

DRAHOMÍRA FIALOVÁ

**ON BASIC RHYTHMIC PATTERNS IN MODERN BRITISH
ENGLISH AND IN CZECH**

We do not think there is anything new in saying that rhythm represents an important and characteristic element in any language and that it is sometimes very difficult to understand foreigners if they do not use the right rhythmic patterns. But still we find that insufficient attention is being paid in the teaching technique of foreign languages to features of rhythm. Neither can we say that there are enough practice books devoted to rhythmic patterns of foreign languages.

Our experience has shown that drills based on a comparative analysis of English and Czech rhythmic patterns have proved very effective. They helped the Czech speaker in a short time get rid of his own speaking habits which would otherwise make his communication with English-speaking people difficult either on the level of the pure communicative function of the language (= sentence structure) or on the level of expression (= the speaker's attitude).

This study aims to show the Czech speaker how rhythmic patterns in English function and to point out the major difficulties resulting from the differences between English and Czech rhythm habits.

First it is necessary to examine the factors which both in English and in Czech are significant for the listener and the speaker in producing the effect of speech rhythm.

Generally the feeling of rhythm is due to the recurrence at more or less regular intervals of one given phenomenon. Now the question arises which phenomena are responsible for the rhythmic measuring of the flow of words in the two languages and for making some places in English and Czech sentences more prominent than the others.

The existence of rhythm in speech may be signalized by various factors. We may say that in both languages the basic rhythm patterning of sentences is based on the recurrence at more or less regular intervals of stressed syllables,¹ that is syllables which are said with more vigour than the others (which will be referred to as unstressed syllables).

Basic or first rhythmic patterning as being distinguished from the second rhythmic patterning based on the "regular" recurrence of the so-called "intonation centre" (compare F. Daneš, *Intonace a věta ve spisovné češtině*, [Intonation and Sentence in Literary Czech], p. 16.) The English equivalent to the "intonation centre" regularly found in English phonetics is "the

¹ For Czech compare F. Daneš, *Intonace a věta ve spisovné češtině* [Intonation and Sentence in Literary Czech], Praha 1954, p. 16, for English compare R. Kingdon, *The Groundwork of English Intonation*, London 1958, p. 237.

nuclear tone" (compare R. Kingdon, *The Groundwork of English Intonation*, p. 6). This tone is always associated with the stressed syllable of the most important word of a word group and is signalized by a change in the melodic pattern of the sentence: from this point the voice either jumps down or goes up.

In English the contrast between stressed (strong) and unstressed (weak) syllables is much greater than in Czech, which makes very little distinction between syllables in the matter of stress.² This fact largely accounts for the characteristic rhythmic patterning in English which the Czech speaker must try hard to cope with. This difference is so great that it usually brings about vowel modification (including both quantitative and qualitative changes of vowels) or complete loss of vowel-phonemes. In Czech, on the other hand, there is no fundamental relationship between stress on one side and quantity and quality on the other side.

Compare the following English examples;

- | | | | | |
|---------------|---------------|---|------------|---------------------|
| 1. company | /kAmˈpəni/ | : | companion | /kəmˈpænjən/ |
| 2. mechanism | /ˈmekənɪzəm/ | : | mechanic | /mɪˈkænɪk/ |
| 3. historical | /hɪsˈtɔrɪkəl/ | : | history | /'hɪstəri, 'hɪstri/ |
| 4. repeat | /riˈpi:t/ | : | repetition | /'repiˈtɪʃn/ |

These examples have illustrated vowel modifications by the use of the neutral vowel /ə/ or the short vowel /ɪ/. The second version of the third example has also shown a complete loss of a vowel-phoneme.

The stressed syllables play the role of prominent peaks in an utterance, thus dividing it into rhythm units based on purely phonetic level.

Under "rhythm unit" we shall understand one stressed syllable and any of the following unstressed syllables; where there are no unstressed syllables between two stresses the rhythm unit will be represented by the stressed syllable itself.

There is a tendency in both languages to place at least one unstressed syllable between two stressed ones. In Czech this tendency cannot be realized within one word, as it may happen in English, the explanation being seen in the different nature of the lexical stress in both languages.

In English the stress is not tied to any particular place in the chain of syllables constituting a word whereas in Czech it always falls on the first syllable of the word.

