

one stresses a syllable. In addition, stress can be a magnitude in determining syntactic relations and meaning.

With respect to stress patterns, it was pointed out that work in generative phonology has brought about the discovery of stress rules in English. Nonetheless the multiplicity of these conventions makes memorisation nugatory. Likewise, the existence of a bundle of exceptions not following the rules declines rule learning. However, learners can, now and again, make meaningful generalisations. The results of many experiments indicate that learners should develop the ability in themselves to construct rules in accord with their own personal experiences rather than deciphering formidable formulae.

Another worthmentioning point deals with the perceived difference between stress-timed and syllable-timed languages. Due to such a difference existing between English and Persian, based on the contrastive analysis, it is expected that Persian learners of English have trouble adjusting their articulatory mechanism to pronounce the intervening syllables between two stressed segments. This is particularly true when the number of syllables is great and one needs to consider, consciously or unconsciously, phonological processes involved, such as assimilation, coalescence, reduction... . This perceived difference calls for practice in covering the distance between the primary stressed segments at roughly equal times.

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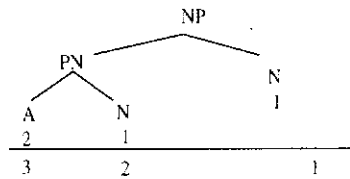
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blackbird's nest
PN N



In larger phrases, the manner in which rules of stress are applied in each cycle is determined by the number of the syntactic units. That is, the larger the syntactic units, the larger the number of cycles and vice versa, (Schane, 1972). The stress contour of the following noun phrase can be determined as follows:

Rule 14.	Spanish ((American history) teacher)			
		NP		CN
Cycle 1: word stress	1	1	1	1
Cycle 2: noun phrase stress		2	1	
Cycle 3: compound noun stress		3	1	2
Cycle 4: phrasal stress	2	4	1	3

In English, Schane states that a construction functions as a compound when a subject title precedes words such as "teacher" or "professor", hence "American history teacher".

Prefix Weak Stress Rule (PWSR) is the Dickerson's stress rule which assigns the primary stress to the English words (Yarmohammadi, 1996). To understand the function of this rule, two terms need to be defined-key syllable and left syllable. Key syllable is the last vowel spelling pattern of a word excluding any endings, e.g.

forgets absorber
mechanically
grumbled tempo limiting
Left syllable is the vowel and all extra letters immediately to the left of the key, e.g.
spelling pattern
digital practical carpeting
purpose generative reckoned

Rule 15. PWSR states, "stress left syllable, but not the prefix. If you can't stress left, stress key".

democratise literative
I k I k

encouragingly
I k

incredible carnival resumed

incredible carnival resumed
pr k I k pr k

conclusion and Two Implications

Stress is a relative term; in other words, it undergoes changes depending on the speaker's meaning, high or low-pitch voice, lung-air pressure, muscular effort and so on. After all, in discourse, in which the above-mentioned factors are apparently invariable, some syllables are heard more clearly than others they are stressed. Stress correlates directly with pitch, duration, loudness, length and vowel quality. It can also be considered as a muscular effort the physiological change taking place in the articulatory and respiratory organs when

occur finally.

The key is ON the table not UNder the table.

Who do you want to give the book TO?

R7. Personal pronouns, possessive adjectives, object pronouns and articles are unstressed unless they are used contrastively or emphatically.

It was SHE who won the attraction not HE.

R8. Complementisers are always unstressed.

The book that you bought before is no longer available.

R9. Relative pronouns are always unstressed.

The book that you bought is no longer available.

R10. WH-words are sometimes stressed in British English.

WHO do you work with?

WHAT have they decided to do to prevent pollution?

R11. "There" as an expletive subject is unstressed, but as an adverb carries a main stress.

There are two pens on the table over THERE.

R12. Auxiliaries are unstressed:

He must go.

They have made a deal.

unless they:

a. begin yes/No questions, e.g. *MUST he go?*

b. are used in short answers, e.g. *Yes, you MUST:/ No, you MUSTn't.*

c. are used in negative contractions, e.g. *You MUSTn't go, (but You must NOT go)*

d. are used in tag questions, e.g.

The school library is open now, ISn't it?

You don't take care of it, Do you?

We must not be impolite, MUST we?

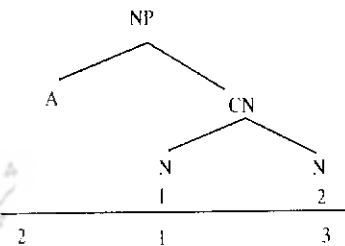
e. are used emphatically, e.g.

Don't say you can be a help. Remember, it's an obligation. You HAVE To do that.

R13. Compound nouns (CN) and Phrasal nouns (PN) can be combined producing intricate contours exemplifying more than two degrees of stress (Schane, 1972). Numbers 1, 2, 3 stand for primary, secondary and tertiary stresses.

