

# ENGLISH WORD STRESS



by

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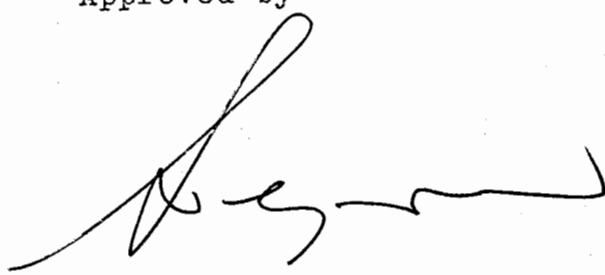
THE DEPARTMENT OF ENGLISH LANGUAGE  
AND LITERATURE  
FACULTY OF ARTS AND LETTERS  
SANATA DHARMA  
YOGYAKARTA

**1981**




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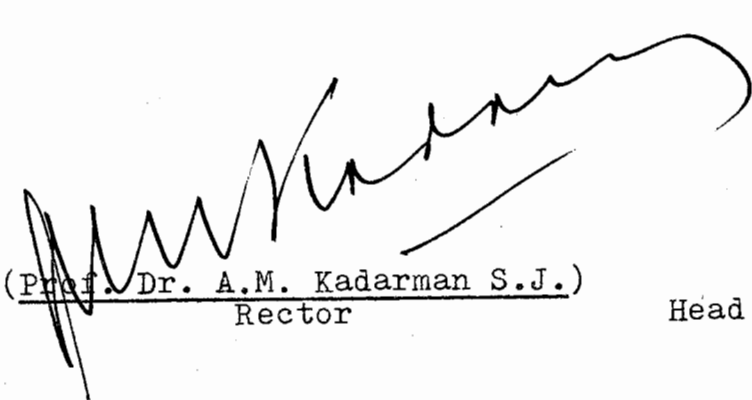
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## ACKNOWLEDGEMENTS

This thesis, presented to the Department of English of I.K.I.P. Sanata Dharma, is in partial fulfilment for the Sarjana Degree, and is equally an expression of my significant gratitude to the Institute and to the Department in particular.

I am greatly indebted to Dr. Soepomo Poedjosoedarmo, who has helped me to determine the choice of the topic and who has given me valuable suggestions, counsel, and encouragement. It is through his patient and kind guidance that this thesis has been accomplished.

I am also indebted to Dra. M. I. Indriani Arief, who has sacrificed her time to go through the manuscript and has provided further corrections and useful suggestions.

My gratitude is also directed to Drs. J. Bismoko, Head of the English Department of I.K.I.P. Sanata Dharma, and all the teachers of the English Department who have patiently taught me during my study.

Jauw Kok Tiong

I. 1354

## TABLE OF CONTENTS

Chapter	page
ACKNOWLEDGEMENT	iii
INTRODUCTION	vi
I. ENGLISH PHONEMES	1
1. English Segmental Phonemes	1
A. Vowels	2
B. Consonants	3
2. English Supra-Segmental Phonemes	6
a. Length	7
b. Pitch	7
c. Juncture	8
d. Stress	9
II. ENGLISH STRESS IN DETAIL	11
1. The Nature of English Stress	11
2. Stress Versus Prominence	11
3. Double Stress	15
4. Functional Stress Changes	19
5. Word Stress	22
A. Simple-Words	22
B. Compound-Words	26
6. Sentence Stress	29
7. Rhythm	32
III. THE INCIDENCE OF ENGLISH STRESS	39
1. Monosyllabic Prefixes and stress	39
2. The Influence of Suffixes on Stress	44
3. Vowel Quality and Stress	59
IV. THE TEACHING OF ENGLISH WORD-STRESS	64
A. Teaching Techniques	65



B. Problematic Stress	68
CONCLUSION	71
BIBLIOGRAPHY	72

## I N T R O D U C T I O N

During my course year in learning English, I often noticed that a good number of my fellow students did not know how to put the right stress in English words. Misstressed words like `repeat, `pronounce, `believe, and a lot more were commonly heard. Incorrect stressing of phrases like `I think, `of course were not uncommon.

It is true that non-native speakers of English may readily understand the students when their speech contains a lot of incorrect stressings. But native speakers of English usually find it hard to understand. Such complaints as 'What are you talking about?' and 'Are you speaking English?' are often heard.

The object of this paper is, therefore, to provide the students with some guidance of English Stress and to help them eliminate many of the faulty stressings that occur in their speech.

This paper is largely based on library study. In order to meet the students' need in learning English word stress, I have picked out ideas found in the books written by Roger Kingdon, Daniel Jones, W. Stannard Allen, and A.C. Gimson, just to mention a few. A complete list of books and their authors are found in the Bibliography.

The standard dialect of British English, that is what British linguists call the Received Pronunciation, is used to indicate the word stress in this paper. It is not because British English is better than American English. It is merely a matter of convenience since the books that I read are written by British linguists.

As a rule, two degrees of stress are indicated by vertical stress marks, a high mark ( ' ) indicating a

primary stress, and a low mark ( , ) indicating a secondary stress. According to Roger Kingdon, it is misleading to use a low stress mark to indicate what is actually a high level stress. He says that the marking of the word in'feri`ority gives a more accurate picture than does in,feri'ority, and `photo,graph is better than 'photo,graph.

Consequently, he introduces a third stress mark ( \ ) to indicate the primary stress. He says that these changes give a clear and logical picture of the stressing of each word, since the marks now illustrate the pitches used in the lexical pronunciation. These changes are used in this paper.

It is usually assumed that English phonemes consist of vowels and consonants only. In chapter I we will see that length, pitch, and especially stress are also phonemic in nature. And stress, being our main concern, is discussed in great detail in Chapter II.

This paper does not attempt to discuss the whole complex problems of English stress. It concentrates on one single aspect only, that is, the stressing of English simple-words. In Chapter III some factors which govern the incidence of English simple-word stress are fully discussed.

To overcome the problems of learning English word stress, some valuable suggestions are given in Chapter IV. But we must keep in mind that the techniques suggested are tentative in nature, since I have no experience in teaching English stress.

# C H A P T E R I

## ENGLISH PHONEMES

### 1. English Segmental Phonemes

English segmental phonemes are those which can be segmented or broken up into different significant units. The word top, for instance, consists of three significant sound units. /t/ is a voiceless alveolar stop made by pressing the tongue tip and the rims against the alveolar ridge (teeth-ridge). /ɔ/ is a back vowel produced by rounding the lips and raising the back part of the tongue against the back part of the palate. /p/ is a voiceless bilabial stop made by pressing the lips tightly together to stop the air.

We can further prove the significant of those sounds by comparing the following minimal pairs.<sup>1)</sup>

<u>t</u> op	-	co <u>p</u>
to <u>p</u>	-	ti <u>p</u>
to <u>p</u>	-	to <u>t</u>

English segmental phonemes fall into two classes, viz; vowels and consonants. In some other languages, linguists recognize more than two classes of segmental phonemes. But we will not discuss them in this paper. In the next few pages English vowels and consonants will be briefly discussed.

#### A. English Vowels

British linguists usually describe English vowels as consisting of simple vowels and diphthongs or glides. The simple vowels are further broken up into short and long vowels.

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1) Minimal pairs are two words which differ from each other in only one sound element.



a. Simple Vowels

- /i:/ (long i) is made by raising the tip of the tongue as high as possible. The lips are spread. E.g., see, bee.
- /i/ (short i) is like /i:/ except that the tongue is a little lower and the lips are in a neutral position. E.g., bit, sit.
- /e/ is made by raising the tongue in a mid front position. The lips are spread or neutral, e.g., set, met.
- /æ/ The tip of the tongue is in a low front position. The mouth is wider than it is for /e/, e.g., bad, sat.
- /ɑ:/ (long a) The tongue is poised in a low central position. The mouth is opened widest, e.g., car, far.
- /ʌ/ The centre of the tongue is poised in a mid central position, e.g., but, cut.
- /ə:/ (long schwa) The centre of the tongue is raised in a low central position, the lips being spread; bird, word.
- /ə/ (short schwa) It is made like the long schwa except that the tongue is a little higher, e.g., above, ago.
- /u:/ The centre of the tongue is poised in a high back position. The lips are rounded, e.g., cool, food.
- /ʊ/ It is similar to the long one except that the tongue is slightly lower. E.g., good, should.
- /ɔ:/ The centre of the tongue is poised in a low back position. The lips are fully rounded and the mouth is opened wider than it is for /u:/; brought, caught.
- /ɒ/ It is like the long one except that the tongue is slightly lower. E.g., hot, top.

b. English Diphthongs

The diphthongs in British English are :

1. Three long glides to /i/

/ei/ The tongue begins in the same position as for /e/ and

moves to an even higher position; e.g., day, play.

/ai/ The tongue begins in the position for /a/ and moves toward a high front position; e.g., fly, try.

/ɔi/ The tongue begins in the position for /ɔ/ and moves toward a high front position; e.g., coy, boy.

## 2. Two long glides to /u/

/ou/ The tongue begins in the position for /o/ and moves toward an even higher position; e.g., go, slow.

/au/ The tongue begins in the position for /a/ and moves toward a high back position; e.g., how, cow.

## 3. Three long glides to /ə/

/iə/ The tongue begins in the position for /i/ and terminates at a mid central position; e.g., ear, beard.

/ɛə/ The tongue begins in the position for /ɛ/ and moves toward a mid central position; e.g., pair, fair.

/uə/ The tongue begins at /u/ and terminates at /ə/; e.g., poor, sure.

## B. English Consonants.

In British English phonological system, there are essentially four types of consonantal phonemes. They are stops, fricatives, nasals, and resonants. There is actually one more type of consonantal phonemes which is called affricate. An affricate is a combination of two sounds, a stop and a fricative, but English speakers regard these as single sounds.

### a. Stops

English stops are made by stopping the on coming air with the lips or tongue as it is exhaled. English has three voiced stops, /b/, /d/, /g/, and three voiceless stops, /p/, /t/, /k/. The term voiced means that during the production of the sound the vocal cords vibrate.

Voiceless means that during the production of the sound the vocal cords do not vibrate.

/p/ and /b/ are called bilabial. They are produced by pressing the lips tightly together to block or stop the air. The only difference between the two sounds is that /p/ is voiceless and /b/ is voiced.

/t/ and /d/ are alveolar. They are made by pressing the tip of the tongue against the teeth-ridge to stop the air. /t/ is voiceless, while /d/ is voiced.

/k/ and /g/ are called velar. They are made by raising the back part of the tongue to touch the velar so that the on coming air is blocked. /k/ is voiceless, /g/ voiced.

