MODULE 6 ENGLISH SYLLABLE, STRESS AND INTONATION

- Unit 1 English Syllable Structure and Strength
- Unit 2 The Phonotactics of English
- Unit 3 Stress in English
- Unit 4 Intonation in English I
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UNIT 1 ENGLISH SYLLABLE STRUCTURE AND STRENGTH

CONTENT

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Contents
 - 3.1 Peak (nucleus, rhythm, or free open syllable)
 - 3.2 Onset (Pre-initial, initial, post-initial syllable)
 - 3.3 Coda (Pre-final, final, post-final: 1 & 2, or close syllable)
 - 3.4 The Weak Syllables
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- 4.0 Conclusion
- 5.0 Summary
- 6.0 Teacher-Marked Assessments
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1.0 INTRODUCTION

In most of the previous Modules above, I have focused on the identification and description of the English phoneme as if it makes up the gamut of the phonology of English. No, it does not but precipitates the discussion of most parts of the English phonology; it forms the template for most other discussion in the field. Your attention in this module will be directed at the identification, description and use of the English phonemes, not in isolation as in the previous modules, but in a group called the syllable. Specifically, the first unit of this module will discuss the structure and strength of a syllable.

HOW TO STUDY THE UNIT

- a. Read this unit as diligently as possible.
- b. Find meaning of unfamiliar words in the unit using your dictionary.
- c. As you read, put major points down in a piece of paper or jotter.

- d. Do not go to the next section until you have fully understood the section you are reading now.
- e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

2.0 OBJECTIVES

By the end of this Unit, you will be able to:

- define and identify the following parts of a syllable:
 - peak (nucleus, rhythm or free syllable),
 - onset (Pre-initial, initial, post-initial or open syllable),
 - coda (Pre-final, final, post-final: 1 & 2, or close syllable), and
 - \diamond consonant clusters.
- analyse the structure of a syllable;
- explain the strength of an English syllable;
- recognise the weak syllables;
- explain what makes the strong syllable strong.

3.0 MAIN CONTENTS

- 3.1 Peak (nucleus, rhythm, or free open syllable)
- 3.2 Onset (Pre-initial, initial, post-initial syllable)
- 3.3 Coda (Pre-final, final, post-final: 1 & 2, or close syllable)
- 3.4 The Weak Syllables
- 3.5 The Strong Syllables

3.1 Peak (Nucleus, Rhythm and Free Syllable)

A syllable is defined by the Oxford Advanced Learners' Dictionary of Current English as: "any of the units into which a word is divided, containing a vowel sound and usually one or more sounds" (p. 1215). From this axis, we can progress to say that, a syllable, essentially, is a division of a word that contains at least a vowel sound; this division is often marked by (the sign of a full stop or period) and mediated by phonetic considerations. One thing you must first of all learn of a syllable, therefore, is that, it must contain a vowel sound. Phonetically, this unit of a word division is usually marked by higher amplitude or intensity (loudness), longer duration, and a change in fundamental frequency (pitch). This is why the term the *peak* has been used to name this unit of the syllable. Because it is the most essential part of a

syllable, the term *nucleus* is often used to name it as well. Also, because in identifying the number of syllables of a word, it often possible to tap the number of beats one can count of the word, the term rhythm is used to name this part of the unit of a syllable.

Some examples of such one-vowel syllables in English are: or, ore and are /5: 0: 0:/ respectively. Because this type of syllable does not have any other sound at its beginning nor end, or because it is preceded and succeeded by silence, it is also referred to as free, open or simple syllable. Please, note that the word division into units we refer to here is phonetically mediated and not morphologically such as: suffix, infix and prefix.

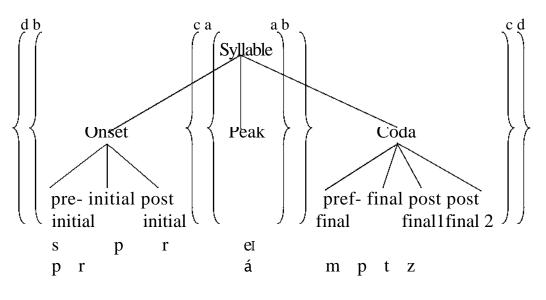
3.2 Onset (Pre-Initial, Initial and Post-Initial)

However, if a syllable is started or preceded by a consonant, i.e. a consonant comes before the mandatory vowel, the consonant at this initial position is named the onset. Sometimes, the onset may be made up of consonant clusters of as many as three consonants (for instance in English). In such an instance, the first of such is called the "pre-initial consonant", the second, "initial consonant" and the third, "final consonant". This can be illustrated with the word "stray" /streI/; where the peak, /eI/ is precede by an onset of three consonants made of /s t r/. Thus, /s/ is pre-initial, /t/ is the initial and /r/ is the final onset.

3.3 Coda (Pre-Final, Final, Post-Final: 1 & 2, Or Close Syllable)

However, just as the peak of a syllable can be free or preceded by an onset, it can equally be succeeded by as many as a cluster of four consonants. These consonants that appear at the final position of the peak is called the coda. The first of them is the pre-final, the second final, the third, post final 1, and the last, post final 2. But note that if the syllable has just one coda, the consonant is the final consonant. Let me illustrate this using "prompts" /promptz/ as an example. The word has a coda of four consonants namely: /m p t z/; where: /m/ is pre-final, /p/ final /t/ post final 1 and /z/ post final 2.

Note that when a syllable has a coda, it is called a close syllable; (e.g. kin). However, if a syllable does not have an onset, it is said to be an open syllable (e.g. in), which has a zero onset. When a syllable does not have a coda, it is a syllable with zero coda (e.g. pay /pei/; if it has neither an onset nor a coda, it is said to be a syllable with zero onset and zero coda; it is, therefore, a free or simple syllable (e.g. woo /u:/. But when a syllable has both an onset and a coda of any number, the syllable is said to be a complex syllable.



