

Rhythm

1. Speech rhythm. Definition. Typology.
2. Rhythmic group as the basic unit of rhythm.
3. Rhythm in different types of discourse.
4. Functions of rhythm.

1. Speech rhythm. Definition. Typology.

We cannot fully describe English intonation without reference to speech rhythm.

Prosodic components (pitch, loudness, tempo) and speech rhythm work, interdependently.

Rhythm seems to be a kind of framework of speech organization. Linguists sometimes consider rhythm as one of the components of intonation. D. Crystal, for instance, views rhythmicality as one of the constituents of prosodic systems [Crystal 1969].

Rhythm as a linguistic notion is realized in lexical, syntactical and prosodic means and mostly in their combinations. For instance, such figures of speech as sound or word repetition, syntactical parallelism, intensification and others are perceived as rhythmical on the lexical, syntactical and prosodic levels.

In speech, the type of rhythm depends on the language. Linguists divide languages into two groups: syllable-timed like French, Spanish and other Romance languages and stress-timed languages, such as Germanic languages English and German, as well as Ukrainian. In a syllable-timed language the speaker gives an approximately equal amount of time to each syllable, whether the syllable is stressed or unstressed and this produces the effect of even rather staccato rhythm.

In a stress-timed language, of which English is a good example, the rhythm is based on a larger unit than syllable. Though the amount of time given on each syllable varies considerably, the total time of uttering each rhythmic unit is practically unchanged.

The stressed syllables of a rhythmic unit form peaks of prominence. They tend to be pronounced at regular intervals no matter how many unstressed syllables are located between every two stressed ones. Thus the distribution of time within the rhythmic unit is unequal. The regularity is provided by the strong "beats".

Speech rhythm has the immediate influence on vowel reduction and elision. Form words such as prepositions, conjunctions as well as auxiliary and modal verbs, personal and possessive pronouns are usually unstressed and pronounced in their weak forms with reduced or even elided vowels to secure equal intervals between the stressed syllables, e.g.:

\Come and 'see me to\morrow

\None of them ^was 'any \good

The markedly regular stress-timed pulses of speech seem to create the strict, abrupt and spiky effect of English rhythm. The English language is an analytical one. This factor explains the presence of a considerable number of monosyllabic form words which are normally unstressed in a stretch of English speech. To bring the meaning of the utterance to the listener the stressed syllables of the notional words are given more prominence by the speaker and the unstressed monosyllabic form words are left very weak. It is often reflected in the spelling norm in the conversational style, e.g.

I'm sure you mustn't refuse him.

Speech rhythm is traditionally defined as recurrence of stressed syllables at more or less equal intervals of time in a speech continuum. We also find a more detailed definition of speech rhythm as the regular alternation of acceleration and slowing down, of relaxation and intensification, of length and brevity, of similar and dissimilar elements within a speech event. In the present-day linguistics rhythm is analyzed as a system of similar adequate elements. A.M. Antipova [1984] defines rhythm as a complex language system which is formed by the interrelation of lexical, syntactic and prosodic means.

2. Rhythmic group as the basic unit of rhythm.

It has long been believed that the basic rhythmic unit is a rhythmic group, a speech segment which contains a stressed syllable with preceding or/and following unstressed syllables attached to it. Another point of view is that a rhythmic group is one or more words closely connected by sense and grammar, but containing only strongly stressed syllable and being pronounced in one breath, e.g. **∨Thank you**→

The stressed syllable is the prosodic nucleus of the rhythmic group. The initial unstressed syllables preceding the nucleus are called *proclitics*, those following the nucleus are called *enclitics*, e.g.:

The 'doctor 'says it's not quite ∨serious = 1 intonation group [4 rhythmic groups]

ðə 'dɒktə	'sez its	'nɒt kwait	∨siə.ri. əs
1st rhythmic group proclitics	2nd rhythmic group enclitics	3rd rhythmic group enclitics	4th rhythmic group enclitics

In qualifying the unstressed syllables located between the stressed ones there are two main alternative views among the phoneticians. According to the so-called semantic viewpoint the unstressed syllables tend to be drawn towards the stressed syllable of the same word or to the lexical unit according to their semantic connection, e.g.:

Negro Harlem | became | the largest | colony | of coloured people.

According to the other viewpoint the unstressed syllables in between the stressed ones tend to join the preceding stressed syllable. It is the so-called enclitic tendency. Then the above-mentioned phrase will be divided into rhythmical groups as follows, e.g.

Negro Harlem | became the | largest | colony of | coloured people.

To acquire a good English speech rhythm the learner should: 1) arrange sentences into intonation groups and 2) then into rhythmic groups 3) link every word beginning with a vowel to the preceding word 4) weaken unstressed words and syllables and reduce vowels in them 5) make the stressed syllables occur regularly at equal periods of time.