#### b. Fricatives

Fricatives are made by obstructing the air with the lips, teeth or tongue, but still allowing a trickle of air to get through. Fricatives differ from stops in that fricatives can be sustained until the speaker runs out of breath. English fricatives are /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, and /h/.

/f/ and /v/ are labiodental. The air passage is narrowed by pressing the upper teeth against the lower lips so that the air in escaping makes a kind of hissing sound. /f/ is voiceless while /v/ is voiced.

/θ/ and /ð/ are interdental. They are made by placing the tip of the tongue between the upper and lower teeth so that the escaping air passes through the slight opening. /θ/ is voiceless, /ð/ is voiced.

/s/ and /z/ are alveolar. They are made by placing the tip or blade of the tongue against the alveolar ridge and blowing. /s/ is voiceless, /z/ is voiced.

/ʃ/ and /ʒ/ are palatal. They are made by placing the middle part of the tongue against the palate, that is

the part of the roof of the mouth immediately behind the alveolar ridge. /ʃ/ is voiceless, /ʒ/ is voiced.

/h/ is glottal. It is made by slightly closing the glottis and blowing. /h/ is voiceless.

#### c. Nasals

Nasals are formed by completely closing the mouth at some point, the soft palate remaining lowered, so that the air is free to pass out through the nose. English has only three nasals, /m/, /n/, /ŋ/, all of which are voiced.

/m/ is bilabial. It is made by pressing the lips tightly together and letting the air pass through the nose.

/n/ is alveolar. It is made by pressing the front part of the tongue against the alveolar ridge and letting the air go freely through the nose.

/ŋ/ is velar. It is formed by raising the back part of the tongue to touch closely against the velum and letting the air pass freely through the nose.

#### d. Resonants

Resonants are continuant voiced sounds, the quality of which is determined by the shape given to the mouth cavity by means of tongue and lip positions. English has four resonants, /j/, /w/, /r/, /l/. /j/ and /w/ are often called semi-vowels because during the production of the sounds the speech organs start at or near a close vowel<sup>2)</sup> and immediately move away to some other vowel.

/j/ is palatal, formed by raising the centre of the tongue toward the palate, but not as high as it is for /ɜ:/.

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2) Close vowels are those which are made by raising the tongue as high as possible so that the mouth cavity is almost blocked.

and exhaling with voicing.

/w/ is labial, produced by rounding the lips and blowing with voicing.

/r/ is alveolar, made by raising the tip of the tongue closely against the teeth ridge and exhaling with voicing.

/l/ is lateral, made by pressing the tip of the tongue against the teeth-ridge and letting the air pass through the sides of the mouth while voicing.

#### e. Affricate

An affricate resembles a plosive but with separation of the articulating organs performed less quickly so that a fricative sound is perceived during the process of separation.

/tʃ/ is a voiceless palato-alveolar affricate. It is made by placing the tip and the blade of the tongue against the teeth-ridge and the front part of the hard palate to make complete contact. The contact is then released in such a manner so that a short /ʃ/ is heard.

/dʒ/ is produced like /tʃ/ except that /dʒ/ is voiced.

## 2. English Supra-Segmental Phonemes

A. C. Gimson<sup>3)</sup> says that a sound has not only quality, whose phonetic nature can be described and function in a given language, but also length, pitch, juncture and stress. He calls these features prosodic or supra-segmental. Supra-segmental phonemes are those which cannot be said in isolation but are produced simultaneously with the segmental ones.

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3) A. C. Gimson: An Introduction To The Pronunciation of English.

Length, pitch and stress are significant features in British English. American English only regards juncture, pitch and stress as significant. Length is not significant in American English. In American English, any of the simple vowels can be sustained indefinitely without affecting its identity.

a. Length.

According to Daniel Jones,<sup>4)</sup> the length or quantity of a sound is the length of time during which it is held on continuously in a given word or phrase. Vowels and continuant consonants have length. Diphthongs and semi-vowels also have length. Flapped consonants and plosives may be regarded, for practical linguistic purposes, as having no appreciable length.

In British English it is not necessary to distinguish more than two significant degrees of length since significant opposition only occurs between long and short vowels. The mark of length is /:/ placed immediately after the symbol of the sound which is long. Short sounds are usually left unmarked.

The following pairs of words show that length poses significant contrast in British English.

hid /hid/	versus	heed /hi:d/
sit /sit/	versus	seat /si:t/
pull /pul/	versus	pool /pu:l/
cot /kɒt/	versus	caught /kɔ:t/

b. Pitch

Pitch is the melody, or intonation, of the utterance.

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4) Daniel Jones: An Outline Of English Phonetics.

It is the degree of highness or lowness as we speak. English makes phonemic use of pitch in its intonational system.

In English the pitch pattern, together with their terminals, distinguish one sentence from another. Consider the following sentences.

1. <sup>3</sup>John <sup>2</sup>went home<sup>1</sup>.
2. <sup>2</sup>John <sup>2</sup>went home<sup>3</sup>?

The wording of the above sentences is exactly the same. However, the meaning of the sentences is not quite the same. The first is a statement and the second is a question. The difference which distinguishes them lies in the changing pitch of the voice. The first sentence uses what we usually call falling intonation, and the second rising intonation.

#### c. Juncture

Juncture can simply be defined as the boundary line between words. An utterance does not necessarily become understandable even when all its vowels and consonants, and its stress patterns have been recognized. It is still necessary to recognize where the boundary falls. Consider the following sentences.

1. He will act, roughly in the same manner.
2. He will act roughly, in the same manner.

In writing, roughly, is assigned to what follows or what precedes by the position of the comma. In speech, the two are equally distinct. The position of the boundary is signalled by elements in the sound system, which are imperfectly represented in writing by punctuation mark.

Moreover, juncture is what distinguishes pairs like:

night rate	-	nitrate
free Danny	-	freed Annie
I scream	-	Ice cream
See Mable	-	seem able

Phonetically, juncture may be defined as the presence or absence of a glottal stop. Freed Annie and seem able have glottal stops. Free Danny and see Mable have no glottal stops. Sometimes juncture is phonetically a matter of the choice of allophone of a stop. For instance, the first /t/ of nitrate is aspirated while the /t/ at the end of night in night rate is not. Similarly the /k/ of ice cream is aspirated while that of I scream is not.

#### d. Stress

Stress may be described as the degree of force with which a sound or syllable is uttered. Every spoken sound or syllable has a greater or lesser amount of energy expended upon it. Usually a sound or syllable which the speaker feels to be important is uttered with relatively greater energy. It is made to stand out from its neighbours.

Like other supra-segmental phonemes, stress is significant in the sense that it is capable of distinguishing one word from another. The pairs of words below show that stress is phonemic in English.

'differ	-	de'fer
'permit(n.)-		per'mit (v)

In most dialect the pairs above are exactly alike except that in the first it is the initial syllable which is loudest and in the second it is the final syllable



which is loudest.

So far we have talked about English segmental and supra-segmental phonemes. Segmental phonemes are the vowels and consonants. Supra-segmental phonemes are length, pitch, juncture, and stress. In the next chapter we will discuss English stress in great details. Rhythm and sentence stress will only be briefly discussed.

## C H A P T E R II

### ENGLISH STRESS IN DETAIL

#### 1. The Nature of English Stress

Stress is the relative degree of force used by a speaker on the various syllables he is uttering. It gives a certain basic prominence to the syllables, and hence to the words, on which it is used. The force used to denote stress gives us an objective impression of loudness.

All languages are characterized by differences in loudness in the chain of utterance, but not all languages employ these differences so as to set up contrasts among them. A good example is the nearly extinct Indian language Tonkawa. In this language, stress falls on the second syllable of any two-syllable utterance and on the penultimate of any poly-syllabic words.

In English, the situation is quite different. As was pointed out in Chapter I, the extreme of contrast in stress can be readily established by comparing two utterances such as 'differ and de'fer. The two forms are alike except that in the first the stress falls on the first syllable and in the second the stress falls on the second syllable.

In English we recognize two types of stress; word stress and sentence stress. Word stress is the relative degree of force used in pronouncing the different syllables of a word of more than one syllable. Monosyllables cannot be said to have word stress. Sentence stress is the distribution of stress upon different words in a sentence.

#### 2. Stress Versus Prominence

Stress is not the same thing as prominence. It is

an important element contributing to prominence. Other contributing elements to prominence are pitch, quality and quantity.

Any or all of the factors may render a syllable more prominent than its neighbours. However, not all have equal validity for speaker and listener alike. They are not equally efficient as markers of the accented syllable.

#### a. Stress

As has been said before, a sound or syllable which is stressed is one upon which relatively great breath effort and muscular energy are expended in the articulation. This is usually perceived by the listener as greater loudness associated with the sound or syllable. Thus, the greater energy which the speaker puts on the first syllable of answer may be perceived as greater loudness for the listener.

The speaker may feel several degrees of articulatory energy in producing polysyllabic words. Nevertheless the English speaker will normally distinguish only stressed and unstressed syllable, to which will correspond the listener's impression of loud and weak syllables.


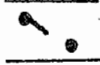
#### b. Pitch Change


Stress (loudness) is not by itself an efficient device for signalling the accent of a given utterance. Consider the following pairs of words.

insult (n)	-	insult (v)
import (n)	-	import (v)
billow	-	below

When they are said on a monotone and with unexaggerated quantities, it is difficult to distinguish them by stress

alone.

However, the accentual cue becomes clear when stress is associated with pitch prominence. The verb and noun forms of insult, for example, are easily distinguished by pitch patterns, that is, with a falling tone  against .

Among stressed syllables, some are more likely than others to be associated with pitch change. Thus, when the word examination is pronounced with pitch pattern , the second syllable may have no pitch prominence in relation to its neighbours. Such accentuation is achieved largely by stress alone. This is called secondary, rhythmic or non-tonic accent.

The fourth syllable /nei/, on the other hand, is always associated with a pitch change when the word is said in isolation. This type of accentuation is called primary, nuclear, or tonic.

The most common relationship of pitch and stress in word accentuation may be summarized as follows:

1. Primary accentuation. The syllable receiving this accent is normally associated with a potential change of pitch direction.
2. Secondary accentuation. The syllable receiving this accent is not normally associated with a change of pitch direction, but may be prominent (signalled by a potential change of pitch level), or rhythmic.

Stress and pitch combined are generally said to be the most powerful devices to signal the degree of the accent in a word.

### c. Sound Quality

The relative prominence of sounds and syllables also

gives rise to the accentual pattern of words. In a sequence of phonemes, vowels will normally be more prominent than consonants. Among the vowels, prominence increases as they become more open. Among the consonants those which are vowel-like stand out from the remainder, while fricatives have higher prominence than plosives.