Let us summarise the above with this tree diagram.

where brackets:

- 1. aa = simple or free syllable (zero onset and zero coda)
- 2. bb = syllable with onset but zero coda
- 3. cc = close syllable with zero onset
- 4. dd = syllable with encased in an onset and coda (complex syllable) and
- 5. two words, spray and prompts, have illustrated the diagram as it is rare to have a word that fulfils all the obligations.

3.4 The Weak Syllables

In English, some syllables of most multi-syllabic words do not often receive emphasis, so are not accompanied by some kind of "loudness" that is relative to the other syllables in the same utterance or word. Acoustically speaking, such de-emphasised syllables experience relative reduction in the movements of the vocal folds, which often leads to reduced FO, intensity and duration. The phonological consequence of this is, this type of syllable is produced with some silence, little or no emphasis and sometimes, totally swallowed or skipped. Such syllables that have these characteristics are called the weak syllables.

Some cues are there for you to identify such weak syllables in an utterance. The most common one is that the peak or the vowel of the syllable is almost always short, i.e., the peaks are made of the short vowel sounds such as: $/I \in \mathbb{R} \cup \mathbb{O} \land \partial/$, which signal the occurrence of a weak syllable. In addition, such a weak syllable with a short peak is usually an open syllable, which does not have a coda. Sometimes when it has, the coda is just the final element - one consonant coda. An example is car.di.nal transcribed as /kQ:.dI.nəl/ or /kQ:.dI.

nl/ of three syllables - /k Ω :/, /dI/ and /nəl/. You will notice that in the second transcription, the final syllable has a syllabic consonant /l/ as its peak giving /nl/, thereby, completely eliding the schwa sound /ə/ that ought to be the peak. Here, it is possible to swallow /a/ because it is a weak vowel, indeed, the weakest of all the vowel sounds. In the instance above, the penultimate syllable, /di/, is equally made of a weak vowel.

3.5 The Strong Syllables

Inversely, if the other vowel sounds, apart from those pointed out in 3.1 above, constitute the peak of a syllable, such syllables are regarded as strong syllables. These vowels we have in mind are: /i: O: D: U: 3:/ and all the diphthongs/triphthongs. Without gainsaying, they are all long sounds, which, therefore, contradict one of the factors that make a weak syllable. One other factor that determines the weight of the syllable is the number of consonants that serves as the coda of the syllable. When a consonant cluster of two or three is the coda of a syllable, this syllable is a strong syllable. Examples: (a) car.di.nal /kO:.di.nal/ (b) sa.dist /sei.dist/, which illustrate factors one and two that determine a strong syllable. In (a), the first syllable, k[†]:, is strong because of the long coda; while the two syllables of (b) are strong in: /sei/ and /dist/ though has a peak of short vowel, but is bounded at the right by two consonants, /s/ and /t/.

4.0 SELF-ASSESSMENT EXERCISES (SAE) I

- i. With illustrations, demonstrate your understanding of the following parts of a syllable: peak, onset, coda.
- ii. What are consonant clusters?

SELF-ASSESSMENT EXERCISES (SAE) II

- i. Explain what is meant by strength in English syllables
- ii. Give three examples of weak syllables
- iii. Give three examples strong syllables

5.0 SUMMARY

In this unit, I have attempted to: explain to you:

• Peak (nucleus, rhythm or free syllable) as a only vowel sound of the syllable.

- Onset (Pre-initial, initial, post-initial or open syllable) as the consonant(s) that precede(s) the only vowel sound a syllable.
- Coda (Pre-final, final, post-final: 1 & 2, or close syllable) as the consonant(s) that succeed(s) the only vowel sound a syllable.
- Consonant clusters as an occurrence of more than one consonant coming together, and
- Analyse the structure of a syllable
- To make you recognise a weak syllable as having a short nucleus only, and a strong syllable as having a long nucleus or a short nucleus with at least two consonants binding it at the right side.

6.0 TUTOR-MARKED ASSESSMENTS

- 1. With a well drawn diagram, analyse the structure of a complex syllable.
- 2. Discuss two factors guiding the recognition of: (a) the strong syllables and (b) the weak syllables.

7.0 REFERENCES/READING LIST

- Ashby, Michael & Maidment, John. (2005). *Introducing Phonetic science*. Cambridge: Cambridge University Press.
- Clark, John & Yallop, Colin. (1990). An Introduction to Phonetics and phonology. Oxford: Blackwell Publishers.
- Fudge, Erik. C. (1984). *English Word-Stress*. London: George Allen and Unwin. pp. 19 23.
- Gimson, A. C. 1980. An Introduction to the Pronunciation of English. London: ELBS & Edward Arnold. Chapter 9, pp. 237-254.
- O'Connor, J. D. (1973). *Phonetics*. Harmondsworth: Penguin Books.
- Roach, Peter. (2000). *English Phonetics and Phonology* (2nd Ed.). Cambridge: Cambridge University Press. Chapters 8 and 9, pp. 70-92.

UNIT 2 PHONOTACTICS OF ENGLISH CONTENT

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Contents
 - 3.1 The Phonotactics of English
 - 3.2 English Syllable Division
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Teacher-Marked Assessments
- 7.0 References and Reading List.

1.0 INTRODUCTION

From the above phonetic consideration of a syllable in Unit 1, although using many illustrations in English, I will move on in this unit to discuss the syllable and its combinatory properties in English.

2.0 OBJECTIVES

What this unit sets to do is to make you to:

- define Phonotactics;
- recognise the Phonotactics of English;
- identify most of the possible combinations of the English phonemes; and
- explain the maximum onsets principle.

HOW TO STUDY THE UNIT

- a. Read this unit as diligently as possible.
- b. Find meaning of unfamiliar words in the unit using your dictionary.
- c. As you read, put major points down in a piece of paper or jotter.
- d. Do not go to the next section until you have fully understood the section you are reading now.
- e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

3.0 MAIN CONTENTS

3.1 The Phonotactics of English

Every language has it is own phonemic system and the possible ways the phonemes can come together to make meaningful units. Languages do not permit arbitrary combinations of phonemes if meaning is to be achieved. Thus, to make an acceptable unit, like the syllable, in a language, users of that language must recognise and use the correct phoneme order of the language. The study of all the possible combinations of the phonemes of a language in order to write an acceptable unit larger than the phoneme is called Phonotactics.

