Features of the Syllable (1) : The Main Features of Word and Sentence Stress in Native Spoken English and How They May Be Taught to Varying Levels of Foreign Learners

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Introduction

Stress may be categorised under the general heading of 'Prosodic Features of Speech', defined by Abercrombie (1965: 41) as "features of the syllable". Its influences and effects on the grammatical forms and meanings of words uttered both in isolation and in sentences in native spoken English are far-reaching. However, the teaching and practice of syllable and sentence stress is, unfortunately, often neglected during pronunciation instruction in the EFL classroom. This paper has been divided into three parts :

Part 1: A basic description of the main features of syllable stress in isolated words as observed in native spoken English.

Part 2: A basic description of the main features of sentence stress and rhythm in native spoken English.

Part 3: Some suggestions as to how these features may be of use to

teachers when faced with presenting and practising them to foreign learners and their effects on such learners' comprehension and comprehensibility of spoken English.

For the purposes of this paper, "native spoken English" will refer to "Standard Southern Spoken British English". Many of the examples given in these pages may not apply to other varieties of native spoken English, e.g. American English. It should also be noted that due to the irregularity and unpredictability of syllable and sentence stress, the examples outlined should only be regarded as guidelines for the foreign learner and not strict rules. The shapes of these features in an utterance largely stem from the habits of the individual speaker, the listener's interpretation and pre-conceived ideas on the parts of both. Therefore, a certain amount of subjectivity is involved.

1. Stressed Syllables in Words and Sentences

1.1 Introduction : What is a Syllable?

In order to fully understand the nature of syllable stress in individual words or in the context of a sentence, one must first look at how syllables themselves are physically generated by the human body in speech. Abercrombie (1965: 16-17, 1967: 35) defines a syllable as (being produced by) "a movement of the organs associated with speech" as opposed to "a characteristic of the sound of speech". The muscles of these organs contract and relax (at approximately five times per second), producing a pulse-like flow of air from the lungs. Each contraction and consecutive relaxation,

resulting in the expulsion of a puff of air, can be called a 'chest-pulse', which in speech largely corresponds to a single perceived syllable. This system of chest-pulses/syllables forms the basis of human speech.

1.2 Stressed Syllables

Abercrombie goes on to state that throughout the normal production of speech ("speech" defined as "modified breathing") extra-forceful contractions and relaxations of the organs produce "reinforced chest-pulses" which are more prominent than their preceding and succeeding ones. These are referred to as "stress-pulses". Given that a 'chest-pulse' may constitute a syllable, we may define a 'stress-pulse' as a 'stressed syllable' of which there is at least one in any multisyllabic word. The syllable process (see 1.1) and the stress process (described here) combined make up the **Pulmonic Mechanism** - the basis on which the whole of speech is built. (Abercrombie (1965: 17, 1967: 35), Rivers/Temperley (1978: 10), Abbot/ Wingard (1987: 42), Scope 3 (1978: 97).

1.3 'Stressed' vs. 'Unstressed' Syllables

If syllables created as a result of a 'reinforced chest-pulse' are to be referred to as 'stressed' syllables, are all other syllables to be defined as 'unstressed'? A syllable exists as a result of a contraction and relaxation of the organs associated with speech. This suggests that there is an element of stress on **every** syllable in speech. Granted, it would be a substantially reduced amount compared to that of a 'stressed' syllable, but for a syllable to be

truly unstressed it would have to involve no movement of the organs at all, in which case the syllable would be non-existent. We can therefore conclude that **all** syllables carry an element of stress and that there is no such thing as an 'unstressed syllable'.

In light of this, the 'black and white' distinction of so-called 'stressed' and 'unstressed' syllables appears inadequate, and so from here on, the terms 'heavily/strongly stressed' and 'lightly/weakly stressed' shall be used, instead of 'stressed' and 'unstressed' respectively.[1]

1.4 Levels of Stress within Individual Words

When considering words spoken in isolation (as opposed to part of a sentence) varying levels of stress in English can be detected. Particularly in the cases of words of three, four or more syllables, up to **three** levels of stress may be present. These levels may be termed as 'primary' (or 'main') 'secondary' and 'tertiary' stress, classifications used by Kenworthy (1987: 61-62)[2]. Consider the following examples:

[1] Not to be confused with syllable stress is the phenomenon of **prominence** within the articulation of a syllable, which can be displayed in various ways through its length and amplitude (see also 1.4, footnote 3).