In addition to the prominence of sounds, certain English phonemes are particularly associated with unaccented situations. /ə/ usually occurs in unaccented syllables. /i, u/, though both may receive full accentual prominence, have a high frequency of occurrence in unaccented syllables.

The other English vowels may also occur in syllables which do not receive primary accent, but they may be associated with some degree of secondary accent, especially /æ, ɑ:/, the long vowels and diphthongs.

Compare:    never    -    nephew    contain    -    canteen  
               wrecker -    record    aghast    -    August

#### d. Quantity

By quantity we usually mean the length of sounds. Long vowels and diphthongs (particularly in their non-reduced form) will always be associated with prominence. However weakly stressed they may be and despite the fact that long vowels or diphthongs in unaccented syllables do not have the same length that they would have in accented syllables, association between long vowels and prominence is inevitable. This is the case of the vowels in the final syllables in such words as phoneme, forward, placard; in the pre-tonic syllables of idea and sarcastic.

Thus, it is clear that any or all of these four factors may play an important part in rendering a sound or syllable prominent. In speech, however, it is stress and

pitch variation which are the most commonly used and the most efficient cue of prominence.

### 3. Double Stress

For practical teaching purposes, we usually recognize only two degrees of stress; primary and secondary stress. So far we have used /' / to indicate primary stress. However, this mark will no longer be valid when we come to deal with double-stressed words. A double-stressed word requires two strong stresses. The second is associated with a pitch change, and therefore more prominent, while the first is not. Therefore we must design some other stress marks which will adequately describe double-stressed words.

#### a. Primary stress /\ /

This stress is said with a falling tone. Syllables taking this stress are the most prominent. In a single stressed word, this stress always falls on one of the first two syllables. For examples:

\private	ne\glectful
re\peat	\comfortable

#### b. Secondary stress

There are two kinds of secondary stress. They are:

##### 1. Secondary stress with a high level tone /' /.

Eventhough it has a full degree of stress, it is less prominent than the primary stress. It is usually pitched at or near the top of the speaker's normal voice range. This kind of stress always comes earlier in the word than that bearing the primary stress. For example:

'half`baked            'photo`graphic  
'can`teen            in'tensifi`cation

2. Secondary stress with a low level tone /, /

It is pitched at or near the bottom of the speaker's normal voice range. It may come either earlier or later in the word than that bearing the primary stress. For example:

,aus`picious        ,bar`barian  
'atti,tude        `circula,rize

We now come to the question of what double stress is. Words that consist of a primary stress on one syllable and a high level secondary stress on an earlier syllable are said to be double-stressed. Examples are 'pay`ee, 'un - `known. Those which have a primary stress preceded or followed by a low level secondary stress are classed as single-stressed.

Double-stressed words form a large proportion of the English vocabulary. A discussion of them is therefore worth-while. In the following are instances of suffixes and prefixes which cause double stressing.

a. Double Stressing Caused by Suffixes

It is a noteworthy fact that a suffix generally demands a stress on a syllable which is not one of the first two in the word. The following suffixes usually give rise to double stressing.

1. Compound suffixes that take a stress on their third syllable automatically give rise to double stressing, even when they are added to a monosyllabic root. They are, -ionalistic, -ionability, as in 'nationa`listic,

and in im'pressiona'bility.

2. Compound suffixes that take a stress on their second syllable similarly give rise to double stressing.

-atorial as in 'dicta'torial  
-ization as in 'coloni'zation  
-omatic as in 'sympto'matic  
-uality as in e'ventu'alidity

3. Suffixes that take a stress on their first syllable introduce double stressing when they are added to roots of more than one syllable. They are -aire, -arian, -astic, -ee, -elle, -ette, -escent, -graphic, -icial, -ier, -mental, -osis, -osity, -uity.

'millio'naire                      'cente'narian  
 'ecclesi'astic                      'refe'ree  
 'ado'lescent                        'silhou'ette  
 'photo'graphic                      'bene'ficial

4. Suffixes that cause the stress to fall on the syllable that precedes them will introduce double stressing only when added to a prefix plus root, containing between them at least three syllables.

-eous as in 'miscel'laneous  
-ferous as in 'carbo'niferous  
-grapher as in 'lexi'cographer  
-ial as in 'cere'monial  
-ience as in 'inex'perience  
-logy as in 'anthro'pology  
-tive as in 'inef'fective  
-ual as in 'intel'lectual

5. Suffixes that cause the stress to fall on the second



syllable before them will introduce double stressing only when added to a prefix plus root, containing between them at least four syllables.

<u>-ary</u>	as in	'super`numenary
<u>-ate</u>	as in	'insu`bordinate
<u>-ite</u>	as in	'ento`parasite
<u>-tude</u>	as in	'inex`acti,tude

b. Double Stressing Caused by Prefixes

Words formed by adding a prefix having a distinct meaning of its own very usually introduce double stressing.

anti-, arch- (in the sense of chief) as in  
 'anti`climax  
 'arch`bishop

dis- (when equivalent to un, or implying separation)  
 'dis`loyal                      'discon`nect  
 'disem`bark

ex- (in the sense of former) as in  
 'ex-`president

half-, in-, im-, il-, ir-, (in the sense of not)  
 'half-`finished              'irre`ligious  
 'insin`cere                      'insuf`ficient  
 'il`logical                      'im`possible

inter- (in the sense of reciprocal) as in  
 'inter`mingle              'inter`act

mal-, mis-, (in the sense of error or falseness)  
 'malfor`mation              'mis`quote

over- (in the sense of too much) as in  
 'over`estimate              'over`ripe

pre- (in the sense of beforehand) as in  
           'pre`paid                    'prede`termine

re- (denoting repetition) as in  
           'rear`range                're`fill

sub- (in the sense of subordinate) as in  
           'sub`human                 'sub`conscious  
           'sub`tropical

ultra-, un-, under- (in the sense of too little)  
           'ultra-`fashioable        'un`fruitful  
           'under`estimate            'under`populated

Thus we see that a good number of prefixes and suffixes gives rise to double stressing. Aside from the fact that suffixes cause double stressing, they may also change the position of the primary stress ('million - 'millio`naire). This phenomenon is essential for the learners to know. A detailed discussion on suffixes affecting the primary stress of the word will be brought forward in Chapter III.

#### 4. Functional Stress Changes

A number of English words show a functional stress distinction. When the word is used as one part of speech, it is stressed on the root, and when it is used as another, it is stressed on the prefix. Most of these words are disyllabic and begin with a Latin prefix.

According to Roger Kingdon<sup>1)</sup> this phenomenon is largely caused by special factor that native disyllabic nouns tend to be stressed on their first syllable and native disyllabic verbs on their second syllable. He fur -

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1) Roger Kingdon: The Groundwork of English Stress.

ther points out that the tendency is for noun to take suffixes, as in `kindness, `handful, `sisterhood, `kingdom; and for verbs to take prefixes, as in a`wait, be`lieve, em`bitter, for`get, with`hold.

Similarly the majority of disyllabic words showing functional stress distinction are those in which the word stressed on the prefix is a noun, while that stressed on the root is a verb. It is important to note that many of the nouns appearing in the list below can be used adjectivally.

The shift of the stress on the disyllabic words almost invariably causes changes in pronunciation, especially of the vowels. These changes, however, are not indicated in the list. The presence of secondary stress is also not shown.

List of words showing functional stress distinction.

<u>NOUN</u>	<u>VERB</u>
`abstract	ab`stract
`accent	ac`cent
`addict	ad`dict
`affix	af`fix
`ally	al`ly
`collect	col`lect
`combat	com`bat
`combine	com`bine
`comment	com`ment
`commune	com`mune
`compact	com`pact
`compound	com`pound
`compress	com`press
`concert	con`cert

`concord	con`cord
`concrete	con`crete
`conduct	con`duct
`confine	con`fine
`conflict	con`flict
`content	con`tent
`contrast	con`trast
`contract	con`tract
`converse	con`verse
`convict	con`vict
`convoy	con`voy
`decrease	de`crease
`desert	de`sert
`detail	de`tail
`digest	di`gest
`discount	dis`count
`eject	e`ject
`escort	es`cort
`export	ex`port
`import	im`port
`increase	in`crease
`insult	in`sult
`object	ob`ject
`permit	per`mit
`produce	pro`duce
`progress	pro`gress
`protest	pro`test
`rebel	re`bel
`record	re`cord
`regress	re`gress
`reject	re`ject
`retail	re`tail

`refill	re`fill
`transfer	trans`fer
`transport	trans`port

ADJECTIVE

`absent
`dilute
`direct
`frequent
`frustrate
`prostrate

VERB

ab`sent
di`lute
di`rect
fre`quent
frus`trate
pros`trate

ADJECTIVE

au`gust
ex`pert
in`stinct
mi`nute
su`pine

NOUN

`august
`expert
`instinct
`minute
`supine

5 A. Word-Stress (simple words)

Most English words of two syllables have one primary stressed-syllable and one weak one. The primary stress is on the first syllable in some word and on the second in others. Examples are:

`comfort	`fortune	`insult
re`peat	in`crease	be`lieve

Sometimes disyllabic words have two strong stresses. They are said to be double-stressed. Examples are:

'pre`paid	'fif`teen	'un`known
-----------	-----------	-----------

In English, words of three or more syllables usually have one strong syllable and occasionally two. The other syllables in the words are usually weak (unstressed), but in some other words there may be syllables with a low level secondary stress. Examples are:

,spon`taneous ,mo`bility `adver,tise

In order to acquire an over-all view of what English stress system is like, it is important to learn the various stress patterns which are permitted in English.

The arrangement of stressed and unstressed syllables in a given word, the type of stresses used, and the relative pitches of the various syllables may be called the stress pattern of the word. In the next few pages classified examples of various word stress patterns found in English will be given.

At the head of each column are tonetic symbols indicating the stress and tone pattern of the words beneath.

- ( \ ) Primary stress with falling tone.
- ( ' ) Secondary stress with high level pitch.
- ( , ) Secondary stress with low level pitch.
- ( — ) Unstressed syllable of high pitch.
- ( \_ ) Unstressed syllable of low pitch.