Our study of the Phonotactics of English will continue from the theoretical level that we established in Unit 1, and I shall largely rely on the discussions of Roach (2000: 70-92) and Gimson (1980: 237-254). Because the discussion of this unit is highly technical and therefore impossible to manufacture new examples, I shall present here a summary of the English Phonotactics discussed by Gimson (1980). Also, because of this technical nature, you are encouraged to read the detailed discussion of at least one of Roach or Gimson in the cited section of their books. There, you will come across many more details, which cannot come into this book; you will equally see a number of tables that present all the English phonemes with all the possible sequences, i.e. all the possible ways the English syllables can combine to make acceptable units.

Specifically, in Table 1 (p. 240), Gimson presents 23 consonants at the initialonset position that can combine with almost all the vowels including the diphthongs to form a CV syllable (one consonant initial onset and a peak). Only /3/ rarely occurs as an onset at the initial position; while / η / does not occur at all. Examples of such sequences are: 1-, s- and b as in: lie, see and boy. In Table 2 (pp. 242-243), he presents a sequence of 46 instances of the possible ways that two consonant onset (an initial cluster of CCV) can combine, and to make acceptable syllables with many English vowels. From the table 1 above, the following onset clusters, with a large number of vowels, are possible in English:

s +: l j w p t k m n f; p, b, f (each) +: l r j; t, d, θ (each) +: r j w; k, g (each) +: l r j w; m, n, l, v, h (each) +: j; \int +: r Examples of the above sequences of clusters at the onset position are: sl-, pl-, tr-, kl-, mj- and Jr- in: sla(p), pli(ght), try, clea(n), mew and shri(nk).

In the Table 3 (pp. 244) of his discussion, Gimson presents the entire possible syllables in English with a sequence of three consonant onsets (initial cluster of CCCV). In such English clusters, /s/ must be the first essential consonant or the pre-initial element of the onsets; next are the three voiceless plosives: /p t k/ to be followed by any of: /l r j w/. Examples of such syllable clusters are: sprit-, str- and skj- in the words such as: Spri(te), stri(ke) and skew. where: + : means: can form a sequence with one of

There are other acceptable sequences at the final position of a syllable in English. Such sequences are VC (peak+final consonant) e.g. a and 1 in all; VCC (peak+pre-final and final consonants, e.g. J and k as in sink. There are other acceptable sequences of longer clusters such as VCCC (peak+pre-final, final and post final consonants), e.g. e and kst in text; and even: VCCCC (peak+ pre-final, final and post final 1 and post final 2 consonants) as in e and ksts as in texts. You check for more discussion and examples in Gimson (1980: 241-252) and Roach (2000: 70-76).

3.2 English Syllable Division

In the foregone, you have been exposed to the various sequences of possible syllables in English, but we have not made any effort to state where and how an English word is divisible into syllables. This may look simple, but indeed, it is a difficult task not only for the users of English as a second language, but also for the native speakers even with the intuitive knowledge of his language. One very common example in the literature on English phonotactics is the word "asterisks". The argument goes that into what syllabic components should the word be divided, for instance of "asterisks"?

a ste risks; as te risks; ast e risks; ast er isks; and as ter isks are possible components

However, it has been advised that dividing a word into syllables is by no means arbitrary in English; certain guidelines have to be followed when you want to divide into syllables. One of such guidelines is what is referred to as the Maximum Onsets Principle (MOP). The principle, according to Roach (2000: 7778), states that:

where two syllables are to be divided, any consonants between them should be attached to the right-hand syllable, not to the last, as far as possible (p. 78).

This means that, where there are two syllable of an utterance, a word or short utterance, any or all the consonants that appear between the two syllabic peaks, i.e. the vowels, must be made the component element(s) of the peak/vowel that stands at the right hand of the syllable.

An example very commonly used in this discussion is the word "extra". This is a word of two syllables, which looks simple and ordinary; but difficulty arises if we make an attempt to divide it into two syllables. The argument goes, like for "asterisks", that how, for instance could "extra" [ekstra] be divided? Is it as: e.kstra, ek.stra, eks.tra, eks.tra or ekstra?

If you were to apply MOP, you have a division such as e.kstra or ek.stra. While the latter option is correct, the former is incorrect. This means that to recognise a syllable boundary some other principles are at work in conjunction with MOP. Some of these are:

- 1. the onset of a syllable must be permissible in English,
- 2. a division is sometimes created such that the strong vowel attracts the consonant,
- 3. two consonants between vowels can be split into two such that the left one serves as the coda of one syllable and the other, the onset of the other syllable.

More details, principles and examples can be accessed from Fudge (1984: 18-23) and Roach (2000: 77-78).

4.0 SELF-ASSESSMENT EXERCISES (SAE)

This unit can be concluded by asking you these questions:

- i. Define Phonotactics.
- ii. Give three examples to illustrate the Phonotactics of English.
- iii. Identify most of the possible combinations of the English Phonemes.
- iv. Using the maximum onsets principle, divide these words into their appropriate syllables: (a) asking (b) fellow and (c) teacher.

5.0 SUMMARY

5.1 In this unit, I have:

- Defined Phonotactics as the study of all the possible combinations of the phonemes of a language you can write an acceptable unit larger than the phoneme, .e.g. a syllable.
- Illustrated to you how to recognise the Phonotactics of English.
- Identify most of the possible combinations of the English Phonemes.
- Explained the maximum onsets principle.
- Mentioned other principles that may guide syllable boundary division.

6.0 TUTOR-MARKED ASSESSMENTS

Using three English words as examples discuss the Phonotactics of English and explain why care must be taken in syllabifying words.

