolar ridge with the tongue between the vowels. Flapping /t/ is also known as replacing the /t/ sound with the /d/ sound. For example: *butter* which sounds like *budder*.

12. Glottalization

Glottalization is the process of narrowing the glottis or compressing the vocal cords to make a creaky voice, ejective pronunciation, or other phonological change. The degree of glottalization is coming from the none or modal voice [d] through stiff voice and creaky voice to full glottal closure. Glottalization is a term for articulation involving a simultaneously, especially a glottal stop. For example:

- Words as in light and put
- Multisyllabic words as in upbeat
- Phrases as in talk back

13. Aspiration

Aspiration is defined as the powerful breath's blast which follows either the release or in the condition of pre-aspiration which is the closure of some obstruent. The aspiration has varying in several languages which is either allophonic or phonemic. The example of allophonic:

- Pin with the aspirated p
- Bin with the partially voiced b
- Nip with unaspirated p

14. Intonation

Intonation is defined as the way how the voice falls and rises in conversation. Some essential intonation's patterns are:

- Falling intonation

It is defined as how the voice falls on the final stressed syllable in a group of words or phrase. It is commonly found in WH-questions. For example: "Where did you buy that bag?"

- Rising intonation

In the end of a sentence, the voice rises, this is the process of rising intonation. This type of intonation is commonly found in yes-no questions. For example: are you thirsty?

- Fall-rise intonation

How the voices fall then rise is called as fall-rise intonation. This type of intonation is commonly used in the end of a statement, when we are not sure, when we add any information. For example: "I didn't go to school yesterday."

15. Spoonerism

This is the term for the error in speech (consonants, vowels, or morphemes) between two words (in a phrase). For example: "The Lord is a

shoving leopard instead of the Lord is a loving shepherd.” Another example of spoonerism is “Three cheers for our queer old dean!” (three cheers for our dear old queen) from Queen Victoria.

EXERCISES

A. Questions

1. What is the characteristic of human language?
2. What are phonetic and phonology?
3. What do you think phonetic symbol, how do you define it?
4. Both of phonetics and phonology are related to speech sounds. In what do they differ?
5. What are phoneme and allophone?
6. Give 2 examples of each phoneme p and b in the last syllable!
7. Give 2 examples of each phoneme t and d in the last syllable!
8. Write that plural use [s], [z], or [iz] ending, and write the reason why that plurals use that ending!
 - a. Books
 - b. Kids
 - c. Matches
 - d. Pens
 - e. Toys
9. Count phonemes in the word below!
 - a. Boot
 - b. Chair

c. Ring

10. What is minimal pairs? Give examples!
11. What is minimal sets? Give examples!
12. What is the difference between minimal pairs and minimal sets?
13. Mention 5 example of word for these following symbol!
 - a. k
 - b. g
 - c. a
 - d. æ
14. Find 3 words that contains the following symbol!
 - a. ʊ
 - b. θ
 - c. dʒ
15. Write down the morphemes in all words below, and decide whether each morpheme is Free (F) or Bound (B)!
 - a. Creating
 - b. Seaward
 - c. Wastage
 - d. Poetic
 - e. Modernize
 - f. Unhealthy
 - g. Waiter

- h. Reconsider
16. Count the morpheme of words below!
 - a. Removable
 - b. Unluckily
 - c. Misunderstandings
 - d. Teachers
 17. Explain about assimilation and dissimilation!
 18. What is natural class?
 19. What is consonant?
 20. What criteria are used to describe consonants?
 21. How many consonants does English have?
 22. What are the symbols included in voiceless consonant?
 23. Which the following words consist of an approximant consonant?
 - a. Hall
 - b. Wash
 - c. Sing
 - d. Map
 - e. Sigh
 - f. Yellow
 - g. Red
 24. Which word does end with a stop sound?
 - a. Bet

- b. Hang
 - c. Nudge
 - d. Nap
 - e. Lots
 - f. Jug
 - g. Lamb
25. What is Fricative?
26. What is Affricates?
27. What is the difference between Fricative and Affricates?
28. Give an example of the following sounds!
- a. /m/
 - b. /n/
 - c. /ŋ/
29. What is diphthong and monophthong?
30. Give an example of the word containing a front vowels!
31. Give an example of the word containing a mid vowels!
32. Give an example of the word containing a back vowels!
33. Which word does contain a rounded vowel?
- a. Put
 - b. Seek
 - c. Grey

- d. Grew
 - e. Hook
 - f. Hold
 - g. Hoe
34. What is the difference between vowels and consonant?
35. What is the distributional difference?
36. What is the meaning of systemic difference in variation between accents?
37. Mention three different characteristic in sysemic difference between British and American accents!
38. Read the following words and transcribe them!
- a. Look
 - b. Dead
 - c. Fruit
 - d. Juice
 - e. Red
 - f. Ten
 - g. Bee
39. Make these transcribes to their actual word!
- a. aɪən
 - b. pəteɪtəʊ
 - c. ka:m
 - d. haʊs

- e. mɪrə
- f. ɜːθ
- g. fɒrən
- h. daɪv
- i. tæksɪ

40. What is syllable?
41. Mention and explain the division of syllables!
42. Determine the onset of the following!
 - a. Pan
 - b. Keep
 - c. Sleep
 - d. Craft
43. Determine the nucleus of the following!
 - a. Bit
 - b. Bed
 - c. Room
 - d. Fast
44. Determine the coda of the following!
 - a. Draw
 - b. Fish
 - c. Buy
 - d. Man
45. What is onset maximality?
46. What is word stress?