[2] Throughout this paper these three degrees of syllable stress within a word will be referred to. However, some authors recognise four.

Key	Examples
① = primary stress ② = secondary stress ③ = tertiary stress	② ③① lemonade ① ③ ② multiply ①③② operate[3] ② ③ ① ③ explanation ② ③③① ③ magnification

fig.1 : Examples of multisyllabic words in English featuring primary, secondary and tertiary syllable stress.

From this, patterns can be observed :

1. **Primary stress** refers to the most heavily-stressed syllable of the word and involves fully-pronounced vowels.
2. **Secondary stress** is not as intense as primary stress but falls on other syllables within the word requiring full vowel pronunciation.
3. **Tertiary stress** falls on the most-weakly stressed syllables, often causing the vowel to be reduced to a 'schwa' /ə/.

1.5 Stress Patterns within Individual Words ('Word-Stress' Patterns)

At first glance of the examples in fig. 1 it would seem that word-stress in English is almost entirely random. There are, however, some reasonably fixed patterns that can be seen to determine the placement of strong and weak stress within words. For example (**Key:** ① = main/primary stressed

[3] The secondary stress designated to the final syllable '-ate' of 'operate' and '-ply' of 'multiply' is arguably articulated to this degree as a result of its **length** (and therefore a case of **prominence** - see footnote 1) rather than secondary syllable stress as shown in fig.1.

syllable) :

1. Many common **nouns** and **adjectives** carry primary/main stress on the **first syllable,** e.g. '①water', '①table'.
2. **Prefixes** are weakly stressed, e.g. '(in-) in①vite', '(con-) con①clude'.
3. **Suffixes** are weakly stressed, many causing the main stress to fall on the syllable before the suffix, e.g. '(-ity) oppor①tunity', '(-ious) in①fectious'.
4. **Compound words** (formed by combining noun + noun, noun + adjective, verb + preposition, etc.): **established** and **fossilised** compound words carry main stress on the first syllable, e.g. '①teapot', '①hotdog'. **Less-established** compound words often have two heavily (though arguably still definable as primary and secondary) stressed syllables, e.g. '①life①jacket', '①black①board'.
5. Some words feature the same spelling but take on different grammatical categorisations and different meanings depending on the syllable on which the main stress is placed. In some cases: **nouns** are stressed on the **first** syllable but **verbs** and **adjectives** are stressed on the **second** syllable, e.g. '①content' (noun), 'con①tent' (verb/adjective). Some are even phonemically different, e.g. '①record' /re/ (noun) and 're①cord' /rɪ/ (verb).

It should be noted that many examples of words in English contradict the above patterns. Therefore, they should not be regarded as specific rules but merely as a focal point for this study. Further examples and exceptions to each of the above patterns can be seen in **fig. 2.**

With regard to the information in fig. 2 on pages 8-9, it is worth noting that:

1. Some of the 'rules' in the table 'cross-over', i.e. more than one rule can be

used to explain which syllable carries the main/primary stress in certain words. For example :

(i.) 'Im①possible' and 'de①licious' are reasonably common adjectives and exceptions to pattern 1 but their stress patterns can also be defined by patterns 2 ('impossible' has the prefix '-im') and 3 ('delicious' has the suffix '-ious') so cannot carry main stress on their first syllable.

(ii.) '①Increase' and '①export' both have main-stressed prefixes and so contradict pattern 2, but their stress patterns can be explained by pattern 5.

(iii.) Main stress on the word '①radio' is determined by the suffix '-io' - see pattern 3.