#### Two-syllable Word

( \ _ )	( _ \ )	( ' \ )	( \ , )
able	absurd	bamboo	profile
easy	condemn	payee	placard
habit	divide	redhot	female
under	result	unknown	invoice
worldly	withdraw	Chinese	programme
over	alone	idea	phoneme

husband	arrive	canteen	expert
cotton	behind	cashier	window

Three-syllable Word

( \ _ _ )	( _ \ _ )	( ' \ _ )
average	eleven	re-entry
bungalow	distressful	half-hearted
eatable	external	misshapen
influence	important	reshipment
innocence	relation	uncertain
( ' _ \ )	( \ _ , )	( _ \ , )
undergo	cataract	embargo
acquiesce	telephone	contribute
immature	photograph	tobacco
represent	pedegree	tomato

Four-syllable Word

( \ _ _ _ )	( _ \ _ _ )	( ' \ _ _ )
agriculture	remarkable	ex-president
evidently	impossible	half-heartedly
matrimony	affirmative	unethical
remediless	photography	unfortunate
ultimately	legality	non-combatant
( ' _ \ _ )	( ' _ _ \ )	( _ ' _ \ )
unimportant	dedicatee	electioneer
advantageous	hullabaloo	examinee
confidential	recitative	misrepresent
incompletely	superimpose	misunderstand
circulation	photogravure	rejuvenesce

( \ \_ \_ \_ , )

capitalize  
counterattact

( \_ \ \_ \_ , )

acclimatize  
enumerate

( \ \_ \_ , \_ )

telescoping  
appetizing

Five-syllable Word

( \ \_ \_ \_ \_ )

cumulatively  
deprecatory  
secondarily  
sectionalism  
speculatively

( \_ \ \_ \_ \_ )

intensifier  
confucianism  
benevolently  
contemporary  
administrative

( ' \ \_ \_ \_ )

inapplicable  
regerminating  
unconscionable  
vice-presidency

( ' \_ \ \_ \_ )

objectivity  
abnormality  
satisfactory  
aristocracy  
representative

( ' \_ \_ \ \_ )

temperamental  
interdependence  
characteristic  
authorization  
circumlocution

( \_ ' \_ \ \_ )

affiliation  
consideration  
impressionistic  
supposititious  
apotheosis

( ' \_ \ \_ , )

rehabilitate  
inexactitude  
incapacitate  
inarticulate

Six-syllable word

( \_ ' \_ \ \_ \_ )

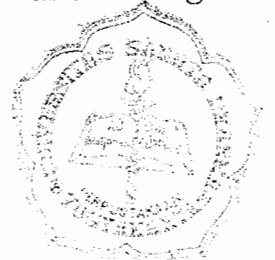
inferiority  
impossibility  
convertibility

( ' \_ \_ \ \_ \_ )

characteristical  
variability  
metereological

( ' \_ \ \_ \_ \_ )

uncooperative  
ceremoniously  
undistinguishable





( ' - - - \ \_ )

palatalization

nationalization

autobiographic

( \_ ' - - - \ \_ )

personification

identification

electrification

Seven-syllable Word

( ' - \ \_ \_ \_ \_ )

unilateralism

( ' - - - \ \_ \_ )

unreliability

( \_ ' - \ \_ \_ \_ )

enthusiastically

( \_ ' - - - \ \_ )

industrialization

( \_ ' - - \ \_ \_ )

impenetrability

We can see that some of the patterns occur with much greater frequency than others. The patterns that contain a series of more than two unstressed syllables tend to be uncommon. In words of more than three syllables final stresses are relatively rare.

5 B. Word-stress (compound words)

By a compound word is meant here a word created by joining two or more words together. In conventional spelling, a compound word is written as one, with or without hyphen.

A compound usually has a more limited meaning than the words from which it has been formed. Thus, daybreak, for example, means the time when the first light of the day begins to grow.

The number of possible collocations in English is almost illimitable, as will be readily realized when it is pointed out that the combinations adjective + noun ( as in

red rose and silent partner), noun + noun (as in space - time and countryman), or verb + adverb (as in go away and breakdown) are potential collocations.

English compounds normally contain a single primary accent on one element of the compound, and a secondary accent on the other element. In the case of disyllabic compounds, the secondary prominence of the second element is realized with a low level secondary accent. Unaccented second elements of these compounds may be observed when the weak vowel /ə/ is present.

The accentual patterns of English compounds in which the primary stress falls on the first element are said to have single stress and are as follows.

#### Two-syllable Compounds

( \ , ) or ( \ \_ )

air-raid	postman	coalmine	flowerpot
backache	footman	windscreen	gas-mask
blackbird	chairman	highbrow	crossword
blackmail	boatswain	lifeboat	earthquake
bridesmaid	birdcage	tail-coat	footprint

#### Three-syllable Compounds

( \ , \_ )

air-worthy  
dance-music  
dog-collar  
golddigger  
grasshopper  
grandfather  
landlady

( \ \_ , )

borderline  
buttonhole  
chambermaid  
copyright  
drawing-pin  
honey-moon  
waiting-room

Four-syllable Compounds

( \ _ , _ )	( \ _ _ , )	( _ \ , _ )
antechamber	musical-box	dispatch-rider
booking-office	Catherine-wheel	machine-minder
carpet-sweeper	labour-exchange	
dinner-jacket		
tape-recorder		

The other type of compound has a primary accent on the second element and a secondary accent with a high level tone on its first element. Compounds of this kind are said to have double or level stress. They are as follows:

<u>Two syllables</u>	<u>Three syllables</u>	<u>Four syllables</u>
( ' \ )	( ' \ _ )	( ' _ \ )
back-fire	archbishop	country-house
downstairs	coldblooded	double-cross
free-wheel	pig-headed	secondhand
full-grown	downhearted	ginger-beer
ground-floor	short-sighted	

Four-syllable Compounds

( ' _ \ _ )	( ' \ _ _ )
broken-hearted	post-graduate
easy-going	vice-chancellor
Indiarubber	
mass-production	

Five-syllable Compounds

( ' \ _ , _ )
hot-water-bottle
waste-paper-basket

## 6. Sentence Stress

Sentence stress is the distribution of stressed and unstressed words in a given sentence. As a general rule, it may be said that the relative stress of the words in a sentence depends on their relative importance. The more important a word is, the stronger is its stress. In any normal sentences the following words are generally important and therefore stressed.

- a. Nouns.
- b. Demonstratives.
- c. Adjectives.
- d. Adverbs.
- e. Verbs (and auxiliaries in certain circumstances)

The other words in a sentence, mostly grammatical words, whose function is to join together the words that carry meaning, are normally unstressed. Thus, prepositions, auxiliaries and conjunctions are not stressed. Pronouns are not stressed also.

When all the important words in a sentence are equally important they are all strongly stressed. Thus in the sentence, 'John has 'just 'bought 'two 'large 'brown \`dogs, every word is stressed except has. In the ensuing paragraphs are some important rules concerning English sentence stress.

The students should note particularly the case of one word qualifying another. Both words usually have strong stresses. Examples are:

- It's 'very im`portant.
- a 'useful `book
- 'next `monday
- 'bank `holiday

In the case of a verb followed by an adverb, the two words together forming what is practically a new word, should be specially noted. Both words are normally stressed. Examples are:

- 'go a`way
- 'give `up
- 'put `down

Phrases which are equivalent to single verbs are treated in the same manner. Examples are:

- 'get `ready
- 'make `haste
- 'go `blind

It is worth noting that the stressing of the phrases above follows what we have called 'double-stress' stress pattern.

In the case of pronouns, we may note that the pronoun one never receives strong stress; as in a `lovely one, and `anyone. The pronoun it is not often stressed in normal, unemphatic speech; for example:

- `Give it to me!
- 'What shall I `do with it?

A word that has just been used previously is not stressed. Examples are:

- 'How many `each? --`Two each.
- 'Soon the 'man was 'joined by a`nother man.

Auxiliary verbs are not normally stressed. They are stressed in the following particular cases.

a. In affirmative statements for the sake of emphasis, e.g.,

- It `can be done.
- It `has been done.

b. When immediately followed by not pronounced /nt/, e.g.,

- I 'shouldn't have `thought so.
- We 'haven't been `able to.

c. When introducing a question, e.g.,

- 'Have you `seen them?
- 'Did you `like it?

d. When the principal verb is suppressed, e.g.,

- 'Yes, I `have.
- He 'always `does.

Words which would normally be strongly stressed may lose some stress when there is some idea of contrast expressed in the sentence. For example:

- We 'heard 'John `talking. (plain statement of fact)
- We `heard John talking. (but we didn't see him)
- We heard `John talking. (but we didn't hear Mary)
- We heard John `talking. (but we didn't hear him singing)

Words which would normally receive strong stress may lose some stress under the influence of sentence-rhythm. The following variations are due to the rhythmic al regularity of strong stresses in connected speech.

a. Words bearing two strong stresses may lose the first when closely preceded by another strongly stressed syllable, or they may lose the second when closely followed by another strongly stressed syllable, e.g.,

'un`known - 'quite un`known

'fif\teen - 'fifteen \shilling - 'ten fif\teen

b. Compound words are similarly affected. For example:

'arm\chair

a 'nice arm\chair

'Put the 'armchair \here.

c. The very common combination of verb + adverb which normally bears strong stresses on both elements is also subject to rhythmical variations. For example:

- I 'got 'up and 'went \out.

I 'can't get \up.

'Get up and \dress.

- He 'put on his \hat.

He 'put it \on.

## 7. Rhythm

Stress, rhythm and intonation should really be considered as a whole, for they are very closely connected elements of a single aspect of the language called Speech Flow. Speech is essentially movement. Students who can pronounce the isolated sounds of a language must still train themselves to set them in motion in the right manner if they wish to make themselves easily understood.

Spoken language behaves in the similar way as music. Music has its stress in the regular recurrence of beats. It has its own rhythm and melody. The sounds of English and isolated syllables, like notes or chords in music, only become intelligible when set in motion.

It is generally assumed that a reasonably correct

speech flow is more important for intelligibility than correct sounds. Foreign speakers of English usually fail to acquire an intelligible speech flow, even though they can make English sounds quite well. As a result, English speaking people find it quite difficult to understand them.

Excellent works on stress, rhythm and intonation have been done by many outstanding authorities. Among them are R. Kingdon's The Groundwork of English Intonation (1958), J. D. O'Connor's Stress, Rhythm and Intonation (1976), W. Stannard Allen's Living English Speech (1973) and Armstrong and Ward's Handbook of English Intonation (1926).

Since rhythm is more closely related to stress than to intonation, we will only discuss English rhythm and set intonation with its complication aside.

The characteristic rhythm of English speech depends upon the stressed syllables. In English sentences, those words which are most important to the meaning at the moment of speaking always contain a stressed syllable. The basic rule of English rhythm is that the stressed syllables follow each other at regular intervals of time. There is approximately the same amount of time between each pair of stressed syllables in a given sentence.

A simple illustration of this rule is found in counting. From one to six, every syllable is stressed, and they follow each other like a regular drum beat.

\one, \two, \three, \four, \five, \six.

The number seven has two syllables, the first one stressed and the second unstressed. This means that the two syllables have to be said in the same space of time as the other single syllables.