7.0 REFERENCES/FURTHER READING

- Fudge, Erik. C. (1984). *English word-stress*. London: George Allen and Unwin. pp. 19 23.
- Gimson, A.C. 1980. An introduction to the pronunciation of English. London: ELBS & Edward Arnold. Chapter 9, pp. 237-254.

O'Connor, J. D. (1973). *Phonetics*. Harmondsworth: Penguin Books.

Roach, Peter. (2000). *English Phonetics and Phonology* (2nd Ed.). Cambridge: Cambridge University Press. Chapters 8 and 9, pp. 70-92.

UNIT 3 STRESS IN ENGLISH

CONTENT

This unit is concerned with the concept of stress marking and its importance to a language like English. It is discussed under the sub-topics below. The unit also discusses certain guidelines that often determine awards of stress marking called the English Stress Rules (ESR). Lastly, the unit will take you through the steps of English stress marking. All this is done under the following subheadings:

- 1.0 Introduction
- 2.0 Objectives
 - 3.0 Main Contents
 - 3.1 What Stress is
 - 3.2 The Importance of Stress to the English Language
 - 3.3 The English Stress Rules (ESR)
 - 3.4 English Stress Marking
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Teacher-Marked Assessments
- 7.0 References/Further Reading

1.0 INTRODUCTION

English language belongs to the Germanic species, one of whose characteristics is determining the meaning of a word or utterance by the syllable that carries the stress or what is sometimes called prominence, which some people again refer to as accent. It is the desire of this unit to present a theoretical background to the discussion of the stress in English, introduce you to some stress rules in English and actually attempt the stress marking of English words and sentences.

2.0 **OBJECTIVES**

At the end of this unit, you will be able to explain:

- what stress is and mention a few experts in the field of stress in English language;
- diacritics to mark stress and the importance of stress to English;
- some common English Stress Rules (ESR);
- manners you will award stress marks on English words and sentences.

HOW TO STUDY THE UNIT

- a. Read this unit as diligently as possible.
- b. Find meaning of unfamiliar words in the unit using your dictionary.
- c. As you read, put major points down in a piece of paper or jotter.
- d. Do not go to the next section until you have fully understood the section you are reading now.
- e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

3.0 MAIN CONTENTS

3.1 What Stress Is

Various definitions have been offered for the word "stress" as a linguistic feature. What is not included in them is that "stress" in this sense does not cover the psycho-medical relations. As a linguistic feature, it concerns the prominence given a syllable of an utterance relative to the other syllables in the utterance. This prominence may be marked by higher intensity (loudness), increased fundamental frequency (pitch) length, etc. occasioned by some organs of speech. Specifically, let me present to you a few definitions or qualifications of stress from some experts in the study. Christophersen (1956: 153) says:

...a certain syllable...uttered with great energy...air is ejected from the lungs with more effort and the other speech organs perform their actions with more vigour...the total effect is that the stressed syllable seems louder than the others.

Erick Fudge (1984: 1), one of the regarded experts in the matter of stress in English language writes in his book: *English word-stress* that:

Stress means essentially that one phonological element is singled out within another, longer, phonological element. *Sentence-stress* involves the picking out of one word or phrase within the *sentence*; this word or phrase is usually given special emphasis of some kind in pronunciation.

Knowles (1990: 96), while referring to stress as accent, offers that:

Accent refers to prominence given to a syllable by means of a change of pitch....concentrates on the increased physical effort which is needed to emphasize a syllable, and the resulting peak of loudness which is perceived as a rhythmical 'beat'... we can assume that accented syllables are accompanied by an increase of loudness.

And Jolayemi (2006: 97-98), giving a working definition, says stress is:

the exertion or force occasioned by the larynx, the vocal folds and other speech organs culminating into prominence on a specific syllable among other contiguous ones (if more than one).

From the above, you can clearly adduce, define and explain the concept of stress. But additional information to know of the English stress is that three levels of stress are recognised. The first is often called the main or primary stress, which is the highest of the three or the most prominent and the one we often request in phonological considerations. It is often marked by a short upper vertical line as diacritic represented as 3 The second level is the secondary stress, which is less in prominence; marked by a short low vertical line represented as 3 The third level is called the tertiary stress, which is the least in prominence. Because of its little recognition, it is often not marked or at best be represented by a little make close to the full stop.

Also you have to know that, generally speaking, a moderate English word of four syllables has its syllables named as, initial, antepenultimate, penultimate and final. Let me exemplify with "allowances" of four syllables: <u>a.llow.an</u>.ces / /a'lav.ənt sız/

where: $/\partial/$ = initial syllable; /la U/ = antepenultimate syllable; $/\partial n/$ = penultimate syllable; and /t siz/ = final syllable. Your knowledge of this is very important as we shall often refer these terms in this discussion where we shall mention the words or syllables to be given prominence among other contiguous words in a sentence or syllables in a word.

3.1.2 Importance of Stress To English

Let us consider these data from Jolayemi (2008: 109)

Deere		Tama	English	Tama	English
Respon.		Tone	English	Tone	English
		Type 1		Type 2	
Ebira i.		ùrùvú	frog	uruvu	intestine
	ii.	ir esú	head	ìrệsù	raining
					season
Edo	i.	ìsẹ	amen	ísẹ	musical
					instrument
	ii.	ádá	sword	àdà	road
					junction
Igala	i.	ojí	thief	òjì	head
	ii.	ogÓ	gutter	ògo	swing
Nupe	i.	ba	cut	bà	count
	ii.	egó	grasses	ègo	worm

 Table 1:
 Examples of Meaning Distinction Through Tone Types

The information we can deduce from the above Table is to the effect that the diacritics of High, Mid and Low (´, not usually

marked and ') determine, to a large extent, the meaning of utterances that are homograph and we are able to distinguish one meaning from the other through them. Therefore, for languages like Ebira, Edo, Igala and Nupe, tone markers are a highly essential semantic property. A similar argument can as well be made of English, but this time, of the importance of stress marking to meaning in the language.

To the native speakers, stress marks an important element in the communicative competence expected of any user. Acquired naturally by an English child, little attention is often paid to its use. It is his intuitive knowledge of stress marking that enables him to immediately distinguish between "import" as a noun and "import" as verb.