(iv.) '①Newspaper' is an established compound word and so carries main stress on the first syllable - see pattern 4.1. However, both 'newspaper' and 'radio' can be classed as common nouns and so pattern 1 can apply.

2. Some **historical rules** can be used to explain the stress patterns of the examples in fig. 2, For example:

(i) **The Anti-Penale Rule:** The third syllable from the end of the word carries the main stress. This rule can be seen to apply to words with certain suffixes, for example '(-ity) oppor①tunity' and '(-ble) im①possible'.

(ii) Other suffixes are arguably already fossilised and so should not be regarded as 'genuine' suffixes, e.g. '(-io) radio'.

It can be argued that historical rules should be avoided, as they mainly

Fig. 2: Table of Patterns, Examples and Exceptions of English Word Stress

	Patterns	Examples		Exceptions	
1.	Many **common nouns** and **adjectives** carry main / primary stress on the **first** syllable.	**Nouns** ① water ① woman ① table ① colour ① money ① father	**Adjectives** ① ugly ① English (n./adj.) ① handsome ① happy ① stupid ① pretty	**Nouns** ① moustache ① tomorrow ① cigar ① banana ① potato	**Adjectives** ① impossible ① delicious (for other examples, see also **3. Suffixes**)
2.	**Prefixes are weakly stressed.** These words mostly carry main stress on their 2nd or 3rd syllables.	**2nd Syllable** (be-) ① begin (in-) ① invite (con-) ① conclude (dis-) ① distract	**3rd Syllable** (un-) ① understand	(in-) ① increase (noun) (ex-) ① export (noun) (see also **5. Nouns**)	
3.	**Suffixes are weakly stressed.** (But many suffixes cause the main stress to fall on the syllable before the suffix.)	(-ical) ① economical (-ity) ① opportunity (-ious) ① infectious (-ic) ① geographic (-io) ① radio (-ify) ① identify		**(i)** (-esque) ① picturesque, ① grotesque (the suffix carries main stress) **(ii)** (-ive) ① administrative (-ient) ① ambient (-al) ① original (-ly) ① quietly (-ful) ① beautiful (the suffix does **not** cause main stress to shift to the syllable before the suffix) **(iii)** (-able) ① adaptable ① detestable ① excitable ① knowledgeable (the suffix does **not** affect main stress when added to a word) **(iv)** (-ary) ① vocabulary (-mony) ① alimony (-ory) ① category (some suffixes cause main stress to be placed on the 4th syllable from the end the word)	

	Patterns	Examples	Exceptions
4. 4.1	**Compound words:** **Established** and **fossilised** compound words carry main stress on the **first** syllable.	① teapot ①newspaper ①postman ① grandfather ①hotdog ①blackbird	**None found at time of writing**
4.2	**Less established** compound words often have **two** heavily stressed syllables.	① ① golddigger ① ①lifejacket	**None found at time of writing**
5.	Some words are spelt alike but take on different grammatical categorisations (and sometimes meanings) according to the syllable on which the main stress is placed.	**Nouns** / **Verbs** ① increase / ① increase ① export / ① export ① overflow / ① overflow **(Examples involving different meanings)** ① content / ① content **(verb/adj.)** ① refuse / ① refuse	**(Both noun and verb forms carry the same stress patterns)** ① answer ① return ① labour ① eclipse

Key: ① = **Main/Primary Stress**

Kenworthy (1987: 63-65), Abbott/Wingard (1987: 45), O'Connor (1973: 234), Scope 3 (1978: 97)

refer to earlier forms of English and so cannot be applied effectively to all cases of modern English. However, some 'rules' are persistent - for example, the tendency to stress the first syllable has existed in Germanic languages for over two thousand years and can also still be observed in English as the stress in the verb ① 'export' (noun) shows.