The sequence 1 to 10 has eleven syllables, but only ten rhythmical beats, corresponding to the ten stressed syllables. The stressed syllables must occur on a regular beat, and the unstressed syllables between them must be fitted in between the stressed ones. Thus,

'one, 'two, 'three, 'four, 'five, 'six, 'seven,  
'eight, 'nine, 'ten.

The number eleven has three syllables together, but only the middle one is stressed. That stressed syllable must be in time with the ten previous ones. And when we come to 13, 14, 15 and so on, which have initial stress, the regular drum beat of these syllables does not change at all. The unstressed second syllables have to be put in between the others without interfering with the beat.

It is a general rule that the speed of utterance is largely dictated by the number of stressed syllables. The fewer the stresses, the more rapidly the voice skips over the intervening unstressed syllables. If we read a passage at random so that we have a fair sample of mixed stressing, we will find that the overall effect of this is to create the impression that stressed syllables occur at fairly regular intervals. When two or more stresses come closely together, the speed of utterance is remarkably slower. But when they are separated by several unstressed syllables, these syllables move along more rapidly; e.g.,

You 'came to 'see him.  
You should 'come in order to 'meet him.  
You should have 'come before it got so 'late.

The first sentence has five words, the second eight and the third nine. And yet the amount of time used to

utter the three sentences should be approximately the same for each sentence has only two stresses and consequently two rhythmical beats. This is done by skipping rapidly over the unstressed words.

In order to acquire the ability of moving along rapidly over the unstressed syllables or words, the students should be familiar with the weak forms of certain words. There are words in English which have strong forms when they are stressed and weak forms when unstressed. These words are mostly form-words.

It is very important to learn to use these words correctly and to give them their weak forms when they are unstressed. The weak forms differ from the strong forms in two main ways:

1. The weak forms show some reduction of the length of sounds and obscuration of some vowels towards /ə, i, u/.
2. A vowel or a consonant is left out in the weak forms.

A fairly complete list of words with their strong and weak forms is listed below.

	<u>WEAK</u>	<u>STRONG</u>
a	/ə/	/ei/
am	/m, əm/	/æm/
an	/n, ən/	/æn/
and	/ənd, nd, ən, n/	/ænd/
are	/ə/ + consonant	/ɑ:r/
	/ər, r/ + vowel	/ɑ:r/
as	/əz/	/æz/
at	/ət/	/æt/
be	/bi/	/bi:/

been	/bin/	/bi:n/
but	/bət/	/bʌt/
can (aux)	/kən, kn/	/kæn/
could	/kəd, kd/	/kud/
do (aux)	/du, də, d/	/du:/
does (aux)	/dəz/	/dʌz/
for	/fə/ + consonant	/fɔ:/
	/fər/ + vowel	/fɔ:r/
from	/frəm/	/frɒm/
had (aux)	/həd, əd, d/	/hæd/
has (aux)	/həz, əz, z, s/	/hæz/
have (aux)	/həv, əv, v, f/	/hæv/
he	/hi, i/	/hi:/
her	/hə, ə/	/hə:/
him	/im/	/him/
his	/iz/	/hiz/
is	/z, s/	/iz/
me	/mi/	/mi:/
must	/məst, məs/	/mʌst/
not	/nt, n/	/nɒt/
of	/əv, v, ə/	/ɒv/
shall	/ʃəl, l/	/ʃæl/
she	/ʃi/	/ʃi:/
should	/ʃəd, ʃd/	/ʃud/
some*	/səm, sm/	/sʌm/
than	/θən, ən/	/θæn/ (rare)
that	/θət/	/θæt/ (rare)
the	/ði/ + vowel	/ði:/
	/θə/ + consonant	/θi:/
them	/θəm, əm, m/	/θem/
there*	/θə/ + consonant	/θɛə/
	/θər/ + vowel	/θɛər/

to	/tə/ + consonant	/tu:/
	/tu/ + vowel	/tu:/
us	/əs/	/ʌs/
was	/wəz/	/wɔz/
were	/wə/ + consonant	/wə:/
	/wər/ + vowel	/wə:r/
who	/hu, u/	/hu:/
will	/l/	/wil/
would	/wəd, əd, d/	/wud/
you	/ju/	/ju:/

\* As part of the indefinite article, some is normally unstressed. As an adjective in contrast to others it is always stressed.

'Let me 'pour you 'out some `coffee. /səm/ or /sm/

'Some people don't `like coffee. /sʌm/

There is also an intermediate form of some, pronounced /sʌm/ but with no stress. It is commonly found as an indefinite pronoun.

`Take some for me.

'Let me 'pour you `out some.

\* As a demonstrative adverb, there is always strong, as in

He 'wants to 'go `there /ðɛə/.

It should be noted that prepositions like to, from, at, and for retain their strong forms when final, even if they are not stressed. For example:

Where have they gone to /tu:/?

Where's he from /frɒm/?

What are you laughing at /æt/?

Note, too, that certain form words, not normally possessing an alternative weak forms, may show some reductions in their vowel quality when said rapidly.

I /ə/ don't know.

What's your /jə/ name?

I go by /bə/ bus.

Do you know my /mə/ mother?

It may be said that the more rapid the speech the greater the tendency to reduction and obscuration of the unaccented words is.

Let us now conclude our discussion on rhythm. The rhythm of English speech depends very much on the stressed syllables. The stressed syllables of an utterance occur at fairly regular intervals of time. When unstressed syllables intervene, they must be fitted in between the stressed ones.

## C H A P T E R III

### THE INCIDENCE OF ENGLISH STRESS

The accentuation of English words is very irregular and is a constant source of trouble to the students whose mother tongue is not English. One may almost say that it is not possible to give any certain rules for the position of the stress in the word. This assumption is actually incorrect. Although simple rules for English stress incidence cannot be formulated, a study of the factors which govern the word stress and of the exceptions to such rules can be done.

In this chapter only three governing factors of word stress are discussed. The first is concerned with monosyllabic prefixes taking the primary stress, the second with the influence of suffixes on word stress, and the third with the association between the vowel quality and the syllable taking the primary stress.

#### 1. Monosyllabic Prefixes and Stress

Monosyllabic prefixes may occupy any one of the four positions with reference to stress. They may:

- a. Precede the pre-kinetic<sup>1)</sup> stress in a double-stressed word, e.g., pre'vari`cation.
- b. Take the pre-kinetic stress in a double-stressed word, e.g., 'conden`sation.
- c. Precede the kinetic stress in a single-stressed word, e.g., in`vesti,gate.

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1) The term 'kinetic', coined by Roger Kingdon, is equivalent to 'primary'.

- d. Take the kinetic stress in a single-stressed word, e.g., `substi,tute.

Of these four, only the last will be discussed. The first three positions are not directly concerned with our subjects, and therefore irrelevant. The fourth position, on the other hand, is a good hint to denote the position of the primary stress.

According to Roger Kingdon,<sup>2)</sup> the presence of a primary stress on a monosyllabic prefix may be due to any of the following causes:

- a. The direct addition to the monosyllabic prefix of a truncated element formed from a Latin Perfect Participle, e.g., -cess, -dict, -duct, -ject, -pact, -plex, -script, -tract, -verse, and numerous words terminating in -ate, -ete, -ite, -ute.
- b. The presence of a similar element which has been modified in its passage through French, e.g., -feit, -fit, -trait.
- c. In certain disyllables, the shifting of the primary stress from the root to the prefix in order to distinguish the noun form from the verb, e.g., `con,vict, `dis,card, `object.
- d. The general tendency in English towards first-syllable stress, which seems to express itself sporadically, and more particularly in trisyllables, e.g., `ecstasy, `recipe, `several.

List of Primarily Stressed Monosyllabic Prefixes.

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2) Roger Kingdon: The Groundwork of English Stress.

ab- (a-)

\abdi,cate	\ab,ject	\abs,cess	\absence
\abso,lute	\abs,tract.		

ad- (a-, ac-, af-, ag-, al-, an-, ap-, ar-, as-, at-)

\accent	\ac,cess	\accident	\accurate
\ad,dict	\ad,ept	\adequate	\ad,junct
\admirable	\adult	\adverb	\ad,verse
\adver,tise	\advo,cate	\affable	\affluence
\al,ly	\aggre,gate	\appe,tite	\applicable
\applicant	\aspect	\arrogant	\aspi,rate
\assonance	\attri,bute	\ave,nue	

al- (a-, ar-)

\alcohol	\algebra	\alkali	\apri,cot
\azure	\arsenic	\alli,gator	

an- (am-, a-)

\amnesty	\anarchy	\ano,nym	\apathy
\atheism	\atom		

con- (co-, col-, com-, cor-, coun-)

\cog nate	\cognitive	\col,league	\col,lect
\college	\com,bat	\com,bine	\comfort
\com,ment	\commerce	\commissary	\common
\com,mune	\com,pact	\company	\comparable
\compass	\compen,sate	\competent	\complement
\com,plex	\compli,cate	\compliment	\composite
\com,press	\compro,mise	\computable	\concen,trate
\con,duct	\conference	\confidence	\con,fine
\con,flict	\congre,gate	\con,gress	\conquer
\conscience	\consequence	\con,sole	\constant



`consti,tute	`con,tact	`contemplate	`con,tent
`con,test	`con,text	`con,verse	`con,vict
`con,voy	`corre,late	`council	`council

de-

`debit	`de,crease	`dedi,cate	`de,fect
`deference	`de,file	`definite	`dele,gate
`delicacy	`demon,strate	`deputy	`desert
`desperate	`destiny	`de,tail	`devi,ate
`de,tour	`devas,tate		

dis- (de-, di-, dif-)

`differ	`difficult	`di,gest	`diligent
`dis,card	`discipline	`dis,cord	`dis,count
`distance	`dis,tract		

en- (em-)

`embryo	`emperor	`emphasis	`em,pire
`energy	`engine	`enve,lope	`envy

ex- (e-, ef-, es-)

`edit	`edu cate	`effort	`e,ject
`elegant	`ele,vate	`eloquence	`emigrant
`eminence	`es,cort	`evidence	`es,say
`excellency	`excrement	`exe,cute	`exer,cise
`ex,ile	`exit	`ex,pert	`ex,port
`exquisite	`ex,tract		

in- (il-, im-, ir-, ig-)

`immi,grate	`im,pact	`impli,cate	`im,port
`impulse	`incident	`in,cline	`in,dex
`indi,cate	`inference	`influence	`inno,vate

`inquest	`in,sect	`instance	`instinct
`insti,tute	`instrument	`in,sult	`injury
`inventory	`irri,gate	`ignorance	`impotence
`infamous	`infant	`infinite	`innocence
`invalid	`irritably	`irri,tate	

ob- (oc-, of-, op-)

`object	`obstacle	`obstinate	`occupant
`occu,py	`offer	`oppo,r,tune	`opposite
`obligatory			

per-

`perfect	`per,fume	`perish	`permanent
`permit	`perse,cute		

pre-

`predi,cate	`preface	`preferable	`preference
`pre,fix	`pregnant	`prejudice	`premier
`presence	`present	`president	`pre,text
`pro,noun	`proper	`prosti,tute	`property
`pros,pect	`pro,test	`Protestant	`proberb

se-

`secret	`secretary	`separate	`separable
`several			

sub- (suf-)

`subject	`subsequent	`subsidy	`substance
`substi,tute	`subtle	`sub,urb	`sub,way
`suffer	`suffix		

sur-

`surface	`surmise	`surname	`surplus
`sur,vey			

syn- (sy-, syl-, sym-, sys-)

`syllable	`syllabus	`symbol	`symbo,lize
`sympa,thize	`sympathy	`symphony	`symptom
`syndi,cate	`synonym	`syn,tax	`system

trans- (tran-)

`tranquil	`tran,script	`transfer	`transit
`transitive	`trans,port		

## 2. The Influence of Suffixes on Stress

The stress of polysyllabic words is difficult to guess. It is largely controlled by the suffixes attached to the words. The suffixes may take the stress themselves or they may throw the stress onto one of the two syllables preceding them. With some suffixes, the stress is fixed very rigidly, while with others the stress depends upon the number of the syllables preceding.