Here are some examples to illustrate this tendency:

In English the tendency reflects:

a) In the positioning of the second stress in multisyllable words with the strong stress placed on any syllable starting from the third syllable on (counted from the beginning of the word):

Examples:

ecclesiastical	/ɪˌklɛ:ziˈæstɪkəl/
antagonistic	/ænˌtæɡəˈnɪstɪk/
perpendicularity	/'pɜ:pənˌdɪkjʊˈlærɪti/

b) In the loss of the intensity in the connected speech of syllables in words with two equal stresses (so-called double-stressed words). Which stress is more liable to suppression depends mostly on the needs of rhythm. These words tend to keep their first stress if they precede the words they are closely linked to, and if they follow the words they are closely linked to they usually keep their second stress.

² Compare B. Hálal, *Uvedení do fonetiky češtiny na obecně fonetickém základě* The Introduction into the Czech Phonetics, Praha 1962 p. 303.

In spite of the different number of syllables in the rhythm units there is a tendency to pronounce the rhythm unit consisting of one syllable in the same amount of time as that consisting of three or four syllables. The same phenomenon might be observed when comparing rhythm units of two sentences, but this is not so common because rhythm units are not necessarily the same length in every sentence we speak.

In English the tendency towards uniform spacing of stressed syllables goes hand in hand with quantitative changes and at the same time it may contribute to the qualitative changes, or sometimes to the loss of phonemes. The syllables of the longer rhythm units must be said more quickly than those of the shorter ones. For instance when comparing the stressed syllable "plain" in the word-groups "I can explain" and "I was explaining" we feel that the syllable "plain" when followed by another syllable is much shorter than the same syllable when standing alone. Such rhythm units whose length is largely dependent on the presence of one strong stress, rather than upon the specific number of its syllables, were labelled by K. L. Pike stress-timed rhythm units.⁴

Czech on the other hand belongs to a group of languages in which it is the number of syllables instead of the incidence of stresses which is responsible for producing the rhythm, and the rhythm units are accordingly called syllable-timed rhythm units (compare K. L. Pike). The length of rhythm units then depends on the number of unstressed syllables between the prominent peaks, which means that units with more syllables take proportionately more time. The quantitative changes of syllables in Czech rhythm units may be neglectable from the practical point of view because they are less marked than in English and do not cause significant qualitative changes.⁵

Here is a Czech example to illustrate it (the extract being taken from "The Italian Letters" by Karel Čapek):

I	II	III	IV	V			
Za	chvilku	je / u	tebe /	chlapík /	a	nastavuje /	klobouk /
1	2	3 4	1 2 3	1 2	1 2 3 4 5	1	2
VI	VII	VIII	IX				
má	v něm /	na	ubrousku /	samé /	pětiliry.		
1	2	1	2 3 4	1 2	1 2 3 4		

Rhythm units in this utterance vary as to the number of syllables in the rhythm units (I—IX) and accordingly also the length of the rhythm units is different. J. Ondráčková in her study "On Speech Rhythm in Czech" has shown that there is a tendency towards two—or three—syllable rhythm units in Czech.

Dividing an utterance into rhythm units based on a purely phonetic level may seem too mechanical a device in English to produce the basic rhythmic scheme because in many cases the rhythmic division falls within a word pattern and automatically eliminates the logical element.

Here is an example:

Mary / wants to / go to / morrow.

In this utterance the third rhythmic division falls within the word "tomorrow".

⁴ K. L. Pike, *The Intonation of American English*, Michigan 1947.

⁵ J. Chlumský, *Česká kvantita, melodie a přízvuk*, Praha 1928.

In Czech, on the other hand, the rhythm unit normally coincides with the beginning of the word. This substantial difference may be explained by the fact that the stress in English is not fixed to the first syllable of the word.

Sense being the most important thing in communication it must be taken into consideration even when dividing sentences into rhythm units, a tendency which is responsible for the tendency that neither in Czech nor in English should the rhythmic division fall within a word pattern.

When talking, we do not separate words from one another but we usually group them into clusters. But now another problem arises when we are to decide the rhythmic division in English because stress as we have seen is not a reliable signal to indicate the beginning of a rhythm unit as it is normally in Czech. And it is most often the syntactical reasons which, in addition to word unity and the natural rhythm of the utterance, help us to solve this problem. To distinguish rhythm units on a linguistic level from those based on a purely phonetic level they will be referred to as rhythm groups, a term commonly used by English phoneticians.

Here is an English example with its Czech equivalent to illustrate a division of a sentence into rhythm groups. Three versions of the same sentence are given: first in ordinary spelling, second in phonetic transcription and third in dots (for unstressed syllables) and dashes (for stressed syllables) to represent the rhythmic patterns.

English

I' ve broken my glasses.

aiv broukn / mai gla:siz

. — . / . — .

Czech

Rozbil jsem si brýle.

rozbil jsem si / bri:le

— . . . / — .