1.6 Other Examples of Vowels Reduced to 'Schwa' /ə/

'Schwa' is the weakest of all vowel forms in English and the one that occurs most frequently in speech - according to a study by B. B. Fry (Scope 2, 1971: 15) 'schwa' accounts for 10% of all vowel occurrences, the next most frequent being /ə/ (as in 'bed') at only 2.97%. 'Schwa' is never used in syllables carrying main/primary stress and in addition to those examples in 1.4, can also be found in many simpler, two-syllable words. Fig. 3 illustrates some examples:

Key	Examples	
①= main/primary-stressed syllable ə = vowel reduced to 'schwa'	① ə sofa ① ə water ① ə actor	① ə cousin ① ə future

fig.3 : Examples of two-syllable words in English displaying primary-stressed syllables and syllables reduced to 'schwa'.

1.7 Word Stress: Conclusion

From the discussion so far, we can conclude that syllable stress within

individual words has **two main features:**

1. **Word stress is variable:** any syllable of a multisyllabic word can carry the main stress.
2. **Word stress is mobile:** main stress may shift from one syllable to another, depending on whether the word is a noun, verb, adjective, etc. (Kenworthy 1987: 59).

2. Timed Stress in Sentences

'Stress' refers to the amount of energy with which a syllable is spoken, whereas 'sentence stress' or 'sentence rhythm' is the combination of strongly and weakly stressed[4] syllables in a sentence and their timing. English is a stress-timed language, which means that the syllables carrying the heaviest stress fall at roughly equal intervals of time forming a rhythm. Those more lightly-stressed syllables occur between those heavily-stressed and constantly vary in number. However, this is a factor which does not disrupt the rhythm of the utterance. (Ponsonby (1987: 24), Rivers/Temperley (1978: 10), Scope 2 (1971: 24), Scope 3 (1978: 97-98), Abbott/Wingard (1987: 42-43), Hawkins (1984: 177-181), Carr (1993: 232), Abercrombie (1965: 24, 1967: 96-98), O'connor (1973: 194-195).

[4] As noted in 1.4, words uttered in isolation can carry detectable levels of stress: primary, secondary and tertiary stress. However, it is very difficult to objectively apply this concept to sentence stress and so in this section only the terms 'strongly/heavily stressed' and 'weakly/lightly stressed' shall be used.

2.1 Features of 'Heavily-Stressed' Syllables within a Sentence

Heavily-stressed syllables, forming the rhythm of a sentence, vary characteristically from those lightly-stressed in the following ways:

1. Heavy stress falls on syllables within words that are **nuclear** parts of the sentence, meaning words of the highest lexical content and grammatical importance - items which are essential to the sentence - e.g. the main noun in a noun phrase and the main verb in a verb phrase.[5]
2. **Amplitude/loudness and length (Prominence):** heavily stressed syllables tend to sound louder and are longer in duration (see also 1.4/footnote 3).
3. **Vowels** within heavily-stressed syllables are pronounced in their full forms.

2.2 Features of 'Lightly-Stressed' Syllables within a Sentence

Lightly-stressed syllables, falling between the rhythm of those heavily-stressed, bear the following characteristics:

1. Light stress usually falls on monosyllabic 'grammatical structure' or 'function' words (e.g. auxiliary verbs, pronouns, prepositions, articles, demonstratives, the negative 'not', etc) which are **not nuclear** to the sentence - i.e. they do not contribute the same degree of lexical content to the basic meaning of a sentence as heavily-stressed words.
2. The stress-timed rhythm of English is correlated with lightly-stressed syllables to undergo vowel reduction, many resulting in 'schwa' /ə/ (see

[5] This comment is not intended to suggest that lightly stressed words in sentences do not retain lexical content or are not of grammatical importance. All 'signs' in language have meaning and perhaps have a lower *information value* in a given context but one would not wish to suggest otherwise.

1.6). Some syllables are often obscured or obliterated to the extent that they seem to almost 'vanish' completely within an utterance.[6] **Fig. 4** illustrates some examples :

Key	Examples
①=most heavily stressed syllable ( )='vanishing syllable'	① comf(or)table ① veg(e)table ① cam(e)ra ① diff(e)rent

fig.4 : Examples of multisyllabic words in English featuring their most heavily-stressed syllables and syllables containing vowels in their most reduced forms.

