

Stress and the schwa

The importance of weak forms in spoken English

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Stress is a very elusive phenomenon to define accurately. Phonetically it is perceived, as some kind of “extra effort” involved in the production of a sound element. At present this prominence is usually attributed to (singly or in combination) pitch prominence, duration, loudness and “quality” the last of which is at best an ill defined notion. In fact some linguists, in an attempt at precision, have preferred to use the word “stress” to refer to effort (production) and loudness (perception), and to use the word “accent” for other kinds of prominence.

Phonologically, a distinction can be drawn between “word stress” and “sentence stress”. Word stress needs at least three relative levels of stress: one to carry the nuclear tone, one to show weak stress, and a third to act in intermediary position. In fact in certain polysyllabic words a secondary intermediate stress has been postulated. The “rules” for words stress seem to need to be learned along with each word, although Chomsky and Halle have postulated cyclical generative rules in deep structure which produce complicated stress contours, which have been accepted, with reservations, by some linguists. The English stress system is in fact, by nature of its evolution, complicated by a conflict between Teutonic (early stress) and Romanic (late stress), but generally speaking we “know” where to expect word stress variation, which may be caused by such factors as emphasis, contrast or grammatical differentiation.

However, more important to the learner is sentence stress, with its associations with the rhythm of the language. Language doesn't consist of sounds or words occurring in isolation - rather it is concerned with 'running speech', and such characteristic features as elision, assimilation, liaison, juncture and gradation. These features, along with intonation, rhythm and stress, are referred to as prosodic or suprasegmental features, being overlaid on the segmentals (vowels and consonants), in so far as they cannot exist without them. It is these suprasegmentals which give language its characteristic quality - that quality which enables us to identify a language although unable to distinguish individual words and which also constitute a major problem for students who wish to acquire a “good pronunciation” in English.

“Pronunciation” is not merely the ability to produce sounds in isolation; sounds always occur in context, and any individual phoneme will invariably be conditioned by the sounds that precede and follow it, and by the speed with which the utterance is delivered. However, as important as the sound values, if not more so, for clear communication, are the stress, rhythm, and intonation which accompany the content of the utterance. Without these features the utterance would be “flat” and possibly ambiguous, as we saw in early examples of synthetic speech which were devoid of prosodic features.

The occurrence of sentence stress in English is not dependent on the place of the syllable in the utterance; any syllable can be stressed according to the context and intention of the speaker. This causes problems for the Spanish speaking learner of English. In Spanish the same amount of time is given to all syllables, irrespective of whether or not they are stressed, and for this reason we can say that Spanish is a “syllable-timed” language. However, English is a “stress-timed” language - the stressed syllables have a tendency to occur at regularly spaced intervals, irrespective of the number of unstressed syllables in between.

As there is less time for each stressed syllable in proportion to the number of unstressed occurring between stressed ones, word are run together and reduction and consequent contraction occur. This has an effect on the phonemic

composition (the sound values) of the unstressed elements, and causes considerable comprehension and production problems for the Spanish speaking learner of English who cannot easily adapt to a different stress system and the consequent difference in rhythm of the target language. Students frequently fail to understand the normal spoken form of an utterance which they would recognise perfectly well in either its written or false (rhythmically incorrect) form, because the sound is “different”.

This change in the sound of the word has been termed gradation, as early as 1885 by Sweet, and a gradation word is “... almost always a monosyllabic grammatical word that connects words of a sentence to each other” (Windsor Lewis, 1987). As they are very often “connecting” words, they very rarely occur in isolation, and therefore are almost always unstressed. These unstressed forms are referred to as “weak forms”, and their stressed form counterparts as “strong forms”. There are about three dozen of these “gradation words” common to standard pronunciation of English, most of them being (auxiliary) verb form, pronouns, conjunctions, prepositions and the articles.

These gradation words, then, have two forms. The form used in a situation of less prominence (unstressed) is the weak form, and this weak form undergoes modification due to rhythm subordination involving some reduction of the articulatory activity necessary for the production of the corresponding strong form. In terms of discourse frequency, these weak forms are overwhelmingly more common than the strong forms. In addition, in terms of occurrence, they are also among the most common words of the English language, and the most frequently occurring, and can therefore be regarded as the building blocks of language learning activity. The implication must be that mastery of these forms is a prime imperative for successful English language acquisition. If the ultimate purpose of English teaching is to enable the student to use the language communicatively, then we as teachers should be aware of this problem and from the start concentrate on the “correct” production of these weak forms.

Another result of the phenomenon of reduction is the existence of contracted forms (*isn't, shouldn't, etc.*) which historically have been caused by the same crowding together of unstressed syllables between stressed ones. Teachers may often, perhaps dutifully inspired by the notes in their teacher's manuals, drill contracted forms, and then when the drill is completed unknowingly revert to the uncontracted forms while continuing to “communicate” with the class. Similarly, this lack of transfer with its consequent use of a phonologically artificial language, may in some cases mean that such gradation words as *but, of, that, than, to, etc.* are pronounced with the strong form instead of the weak form which they almost always have. For example, in the sentence:

I'm going *to* have *a* cup *of* tea *and* go home.

the italicized words, in any acceptable verbalization, would all have a weak form word in which the quality of the vowel is perceived as an indefinite, centralized and very short approximation of the schwa.

/aɪm 'gəʊɪŋ tə həv ə kʌp əv ti: ənd gəʊ həʊm/

This is perhaps a simplification, but the salient point is that under no circumstances would a strong form be used in these instances. The student can only repeat what he hears - in this respect dare I suggest that some teachers might derive a salutary lesson by tape recording their classes and then listening to what they *do* say.

As I have just stated, the common denominating factor of these weak forms in the centralizing effect on the vowel. The most central vowel in British Standard English is the schwa (/ə/), and it is this vowel that is usually approximated in the weak forms

of gradation words. The schwa is of very little duration, so short in fact it may disappear completely, rendering the following consonant syllabic. It is described by Gimson (1972) as “a central vowel with neutral lip position having in nonfinal positions a tongue raising between half-open and half-close”.

It is this central position which leads us to think of it as a “vague” vowel; it is indefinite with regard to duration or direction, (eg. front/back, open/close). However, the production of the schwa doesn't present much of a problem to the Spanish speaking learner of English, other than a possible tendency to liprounding and an insufficiently, short articulation, both of which are easily corrected. The problem is much more achieving production of this vowel in the right context, and teachers should from the very beginning correct any deviation from the genuine correct pattern. Far too much time is often spent on phonemic contrasts or even, sadly, on sounds in isolation, when in fact failure to master the prosodic elements, of which here I have only mentioned gradation, may well be a far greater impediment to communication.