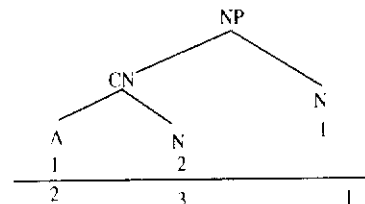
blackbird' s nest

A CN



blackbird' s nest

CN N



Below some practical and valuable rules of stress are introduced to the language teacher. An attempt has been made to describe those rules which are general and explicit enough so that the learner can make correct generalisations.

R 1. A syllable with the nucleus vowel /ə/ is never stressed.

about /ə'baʊt/	atrocious /ə'trʊʃəs/
atrocious /ə'trɒsətɪ/	closure /'kləʊʒə/
summary /'sʌməri/	navigable /'nævɪgəbl/
vulnerable /'vʌlnərəbl/	

R 2. Monosyllabic words always have initial stress.

small /'smɔl/	badge /'bædʒ/	bask /'bɑsk/
vest /'vest/	print /'prɪnt/	scar /'sɪə/

R3. Syllables with the nucleus vowel of / I / or / U / may or may not be stressed. Other vowels always carry some degree of stress.

ubiquitous /ju:'bɪkwɪtəs/	poofter /pʊftə/
splendiferous /splɛn'dɪfərəs/	

R4. In tri-syllabic words, if the final syllable is a long vowel or diphthong, the stress will usually be placed on the first syllable.

intellect /'ɪntɪlekt/	marigold /'mæɪrɪgəʊld/
alkali /'ælkəlaɪ/	stalactite /'stæləktatɪt/
visualise /'vɪʒʊəlaɪz/	violate /'vaɪəleɪt/

R5. Affixes will have one of three possible effects on the word stress:

a. *The affix itself receives stress*

racketeer /rækə'triə/	semicircle /'semɪsɑ:kɪl/
refugee /refjʊ'dʒi:/	personality /pɜ:sə'næləti/

b. *The word receives stress just as the affix was not there.*

unpleasant /ˌn'plezənt/	premeditate /pri'medɪteɪt/
unwary /ˌn'weəri/	self-locking /self'lɒkɪŋ/
illogical /ɪ'lɒdʒɪkəl/	irreverent /ɪ'revərənt/
encouragement /ɪn'kɒrɪdʒmənt/	terminable /'tɜ:mɪnəbl/
widower /'wɪdəʊə/	mislead /mɪs'li:d/
dramatise /'dræmətaɪz/	arrange /ə'reɪndʒ/
foretell /fɔ:'tel/	surpass /sɜ:'pɑ:s/
disembark /dɪsɪm'bɑ:k/	decapitate /dɪ'kæpkɪteɪt/

c. *The stress remains on the stem, not affix, but it is shifted to a different syllable.*

R6. Prepositions are unstressed unless they are used emphatically or they

reference /refərəns/	necessity /nɪ'sesəti/
magnetic /mæɡ'netɪk/	resolution /rezə'lju:ʃn/

intervals of time in spite of the various number of the intervening syllables, that is, English is stress-timed. Nevertheless, locating English in the stress-timed category is not strict owing to the fact that the speech of native speakers has not always been meticulously and methodically organised and syllables may tend to vary in time though much less considerably. This seemingly unscrupulous but actually realisable pronunciation might be due to pauses, hesitations, hems and haws, turning points and tiredness to count but a few.

Is "English Stress" Rule-Governed?

When asked by students how one can acquire English stress, teachers are usually at a loss for words. True as it is, this is a mind boggling and pestering question with which teachers have constantly been molested. The question of whether stress in English is law-abiding or how we can determine the place of stress in a word has been kicking around for long. English is not like those languages where stress is always predictive, that is, it always occurs on a fixed syllable, e.g. the penultimate syllable like Gzech (Roach, 1983). It is unanimously believed that stress in English is so complex that it does not lend itself to teaching through formulation of an assortment of rules. In other words, rule formulation and word analysis for stress seems to be a futile act. Accordingly, linguists place it as a property of individual words-each word possesses its own stress-pattern and has to be learned per se.

However, when an English speaker comes across a new word that he has never heard or seen before or a newly coined word, in majority of cases he knows how to pronounce it. It seems as if there are underlying rules which help speakers to pronounce words accurately. Studies which are founded on Generative Phonology show that there are rules which can be explicated. Nevertheless, these rules undergo so many exceptions that the learner may decide to turn a blind eye to these rules and consider stress as a characteristic feature of individual words. In other words, one can easily witness many forms not meeting the condition of a rule or undergoing it. As a result of this capriciousness and often-changing status of stress in words, proponents have never pinned down these rules or encouraged learners to extract all the rules. Thus, in order not to give learners sanguine delusions, in this paper, an attempt has been made to introduce only those productive rules and formulations which one can make generalisations through.

Stress Rules

In order to determine the place of stress on words, Roach (1983) suggests the following considerations:

1. Whether the word is monosyllabic or polysyllabic
2. The number of syllables
3. Whether the word ends with a suffix
4. Whether the word begins with a prefix
5. Phonological structure of a word

producing speech, speakers do not keep up a steady degree of articulatory energy. This level varies over the articulatory and respiratory muscles. From a listener's viewpoint, stress can also be defined with reference to "motor theory of speech perception" (For more information see Ladefoged, 1982, 104). These characteristics—linguistic function and muscular function—account for the recognition of stressed syllables.