Maintaining a regular beat from stressed syllable to stressed syllable and reducing intervening unstressed syllables can be very difficult for Ukrainian learners English. Their typical mistake is not giving sufficient stress to the content words and not sufficiently reducing unstressed syllables. Giving all syllables equal stress and the lack of selective stress on key/content words actually hinders native speakers' comprehension.

The rhythm-unit break is often indeterminate. It may well be said that the speech tempo and style often regulate the division into rhythmic groups. The enclitic tendency is

more typical for informal speech whereas the semantic tendency prevails in accurate, more explicit speech.

The more organized the speech is the more rhythmical it appears, poetry being the most extreme example of this. Prose read aloud or delivered in the form of a lecture is more rhythmic than colloquial speech. On the other hand rhythm is also individual – a fluent speaker may sound more rhythmical than a person searching for the right word and refining the structure of his phrase while actually pronouncing it.

However, it is fair to mention here that absolutely regular speech produces the effect of monotony.

The most frequent type of a rhythmic group includes 2-4 syllables, one of them stressed, others unstressed. In phonetic literature we find a great variety of terms defining the basic rhythmic unit, such as an accentual group or a stress group which is a speech segment including a stressed syllable with or without unstressed syllables attached to it; a pause group – a group of words between two pauses, or breath group – which can be uttered within a single breath. As you have probably noticed, the criteria for the definition of these units are limited by physiological factors. The term "rhythmic group" used by most of the linguists [see Lehiste; Gimson] implies more than a stressed group or breath group.

Most rhythmic groups are simultaneously sense units. A rhythmic group may comprise a whole phrase, like "*I can't do it*" or just one word: "*Unfortunately...*" or even a one-syllable word: *Well...; Now....* So a syllable is sometimes taken for a minimal rhythmic unit when it comes into play.

3. Rhythm in different types of discourse.

We undoubtedly observe the most striking rhythmicality in poetry. In verse the similarity of rhythmical units is certainly strengthened by the metre, which is some strict number and sequence of stressed and unstressed syllables in a line. Strict alternation of stressed and unstressed syllables in metric versification allows us to regard a syllable as the minimal rhythmic unit in metric verse. Then again comes a rhythmic group, an intonation group, a line, a stanza. They all form the hierarchy of rhythmic units in poetry.

English verse is marked by a descending bow-shaped melody contour, decentralized stress organization. The strict recurrence of such intonation patterns secures a stable periodicity in verse rhythm. The basic rhythm unit in verse, however, is a line. On the prosodic level the rhythm in a line is secured by the similar number of syllables, their temporal similarity, descending melody contour, tone and intensity maximum at the beginning, tone and intensity minimum at the end and the final pause. These parameters make the line a stable rhythmic unit.

Phonetic devices add considerably to the musical quality a poem has when it is read aloud.

1. First and foremost among the sound devices is **the rhyme** at line endings. Most skillful rhyming is sometimes presented by internal rhyme with two rhyming words within a single line.

2. **Assonance** occurs when a poet introduces imperfect rhymes often employed deliberately to avoid the jingling sound of a too insistent rhyme pattern, e.g. "stone" is made to rhyme with "one"; "youth" is rhymed with "roof". In this way the rhymes do not fall into a sing-song pattern and the lines flow easily.

3. **Alliteration** is the repetition of the same sound at frequent intervals.

4. **Sound symbolism** (imitation of the sounds of animals) makes the description very vivid.

Structural or syntactical stylistic devices indicate the way the whole poem has been built, thus helping the rhythm to fulfil its constitutive function.

1. **Repetition.** Poets often repeat single lines or words at intervals to emphasize a particular idea. Repetition is to be found -in poetry which is aiming at special musical effects or when a poet wants us to pay very close attention to something.

2. **Syntactical parallelism** helps to increase rhythmicality.

3. **Inversion**, the unusual word order specially chosen to emphasize the logical centre of the phrase.

4. **Polysyndeton** is a syntactical stylistic device which actually stimulates rhythmicality of a poem by the repetition of phrases or intonation groups beginning with the same conjunctions "and" or "or".

Semantic stylistic devices impart high artistic and aesthetic value to any work of art including poetry.

1. **Simile** is a direct comparison which can be recognized by the use of the words, "like" and "as".

2. **Metaphor** is a stylistic figure of speech which is rather like simile, except that the comparison is not direct but implied and that makes the effect more striking.

3. **Intensification** is a special choice of words to show the increase of feelings, emotions or actions.

4. **Personification** occurs when inanimate objects are given a human form or human feelings or actions.

Rhythmic groups blend together into intonation groups which correspond to the smallest semantic text unit — *syntagm*. The intonation group reveals the similarity of the following features: the tone maximum of the beginning of the intonation group, loudness maximum, the lengthening of the first rhythmic group in comparison with the following one, the descending character of the melody, often a bow-shaped melody contour. An intonation group includes from 1 to 4 stressed syllables. Most of intonation groups last 1-2 seconds. The end of the intonation group is characterized by the tone and loudness minimum, the lengthening of the last rhythmic group in it, by the falling terminal tone and a short pause.