But to a learner of English as a second language, conscious efforts are made to learn stress as he learns the other elements of the language. To him, he encounters difficulty at three different levels: the complexities of the concept of stress, which to a large extent, is encountered by the native speakers also; stress competence manifests at spoken English level only (except when trying to transcribe); and lastly, there is no existence of such a feature in his linguistic repertoire. Yet, he is expected to show a measure of competence in his daily use of spoken English! If he does not, he will be missing an important communicative skill in English and his speech may not be adequately intelligible nor acceptable. He may sound like someone who, in Edo language, says: isp (with High-Low tones), meaning amen when he actually wants to say ise (Low - Mid tones), which is a musical instrument.

3.3 The English Stress Rules (ESR)

In English, certain rules are applicable to assist in the determination of what syllable of a word is to be stressed, these rules help, to a large extent, the predictability of the occurrences of stress markings in English. Although a few traditional phonologists have argued the difficulties of configuring rules of stress marking, modern phonologists have since proved that it is indeed possible to have rules of stress marking. This has being the engagements of the generative phonologists such as Chomsky & Halle (1968), Autosegmental phonologists like Goldsmith (1976, 1995) and metrical phonologists such as Liberman & Prince (1976), Hogg & McCully (1987), Jolayemi (2001) and Jolayemi (2006). It is from their perspectives that I will introduce to you a few ESR that can assist you in predicting the stressed syllable. A few general guidelines from the classical/traditional phonologists such as: Fudge (1984),

Gimson (1990) and Roach (2000) on predicting stress occurrences will also be beneficial in this exercise.

As already indicated above, stress marking has been one discussion confronting and engaging the attention of phonologists, traditional and generative alike. The working guidelines and formalised rules in stress marking of these theorists shall be summarised in this unit. It is hoped that the summary will give you a gist of what you need while marking out a stressed syllable in English.

From the previous module on the study of the English Phonotactics and syllable, specifically, in Unit 3 of Module 6, you have been introduced to the strength of English syllables; it is from here that I shall take off:

- i. Unless otherwise stated, only strong syllables can be stressed in an English word eg.: a.pply /ə`plɑɪ/, /ə/ is not stressed as it is a weak syllable, but /plɑɪ/ is stressed because it is a strong syllable. So that you have a pply and not apply. This often referred to as the Main Stress Rule (MSR).
- ii. A weak syllable can only be stressed when the previous one or two syllables cannot be stressed.
- iii. All the theories of phonology agree that words that may attract a primary stress are in the categories of noun, adjective, verb and adverb.
- iv. The generative phonologists advise that when a syllable is stressed, all the other syllables in the word must be distressed or weakened (Chomsky & Halle, 1968).
- v. The metrical phonologists state that the final syllable of a noun or adjective is "extrametrical", so should be ignored when you want to apply ESR.
- vi. They also say that application of ESR should start at the extreme right
- vii. The metrical phonologists also state that stress marking, or the application of ESR must start from the extreme right.
- viii. Generally speaking most nouns and adjectives tend to have stress towards the initial position because as the metrical phonologists have stated, the last syllable is "extrametrical" meaning it should be discountenanced before the application of ESR. So do not stress the final syllable of words in these categories (Hogg and McCully, 1987).
 - ix. For words in the categories of verbs and adverbs, the rule states that the final syllable is often stressed, if and only if it is not a weak syllable or a syllable ending in the diphthong /əʊ/ (Roach, 2000: 98).
 - x. Certain affixes are stress "repellents" i.e. they push stress away from themselves by one or two syllables, eg.; some are "stress attractors" i.e. they attract stress towards themselves; Examples are some are -ion, -ity;

while some are stress retainers i.e. they pull stress right on themselves. (Jolayemi, 2006).

xi. Most prefixes do not influence stress marking. Eg. imŒSortant and unimportant; un- the negative marker has no influence on the stress position.

Most of the ESR given above are applicable to isolated words only or operated at the word level. So, most of them are called Lexical Stress Rules (LSR).

- xii. There is a rule that predicts stress occurrence in compound words only; this is called the Compound Stress Rule (CSR). It states that in the occurrence of a compound word, the first word of the compound word receives the primary stress.
- xiii. The last of the ESR borders on longer utterances than the single words or compound words; it concerns a group of words that makes a phrase. The ESR often used to determine stress placement is called Nuclear Stress Rule (NSR); and states that in group of words that form a phrase, place the primary stress on the final word of the phrase, if and only if it is in the categories of noun, adjective, verb and adverb, if not, place it on the word that satisfies this condition before the final word.

This is just a summary of ESR; details can be sought from the reference and further reading list.

3.4 English Stress Marking

Word and sentence level stress placement is the concern of this section, which is done under the sub-heading below.

- 3.4.1 Word-Level Stress Marking
- 3.4.2 Compound Stress Marking
- 3.4.3 Phrase/Sentence Stress Marking

3.4.1 Word-Level Stress Marking

Congratulations, you are completing a very crucial part of a course in phonology, a very important one for that matter, with a very stressful section: Stress Marking. I have so far explained to you some of the general rules that can assist in predicting the syllables that we can award the primary stress in English words and utterances. The objective of this Section, therefore, is the application of these rules in the placement of the primary stress on the acceptable syllables of words and utterances in English language using the generative and metrical theories.

Let us consider this group of English words from Chomsky & Halle (1968: 80) and Jolayemi (2006:52):

Noun	Adjective	Verb
A'merica	'manifest	main 'tain
'cinema	'Shallow	e'lect
ho 'rizon	'fran tic	de'termine

Under the noun category, we cannot place the stress on the final syllables of America and cinema because our rule says they are extrametrical, meaning we will ignore them before we apply the appropriate rule. We neither stress the penultimate, because they are weak syllables. This is what accounts for the initial stress pattern that we have observed for the two words under noun and the three adjectives. However, horizon defers this pattern by taken a penultimate stress marking instead of the final like the others. The reason is simple, and that is: we cannot skip the penultimate syllable /rai/ like we did for the rest because it is a strong syllable. This why we have the pattern ho'rizon and not 'horizon.