3. A peculiar example of a heavily-stressed syllable disappearing is the first syllable of the phrase "thank you", as pointed out by Abercrombie (1965: 20, 1967: 35). Except in cases when the word "thank" is intentionally heavily-stressed, many native English speakers just say "kyou", although the presence of this 'lost' syllable can still be detected in their speech movements. These occurrences of 'vanishing syllables' could be the closest possible examples of 'unstressed syllables'.
4. **Contractions,** resulting in the production of a single syllable, occur between heavily-stressed syllables in a sentence: e.g. 'I will' ⇒'I'll', 'She is' ⇒'She's' etc.
5. Lightly-stressed syllables are of **lower amplitude** and **shorter duration**.
6. Due to the even rhythm of sentence stress, strings of two, three or even four lightly-stressed syllables (falling between heavily-stressed ones)

[6] This phenomenon also occurs when the same words are said in isolation but is generally more extreme when uttered in the context of a sentence.

would all take **(approximately) the same amount of time to utter.**

2.3 'Hesitation Phenomena'

The natural course of speech undergoes many disruptive factors, such as hesitations, pauses, false starts, the repetition of words, etc. All human speech (not only in English) possesses rhythm, but these elements tend to disguise this fact.

2.4 'Contrastive' Stress

It is worth noting, in addition to the discussion and examples given so far, that **any** expression or sentence may be uttered with heavy stress on **any** of its syllables without causing the listener to think it odd. By strongly stressing alternative words or syllables within the sentence, one can place extra emphasis on items of importance, clarify something which may be believed not to have been understood by the listener or contrast two items, resulting in profound changes of meaning and implication. This element of stress may also be marked by extra high pitch, loudness or duration, particularly when falling on a word already strongly stressed. The following are examples of the same sentence but with the strongest stress falling on different words and with their resulting underlying meaning in brackets:

1. ①Did you see him? (or *didn't* you see him?)
2. Did ①you see him? (or was it *somebody else* who saw him?)

3. Did you ①see him? (or did you only *speak to him on the phone*?)

4. Did you see ①him? (or did you see *her*?)

5. ①Did ①you ①see ①him? (Answer me! I'm getting angry! - each word is strongly stressed.)

6. "They ①reported him?" (a dialogue)

"No, they ①deported him."

Key: ① = word/syllable carrying the strongest stress.

In example no. 6 the heavy stress illustrates the contrast in meaning between 'report' and 'deport'. 'Deport' would normally carry main stress on its second syllable but in this case it shifts to the prefix. (Rivers/Temperley (1978: 11), Bright/Mcgregor (1970: 189), Scope 2 (1971: 23-24), Carr (1993: 232).

2.5 Contextualisation (New and Given Information)

In 2.1, it was mentioned how items in a sentence with the highest lexical content and grammatical importance, i.e. those that contain the most information of value to the listener, are heavily stressed by the speaker. However, if some of those items contain information which is already of familiarity to both the speaker and the listener (i.e. part of a given, shared or already acknowledged topic) it will not be necessary to stress them as strongly. Only those words conveying new or additional information to the topic will be strongly stressed. Thus, sentences produced by both parties during conversation will contain strongly-stressed words and syllables but spaced further apart. Consequently, the rhythm will be slowed and seem less constant but will nonetheless occur regularly and remain intact.

Below is an extract from a conversation to illustrate the features of timed stress in sentences outlined in part 2 of this paper so far. It is from a conversation between a wife and her husband just after he has taken his driving test, which he has failed. To avoid complication, only the heaviest stresses are marked, in their most natural positioning under consideration of the context of the dialogue :

Jill: ①⌒Well? ①Did you?

Bob: ①No.

Jill: Oh ①⌒no, that's the ①⌒fourth time! ①⌒What went ①wrong?

Bob: ①⌒Everything. I didn't do ①⌒anything right. Not in the ①⌒test anyway. In the ①⌒lesson ①⌒before, I did it all ①⌒perfectly. I mean ... the ①⌒instructor said if I ①⌒drove like that in the ①⌒test, I'd ①⌒pass.

