

6.2. DEGREES OF WORD STRESS

In determining the number of degrees of stress in a language one should first of all distinguish between the physical and linguistic aspects of the problem. In order to get a clearer understanding of the problem the chief interest is to be concentrated upon its linguistic aspect.

When we speak about the degree of stress or of the physical side – the degree of acoustic energy of the syllable – it seems reasonable to assume that each syllable in speech (stressed as well as unstressed) is always characterised by some amount of energy and if the degree of energy is treated from the physical point of view, there may be distinguished as many degrees of stress in the word, as there are syllables in it.

When we speak about the degrees of word stress in the given language we have to take into consideration, as it has been mentioned above, the number of functionally opposed degrees of energy within the word. In this case we speak about the functional or linguistic aspect of word stress.

Structurally, from a linguistic point of view, in every language there exists a functional discrimination of definite degrees of stress, the number of which may be different in different languages.

To understand the question one should take into consideration those stressed syllables which are phonologically opposed to unstressed syllables of the word and may therefore be said to be stressed.

Degrees of stress may be opposed to each other in case of primary and secondary stress as a stressed syllable to another stressed syllable.

The linguistic explanation of the existence of three degrees of stress can be found in the above-mentioned scientific works by G.P. Torsuyev, M.A. Sokolova and others. The majority of English phoneticians assert that there are three degrees of stress in English: primary, secondary and unstressed, e.g.

,funda'mental;
ex,peri'mental;
in,vesti'gation.

The degree of total acoustic energy of unstressed syllables is considerably smaller than that of stressed syllables and depends upon the position of the syllables in the word.

The first unstressed syllables are stronger than all the others unstressed syllables in the word. The final unstressed syllables are weaker than the first ones, but stronger than the second unstressed syllable from the end. The following examples illustrate the accentual structure of the polysyllabic words. The biggest degree of acoustic energy is marked by number 1 (primary stress). The secondary stress is marked by number 2. The increasing row of numbers represents the decreasing acoustic force of the unstressed syllables. The bigger the number is above the syllable, the weaker its acoustic energy is, e.g.

3 2 5 1 4
encyclopedia [I n,saI kIq'pJ dI q];
 3 2 6 1 5 4
responsibility [rI ,spPnsq'bI lqtI];
 2 4 1 5 3
satisfactory [sxtI s'fxktqrI].

The existence of a primary and a secondary word stress in English polysyllabic words of four and more syllables is explained by the rhythmic tendency which is the result of a great number of short notional words, consisting of one, two or rarely three syllables and numerous unstressed form words between them, which facilitate rhythmic tendencies of alternation of stressed and unstressed syllables in speech (Topcyev Г.П., 1950).

Some linguists tried to solve the question of degrees of stress from a physical viewpoint and found a different number of degrees of stress in English.

Thus, D. Jones speaks about several degrees of stress, treating the problem from the physical point of view (Jones D., 1962).

Four degrees of stress (primary, secondary, tertiary, weak), corresponding to four degrees of loudness are mentioned by G.L. Trager and H.L. Smith in 1957.

Consequently, there exists a phonological opposition between three degrees of word stress – primary, secondary stress and unstressed syllables in English

polysyllabic words and two degrees of stress in two- and three-syllable words, which have only one stressed syllable.

In polysyllabic words the primary stress usually falls on the second or third syllable from the end in most cases. The secondary stress falls on initial or second syllable of the word more often.

Primary stress is characterised by the biggest degree of energy. The secondary stress is also strong, but weaker than the primary stress.

Most words with prefixes and suffixes in English have two primary stresses – the first primary stress falls on the root of the word, the second primary stress falls on the suffix or prefix.

In the Ukrainian language stressed syllables are weaker in than in English. Stressed and unstressed syllables are not so vividly opposed by the degree of total acoustic energy in Ukrainian as in English. It is explained not only by a weaker energy of Ukrainian stressed syllables and a stronger acoustic force of unstressed syllables but by the absence of reduction of unstressed syllables in Ukrainian, which is typical of English. Besides, due to the peculiarities of the Ukrainian grammatical structure, the form words are not so numerous and consequently, a regular rhythmic alternation of stressed and unstressed syllables is not observed in Ukrainian.

Nearly all polysyllabic Ukrainian words have two degrees of word stress – stressed and unstressed. Three degrees of word stress are sometimes used for the sake of emphasis in compound words or words with prefixes. Two strong stresses in multi-syllable words are met more often.