There are two strong syllables in both sentences dividing the utterance into two rhythm groups. In Czech the rhythm division is well indicated by the stressed syllable /bri:/, in English, on the other hand, it falls between two unstressed syllables /kn/ and /mai/, the former forming a rhythm group with the preceding stressed syllable to which it is closer in meaning and the latter belonging to the following rhythm group to which it is closer in grammar. Thus in contrast to Czech we must try to find other substitutes to signalize the rhythm groups in English.

The assignation of unstressed syllables to either of two rhythm groups in English may be well signalized by quantitative modifications of one sound or two on either side of the rhythmic division. In the sentence "I' ve broken my glasses" to indicate the end of the rhythm group /aiv broukn/ the English speakers lengthen the syllable /kn/ in the word /broukn/ so that both syllables /brou/ and /kn/ will have the same length. On the other hand they speed up the unstressed syllable /mai/ forming the rhythmic division on the other side to show that this syllable enters into one rhythm group with the following syllables.

Sometimes the rhythmic division in both languages coincides with a complete shutting off of the breath. But it would be wrong to understand that a rhythmic division necessarily implies such a gap in the speech. The rhythmic division only represents a potential place for making such a pause. Too frequent use of physical pauses would completely ruin the fluent rhythm of speech in both languages (and in connection with this it would be useful to point out that Czech speakers ought to eliminate the over-use of the glottal stop).

The group which is finished with a physical pause is usually called a "breath group" and its length is determined by the sense. Therefore it is often called a *sense-group*, a term superior to a rhythm group because usually there are more rhythm groups combined to form sense groups. To illustrate this there is one sentence first divided into rhythm groups, second into sense-groups:

English:

1. The 'stressed / 'syllables / do 'not / 'all / 'occupy / the 'same / 'relative / po'sition / in the 'group /.
2. The 'stressed 'syllables / do 'not 'all 'occupy / the 'same 'relative po'sition in the 'group. /

Czech:

1. 'Kdyby / 'bylo / 'odpoledne / 'pěkné / 'počasí / 'šli bychom / 'na procházku. /
2. 'Kdyby 'bylo 'odpoledne 'pěkné 'počasí / 'šli bychom 'na procházku.

Now a question may arise: Is it important to divide an utterance into rhythm groups? In both languages rhythm groups represent the framework on which the melody of the utterance hangs (we shall not go into detail here, the subject being the material for our further study). Rhythmic division may also contribute to the meaning of the phrase or of the sentence.

Compare the following examples illustrating two different versions of the same phonemic sequence of sounds.

English

The phonemic sequence of sounds /s — A — m — ə — d — r — e — s — i — z/ may be interpreted as /'sAm ə'dresiz/ = some addresses, with the rhythmic division between /m/ and /ə/, or as /'sAmə'dresiz/ = summer dresses, with the rhythmic division between /ə/ and /d/. Such variation of rhythmic grouping is accompanied by changes of quantity, /m/ and /A/ in the first case being slightly longer than in the second case, and /ə/ in the second case being slightly shorter than in the first case and together with /m/ forming a syllable which has the same length as the preceding syllable to which it belongs in meaning.

Czech

Examples of the same kind may be found also in Czech. For instance, the phonemic sequence /j — e — d — e — n/ may be interpreted either as /je'den/ = it's daytime, or as /'jeden/ = one (the numeral), the rhythmic division in the first case being between /e/ and /d/ and in the second case coinciding with the beginning of the chain of phonemes.

But rhythmic cues to the meaning of similar phoneme sequences may seem to be more or less redundant in both languages because the choice of meaning is normally dependent on the context. But still the rhythmic division does represent for the speaker a reality he cannot thoroughly avoid. The Czech speaker must get used to the lengthening and shortening of syllables in the rhythm groups. And it is very important for the Czech speaker to work at it because English spoken with all the syllables at the same length is hard for English listeners to understand. And at the same time he must also pay attention to the qualitative changes in unstressed syllables (see p. 2) which go hand in hand with quantitative changes, a fact which is most responsible for the characteristic rhythm of speech in English.

Rhythm groups in both languages may be represented either by one word or by more words. In Czech, in contrast to English, there is a tendency to one-word

groups (which may be explained by a relatively greater number of multisyllable words in Czech).

This tendency leads to the well-known fact that Czech speakers tend to isolate words in English by pronouncing them all with stress, which is one of the habits they must eradicate. Unnecessary stresses may not only destroy the normal speech rhythm in English but it also may obscure the meaning of the utterances. We have chosen one example to illustrate it:

The sentence "I can see the hilltop" may be divided into two or, three rhythm groups. The first version "I can¹see/the¹hilltop" is meant as a simple statement of the fact. The second version "I¹can /¹see/ the ¹hilltop" is meant as a contradiction of "You can't see the hilltop".