On the verb category, you will notice that we accurately stressed the last syllable of maintain, because it is made of a strong syllable of a diphthong, tain /teIn/. This is also applicable to elect, stressed as e'lect, because the last syllable, /lekt/, is strong. You still remember that a short vowel sound makes a strong syllable if two consonants serve as its coda (Module 6, Unit 3.2 above). But determine, the third word in the verb category, does not obey this pattern because its final syllable, /mIn/, is weak, hence we have to transfer the stress to the next available strong syllable. Thus, we have the final output of determine with /ta:/, a strong syllable being the recipient syllable.

If you follow and work through these practical examples given above, you will be able to use stress in English correctly, especially at word level.

3.4.2 Compound Stress Marking

Remember that a compound word is often made up of two independent words, which are written separately (pen knife), written with a hyphen separating them (pen-knife) or in neither of these ways (penknife). In many cases, the first word of a compound often attracts the main stress. You will notice that this is what our formulated rule xi in Unit 2 of this Module states. Thus, let's

use the compound word very common in the literature: blackboard. This word is in the noun category, which means a flat wide wooden slate painted black that is often placed at the front of a class for teachers to write on. So, it has the stress on black as in 'blackboard. Other examples are 'headmaster, 'word -stress, 'football, ' stress -shift. Stress marking may not be as straight forward as it seems here, as complication may arise when use as a phrase or within a phrase as it will be clear in the next sub-unit below.

3.4.3 Sentence Stress Marking

Let me make it clear from the outset that, by sentence, we mean anything above the word or the compound; therefore, we include here the phrase, short as it may be. Let me exemplify with "blackboard" and "black board" in these two sentences:

- i. The teacher needs the blackboard to write the summary of his lecture.
- ii. The teacher needs the black board to construct the stage for that scene.

In i. we mean a classroom material for teaching; in ii. We mean a board that happens to be black in colour for stage construction; it may necessarily be a board that is brown, green or white. Therefore, "black" in i. is an essential component of the classroom material, so the compound word is given the Compound Stress treatment (CSR) as blackboard. But "black" in ii is a mere adjective to describe the particular colour of the board that the teacher needs for the stage. It is therefore a phrase, an adjectival phrase, which essentially, must attract the Nuclear Stress Rule (NSR) stress marking giving black board.

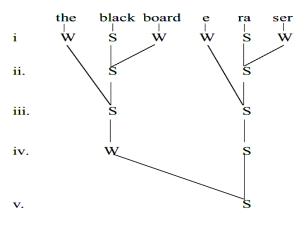
Let's take another near similar phrase: the blackboard eraser. Here, we must apply a complex of ESR to be able to correctly mark the stress. It will be helpful if we do this exercise one step after the other:

- Step 1: decide if the above is a word, compound or phrase to know what rule or rules to apply. In this case, we know it is a phrase.
- Step 2: what does the phrase rule state? Stress the word at the extreme right hand of the phrase. In this case: eraser.
- Step 3: But you will notice that "eraser" has three syllables! So, we actually have multiple difficult tasks on our hands; namely (a) how do we decide where to break erase into three syllables: e.ra.ser, er.a.ser or <u>er.as.er</u>? (b) which of the three takes the stress diacritic [e.], [ra], [as] or [er]? If you remember your maximum onsets principle (Module 7, Unit 2, Section 3.2 above), then, e raser, will be correct.

-		ord from the right is blackboard, which we know is a word and so takes stress mark at the initial position ekboard.				
Step 5:	the last word at the extreme left is the; which, although may receive a main stress if it stands alone, but which does not fall into the category of words to be stressed in a phrase.					
The phrase in question can be analysed in the following ways:						
Classical Theory:		the blackboard e raser 6 4 5 3 1 2				
Generative Theory: least stressed).		the blackboard eraser (1is most stressed; 6				
Metrical Theory:		the blackboard eraser				
Autosegmental Theory:		the blackboard eraser				
		- ++-				
		(- = no stress; + = stress)				

For the benefit of those who will study phonology at the Postgraduate level, let me further explain how the metrical phonologists arrive at the stress pattern indicated above with

what is called the arboreal diagram, using Jolayemi's (2006: 105) Straight Tree System (STS):



This is the arboreal analysis of the phrase in the metrical phonology theory.

- indicates the syllabic weight at the syllable level i.
- indicates the syllabic weight at the word level ii.
- indicates the syllabic weight at the class level: the 'blackboard (nominal iii. adjective) and e raser (noun, head)
- indicates the syllabic weight at the phrase level (between "the iv. 'blackboard" and "e'raser")
- gives the ultimate prominence in the phrase to "e'raser". v.

4.0 SELF-ASSESMENT EXERCISES I

- i. What class of words normally receive the stress marking?
- ii. By what diacritic can mark stress?
- iii. From what direction do you start to apply ESR?
- iv. What do you understand by extrametricallity?

SELF-ASSESSMENT EXERCISES II

- i. Why does 'import (Nn) has a different stress
- ii. pattern from im`port?
- iii. Put the stress diacritic on the right syllable of the following words:
- iv. Housemaster, among, stable, concentrate, congratulations.
- v. Put the stress diacritic on the right syllable of the following sentences:
 - a. This is my driver.
 - b. That answer is wrong.
 - c. Shut the windows and lock the door.

Note: As I have said at the beginning of this course, you must possess a good pronouncing dictionary, which you can now use to check if some of your answers to these questions are right.

5.0 SUMMARY

This unit has explained:

- what stress is;
- the diacritics to mark stress;
- the importance of stress to English Language; and
- mentioned a few experts in the field of stress in English language

Also in this unit, I explained to you some common English Stress Rules (ESR). I also explained to you the steps you can take to be able to award the stress mark with emphasis on the application of ESR in the placement of the primary stress on the acceptable syllables of words and utterances in English language using the generative and metrical theories. I have also practically demonstrated, in the unit, how you can achieve this with "the blackboard eraser" as an illustration.

