

Batna 2 University

Course: Phonetics

Level: 1st year LMD

Groups: 1, 2, and 3

Mrs. Rabehi. A

Chapter Five: Word Stress

Structure of the syllable

The syllable may be defined as an uninterrupted unit of utterance that is typically larger than a single sound and smaller or equal to a word, e.g. *see* /si:/, *simplify* /'sɪm.plɪ.fai/ (Crystal 2008: 467). In English, a **minimum syllable** is formed by a single vowel, e.g. *are* /ɑ:/, *or* /ɔ:/. Longer syllables have one or more consonants preceding or following the vowel, e.g. *meet* /mi:t/, *consonant* /'kɒn.sə.nənt/.

Phonologically, the syllable is “a unit of phonological organisation whose central component is a nucleus, which is normally a vowel, and which may be preceded or followed by consonants” (Carr 2008: 171). The vowel in the centre of the syllable is called the **syllable nucleus**, and the optionally surrounding consonants or sonorants are defined as **margins**. The initial margin is the **onset**, whereas the final margin is called the **coda**. See the figure below:

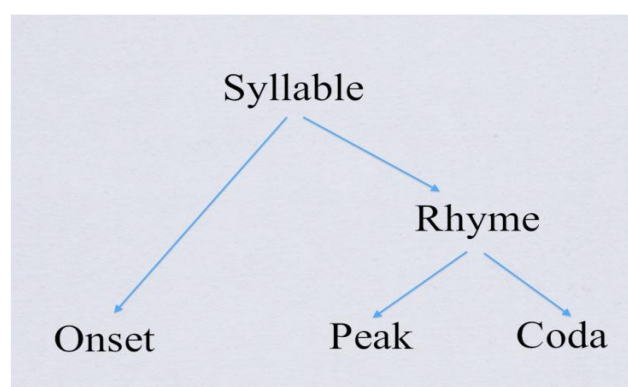


Figure 01: The syllable structure (adapted from Roach 2009: 60)

Some syllables have **syllabic sonorants** as their nucleus. Words like *bottle* /'bɒtl/, *trouble* /'trʌbl/, *pigeon* /'pɪdʒn/, *often* /'ɒfn/ are formed by two syllables, though they do not have a vowel as the nucleus. Instead, sonorants may serve the function of the nucleus, and in these positions, they are noted with a small vertical diacritic underneath the symbol, e.g. /'trʌb̩/,

/ˈpɪdʒŋ/. The typical syllabic sonorants are /l/ and /n/, yet /r/, /m/, and /ŋ/ can also acquire syllabic positions, especially under the influence of some processes in connected speech. If preceded by a vowel, sonorants do not count as syllabic. Compare the following examples:

sadden /sædn/ – *sand* /sænd/

doesn't /dʌznt/ - *don't* /dɒnt/

The division of words into syllables is referred to as **syllabification** or syllabication, which helps to distinguish between **monosyllabic**, **disyllabic**, **trisyllabic** and **polysyllabic** words according to the number of syllables they possess.

Strong vs. Weak syllables

Syllables are often defined as **strong** or **weak** (see Roach 2009: 64). The strong syllables are relatively longer, more intense, and different in quality as they appear in stressed positions of a word (see section on Word Stress). The weak syllables contain either /ə/, /i/ or /u/ and are never stressed. Syllabic sonorants are also counted as forming weak syllables.

The **transcription** of monosyllabic words is very straightforward. Monosyllabic content words represent strong syllables only and may hold any phonemes, except for /ə/, /i/ or /u/. Function words, however, may be realised in strong and weak syllables.

Word Stress

Word stress or **lexical stress**, in transcription, is a superscribed vertical line that appears before the stressed syllable, e.g. *never* /ˈnevə/, *agree* /əˈɡriː/. Every disyllabic or polysyllabic word is pronounced with one or more syllables emphasized more than the remaining syllables in the word. Stress is usually equated with the notions of **emphasis** and **strength**, as the stressed syllables seem to be pronounced with more effort than unstressed ones. Clark and Yallop (1992: 295) say that this emphasis is “signalled by pitch as well as by supporting factors, notably loudness and duration”. Roach (2009: 73) defines it as a **prominence** that is determined by four main factors: loudness, vowel length, vowel quality and pitch. In the table below, the stressed syllables are opposed to unstressed ones:

Table 01: The prominence characteristics of stressed and unstressed syllables (adapted from Roach 2009: 74)

	Loudness	Vowel length	Vowel quality	Pitch
Stressed syllables	Loud	Long	Strong	High
Unstressed syllables	Quiet	Short	Weak	Low

Levels of Stress

In some words it is possible to determine a second, weaker, stressed syllable as contrasted to the syllable holding the **primary stress**. This is considered to be the **secondary stress** and is notated by subscripting a low vertical line before the stressed syllable.

For instance: pronunciation /prəˌnʌnsɪˈeɪʃn/.

Placement of Stress

The position of the stress determines the different types of it as described below. In many languages, word stress is fairly predictable, i.e. it is determined by rules that apply to the majority of entries in the vocabulary. These languages are said to have **fixed stress**. However, languages with **free stress** have a vocabulary for which stress placement is difficult to predict. English is a free stress language. Moreover, free word stress may be either **constant** (remaining on the same syllable in different word class or in different derivatives from the same root, e.g. **wonder**, **wonderful**, **wonderfully**) or **shifting** (varying between the syllables, e.g. **proverb**, **proverbial**).