From what has been said about rhythm groups in the compared languages we may conclude;

1. In both languages rhythm groups represent the basic units to compose the first rhythmical pattern of an utterance, thus forming a framework for the second rhythmic division (for the second rhythmic division see note on p. 25).

2. The languages differ in the structure of the rhythm groups. In Czech the stressed syllable is a reliable signal to indicate the beginning of a rhythm group, whereas in English rhythm groups very often have unstressed syllables at their beginning. Speaking in terms common in poetry, we may say that the basis of English speech rhythm is the iambic foot, whereas in Czech it is the trochee or dactyl.

Problems in Czech may arise if a monosyllable coincides with the beginning of the sense group, most often with the beginning of the sentence. This word is then often pronounced with less intensity in comparison with the following strongly stressed syllable, a fact which makes some linguists think (compare V. Mathesius, *The Dynamic Line of the Czech Sentence*) that there is also a iambic foot in Czech. On the specific position of monosyllables in Czech rhythm groups see J. Ondráčková (footnote 3). Some phoneticians argue with them (compare B. Hála, *The Introduction into the Czech Phonetics*) considering these monosyllables as separate groups because stress as a relative matter must be considered within the framework of the whole sentence and moreover the rhythmic division between them and the following words is well signalized by a sudden increase in intensity and a change in melody (a signal labelled by B. Hála as a dynamic and melodic break in his study on the Czech iambus).

Here are a few examples to illustrate the structure of rhythm groups in English and in Czech. First the rhythmic pattern is given which is then followed by examples arranged according to the number of syllables and words. The correspondence in meaning is not the rule. Second stresses are not specially marked, attention being paid only to relatively strongly stressed syllables (which in both languages represent potential places with which the change of the pitch of the voice might be associated).

Rhythmic pattern	English	Czech
— .	a) ¹ China b) ¹ thank you	¹ Čína ¹ dal to (na stůl)
— . .	a) ¹ Germany b) ¹ Chapman, sir c) ¹ how many (¹ times) d) ¹ give me a (¹ ring)	¹ Německo ¹ kampak to (jel) ¹ jak dlouho (¹ čekal) ¹ dnes se mi (¹ zdálo)
. —	a) to ¹ night	Ø

Note A: No equivalent in Czech the explanation being in the nature of the Czech lexical stress.

.. —	b) <i>I¹want (to¹know)</i>	<i>je¹den</i>
	a) <i>repre¹sent</i>	Ø (see note A)
	b) <i>I¹'m af¹raid</i>	Ø (see note A)
	c) <i>It's a¹book</i>	Ø

Note B: A word group of the same number of syllables in Czech would have a different rhythmic structure. E.g. *je prý zde* — . —

. — .	a) <i>mathe¹matics</i>	Ø (see note A)
	b) <i>a¹penny</i>	to ¹ jisté
	c) <i>I¹think so</i>	je ¹ po tom

..... — *It can be a re¹lief for you.* Ø

Note C: There can be no equivalent in Czech. It is not possible to begin a rhythm group with so many unstressed syllables (compare V. Mathesius, *On the Dynamic Line of the Czech Sentence*). These syllables are in English said very quickly and this is one of the differences the Czech speaker must cope with when trying to get the English rhythm right.

Having dealt with the distribution of stresses within a rhythm group we have come to the last point of our study. We shall try to answer the question: what are the rules governing the selection of words to be usually stressed in English and Czech sentences?

In both languages we may find words whose stress is relatively suppressed in connected speech. In any normal sentence these words are largely represented by structurally less important words which are usually called *form* or *grammatical words*. The choice and number of these words in the compared languages are different.

In English these words, consisting mostly of monosyllables, include words like prepositions, auxiliaries, conjunctions, pronouns; most of them appear in the so-called "weak forms", i.e. modified forms whose vowel sounds regularly lose their full value (the full value of vowel sounds accompanied with an increase in intensity would imply a kind of emphasis on the side of the speaker).

In Czech these grammatical words may be divided into three categories: as in English they are largely represented by monosyllables.

a) Monosyllables that are never stressed and therefore can never stand at the beginning of a rhythm group. They are not many in number (compare B. Hála, *The Introduction into the Czech Phonetics*, p. 311).

b) Monosyllables that are always associated with stress and therefore used to open a rhythm group, for instance prepositions (which in contrast to Czech are never stressed in English in a normal sentence).

c) Finally there are words which may occupy both the beginning and the non-beginning position in the rhythm group and according to that these words represent a weak—or strong-stressed part of the utterance.