6.0 TEACHER-MARKED ASSESSMENTS

Certain suffices participate in stress marking while some are unconcerned; with 2 examples each, discuss.

i. Put the stress diacritic on the right syllable of the following sentences:

- a. This is my driver.
- b. That answer is wrong.
- c. Shut the windows and lock the door.

7.0 REFERENCES AND READING LIST

- Chomsky, Noam & Halle, Morris. (1968). *The sound Pattern of English*. New York: Harper & Row, Publishers.
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UNIT 4 ENGLISH INTONATION I

CONTENTS

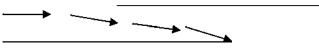
Another main reason for the "musical" tune typical of the English language is the intonation features of the language. Intonation is defined as the rise and fall of the pitch of an utterance (Jolayemi, 1999: 82). It is also described as voice modulation; when you have your voice high or low. Gimson, (1980: 264) describes intonation as "variation of pitch". How this comes about is the issue to be explained in this unit and the next. Its main linguistic significance is the exhibition of non-phonemic gestures or information that often accompanies the spoken words. This may be for the purpose of showing surprise, agree/disagreement in subtle ways, command, etc. Please, note that what I will discuss here is intonation in the sense of its functional use. For a detailed and advanced discussion of intonation, its complexity and pedagogy, refer to an author like Roach (2000), who dedicates five chapters (Chapters 15-20) to this endeavour. You will find it on pages 156-203 of the 2005 Reprint. There, you will also have the opportunity to hear and practise the concept from guided tape-recorded conversations of native speakers of English if you are able to secure the tape, which I strongly advise, you should access.

Three main types of intonation pattern, which are often referred to as tunes, are usually identified, namely: Tune I, Tune II and the Polar Tune. The first of them, Tune I, is the concern of this unit, which is discussed under the sub-headings below.

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Contents
 - 3.1 Complete Statements
 - 3.2 Emphatic Statements
 - 3.3 Commands
 - 3.4 Wh- Questions
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Teacher-Marked Assessments
- 7.0 References/Further Reading

1.0 INTRODUCTION

It is usually said of English that the language sounds musical. One way this is achieved is the lowering of the pitch towards the end of an utterance from a high level at the beginning of the utterance. This is what is popularly referred to as Tune I. Let me practically illustrate the flow of the Tune with these gradient arrows:



What the diagram explains is that the pitch produced by the utterance, which starts on a high level, gradually descends at the end of the utterance. Therefore, a black thick downward arrow is used to represent the tune: to indicate that the utterance starts at a somewhat high and ends up somewhat low level.

2.0 OBJECTIVES

At the end of this unit, you will be able to:

- identify what Tune I is;
- explain when it usually occurs in connected English speech; and
- Give examples of utterances that are rendered in Tune I.

HOW TO STUDY THE UNIT

- a. Read this unit as diligently as possible.
- b. Find meaning of unfamiliar words in the unit using your dictionary.
- c. As you read, put major points down in a piece of paper or jotter.
- d. Do not go to the next section until you have fully understood the section you are reading now.
- e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

3.0 MAIN CONTENTS

Occasions when Tune I is implored, are discussed below. A few utterances to illustrate each of the occasions also spice up this section of the unit.

3.1 Complete Statements or Listing

When complete statements, especially of short duration are made, the Tune I is implored. Also when listing items more than two, you can use this tune. Examples are:

i. Let's go home.

- ii. That's good for you.
- iii. The lecture starts right away.
- iv. You may call me Mr Thompson.
- v. I need a biro, a pencil and a book rap paper.
- vi. Buy a spoon, a knife and a set of teacup.

You will notice that our example in ii. above generates the tune flow typical of the diagram illustrated in Unit 4.1.0 as shown below:

That's good for you

implicating that "That" is higher than "good", which is higher than "for" that is higher than "you". This can also be simply written as: That's good for you .

3.2 Emphatic Statements

When you want to lay particular emphasis on certain utterances you want to make in order to convey some special message, you often use Tune I. this is a speech act that we make very regularly. Examples are:

- i. I do not hate you.
- ii. Rivers flow downhill.
- iii. That's not it.
- iv. Corruption won't help there.

Note that almost any statement can be rendered emphatically; it all depends on the arrangement of the flow of the pitch.

3.3 Commands

We often perform the speech act of command very regularly in daily interaction with friends, siblings and school-mates, whether we mean it as a joke or a fact. Whenever we perform this act, we often implore Tune I. Examples of such perfomative acts of command are:

- i. Get out now.
- ii. Stop shouting.

- iii. Keep moving there.
- iv. Drop that book now.

3.4 Wh- Questions

Tune I is often the right tune to use when you ask questions from people which starts with wh-. Such question-words we have in mind are: what, where, when, which, who and why. Remember that each time you ask a wh- question, the utterance should start of as high while it should end up as low. Instances of such utterances where you can implore this tune are:

- i. What is your name?
- ii. Where are you going?
- iii. When will you arrive?
- iv. Which way do we turn?
- v. Who is your right man?
- vi. Why are you so cruel?

4.0 SELF-ASSESSEMENT EXERCISES (SAE)

- i. Define intonation in relation to English language.
- ii. Into what speech type of Tune I will you classify each of the following?
- iii. What made you late?
- iv. Drop that baby now.
- v. That's the right one.
- vi. Smile as you eat.

5.0 SUMMARY

In this unit, I have:

- defined and explained the concept of intonation in English language
- identified for you what Tune I is.
- explained to you when Tune I usually occurs in connected English speech.
- given many examples to illustrate various types of utterances that are rendered in Tune I.

6.0 TEACHER-MARKED ASSESSMENTS

With the aid of four diagrammed illustrations, explain what you understand by Tune I using examples from English.

7.0 REFERENCES/FURTHER READING

Chomsky, Noam & Halle, Morris. (1968). *The Sound Pattern of English*. New York: Harper & Row, Publishers.