Jill: So what ①⌒happened?

Bob: ①⌒Oh, I was just so ①⌒nervous. And the ①⌒examiner was ①⌒horrible - ①⌒really ①⌒sarcastic.

Jill: They're ①⌒usually sarcastic.

Key: ①=heavily stressed words/syllables

①⌒ ①⌒ ①⌒ = examples of sentence rhythm

1. The heaviest stresses fall on those words **'nuclear'** to the sentence (i.e. essential both lexically and grammatically) without which the dialogue would not make any sense (see 2.1).
2. It can be seen that those words falling between the rhythm of the heaviest stresses (and would be lightly stressed) consist largely of

articles, pronouns, demonstratives, auxiliary verbs, etc. - 'grammatical function words' that are **not** nuclear to the sentence (see 2.2).

3. Many of the lightly stressed syllables undergo **vowel reduction,** e.g. every example of 'the' in the dialogue (see 2.2).
4. Some **contractions** occur as a result of the stress rhythm, e.g. (Bob) 'didn't', 'I'd' and (Jill) 'they're' (see 2.2)
5. Regardless of individual length and variance in number, the groups of lightly stressed syllables in the sentences with more even rhythm (i.e. those sentences less subject to 'hesitation phenomena' - see 2.3) all take roughly the same length of time to utter. For example:

Bob: "The ①instructor said if I ①drove like that in the ①test, I'd ①pass."
(4 syllables) (4 syllables) (1 syllable)

The two groups of four syllables and the final single syllable contraction are compressed and lengthened respectively in order to preserve the natural rhythm of the sentence (see 2.2).

6. **Sentence Rhythm:** the rhythm of the dialogue is disrupted at points due to elements of:

(i) 'Hesitation Phenomena' (see 2.3): extra emphasis on some words places the surrounding syllables in subordination, breaking up the rhythm slightly. For example:

Bob: "I didn't do ①anything right" (*nothing* went right *at all*)
"Not in the ①test anyway. In the ①lesson ①before ..."

(a contrast in meaning between the words 'test' and 'lesson'. 'Before' is

stressed heavily to emphasise *which* lesson).

Jill: ①⌒ "Did you?" (or *didn't* you pass?)
"That's the ①⌒ fourth time!" (as opposed to the *1st - 3rd* times)

(ii) Contextualisation: Bob heavily stresses the word 'sarcastic' and Jill stresses 'usually' at the end of the extract as these items contribute new information to the dialogue (see 2.5).

2.6 A Note on Syllable-Timed Languages

English is a typical example of a language with a stress-timed rhythm (Abercrombie 1965: 7). In contrast, some languages (e.g. Japanese and French) do not follow such a principle. **Each syllable** in a sentence is uttered at a more even speed, and although possesses a form of characteristic rhythm, the rhythm is not stress-timed. Such languages are known as **syllable-timed.**

3. Teaching Word and Sentence Stress

3.1 The Importance of Teaching Stress

As can often be seen in many learners of English as a foreign or second language, information can be communicated without worrying about the production of 100% accurate pronunciation and structure, or entirely appropriate vocabulary. However, if the study of these aspects is left neglected, students will find themselves 'plateauing out' at a level of 'pidgin

English'. This can be avoided if students (and their teachers) devote some attention to, in particular, strengths and weaknesses in their pronunciation. As Rivers/Temperley (1978: 160) mention:

Incorrectly articulated consonants affect the production of vowels, just as incorrect vowel production affects neighbouring consonants.