The students' problems are generally concerned with the kinds of suffixes which influence the stress of the words. Take, for instance, the word democrat, which has initial stress. If the suffix -acy is added to it, the stress of the word is shifted to the second syllable. If the suffix -ic is added to it, the stress is on the third syllable. Thus,

`demo crat	de`mocracy	'demo`cratic
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Some other examples are:

`photo,graph	pho`tography	'photo`graphical
`benefit	be`neficient	'bene`ficial

The best solution of the problem is to give the student a complete list of suffixes which influence the stress of the words. After that we bring problematic suffixes into the students' attention.

The following list is taken from Roger Kingdon's The Groundwork Of English Stress. To comply with the students' need, the list has been modified in some way. Only suffixes which have a high frequency of occurrence are included. They are listed in alphabetical order with as many examples as possible. Hopefully, the list will be of special value to the students both as a guide and reference.

List of Suffixes Influencing the Primary stress.

References:

- 2: Suffixes throwing the primary stress two syllables before them.
- 1: Suffixes throwing the primary stress one syllable before them.
- 0: Suffixes having no influence on the primary stress.
- 1: Suffixes taking the primary stress on their first syllable.
- 2: Suffixes taking the primary stress on their second syllable.

-able (-ableness, -ably, -ible)

0:	\bearable	\breakable	\capable	\changable
	\drinkable	\eatable	\lovable	\movable
	\payable	\readable	\suitable	\workable
	ac\ceptable	a\dorable	ad\visable	a\greeable
	a\available	be\lievable	de\sirable	en\joyable
	\credible	\feasible	\horrible	\probably

Exc.: dis`able, en`able, un`able, `admirable, `comparable,  
 `lamentable.

-ability (-ibility)

0 :	'affa`bility	'amia`bility	'capa`bility
	'disa`bility	'insta`bility	'muta`bility
	'proba`bility	'sui`ta`bility	ac`cepta`bility
	a`vaila`bility	re`lia`bility	res`pecta`bility
	'applica`bility	'irrita`bility	'credi`bility
	'feasi`bility	'possi`bility	im`possi`bility

-acy

0 :	`curacy	`legacy	`lunacy	`privacy
	`accuracy	`adequacy	`delegacy	`delicacy
	`intimacy	`literacy	in`accuracy	in`adequacy

-age

0 :	`bondage	`manage	`tonnage	`breakage
	`carriage	`usage	per`centage	

-ageous

1 :	cou`rageous	,out`rageous	'advan`tageous
	'disadvan`tageous		

-ain

1 :	abs`tain	at`tain	comp`lain	con`tain
	de`tain	dis`dain	ex`plain	main`tain
	ob`tain	re`gain	re`main	res`train
	re`tain	sus`tain	'enter`tain	

-aire

1 :	'doctri`naire	'millio`naire	'questio`naire
	'soli`taire	com`missio`naire	

-al

0 : `tribal          pro`posal          `personal          `musical  
 re`moval          'disap`proval

-ality

1 : ,bru`tality          ,du`ality          fa`tality  
 ,for`mality          le`gality          ,lo`cality  
 ,men`tality          ,neu`trality          'abnor`mality  
 'cordi`ality          'hospi`tality          'natio`nality  
 o'rigi`nality          po'tenti`ality          'sentimen`tality  
 'spiritu`ality          'artifici`ality          'individu`ality

-ance (-ant, -ancy, -antly)

0 : `clearance          `grivance          ac`ceptance  
 ac`cordance          ac`quaintance          ad`mittance  
 al`lowance          an`noyance          ap`pearance  
 as`surance          a`voidance          dis`turbance  
 en`durance          in`surance          re`membrance  
 re`semblance          re`sistance          a`bundant  
 ac`countant          as`sistant          at`tendant  
 con`sultant          con`testant          de`fendant  
 de`pendant          ex`pectant          im`portant

Exc. : `ignorance, `maintainance, `applicant, `disputant,  
 sig`nificant.

-anity

1 : hu`manity          in`sanity          ur`banity

-arian (arianism)

1 : ,bar`barian          ,u'tili`tarian          'parliamen`tarian  
 gram`marian          ,li`brarian          ,hu'mani`tarian

-arity

1 :	,bar`barity	'popu`larity	'regu`larity
	'simi`larity	'singu`larity	'soli`darity
	'famili`arity	'peculi`arity	

-ary

0 :	`arbitrary	`customary	`honorary
	`legendary	`literary	`necessary
	`ordinary	`secondary	`secretary
	`seminary	`solitary	i`maginary

Exc.: `adversary, `salutary.

-ate (In verbs of two syllables, it takes the stress itself)

1 :	de`bate	in`flate	,mi`grate
	nar`rate	,lo`cate	,ro`tate
	trans`late	se`date	

In verbs of more than two syllables it throws the stress two syllables before.

-2 :	`alter,nate	`ani,mate	`hesi,tate
	`indi,cate	`contem,plate	`corre,late
	`inti,mate	`ope,rate	`separate
	`stimu,late	ap`propri,ate	de`liberate
	e`laborate	ap`proxi,mate	

-ative (-atively, -ive)

0 :	`curative	`formative	ac`cusative
	con`servative	con`sultative	de`clarative
	de`rivative	`educative	com`municative
	`legislative	`qualitative	ad`ministrative

Exc.: `locative, `narrative, `rotative, `sedative,  
al`ternative, de`monstrative, 'inter`rogative.

-crat

0 : \auto,crat      \demo,crat      \plito,crat

-cracy

-1 : ,au`tocracy      ,bu`reaucracy      de`mocracy

-culture

0 : \agri,culture      \horti,culture      \viti,culture

-dom

0 : \boredom      \freedom      \kingdom      \wisdom

-ed (-edly, -edness)

0 : \rubbed      \raised      \rained      \followed  
       \waited      \forcedly      \blessedness      pre`paredness

-ee/-een /-eer

1 : 'pa`yee      'trus`tee      'absen`tee      'adres`see  
       'divor`cee      'employ`ee      'refe`ree      ex`ami`nee  
       'six`teen      'engi`neer      'pio`neer      'volun`teer

-en

0 : \broaden      \deaden      \freshen      em`bolden  
       en`lighten      \golden      \silken      \wooden

-ence (-ent)

-2 : \conference      \deference      \difference      \inference  
       \preference      \prevalence      \reference      \confident  
       \excellent      \resident

- 1 :

\absence      \essence      \licence      \sentence  
       \absent      \accent      \agent      \current  
       \decent      \parent      \patent      \present  
       \silent      \student      \urgent      ex`istence



oc`currence	ap`parent	com`ponent
de`tergent	in`sistent	de`pendent
op`ponent	res`pondent	

-er

0 :	`bomber	`player	`robber	`weaver
	`officer	`prisoner	in`terpreter	

-erity

1 :	,dex`terity	,pos`terity	,pros`perity
	se`verity	,sin`cerity	'insin`cerity

-ese

1 :	'Bur`nese	'Chi`nese	'Japa`nese
	'Java`nese	'Bali`nese	

-ess

0 :	`actress	`duchess	`hostess
	`mistress	`murderess	`stewardess
	ad`venturess		

-ete

1 :	com`plete	com`pete	de`lete
	'incom`plete	con`crete	

-ette

1 :	,bru`nette	'ciga`rette	'kitche`nette
	'nove`lette		

-ful (-fully, -fulness)

0 :	`artful	`awful	`careful	`doubtful
	`faithful	`fearful	`fruitful	`harmful
	`helpful	`hopeful	`joyful	`painful
	`peaceful	`beautiful	de`lightful	`powerfully

-gram (-graph)

0 :	\centi,gram	\dia,gram	\kilo,gram
	\milli,gram	\tele,gram	\homo,graph
	\para,graph	\photo,graph	

-grapher (-graphy, -graphist)

- 1 :	,bi\ographer	pho\tographer	ste\nographer
	'lexi\cographer		

-fy (-fier)

0 :	\ampli,fy	\beauti,fy	\clari,fy
	\glori,fy	\horri,fy	\noti,fy
	\quali,fy	\magni,fier	\puri,fier
	\stupe,fier		

Exc.: per\soni,fy, so\lidi,fy.

-ial (ialism, -ialist, -ialize, -ially)

- 1 :	\burial	\cordial	\partialial
	\trivial	ad\verbial	co\lonial
	,fi\nancial	im\partialial	pro\vincial
	re\medial	'cere\monial	

-ic (-ics, -ical, -ically, -icize, -icism)

- 1 :	\basic	\logic	\music
	\public	\topic	\physics
	dra\matic	fa\natic	sym\bolic
	'ener\getic	'melan\cholic	po\litical
	rhe\torical	\chemical	\lexical
	\medical	\practical	\typical
	gram\matical	fa\naticism	dra\matically

Exc.: \Catholic, \Arabic, \lunatic, \politic, \politics.