Functions of Stress

In English, stress is associated with meaning or distinguishability. In other words, any change in the place of stress, especially stress in the stream of discourse, would frequently result in a different meaning. Generally speaking, Ladefoged (1982) counts a number of functions for stress:

1. In English, the relationship between the realisation of information units phonologically and clause syntactically is carried out by means of stress. To achieve this, stress is usually with the last lexical item (Halliday, 1989). This is the normal way of packaging the information which is implemented by stress.

Did you buy a shirt for Mary 'yesterday?
I bought a shirt for Mary 'yesterday?
When did you buy a shirt for 'Mary?

2. Stress may give emphasis to a word:
Neither do I study nor let 'you study.

3. Stress may function contrastively. That is, it contrasts one word with its alternative:
I bought a shirt for Mary 'yesterday.
 (no contrast)
I bought a shirt for 'Mary yesterday.
 (not for Jane)
I bought a 'shirt for Mary yesterday.
 (not a blouse)
I 'bought a shirt for Mary yesterday.
 (not sold)
'I bought a shirt for Mary yesterday. (not you)
4. Stress may indicate syntactic relations between words or parts of words, e.g. Noun+ Noun; Noun + Verb; Preposition + Noun; Noun +Suffix.

English Is Stress-timed

Another worthmentioning factor in stress is time which has given rise to the time-honoured division into stress-timed and syllable-timed languages. (Dalton and Seidlhofer, 1994). Syllable-timed languages are claimed to have a characteristically even, rather "staccato rhythm", that is, all syllables are said to recur at equal intervals, (Ladefoged, 1984). Persian is usually referred to as syllable-timed (Haqshenas, 1992):

u:/ke/tabe/ha/san/ra/qarz/ge/refit/

Each segment would take the speaker the same time to utter. However, in English, primary stress tends to recur at equal and regular

speakers expend more energy, and they also require greater muscular effort.

The nature and concept of stress is easy to understand, as one can easily recognise the difference between stressed and unstressed syllables. A stressed syllable is produced by greater subglottal air pressure relative to other adjacent syllable. It, thus, has greater respiratory energy than the unstressed syllables and presumably an increase in the laryngeal activity.

In a technical sense, stress may be studied at two levels. Stress at the word level deals with the pronunciation of words disjunct from a meaningful context. But rarely do people happen to use words separately. When words are placed in a context, it is unimaginable to think that words retain their individual stress pattern. Instead, they adopt a new stress pattern when they appear in connected pieces of discourse. It is noteworthy to state that neither of the pattern is a prerequisite for the other. Both are equally important, and one needs experience in both if one wants to learn a foreign language with a special care for his pronunciation. However, studying stress in isolation creates a laboratory situation so that one can study it in optimal form. The following diagram shows that words in and outside context take on different stress patterns:

	(black	bird)CN	(black	bird)PN
word stress	1	1	1	1
compound noun stress	1	2		
phrasal noun stress			2	1

This paper consists of two parts. In the first part, it is primarily concerned with introducing the nature and functions of stress and the factors involved in the production of a stressed syllable. In the second part it deals with some of the generalisations which can be made to ease the burden in learning stress both at the word and at the contextual level.

Stress and the Two Senses

Dalton and Seidlhofer (1994) use the term "stress" in two senses. The first concerns stress as a "linguistic foregrounding function". It does not exclusively correlate with loudness, which is our perceptual response, but with the effect of other factors as well. Different sound characteristics are crucial in making a syllable recognisably stressed such as duration, length, pitch and vowel quality rather than loudness (Roach, 1983). Stress can, likewise, account for grammatical differences like 'contest and con'test. The second sense concerns stress as a "muscular effort" in production from the perception and production point of view, that is, the way speakers achieve this impression of prominence, i.e. its physiological cause on the speaker part on one side and its perceptual cause on the listener on the other side. In

Let's Lay

Stress

On

Stress

علیرضا جلیلی فر
فوق لیسانس آموزش زبان
دبیر زبان انگلیسی مراکز پیش دانشگاهی اهواز

ABSTRACT

The present article comprises two parts. First it defines stress as the prominence of a syllable in terms of loudness, duration, pitch and quality achieved through greater subglottal air pressure. It also brings into account topics such as **stress** from a linguistic and physiological point of view, **functions of stress**, and **stress and rule-governedness** in English. The second part of the article introduces 15 rules of stress a few of which might be regarded as over-simplified and too straightforward, but they are at the same time generalizable across the English language, and as a result they facilitate the learning of stress. As a final word, two types implications which

are directly related to the teaching and learning of stress are suggested.

Introduction

Everybody was astounded to see John enunciating each word too slowly. He was uttering the words with almost no recognisable difference in his voice tone. He wondered if he could find a way to communicate!

As a matter of fact, in producing speech speakers do not keep up a steady flow of articulatory energy. This varies over and across the articulatory and respiratory muscles. Thus, to place stress on a word or part of a word,