47. Give 2 examples and draw the diagram of word stress!
48. What is foot?
49. Give 2 examples and draw the diagram of foot!
50. What is spoonerism? Give some examples!

B. Enhancement

- a. Write down an outline of an article
- b. Then consult the outline to the lecturer first
- c. Revise it and try to revise again
- d. Write down an article 4500-8000 words
- e. Choose to analyse subtitles of novels, films, webtoon, wadpatt, song, thriller, youtube videos, vlogs, news, speech, songs, texts, and etc.
- f. Find syllables, stress, diphthongs, consonants, vowels, morphemes, morphophonemic processes, metaphor, idioms, social interactions, speech acts, discourse text and etc.
- g. Analyse them using the Linguistics and phonology theories that you have mastered them.
- h. Find the links of the examples of article

https://scholar.google.com/citations?user=wMzGI_MAAAAJ&hl=en

<https://www.google.com/search?q=academiedu+dwi+astuti+wahyu+nurhayati&oq=aca&aqs=chrome.2.69i60j69i57j35i39l2j0i67i457j>

69i60l3.4742j0j7&sourceid=chrome&ie=UTF-8

C. Creativity

- 1) Create a story using watpadd, noveltoon, webtoon, drama, manga, cartoon, short stories, legend, folklore, fairy tales, novel, speech, texts, song, poetry, and any other literary works using your own ideas, imagination within 1000 words minimal except for songs!
- 2) Create mini modul in learning and teaching English! Supplementary with audio, video and texts, do as well as you can do, as you wish, and as creative as possible!

REFERENCES

- Eka, D. (2010). Introduction to Phonetics and Phonology of English. Victoria Island: National Open University of Nigeria.
- Fromkin, V, et al. (2014). An Introduction to Language. New York: Wadsworth
- Gussmann, E. (2002). Phonology Analysis and Theory. New York: Cambridge University Press.
- Hazen, K.(2015). An Introduction to Language. United Kingdom: John Wiley & Son, Inc.
- Jovanović, Z. V. (2016). English Morphology, p.81-89.morphology.pbworks.com/f/morphophonemic+changes.doc. Acccesed on March,25 2016.
- Kelly, G. (2000). How to Teach Pronunciation. England: Pearson Education Limited.
- Maharsi, E. (2002). Introduction to Linguistics. Malang: CintraMentari Group.
- McMahon, A. (2002). An Introduction to English Phonology. Edinburgh: Edinburgh University Press.
- O'Grady,W.et al.(1997). Contemporary Linguistics. Edinburg: Pearson Education Limited.
- Nurhayati, D. A. W. (2015a). Morphological Process and Morphophonemic Process of Alay Variation. *Lingua*. Vol. 12, (1), 61-72.
- Nurhayati, D. A. W. (2016b).Word Formation Processes and a Technique in Understanding Waria Slang Tulungagung. *EFL Journal*, Vol. 1 (1), 59-87.
- Nurhayati, D. A. W. (2016f). Inverstigating Morphological Process of Payandra on Javanese Metaphor. *Journal*

of English Language Teaching and Linguistics (JELTL), Vol.1 (3), 245-259.

Roach, P. (1998). English Phonetics and Phonology. United Kingdom: Cambridge University Press.

Yule, G. (2006). The study of language. New York: Cambridge University Press.

ABOUT THE AUTHOR



Dwi Asuti Wahyu Nurhayati

was born in Lamongan, February 22, 1976 is the second of three children. Undergraduate education was taken at the Faculty of Letters, Languages and English Letters, University of Jember (1999), Masters in the Department of English Education at Sebelas Maret University of Surakarta and S3 Linguistics (Descriptive Linguistics) at Sebelas Maret University of Surakarta (2018).

Several works have been published by the author, namely: in 2020 the article entitled, "Strategies to Improve Skills to Write Stories: A Case Study in Universities in Tulungagung City (IJELTAL) and a book entitled, Creative Writing and An Introduction to English Morphology; while other articles under a title Phonology and Online Media Used in Enhancing Listening Skill (IJEFL); Basic Need Analysis in Practical English Grammar: An Effort on Creating and Empowering Autonomy Learners IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics). For correspondence the author can be visited through +6285749813337/+6281234020600.