There may be more than one of these grammatical words losing their stress in the rhythm groups both in Czech and in English. Accordingly an utterance containing a high percentage of them will receive fewer stresses than the one with the same number of syllables but a higher proportion of content words.

*Compare:**English*

The first / six / have each / won / a prize / .
 . - / - / . - / - / . -

There were prizes / for six of them.
 . . - . / . - . .

Czech

Šedivé / mlhy / nad lesem / plynou.
 . . . - . - . . . - . . .

Myslil jsem, / že by se to / zkazilo.
 / - / -

In both languages full stress is placed on words which are grammatically important, such as nouns, adjectives, content verbs, adverbs. But because the choice of words to be stressed is also governed by rhythmic reasons, the style, the speed of delivery and by semantical reasons, it occurs that content words are also weakened in intensity, especially when stressable words follow too closely one upon another.

*Compare:**English*

all the way : all the way there and back
 /'o:l ðə 'wei/ : /'o:l ðə wei 'ðeə ənd 'bæk/

Czech

co děláš : co děláš doma
 /'co 'děláš/ : /'co 'děláš 'doma/

In English the quality of the sounds in the weak content words does not change as is the case with form words!

MLUVNÍ RYTMUS V ANGLIČTINĚ A V ČEŠTINĚ

Tato studie byla napsána s cílem srovnat způsob rytmického uspořádání mluvy v angličtině a v češtině. Při srovnávání jsme se omezili na jazyk spisovný v jeho funkci čistě sdělovací a nechali jsme stranou využití přízvuku v komplexu s intonací.

Podmínkou rytmu vůbec je opakování nějakého prominentního jevu v čase a jeho střídání s jevy méně prominentními. V této studii se zabýváme jednak otázkou, co je ve srovnávaných jazycích tímto prominentním jevem, který podmiňuje členění souvislého projevu na rytmické úseky, a dále otázkou jeho distribuce, jak z hlediska fonetického, tak z hlediska významového.

Prominence slabik může být dána těmito zvukovými prostředky: přízvukem (tj. silou, intenzitou), výškou, délkou a kvalitou. Tyto prostředky se v souvislé mluvě zpravidla kombinují. I když v tomto souhrnu zvukových prostředků nelze považovat přízvuk vždy za nejdůležitější faktor při určování prominencí slabik, je možno říci, že rozhodující vliv na vznik základního rytmického půdorysu výpovědi v obou jazycích lze připisovat přízvuku.

Z praktických důvodů postačí rozlišení mezi slabikami přízvučnými a nepřízvučnými. Intenzitní rozdíl mezi těmito slabikami je v češtině minimální. Zato v angličtině je tak silný, že je ho využito k vytvoření základního rytmického půdorysu.

K základním rytmickým tendencím v obou jazycích patří střídání slabik přízvučných a nepřízvučných, tzv. alternativní tendence. Shlukováním přízvučných a nepřízvučných slabik vznikají zvukové celky, které jsou nadřazeny slabice, často i slovu. Tyto celky nazýváme takty (angl. rhythm units), přičemž za takt v obou jazycích můžeme považovat část promluvy od přízvuku k přízvuku. Taktové členění se v tom případě děje na podkladě čistě rytmickém, nikoli významovém.

Oba jazyky se však liší tím, že povědomí o rytmu nevzniká na základě téhož principu. V angličtině mnohem výrazněji než v češtině se projevuje tendence k pravidelnosti výskytu přízvuků. Verrier nazval tuto tendenci isochronní a ve studii o ní podrobněji pojednáváme. Vzhledem k této isochronní tendenci patří angličtina k jazykům, v nichž mívou doby rytmické organizace promluvy je takt.

V češtině na rozdíl od angličtiny se slabika nepodřizuje tak zřetelně taktu a rytmická struktura je založena spíše na subjektivním dojmu vnímání slabiky než na pravidelnosti výskytu přízvuků. Mívou doby rytmické organizace promluvy je tedy slabika.

Přistupujeme-li k taktovému členění z hlediska významového, není v angličtině přízvuk vždy spolehlivým signálem začátku taktu jako v češtině. Abychom odlišili takto vzniklé rytmické jednotky od jednotek vzniklých čistě na podkladě rytmickém, zavedli jsme pro ně v angličtině termín "rhythm groups" (na rozdíl od "rhythm units"). Při tomto členění je struktura taktů v angličtině pestřejší než v češtině.

V závěru studie jsme si položili otázku, která pravidla ovlivňuje výběr slov, která jsou v obou jazycích v klidné věcné výpovědi zpravidla přízvučná.