The ability to process, segment, and decode speech depends not only on the listener's knowledge of lexicon and grammar but also on being able to exploit knowledge of the phonetic means. It has been proved that the incoming stream of speech is not decoded on the word level alone. Having analyzed a corpus of 'mishearings' committed by native English speakers in everyday conversation, scholars have discovered the following four strategies (holding the stream of speech in short-term memory) which the speakers employ to process incoming speech [see: Celce-Murcia et al 1996: 222]:

1. Listeners attend to stress and intonation and construct a metrical template – a distinctive pattern of strongly and weakly stressed syllables - to fit the utterance.

2. They attend to stressed vowels. (It should be noted, however, that errors involving the perception of the stressed vowels are rare among native speakers).

3. They segment the incoming stream of speech and find words that correspond to the stressed vowels and their adjacent consonants.

4. They seek a phrase – with grammar and meaning - compatible with the metrical template identified in the first strategy and the words identified in the third strategy.

All four strategies are carried out simultaneously. In addition to carrying out these strategies, listeners are also calling up their prior knowledge, or **schemata** (higher-order mental frameworks that organize and store knowledge), to help them make sense of the bits and pieces of information they perceive and identify using these strategies [Gilbert 1983; Celce-Murcia et al 1996: 223]

These exemplified strategies suggest that in decoding speech listeners perform the following processes related to pronunciation:

1. discerning intonation units;
2. recognizing stressed elements;
3. interpreting unstressed elements;
4. determining the full forms underlying reduced speech.

One of the most important realizations that contributes to successful speech processing is that spoken English is divided into **chunks of talk = intonation units** (also referred to as *thought groups* or *prosodic phrases*). In spoken English there are five signals that can mark the end of one intonation unit and the beginning of another [Celce-Murcia et al 1996: 226]:

1. A unified pitch contour.
2. A lengthening of the unit-final stressed syllable.
3. A pause.
4. A reset of pitch.
5. An acceleration in producing the unit-initial syllable(s).

Successful identification of the metrical template is based on the identification of the prominent elements in a thought group.

4. Functions of rhythm.

In their overview of phonology and discourse, Celce-Murcia and Olshtain [2000:30-45] emphasize the following important functions of prosody in oral discourse:

1. the information management function;
2. the interactional management function, and
3. the social functions of intonation.

Now we will discuss these functions in brief and outline their importance for intercultural verbal interactions.

It is generally claimed that phonology performs two related intonation management actions in English and in other languages:

1. it allows the speaker to segment intonation into meaningful word-groups;
2. it helps the speaker signal new or important information versus old and less important information [Celce-Murcia, Olshtain 2000: 36].

In English the speakers usually resort to the following prosodic clues to segment their speech into meaningful word groups:

1. They make a pause at the end of a meaningful word group, 2) deploy a change in speech and 3) lengthen the last stressed syllable [Gilbert 1983]. These clues enable them to organize information into chunks. Consider the following examples to illustrate this function prosody, in which the same words with different prosody express very different meanings [Celce-Murcia, Olshtain 2000: 37]:

<i>Have you met my brother Fred?</i> <i>Have you met my brother, Fred?</i>	<i>Father, " said Mother, "is late".</i> <i>Father said, "Mother is late ".</i>
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At the discourse level the speaker should aim at appropriate prosodic segmentation and avoid misinterpretation or confusion on the part of the listener. The other important information management function of prosody is marking *new* versus *old* information. It should be noted that new information typically occurs at the end the utterance. In these examples [taken from: Celce-Murcia and Olshtain 2000:38], whatever information is new tends to receive special prosodic attention: the word is stressed and the pitch changes (such syllables are printed in capital letters):

A. Speaker I Can I HELP you?	B. SI I've lost an umb RELL a.
Speaker 2 YES , please. I'm looking for a	S2 A Lady's umbrella.
BL Azer.	SI YES . One with STAR S on it.
SI Something CAS ual?	GREEN stars.
S2 Yes, something casual in WOOL .	

Interaction management function of prosody includes moves involving contrast, correction / repair, and contradiction. The speakers signal contrast using prosodic cues (strong stress, high pitch) when they want to shift the focus of attention or create a contrast where there was none before [ibid: 38] as in the example that follows:

S1 I'd like APples, please.

S2 Would you like the YELlow ones or the RED ones?

When contradictions or disagreements arise in oral discourse, the speakers apply prosodic clues to shift the focus from one constituent to another, e.g.:

S1 It's HOT.

S2 It's NOT hot

S1 It IS hot.

S2 Come on, it's not THAT hot.

The speakers actively use prosodic means while self-correcting or correcting their interlocutors in the process of conversation during the so-called **repair**. This example of interactional management function is very similar to disagreement from a prosodic point of view, e.g.:

S1 You speak GERman, DON'tyou?

S2 Not GERman, FRENCH.

The examples given above illustrate how English speakers use prosody for **informational management and interactional management**. Phonetic and phonological problems of discourse still require a point-by-point and systemic study.