Word and sentence stress (or rhythm) can also greatly affect an individual's articulation of vowels and consonants and can arguably contribute more to making a student's speech more intelligible than the more accurate production of individual sounds within a word. If stress is wrongly placed, a word can easily become unrecognisable, and incomprehensible to the listener. In contrast, an inaccurately produced speech sound within a word may not result in the same degree of incomprehensibility. (Bowen/Madsen/Milferty (1985: 133-134), Bright/Mcgregor (1970: 187), Hill/Dobbyn (1979: 40), Scope 2 (1971: 16)

3.2 Teaching Word Stress

3.2.1 Beginners or Low Level Students[7]

Many of the authors mentioned in 3.1 put forward the argument that misplaced stresses result in comprehension failures more than wrong

[7] As labels to various levels of students' proficiency in English can overlap and be somewhat vague, references shall be restricted to 'beginners/low level students', 'intermediate' and 'advanced/high level students'.

words. From the earliest stages of learning to speak English, teachers should drill students in the production of the varying levels of stress (at least primary stress) found within individual words (see 1.4) so that correct stressing becomes habit, even when teaching the most elementary vocabulary items.

For example, the first pattern stated in the word stress table in **fig.2** ("Many common nouns and adjectives carry main stress on the first syllable") may be used as a basis by the teacher but need not be mentioned to the student as such terminology (similarly 'primary, secondary and tertiary stress') may just confuse this level of learner. Exceptions to this pattern (see fig. 2) may also be introduced and drilled but again, only so as their pronunciation becomes a natural habit to the student. The most important thing at this level is to introduce, and then increase the learner's awareness that stress in individual words *does* exist and that it is important to the mutual comprehension of the speaker and to the listener. These aspects of pronunciation may be presented to and practised with the learner through example dialogues, poems, songs and various other linguistic exercises. Such exercises are of course, artificial in terms of spontaneous, fluid speech but may be prepared to a degree of authenticity so as to reasonably represent the pronunciation features of 'normal, every-day conversation'.

3.2.2 Intermediate and Higher Levels

By this level, students should be starting to develop near-natural habits in word stress. From Intermediate level and onwards, patterns such as

numbers 2 - 5 in fig. 2 may be presented as part of, for example, 'grammar presentation and practice' lessons associated with these levels (e.g. the correct application of prefixes and suffixes, forming compound words, differentiating between noun and verb forms of a word, etc). The table in fig. 2 would more than likely be too confusing if presented as a lesson unto itself (although it may come in useful as a general reference chart to the student) but as each lexical item arises in class, its correct stress placement could be taught. Teaching word stress in these ways would also help the learners in their recognition of grammatical parts of speech (e.g. whether a word is a noun or a verb, etc).

3.3 Teaching Sentence Stress and Rhythm

3.3.1 Beginners or Low Level Students

Rivers/Temperley (1978: 160) sum up "the characteristic rhythmic pattern of English speech" as being "that of a few, regularly spaced, strongly-stressed syllables interspersed with weakly-stressed syllables." In order to achieve good rhythm habits from the very first steps of learning teachers should:

(i.) Insist on a clear contrast between strongly and weakly-stressed syllables.

(ii.) Present the clearest possible rules for assigning phrase and sentence stress.

(iii.) Strengthen the students' sense of rhythm through regular classroom practice.

The clearest, simplest way of presenting the concept of sentence stress at

this level is to show that (referring again to Rivers/Temperley's definition) it is only necessary to heavily stress *a few* syllables in each utterance and that these syllables are *regularly spaced.* Again, emphasis should not be placed on presenting learners with the rule itself, but practice through repetition so that it becomes a natural habit. This can be achieved through the use of, for example, rhymes (by tapping a pencil on a desk, hand claps, etc.) and activities involving music, as they all contain a regular beat.

It should be noted, however, that although learners need to be made aware that their pronunciation is important, too much emphasis on the above during a lesson may result in boredom and frustration - especially in the cases of children. The duration of these activities should be kept short, for example, five to ten minutes per lesson.

3.3.2 Intermediate Levels

As the student progresses to this level, sentence (and also word) stress can be taught while presenting and practising other aspects of pronunciation, such as :

(i.) Placing heavy stress on key syllables can make it easier for students to lengthen/diphthongise vowels (as there is, after all, a connection between these two aspects) - diphthongs being, arguably, more appropriately taught at an Intermediate level when a student can already confidently use a word correctly rather than grapple with its meaning (let alone the pronunciation) at a lower level.[8]

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[8] One would not wish to suggest, however, that the teaching and practice of diphthongs should be avoided at lower levels. Many very elementary words in English contain diphthongs, such as 'my' and 'how', the correct pronunciation of which must be reinforced from the earliest stages of learning.