-ican

- 1 : \Anglican           \Mexican           re`publican  
           \Vatican           A`merican           `publican

-ician

1 : ma`gician           mu`sician           'elec`trician  
       'poli`tician

-icity

1 : com`plicity       ,du`plicity       ,pu`blicity  
       ,sim`plicity       'authen`ticity       'eccen`tricity

-id

- 1 : \fluid           \frigid           \horrid           \humid  
       \liquid       \orchid           \rapid           \solid  
       \splendid    \stupid           \timid           \valid

-idity

1 : fri`gidity       ,hu`midity       ra`pidity  
       so`lidity       ,stu`pidity       va`lidity

-ience (-ient, -iency, -iently)

- 1 : \audience       \conscience       \patience  
       \ancient       con`venience       ex`perience  
       im`patient       o`bedient           ef`ficiently  
       suf`ficiency

-iety

1 : ,an`xiety       so`ciety           va`riety  
       'noto`riety

-ility

1 : fa`cility       fer`tility       fra`gility  
       ,mo`bility       sta`bility       'immo`bility

-ion (-ionable, -ionalize, -ionary, -ional, ionalism)

- 1 :	\`action	\`caution	\`champion
	\`mention	\`million	\`mission
	\`nation	\`passion	\`question
	\`section	\`union	af`fection
	com`panion	com`pletion	cre`ation
	dic`tation	dis`tinction	ex`pansion
	\`fictional	\`regional	\`unio,nize
	\`actionable	\`nationa,lize	\`dictionary
	pro`fessionalism		

-ior

- 1 :	\`junior	\`senior	ex`terior
	in`ferior	in`terior	su`perior

-ious

- 1 :	\`anxious	\`cautious	\`conscious
	\`curious	\`envious	\`glorious
	\`gracious	\`obvious	\`precious
	\`previous	\`serious	am`bitious
	de`licious	in`genious	me`lodious
	re`ligious		

-ique

1 :	an`tique	o`blique	phy`sique
	,tech`nique	,u`nique	'Mozam`bique

-ish

0 :	\`childish	\`selfish	\`feverish
	\`yellowish	\`boyish	\`devilish

-ite (words of more than two syllables)

- 2 :	\`opposite	\`composite	\`definite
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`hypocrite	`favourite	`infinite
`appe,tite	`dynamite	`para,site
`satel,lite		

-ity

- 1 :	`brevity	`density	`dignity
	`enmity	`quality	`quantity
	ab`surdity	ce`lebrity	com`plexity
	ex`tremity	i`dentity	in`tegrity
	,sin`cerity	'uni`versity	

-ivity

1 :	a`ctivity	cap`tivity	fes`tivity
	pas`sivity	'objec`tivity	'produc`tivity
	'rela`tivity	'sensi`tivity	'subjec`tivity

-ize

0 :	`rea,lize	`colo,nize	`criti,cize
	`drama,tize	`huma,nize	`memo,rize
	`orga,nize	`recog,nize	`standar,dize

-loger (-logist, -logize, -logous, -logy, logism)

- 1 :	as`trologer	,bi`ologist	a`pologize
	a`nalogous	,mor`phology	'pharma`cologist
	'toxi`cologist	'crimi`nology	

-less (-lessly, -lessness)

0 :	`aimless	`bloodless	`careless
	`endless	`friendless	`hopeless
	`meaningless	`merciless	`motionless
	`numberless	re`lentlessly	

Exc.: un`less, 'neverthe`less.

-ment

0 :	'basement	'judgment	'movement
	'payment	a'chievement	a'greement
	a'partment	ar'rangement	com'mitment
	en'gagement	en'largement	'argument
	'government	'management	'measurement

-mental

1 :	,seg'mental	'depart'mental	'docu'mental
	'funda'mental	'instru'mental	'monu'mental
	'senti'mental	ex'peri'mental	

-meter (-metry)

- 1 :	'symmetry	ba'rometer	,di'iameter
	ther'mometer	ge'ometer	,hep'tameter

-mony

0 :	'ceremony	'hegemony	'matrimony
	'patrimony	'testimony	'acrimony

-monial (monic, -monious)

1 :	'cere'monial	'hege'monic	'matri'monial
	'patri'monial		

-oo /-oon

1 :	'bam'boo	'sham'poo	'ta'boo
	'tat'too	ba'boon	bal'loon
	,har'poon	la'goon	'panta'loon

-oria (-orial, -orian, -orious, -orium)

1 :	vic'toria	,doc'torial	me'morial
	pic'torial	sec'toral	,tu'torial
	his'torian	la'borious	no'torious
	'terri'torial	'audi'torium	'crema'torium

-ority

1 :	,au`thority	ma`jority	,mi`nority
	,pri`ority	so`nority	seni`ority
	'infe`ri`ority	'superi`ority	

-our

- 1 :	`armour	`colour	`flavour
	`glamour	`harbour	`honour
	`humour	`labour	`neighbour
	`odour	`rumour	

-ous

0 :	`amorous	`glamorous	`humorous
	`famous	`nervous	`marvellous
	`murderous		

-phone

0 :	`gramo,phone	`micro,phone	`saxo,phone
	`tele,phone		

-some

0 :	`fearsome	`handsome	`lonesome
	`troublesome		

-sor

- 1 :	`censor	`scissors	`sponsor
	ag`gressor	com`pressor	con`fessor
	de`pressor	op`pressor	pos`essor
	pro`fessor	suc`cessor	

-sure

- 1 :	`closure	`leisure	`measure
	`pleasure	`treasure	com`posure

dis`closure      `pressure  
Exc.: as`sure, en`sure, in`sure.

-teen

1 : 'thir`teen      'four`teen      'six`teen  
     'seven`teen      'eight`teen

-tude

- 2 : `alti,tude      `ampli,tude      `apti,tude  
     `atti,tude      `grati,tude      `longi,tude  
     si`mili,tude      so`lici,tude

-tudinal

1 : 'lati`tudinal      'longi`tudinal      'multi`tudinal

-ture (tural)

- 1 : `capture      `future      `gesture  
     `junction      `lecture      `mixture  
     `picture      `posture      `puncture  
     `structure      ad`venture      de`parture  
     `structural      'super`natural

Exc.: ma`ture, `premature, `architecture.

-ual

- 1 : `actual      ha`bitual      `annual  
     `casual      `equal      `gradual  
     `manual      `mutual      ac`centual  
     con`tinual      e`ventual      bi`lingual

-ward /-wise

0: `backward      `forward      `clock,wise  
     `other,wise      `homeward      `westward  
     `like,wise      `contrari,wise



Since the suffixes are listed in alphabetical order, it is necessary to classify them according to the positions of the primary stress. It will assist the students in learning the rules.

1. Suffixes having no influence on the primary stress ( 0 ).

-able	-culture	-gram	-ness
-acy	-dom	-hood	-ous
-age	-en	-ible	-phone
-al	-er	-ish	-some
-ance	-ess	-ize	-ship
-ant	-ful	-less	-ure
-ative	-fy	-ly	-ward
-crat	-graph	-ment	-wise

2. Suffixes throwing the primary stress one syllable before them ( - 1 ).

-cidal	-cracy	-grapher	-graphy
-ial	-ic	-ical	-ican
-id	-ience	-ient	-ion
-ior	-ious	-ity	-loger
-logy	-meter/metry	-our	-sor
-sure	-ture	-tural	-ual

3. Suffixes throwing the primary stress two syllables before them ( - 2 ).

-ence/-ent	-ate	-ite	-tude
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4. Suffixes taking the stress on their first syllable ( 1 ).

-ain	-aire	-ate	-ality
-anity	-arian	-arity	-cultural

-ee	-eer	-ese	-ician
-icity	-idity	-iety	-ique
-ivity	-oo	-oon	-orial
-ority	-teen	-tudinal	

5. Suffixes taking the stress on their second syllable ( 2 ).

-ability	-ionistic	-uality
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3. Vowel Quality and Stress

Some linguists think that there is a relation between vowel qualities and word stress positions. Some other linguists, however, reject this idea. In this chapter we will discuss the opposing ideas of two linguists only, A. C. Gimson<sup>3)</sup> and Daniel Jones<sup>4)</sup>.

According to Gimson, communication involves at least two aspects, i.e., the production stage and the receiving end. At the production stage, stress is realized with greater intensity which is brought about by an increase of air-pressure from the lungs. At the receiving end stress gives an objective impression of loudness. The two aspects are closely related to each other.

This greater intensity is not in itself usually the most important factor in rendering a sound prominent in English. As shown in Chapter II, pitch, quality and quantity also contribute to the prominence of a sound.

Moreover, he says that, all other things being equal, some sounds appear by their nature to be louder or

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3) Gimson: An Introduction to the Pronunciation of English.

4) Daniel Jones: An Outline of English Phonetics.

more sonorous than others. Consequently some phonemes in English are particularly associated with unaccented situations due to their lack of qualitative prominence and some others are associated with accented situations by virtue of their qualitative or quantitative prominence.

He states that /ə/ almost always occurs in unstressed syllables. /i, u/, though both may receive strong stresses, have a high frequency of occurrence in unstressed syllables. /e, æ, ɔ, ʌ/, the long vowels and diphthongs, when occurring in weak positions, are pronounced in reality with secondary stress.

Jones, however, is not satisfied that this view is a correct one. /e, æ, ɔ, ʌ/ are undoubtedly more prominent than /ə, i, u/, but this does not necessarily mean that they derive their prominence from stress, namely from a special push of the diaphragm. He agrees that /e, æ, ɔ, ʌ/, the long vowels and diphthongs have considerable prominence by reason of their inherent sonority, and that if /e/ and /ə/ are uttered with what the speaker judges to be equal push from the diaphragm, /e/ is clearly audible at a greater distance than /ə/ is. But there is nothing to prevent them from being unstressed, i.e., uttered with a very weak push from the diaphragm.

According to him, the most that can be said in favour of the theory is that /e, æ, ɔ, ʌ/ are generally uttered with greater jaw movement and a slightly greater length than /ə, i, u/, and that the long vowels and diphthongs have considerable prominence by reason of their length.

Thus Gimson considers the second syllables of the following words to have secondary stresses, while Jones does not.

`abstract	`schedule	`concrete
`hiccup	`insect	`mundane

All we can say about these two opposing views is that both have their own way of interpretation. Jones sticks to his opinion that a stressed syllable must involve a special push of the diaphragm. He sees stress in terms of its production. Gimson, on the other hand, takes into account the acoustic effect of stress on the listener. He believes that, like stress, sonorous vowels and diphthongs are perceived as greater loudness at the receiving end.

Since the object of this paper is to throw some light on the positions of the primary stress in English words, a lengthy discussion on secondary stress is unnecessary. What is then the purpose of bringing Gimson's theory into our attention?

When the writer studied Gimson's theory, it gradually occurred to him that there was actually a close association between vowel qualities and primary stress in words. The writer noticed that the primary stress of English words often occurred on the syllables which had strong vowels.

Thus, in the light of Gimson's theory, we can actually go further and say that /e, æ, ɔ, ʌ/, the long vowels and diphthongs are often associated with the primary stress of English words. This assumption has not been proved yet, but the writer's experience in learning English seems to confirm it. Specifically the assumption is as follows:

1. /ə/ is always weak and therefore unstressed.
2. /i, u/ are either weak or strong. In most cases they occur in unstressed positions.