Although English is a free stress language, it is possible to predict the stress placement according to the following information as indicated in Roach (2009: 76): the syllable number in the word, the phonological structure of the syllable, the grammatical category of the word, and the morphological structure of the word. The basic stress patterns are given below, but there are exceptions, thus learners should treat each single case individually.

Syllabification is one of the factors that support the prediction of stress placement. The following section presents the context when the stress is influenced by strong and weak syllables.

Stress of Simple words

- **Disyllabic words**

Nouns: Stress on the first syllable, for instance: object /'ɒbdʒekt/, speaker /'spi:kə/

Verbs: Stress on the final syllable (if the final syllable is strong), for instance: arrange /ə'reɪndʒ/, release /rɪ'li:s/

Stress on the first syllable (if the final syllable is weak), for instance: open /'əʊpən/, answer /'ɑ:nsə/

Adjectives: Stress on the final syllable (if the final syllable is strong), for instance: polite /pə'laɪt/, discrete /dɪ'skri:t/

Stress on the first syllable (if the final syllable is weak), for instance: fatal /'feɪtəl/

, lovely /'lʌvli/

- **Trisyllabic words**

Nouns: Stress on the first syllable, for instance: chocolate /'tʃɒklət/, paragraph /'pærəgrɑ:f/

Stress on the second syllable (if the first syllable is weak), for instance: confusion /kən'fju:ʒn/, behavior /bɪ'heɪvjə/

Verbs: Stress on the final syllable (if it is strong), for instance: entertain /,entə'teɪn/

Stress on the preceding final syllable (**penultimate**), if the final syllable is weak, for instance: remember /rɪ'membə/

Stress on the first syllable (if the final and the preceding final syllables are weak), for instance: celebrate /'seləbreɪt/

Adjectives: Stress on the first syllable, for instance: positive /'ɪnsələnt/, shimmering /'ʃɪməɪŋ/

Stress of Compound words

Most compounds words have two stresses: primary and secondary. Depending on how compounds function in the sentence, the following stress patterns are found.

- **Compound Nouns:**

Following the general rule, primary stress is on the first element, whereas the secondary stress is on the second element, for instance: swimming pool /'swɪmɪŋ ,pu:l/, goldfish /'gəʊld,fɪʃ/

If the first element is an ingredient of the second element, primary stress is on the second element, whereas the secondary stress is on the first element, for instance: apple pie /,æpl 'paɪ/, strawberry milkshake /,strɔ:bri 'mɪlkʃeɪk/

Exception: Except compounds ending in cake, juice or water, Primary stress on the first element, secondary stress on the second element, for instance: chocolate cake /'tʃɒklət ,keɪk/, lemon juice /'lemən ,dʒu:s/, rose water /'rəʊz ,wɔ:tə/

- **Compound Adjectives:**

Following the general rule, Primary stress on the second element, secondary stress on the first element, for instance: blue-eyed /,blu: 'aɪd/, kindhearted /,kaɪnd 'hɑ:td/

If the first element is a noun, Primary stress on the first element, secondary stress on the second element, for instance: homesick /'həʊm ,sɪk/, handmade /'hænd ,meɪd/

- **Compound Verbs:**

Following the general rule, Primary stress on the second element, secondary stress on the first element, for instance: over boil /,əʊvə 'bɔɪl/, underestimate /,ʌndə'restɪment/

Stress in Word Class Pairs

There are words with identical spelling that represent different parts of speech. These words are differentiated by means of **shifting of the stress**. A small group of words for which the noun is differentiated from a verb by stress without a change in sound quality, e.g.:

increase /'ɪnkri:s/, Noun, whereas *increase* /ɪn'kri:s/, Verb

insult /'ɪnsʌlt/, Noun, whereas *insult* /ɪn'sʌlt/, Verb

impress /'ɪmpres/, Noun, whereas or *impress* /ɪm'pres/, Verb

Next follows another group of words for which the shifting of the stress may or may not be accompanied by a change in the quality of the vowel in the unstressed syllable of the verbs, e.g.:

transport /'trænsɔ:t/, Noun, whereas *transport* /træn'spɔ:t/ or /trən'spɔ:t/, Verb

torment /'tɔ:ment/, Noun, whereas *torment* /tɔ:'ment/ or /tə'ment/, Verb

Finally, there is a large group of words for which the shifting of the stress is accompanied by a change in the quality of the unstressed vowel, e.g.:

combine /'kɒmbaɪn/, Noun, whereas *combine* /kəm'baɪn/, Verb

conduct /'kɒndʌkt/, Noun, whereas *conduct* /kən'dʌkt/, Verb

contrast /'kɒntrɑ:st/, Noun, whereas *contrast* /kən'trɑ:st/, Verb

There are also quite a few nouns that can form compounds but that can also be used like adjectives to make phrases with other nouns. When they constitute a compound, the main stress is placed on the first element. If they function as a phrase (adjective + noun), the second element acquires the main stress (see Carr 2013: 86). Consider the following examples:

a blackboard /'blækbɔ:d/ as a compound noun;

a black board /,blæk 'bɔ:d/ as an adjective and noun.

Stress Shift

When the change in stress placement is caused by the context, this is known as **stress shift** (Roach, 2009a). When a polysyllabic word with a stress placed at the end of it is followed by another word with the stress placed in the beginning of it, there is a tendency for the stress in the first word to shift towards the beginning, especially if it has a syllable that is capable of receiving stress, e.g.:

Japanese /,dʒæpə'ni:z/, but a *Japanese student* /'dʒæpə,ni:z 'stju:dnt/.