(ii.) Similarly, weakly stressing other syllables will facilitate the production of reduced vowels (e.g. 'schwa'), 'disappearing consonants', contractions and other reduced forms (see 2.2).

By this level, students should not be experiencing too much difficulty in maintaining a regular rhythm and so require less practice than at Beginners level. Instead, focus should be shifted to getting through the weakly-stressed syllables *fast enough,* as these can vary considerably in number and potentially disrupt the natural rhythm - a problem experienced by many learners, but unfortunately not interpreted by them as such. Often, their ears tell them that native speakers "talk too fast" and "swallow their words", hence many students want to talk slowly and stress too many words. This feature could be drilled using reasonably short sentences but would possibly come to more practical use if emphasised during a role play activity or other such situations requiring spontaneous production of speech. (Rivers/Temperley (1978: 160-161), Bright/Mcgregor (1970: 187)

3.3.3 Advanced or High Level Students ('Phonetic Empathy')

Kenworthy (1987: 33) states that "stress placement in utterances is linked to relative importance." It has already been discussed (see 2.5) how even some words of high grammatical and lexical importance can avoid being heavily stressed if not deemed as contributing essentially new information to a conversation. The student then has to decide precisely which words to stress in order to effectively convey the intended meaning to the listener. But how should the student go about choosing what is important? Abercrombie (1965: 19) notes that both the native speaker and listener

employ a process of 'phonetic empathy' when conversing. The speaker only heavily stresses the words or points he or she thinks the listener needs to take in - the listener, similarly, only listens for those words, almost ignoring the others as they do not contribute as highly in content.

The learner, in order to achieve native speaker-like competence, needs to master such empathy - Kenworthy's element of "relative importance". This concept should be considerably more accessible to an advanced learner, as a beginner, struggling to put a message together and worrying about "leaving something out" (not to mention frequently pausing) will tend to overstress - the overstressing of weak syllables being one of the most common student errors.

This concept should not be restricted exclusively to advanced levels though. A beginner should be able to comprehend that in the sentence "Your dinner's on the table", the words 'dinner' and 'table' need to be heavily stressed by the speaker and focused on by the listener, as these words carry the main message.

However, advanced learners should be taught to appreciate that such highlighted points in their messages (such as examples including elements of 'contrastive' stress - see 2.4) will, as speakers, help them convey their most relevant points, and as listeners, aid them in deciding how these points relate to what has been said and what the speaker is possibly leading up to.

3.4 A Note on Correcting Student Errors

It would seem only natural, when teaching, to correct a student (at any

level) who might perhaps say "This is pen" with the reply "This is **a** pen", heavily stressing the 'a' to draw attention to the error. However, this can be very misleading to the learner, as under normal circumstances, the indefinite article would be weakly stressed in such a sentence. Similarly, a student is not helped by a teacher speaking slowly and evenly with every word said precisely and equally - people just do not speak that way (Scope 2, 1971: 16). The rule of thumb should be, therefore, to speak slowly in class (if necessary) but preserving the natural rhythm of the utterance and weak forms (lightly stressed words).

3.5 Teaching Stress and Intonation : Conclusion

To conclude the discussions in this paper, it can be said that without the correct placement of word stress, individual words can become unintelligible and sentences can lack certain qualities in meaning if word and sentence stress are inappropriately applied. Much attention, therefore, should be paid to the production of **natural** (as opposed to the impossible definition of 'correct')[9] stress and rhythm when teaching and drilling new structures and lexical items. Use of appropriate stress patterns will make a learner's speech sound less like a foreign speaker and more like a native English speaker, often compensating for other faults of pronunciation.

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[9] The erratic nature of sentence stress within the example dialogue in 2.5 illustrates that although sentence stress and rhythm can be a useful model on which to base lessons for foreign learners, it is not a 100% preserved feature in all examples of spoken English.

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