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UNIT 5 ENGLISH INTONATION II

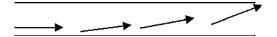
CONTENT

Welcome to the last unit of this course book. Here, I will discuss Tune II, which is the direct opposite of Tune I. I will also discuss the Polar Tune, which you may also call Tune III because it combines the futures in Tunes I and II. This you will find done under the following sub-headings.

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Contents
 - 3.1 Yes or no or Polar Questions
 - 3.2 Non Wh- Questions and Non Yes or No Questions
 - 3.3 Incomplete Statements or Listing
 - 3.4 Question Tags
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Teacher-Marked Assessments
- 7.0 References/Further Reading

1.0 INTRODUCTION

This is the tune used by native speakers of English in a way that the voice pitch starts on a somewhat low level at the beginning of an utterance but rises towards the end of the utterance. I have earlier described it as the opposite of Tune I. Let me illustrate this with the reversed version of the diagram in Unit 4 of this module.



You may also identify the tune by simply denoting the rising tune with a black upward arrow such as at the end of the utterance. This tune can be implored when you want to make utterances that involve:

- i. Yes or no or Polar Questions
- ii. Non Wh- Questions and Non Yes or No Questions
- iii. Incomplete Statements or Listing
- iv. Question Tags

Each of these shall be discussed shortly.

2.0 OBJECTIVES

By the end of this unit, you will able to:

- identify what Tune II is;
- recognise Tag or Tune III;
- explain when they usually occur in connected English speec; and
- give examples of utterances that are rendered in Tunes.

HOW TO STUDY THE UNIT

- a. Read this unit as diligently as possible.
- b. Find meaning of unfamiliar words in the unit using your dictionary.
- c. As you read, put major points down in a piece of paper or jotter.
- d. Do not go to the next section until you have fully understood the section you are reading now.
- e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

3.0 MAIN CONTENTS

3.1 Yes or No or Polar Questions

During an interlocution (discussion) in English, you often ask questions that require "yes" or "no" answers. These types of questions are also known as polar questions. Such questions, essentially, require you to use Tune II. This is because the native speakers will start the questions on a low pitch and end it on a high pitch; and you are expected to do the same. Examples of such polar questions are:

- i. Are you ready now?
- ii. Will you help me?
- iii. May we meet tomorrow?
- iv. Is she okay?

3.2 Non Wh- Questions and Non Yes or No Questions

Anytime you want to make utterances that involve questions that do not start with wh-, just like those you have in 3.1, Tune II is your choice. If you also want to ask questions whose answers will not require "yes" or "no", Tune II is what you need. These are many of the speech acts that you perform on a daily basis. Take these examples as illustrations:

- i. Thank him for what?
- ii. Will you describe the thief you saw?
- iii. How shall I write the letter?
- iv. How will he start all over?

3.3 Incomplete Statements or Listing or Questions

Tune II is mostly implored when you make an incomplete statement; that is, because of some reasons, you do not complete the utterance you are making. Put in another way the speech act is hanging. Similarly, Tune II is used when you make an incomplete list of several items; that is, you hang up without completing listing of the items. Also, the same phenomenon manifests when you do not complete a question you want to ask. The examples below will concretise my explanation.

The campus is deserted but... Must she and... He needs a nail, a hammer,... One, two, three, four,... Are you aware of...? Shouldn't you alone do the...?

3.4 Question Tags or Tune III

One typical interactive native use of English in conversations is the deployment of short questions after a complete statement. These complementary questions are called tags or question tags; which serve as a means to confirm, agree, disagree or emphasise the statement made earlier. Using such tags requires a mixture of Tunes I and II. It is done in such a way that the first part of the utterance, which is a complete statement, starts on high-level pitch but ends up a low-pitch, typical of Tune I utterances. As soon as this ends, the question tag, seeking additional information and most of which are polar and non wh-, begins on a low and ends up on a rising pitch, a feature of Tune II. It is because of this distinct pitch variation, which combines the linguistic features of Tune I and Tune II that the pitch formation of the statement and its question tag is given the term Tune III. Like I did for Tunes I and II, let me diagrammatically represent below what I have explained to you on Tune III above. At the same time, I shall illustrate with a typical utterance, noting that the second syllable of the question tag is a phonetic rendition of a native speaker.

You don't love me. Do oo you?

Also, a curly arrow that descends (Tune I) and then ascends

(Tune II) may such as this simply be placed at the end of an utterance to indicate that it has the Tune III features. Thus, the example above can equally be analysed as:

You don't love me, do you?

A few more examples that you can use to practise are given below:

- i. You are not an undergraduate, are you?
- ii. Give me the blackboard eraser, won't you?
- iii. Oceans don't dry, do they?
- iv. This course has come to an end, hasn't it?
- v. You like phonology of English, don't you?

4.0 SELF-ASSESSMENT EXERCISES (SAE)

- i. With the aid of four utterances, demonstrate your knowledge of Tune II.
- ii. Into what speech acts in Tune II will you categorise the following utterances:
 - a. Come along with your pair of bats, net and
 - b. Do you understand?
 - c. Cash has no enemy, does it?

5.0 SUMMARY

In this unit, I have:

- identified what Tune II is,
- expatiated Tag or Tune III,
- explained when these tunes usually occur in connected English speech,
- diagrammatically captured Tunes II and III and
- given examples of utterances that are rendered in the tunes.

6.0 TUTOR-MARKED ASSESSMENTS

- 1. With the aid of four utterances, demonstrate your knowledge of Tune II.
- 2. Into what speech acts in Tune II will you categorise the following utterances:
 - a. Come along with your pair of bats, net and...
 - b. Do you understand?
 - c. Cash has no enemy, does it?
- 3. Tune I + Tune II = Tune III. Discuss.

7.0 REFERENCES/FURTHER READING

Chomsky, Noam & Halle, Morris. (1968). *The Sound pattern of English*. New York: Harper & Row, Publishers. Christophersen, Paul. (1956). *An English phonetics course*. London: Longman.

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