3. /e, æ, ɔ, ʌ, i:, ɔ:, a:, u:, ə:/ are almost always strong. They often occur in strongly stressed syllables.
4. /iə, uə/ are either weak or strong.
5. /ei, ou, ai, au, ɔi, ɛə, ɔə/ are almost always strong.

Let us take some examples and see if our assumption works.

-alone /əˈləʊn/ : /ə/ is always weak.  
/ou/ is almost always strong.  
The stress is on the second syllable.

-answer /ˈɑ:nsə/ : /ɑ:/ is almost always strong.  
/ə/ is always weak.  
The stress falls on the first syllable.

-ambush /ˈæmbʊʃ/ : /æ/ is almost always strong.  
/u/ is either weak or strong.  
The stress is on the first syllable.

-hospital /ˈhɒspɪtəl/ : /ɒ/ is almost always strong.  
/i/ is either weak or strong.  
/ə/ is always weak.  
The stress falls on the first syllable.

Other examples are:

awake /əˈweɪk/

because /biˈkɔ:z/

believe /biˈli:v/

number /ˈnʌmbə/

basket /ˈbɑ:skɪt/

baby /ˈbeɪbi/

develop /di`veləp/

memory /`meməri/

imagine /i`mædʒin/

permanent /`pə:mənənt/

It is to be noted that those vowels which are usually weak, notably /i/, may be strong under the influence of powerful suffixes. /i/, for example, receives a primary stress in 'contra`diction, 'poli`tician and no`bility. The strong vowels, as we can see, only receive secondary stresses.

In the absence of influencing suffixes our assumption can best be applied. It may help the students in determining the positions of the primary stress in words. In addition, it may help the students in remembering the position of the primary stress.

To conclude our discussion on the incidence of English word stress, it is wise to warn the students that the guiding rules suggested here do not cover the whole complex problems of English word stress. The rules, for example, do not explain the fact that words like `syntax, `insect, `hiccup are stressed on the syllables which have weak vowels.

We can only say that language is arbitrary and that rules in language are always subject to exceptions. It is always good to learn the stress of each word individually by consulting a reliable dictionary.

## C H A P T E R IV

### THE TEACHING OF ENGLISH WORD-STRESS

It is a well-known fact that when the native language facility involves language patterns similar to the new ones to be learned, there will be either facilitation or interference in learning, depending of the degree of functional similarity. If the patterns to be learned are not the same and will not function as the same in the new language, there will be maximum interference.

In the process of learning a new language, interference is more of a hindrance than a help. The native language habit usually distorts the new one. As a result, the new patterns have to be learned as a new language habit.

Unlike English, stress in Indonesian is not phonemic. According to A.M. Almtsier<sup>1)</sup> nearly all syllables in Indonesian words can be stressed or unstressed without affecting the meaning of the words. The word malam (meaning evening), for example, can be stressed initially or finally depending on the speaker's feeling. But in normal speech, Indonesian words are stressed on the penultimate syllables. Examples are:

`saya	ja`waban
`makan	meng`apa
`nasi	me`mungut
`tadi	se`tuju
`sedang	menga`takan

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1) A. M. Almtsier: How to Master Indonesian Language.

The native language habit of Indonesian students is generally held responsible for the many faulty stressings found in their speech. Indonesian students are usually ignorant of the fact that English stress is phonemic in nature and that incorrect stressing may cause misunderstanding. They see English stress in terms of their native language habit and put the stress of English words wherever they wish.

#### A. Teaching Techniques

To overcome the problem, the following techniques of teaching English word stress are recommended. It is to be noted, however, that the techniques suggested here are of general nature. They do not deal with specific problems of English misstressed words. They are also tentative, since the writer practically has no experience in teaching English.

##### 1. Identification

The first activity we do when learning a new language is that which is concerned with our ear, that is, we listen. Understanding and articulating the new language come later. Likewise, the teaching of English stress should begin with a model of perception.

By perception is meant the ability to identify the positions of English stress in words. The teacher says a number of words, and asks the students to identify the stress patterns which they hear. The students' response should consist only of first, second, or third depending on the positions of the stress in the words.

Comparing one stress pattern with another can also be done. The teacher begins by giving one stress pattern



orally to the class some three times. Then he adds some other stress patterns of the same and of different kinds. He asks the students after each example whether it is the same as or different from the first. At first some will be confused and will say it is different when it is the same. With a little practice the responses will become uniform, indicating that the class can identify the patterns.

When the students have trouble indentifying the examples, draw their attention to the element or feature that they are missing. The teacher can use such props as lines, dots on a scale, numbers and typographical devices like capital letters, italic type, etc.

## 2. Imitation

Imitation plays a very important part in learning English word stress. But we must realize that accurate imitation is impossible so long as accurate perception is not achieved. Imitation, then, must be postponed until the students have possessed the ability of identifying English stress patterns.

Like the identification stage, when imitation does not work the teacher should use any means at his command. Such props as capital letters and lines may be quite useful.

## 3. Rules of English Word Stress

Once the students are able to imitate and remember the examples, the teacher may proceed with the rules of English word stress as depicted in Chapter III. But he must be selective in presenting the rules, depending on the students' condition and mastery of the language.

The phonemic nature of English stress and the general tendency in English word stress should also be brought into the students' attention. If possible the exceptions of the rules should also be given.

#### 4. Wide Exposure

One does not teach everything about the stress system of the language. This would be pedantic and would hinder more than it would help. We must not expect the students to overcome the problems of English word stress once and for all because we have explained them.

The students should be widely exposed to the new stress system. It must be practiced again and again until the desired result is achieved. In some cases as many as fifteen or twenty separate practice may be required to master the problems.

For exercises in English word stress and rhythm, I shall refer to an excellent workbook, Living English Speech, by W. Stannard Allen.

#### 5. Good Models

Throughout the teaching-learning activity of English word stress, the teacher should provide good models. It is a fact that poor models produce poor imitation. Good models do not guarantee good imitations, but they are necessary to permit good responses.

#### 6. Dictionary

A dictionary is indispensable in any language learning. Ideally the students are obliged to learn the stress of each word individually since English word stress is highly irregular. The teacher's task is to encourage the stu-

dent to use a reliable dictionary in learning English word stress.

### B. Problematic Stress

Many students have the tendency to stress the last syllable of words ending in -ute, -ude, -ise, -ize. For example:

criti`cize	instead of	`criticize
grati`tude	instead of	`gratitude
exer`cise	instead of	`exercise
prose`cute	instead of	`prosecute

This tendency is actually understandable because diphthongs and strong vowels are often associated with some sort of strong stress due to their qualitative prominence.

-ive and -ative, which often occur in words of more than two syllables, are also problematic. The students usually put the stress of the words bearing these suffixes either initially or finally while actually the new forms are stressed on the same syllable as were the basic words. For example:

re`peat	-	re`petative
af`firm	-	af`firmative
con`tribute	-	con`tributive
repre`sent	-	'repre`sentative
com`municate	-	com`municative

-ion (-lion, -sion, -tion), -ical, -ity are not subject to any hard rule. The suffixes almost always throw the stress on the syllable immediately preceding. But the

following faulty stressing is often heard. For example:

pro`nunciation	instead of	pronunci`ation
`dramatic	instead of	dra`matic
`expansion	instead of	ex`pansion
drama`tical	instead of	dra`matical
iden`tity	instead of	i`dentity

If we examine the words in the examples above, we can actually simplify the rule and say that almost all of them have what we call antepenultimate stress. Thus, the stress is on the third syllable from the end, which results in a classical dactylic rhythm (— u u). This also applies to words terminating in -tion, -lion, -sion, -cian, -ual, -iar, etc. for these suffixes were pronounced as two syllables until at least the end of the seventeenth century.

Hence, the tendency of English polysyllabic words is toward antepenultimate stress. This tendency is common to a very large proportion of words of more than three syllables. However, it is not to be taken as a reliable guide to the correct stressing of all such words. The students who are not sure of the right way to stress polysyllabic words should ask an English speaker or consult a reliable dictionary.

The shifting of the stress to the antepenultimate syllable is very important for the students to learn. Here are some word-sequences to practice. In order to show the contrast, the secondary stress of the words is not marked.

`politics	po`litical	poli`tician
`democrat	de`mocracy	demo`cratic
`personal	per`sonify	perso`nality
`hypocrite	hy`pocrisy	hypo`critical

`mechanism	me`chanical	mecha`nician
`contemplate	con`templative	contem`plation
`artifice	arti`ficial	artifici`ality
`intellect	in`telligence	intel`lectual
`family	fa`miliar	famili`arity
`telegraph	te`legraphy	tele`graphic
`particle	par`ticular	particu`larity
`competence	com`petitor	compe`tition

Here is some more reading practice which is useful for the students in learning polysyllabic words having antepenultimate stress.

mo`notonous	no`bility	sig`nificant
libe`rality	par`ticular	rela`tivity
gene`rosity	co`median	psycho`logical
ba`rometer	ge`ography	qualifi`cation
ca`tastrophe	bo`tanical	adminis`tration
ma`nipulate	gram`matical	exami`nation
contra`diction	conti`nuity	materia`listical
inde`pendently	personifi`cation	pronunci`ation
discrimi`nation	repro`duction	mathema`tician
af`firmative	un`fortunate	pho`tography
le`gality	im`possible	un`ethical
extra`dition	in`terrogate	su`perfluous
contra`dictory	uni`lateral	circum`stantial
exe`cution	illus`tration	substi`tution

## C O N C L U S I O N

English stress is very complex. This paper only deals with a small portion of it, that is, the problems of learning English simple-word stress and the tentative suggestions of overcoming the problems.

The native language habit of Indonesian students is responsible for the many faulty stressings found in their speech. In Indonesian nearly all syllables in words can be stressed or unstressed without causing any misunderstanding, since stress is a non-phonemic feature in the language. In English, on the other hand, stress is phonemic. Incorrect stressing leads to misunderstanding.

Some linguists think that there are no rules determining which syllables of English words bear the primary stress. In Chapter III we can see that, although simple rules cannot be formulated, a study of the factors which govern the positions of the primary stress can be done. A fairly complete list of monosyllabic prefixes which usually bear the primary stress and a list of influencing suffixes are given. In addition, we propose a theory saying that the primary stress of English words often falls on the syllables that bear strong vowels.

In the final chapter some tentative techniques of teaching English word stress are suggested. At the first stage, the teacher is expected to begin with perception - and identification of English stress before dealing with imitations. He is also supposed to provide the students with a lot of exercises since mere explanation is not enough. The models of the teacher is also important in learning because poor models produce poor imitations.

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