

SYLLABIFICATION OF ENGLISH FOR SECOND LANGUAGE LEARNERS

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It is universally known that the way a second (foreign) language speaker sounds is determined by the quality of the sounds he produces, stress in words and in utterances, intonation patterns he uses. What is often paid little attention to is the process of syllabification which, as in case of Russian-speaking learners of English, plays a crucial role not only in forming a strong "Russian" accent, but also hinders oral understanding and quite often ... "It is not just the ability to produce an individual segment that determines second language accent. The second language learner must also learn to be able to combine the segments in the sequences demanded by the target language." [1, p. 137]

There is no uniformity among the linguists in what exactly is a syllable as, unlike a phoneme, it appears to be a rather ambiguous concept. According to Dictionary of Phonetics and Phonology syllable is "a fundamental but elusive phonological unit typically consisting of a short sequence of segments, most typically a single vowel or diphthong possibly preceded and/or followed by one or more consonants" [3, p. 345].

Syllable has got a complex structure. The traditional components are the onset and the rhyme. The rhyme is further divided into the nucleus (vowel) and the coda. Thus, **the onset, the nucleus, and the coda** are three main elements of a syllable. Of the three elements only the nucleus is always obligatory, both the onset and the coda are optional. The nucleus is most often a vowel, though in some cases, as in English *table* [□teɪ.b(ə)l] liquids and nasals are allowed as syllabic nuclei and in certain languages permit other segments to fill the nuclei position.

A syllable that doesn't have a coda and consequently ends in a vowel having the structure (C)V, is called an **open syllable**. One having a coda and therefore ending in a consonant – of the type (C)VC is called a **closed syllable**. The kind of syllable that is predominating in a given language leaves its print on the acoustic features of the respective idiom. Languages differ considerably in the syllable structures that they permit.

S.V. Knyazev defines a syllable as a prosodic unit characterised by certain phonetic and phonological features [6, p. 10]. Traditionally there are distinguished the following universal phonetic characteristics:

1. a syllable acts as an integral articulatory complex produced with its own motor programme;
2. a syllable is a minimal unit with coarticulation rules observed within;
3. a syllable is a minimal sound interval corresponding to a single respiratory movement, or a single opening and closing of the vocal tract, as a single peak of prominence in the soundstream resulting from a combination of stress, pitch, length and intrinsic sonority.

Besides its universal phonetic characteristics the syllable can possess certain phonological characteristics, differing from one language to another:

1. restricted syllabic structure. There are languages that will accept no coda; they only allow a syllable structure of the type CV (open syllables only, e.g. Japanese). Other languages will have codas, but the onset may be obligatory;
2. distributional restriction (consonants are aspirated at the beginning of the word and glottalised at the end of it, that is why we syllabify *a-trocious* [t^h], but *At-lantic* [t']);
3. compensatory relations regulating the length of a vowel and the following consonant (e.g. distinguish, *tack* and *tak* in the Sweden language);
4. accent placement depending on the syllable quantitative characteristics (e.g. in Spanish, Polish, etc.) and so on.

S.V. Knyazev suggests classifying languages as "quantum" or "wave" ones depending on the presence or absence of phonological characteristics in their syllabic structure [6, p. 11]. Languages with phonological syllabic characteristics being present and recognised by native speakers have distinct syllable boundaries. Syllable division is realised through the acoustic signal and impressed in the native speaker's mind. Native speakers generally have no difficulty defining the syllable boundary. German languages, including English are rated among "quantum".

"Wave" languages, including Russian, don't possess phonological characteristics, that's why syllable boundaries are neither defined by acoustic signal, nor imprinted in the native speaker's mind. So the very sequence of phonemes can be syllabified differently by different speakers. A "wave" language speaker realize the nuclei of syllables which actually exist in the speech but not syllable boundaries that are not usually registered in fluent speech.

Thus every separate language has its own rules for dividing the words into syllables, so there are different principles that primarily determine syllabification in different languages. There exist though several universal

phonological principles which, applied in different order, determine the syllabification in every language. **The universal principles of syllabification** are the following:

1. Open Syllable Principle states the dominance of the open syllable over the closed one. Open syllable is the basic syllabic, the one people first acquire in infancy when they start to speak. That is why it is often called the core syllable.

2. Maximal Onset Principle: whenever we have a number of consonants between two syllable nuclei, we will group together the maximum number of consonants that form an acceptable onset according to the phonotactics of the respective language and the remaining number of consonants will be included in the coda of the preceding syllable.

3. Phonotactic Constraint commands that only the phoneme combinations occurring in initial position of a word can occur in onsets and respectively the combinations in final position can occur in codas. For example, an English word can have a maximum of three consonants before the first vowel; if three occur, the first must be /s/, the second must be a voiceless plosive /p t k/, and the third must be a liquid or glide /l r w j/.

4. Sonority Sequencing Principle: sonority (or loudness) of segments in a syllable should increase in onset and decrease in coda, the nucleus bearing the peak of sonority.

5. Sonority Dispersion Principle demands that the sonority increases in the onset as abruptly as possible while the sonority in the coda should decrease gradually.

6. Morpheme structure rule makes the syllable boundaries repeat the morpheme boundaries in some cases.

Syllabification in English is determined by certain principles and rules. The basic configuration or template of an English syllable will be therefore (C)³V(C)⁵ – the parentheses marking the optional character of the presence of the consonants in the respective positions.

There is no uniformity among scientists in defining the hierarchy of syllabification principles in English. We have chosen a very comprehensive and straightforward principle of syllabification suggested by J.C. Wells [4]:

1. Subject to certain conditions (No. 3-6), consonants are syllabified with the more strongly stressed of two flanking syllables: *happy* /hæp-ɪ/, *typing* /taɪp-ɪŋ/. There are distinguished five grades of the "syllable strength":

- 1) primary word stress;
- 2) pre-tonic secondary stress;
- 3) tertiary (post-tonic) stress;
- 4) unstressed but with full vowel;
- 5) weak (reduced) vowel.

2. Where adjacent syllables are of equal grade (those involving weak vowels (grade 5), consonants are syllabified with the leftward syllable: *carpeting* /kæp-ɪt-ɪŋ/, *purity* /pjʊər-ət-ɪ/.

3. There is a condition on the main principle. In polymorphemic words, consonants belong to the syllable appropriate to the morpheme of which they form a part. This applies only to synchronic, psychologically real morphemes. So you distinguish *highness* (the official address) /haɪn-əs/ and *highness* (the condition of being high) /haɪ-nəs/.

4. Maximal Onset Principle is applied as much as possible.

5. Consonant clusters should not violate Phonotactic constraint, which means that only clusters established in monosyllables are allowed in onsets and codas: *English* /ɪŋ-ɡlɪʃ/, but *chandler* /tʃænd-lə/ (/gl/ can stand at the beginning of a word, whereas /dl/ cannot). One must remember that short vowels (except /ɪ, ə/ are never left open.

6. Affricates (/tr, dr, tʃ, d/) are treated as indivisible, not split between syllables: *catching* /kæt-ŋ/, *petrol* /petr-əl/.

There has been created a hierarchy of the universal principles of syllabification explaining the Russian syllabification of most native Russian speakers [Knyazev]:

1. Phonotactic constraint: *безд-ство, Эм-ма*;
2. Sonority Sequencing Principle: *кош-ка*;
3. Open Syllable Principle: *па-ход*;
4. Maximal Onset Principle: *зе-мля*;
5. Sonority Dispersion Principle: *у-тро*;
6. Syllable structure tends to repeat the morpheme structure.

We can compare the difference between the syllabification of the words *economical* [ek-ə-nɪm-k-əl] or [i:-kə-nɪm-k-əl] and *э-ко-но-ми-ка* which Russian-speaking learners of English tend to pronounce similarly.

To sum up, it is obvious that there exist different leading principles of syllabification in English and Russian. The Russian language being defined as "wave" while English – a "quantum" one explains the difficulty the

Russian learners of English have in correct syllabification of English words. To avoid strong "Russian" accent the Russian learners should be aware of and follow the principles of syllabification of the English language.

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